

NORTH LONDON WASTE AUTHORITY

REPORT TITLE: DEVELOPMENT AND PROGRESS ON THE NORTH LONDON HEAT AND POWER PROJECT

REPORT OF: MANAGING DIRECTOR

FOR SUBMISSION TO: PROGRAMME COMMITTEE

DATE: 10TH SEPTEMBER 2026

SUMMARY OF REPORT:

The energy recovery facility is the part of the North London Heat & Power Project ('NLHPP') under construction. This report provides a reminder of the business case under which the project was developed, reports on how the Authority project team is managing its client responsibilities, the progress which has been achieved and provides an update on the current status.

RECOMMENDATIONS:

The Programme Committee is recommended to note and comment on the contents of the report.

SIGNED:  Managing Director

DATE: 28 August 2026

1. INTRODUCTION

- 1.1. The North London Heat and Power Project (NLHPP) was developed by North London Waste Authority to secure the long-term delivery of waste disposal services which are a statutory responsibility of the Authority and an essential service on which residents rely. The Development Consent Order which authorised and set the scope of the project was approved in February 2017¹ by the Secretary of State for Business, Energy and Industrial Strategy.
- 1.2. Following the carrying out of preparatory works and procurement of initial facilities, the procurement for the Energy Recovery Facility ran from June 2020 to December 2021, and NLWA Members agreed² to award a contract to ACCIONA SA in January 2022. This was for the design, engineering, procurement, construction and commissioning of a new energy recovery facility which will be owned by the Authority and operated by LondonEnergy Ltd (LEL).
- 1.3. The report structure provides an overview focussing on the Energy Recovery Facility, with a focus on the rationale to deliver this critical infrastructure and the current delivery position.
 - 1.3.1. Section 2: Rationale for developing NLHPP as a publicly owned infrastructure project
 - 1.3.2. Section 3 Governance
 - 1.3.3. Section 4: Delivery arrangements for the new Energy Recovery Facility (ERF)
 - 1.3.4. Section 5: Construction of the ERF
 - 1.3.5. Section 6: Delivery challenges
 - 1.3.6. Section 7: Cost and risk position
 - 1.3.7. Appendix A: Glossary of abbreviations

2. RATIONALE FOR DEVELOPING NLHPP AS A PUBLICLY OWNED INFRASTRUCTURE PROJECT

- 2.1. North London boroughs include a quarter of London's population. Constituent boroughs collect 3% of the UK's municipal waste and deliver it to North London Waste Authority (NLWA). This is currently more than one tonne of residual waste

¹ The North London Heat and Power Generating Station Order 2017 can be viewed at: <https://www.legislation.gov.uk/uksi/2017/215/introduction>

² Decision paper for the December 16 2021 Meeting can be viewed at: <https://www.nlwa.gov.uk/sites/default/files/2021-12/03%20ERF%20Procurement.pdf>

every minute and 560,000 tonnes per year. NLWA has the statutory responsibility for the safe transport and disposal of waste delivered to it.

- 2.2. For residual waste, since 1971 this has been predominantly at the existing Edmonton Energy from Waste facility (EfW). For decades, the facility has enabled north London boroughs to manage residual waste at lower costs than many authorities that rely on private sector disposal contracts. In addition, transport emissions associated with waste have been reduced by the facility being within the Authority's area. This meets the 'proximity principle'; north London's waste gets managed as close to the point of production as possible as per national planning guidance and Mayor of London's strategy. However, the facility is the oldest in the country and has exceeded its original design life. To ensure the ability to continue carrying out its statutory duty, the Authority began consideration of future waste management options in 2010³.
- 2.3. The Authority considered several approaches, including partnerships with private operators, developing a new facility outside north London, and redeveloping the Edmonton EcoPark through a publicly owned project.
- 2.4. Initially, NLWA pursued a Public Private Partnership (PPP) model. However, following detailed assessment, Members concluded in 2013 that a publicly financed and publicly owned redevelopment would deliver better value for money, greater local benefits and improved environmental outcomes than the increasingly expensive PPP option. As a result, Members approved the decision⁴ to pursue a planning application for a replacement facility at Edmonton, establishing the foundation for the North London Heat and Power Project. This decision was taken on the consideration of several factors, principally those below:

Supporting the circular economy

- 2.5. As indicated above, NLWA has the statutory duty to manage the waste collected by constituent boroughs, which represents about a quarter of all the rubbish and recycling in London. In line with the waste hierarchy, delivering the ERF forms part of the wider NLHPP investment. The dedicated facilities have been specifically designed to increase recycling and resource recovery performance across North London; the Resource and Recovery Facility (RRF) and the Reuse and Recycling Centre (RRC) have been designed to increase the amount of material that can be recovered and recycled before waste reaches the ERF. EcoPark House offers a thriving education and community centre to help North London residents recycle and reuse more. The redevelopment been designed to be compatible with future

³ Outline Business Case Report January 2010 can be viewed at:

https://www.nlwa.gov.uk/sites/default/files/inline-files/NLWA%20OBC%20012910_Final_Redacted.pdf

⁴ Decision taken in a Part 2 Paper on Residual Waste Treatment Strategy at the 12 December 2013 Authority Meeting.

carbon capture technology, with future development space earmarked within the EcoPark.

- 2.6. The North London Joint Waste Strategy 2025-2040⁵ establishes a clear commitment to managing waste in accordance with the waste hierarchy, prioritising waste reduction, repair, reuse and recycling, while ensuring that any remaining waste is managed using the most climate-friendly disposal option available. Evidence developed throughout the project showed that significant volumes of non-recyclable waste will continue to require treatment for the foreseeable future, even under scenarios with higher recycling rates and lower waste growth. National policy similarly recognises that, while waste prevention and recycling must remain the priority, some residual waste will continue to arise even under ambitious waste reduction scenarios. DEFRA's waste hierarchy guidance places energy recovery above disposal to landfill because it enables value to be recovered from unavoidable waste in the form of heat and electricity.
- 2.7. A range of alternatives were assessed, including landfill, exporting waste to facilities outside north London, refurbishment of the existing Edmonton plant, and alternative treatment technologies. These options were found to involve greater cost, environmental impact and delivery risk, while some technologies had not been proven at the scale required for north London's waste arisings.
- 2.8. The facility also contributes to North London's response to the climate emergency. The Joint Waste Strategy identifies reducing environmental impacts and tackling climate change as core objectives. The replacement ERF will use modern emissions control technology, generate energy and heat from unavoidable waste, and has been designed to be compatible with future carbon capture technologies. Managing residual waste locally also avoids the additional emissions associated with transporting waste over long distances for treatment elsewhere.

Strategic case for the ERF

- 2.9. The strategic case for the Energy Recovery Facility (ERF) has been reviewed and revalidated at a number of key decision points throughout the development of the North London Heat and Power Project. Assessments undertaken during the development of the residual waste strategy in 2013⁶, prior to implementation of the Development Consent Order in 2017⁷, during the 2021 ERF procurement process⁸, and most recently by officers in 2025. These have consistently concluded

⁵ North London Joint Waste Strategy 2025-2040 can be viewed at:

https://www.nlwa.gov.uk/sites/default/files/2025-12/north_london_joint_waste_strategy_2025-2040.pdf

⁶ Decision taken in a Part 2 Paper on Residual Waste Treatment Strategy at the 12 December 2013 Authority Meeting.

⁷ Decision taken in a Part 2 Paper on Future Residual Waste Management at the 7 December 2016 Authority Meeting.

⁸ Decision paper for the December 16 2021 Meeting can be viewed at:

<https://www.nlwa.gov.uk/sites/default/files/2021-12/03%20ERF%20Procurement.pdf>

that a publicly owned ERF at Edmonton represents the most cost-effective and environmentally sound option for north London boroughs.

- 2.10. A new Energy Recovery Facility at Edmonton continues to represent the most reliable long-term solution, maintaining waste treatment capacity within north London, reducing reliance on external operators and avoiding the environmental impacts associated with transporting waste elsewhere. The facility was also designed to recover both electricity and heat from residual waste, supporting wider environmental and energy objectives. Public funding of the project offers the prospect of reducing future inflationary pressure subject to attractive fixed rate borrowing continuing to be available to public sector entities.
- 2.11. An Energy Recovery Facility which provides both heat and power was decided by Members to be the most suitable option to deal with waste in north London and to secure the best environmental and financial outcomes. This included new facilities that would provide a community centre, new reuse and recycling facilities and a waste transfer station for resource recovery with modern odour controls.
- 2.12. **Environmental benefits:** A major objective of the ERF project is to deliver a significant improvement in environmental outcomes, going well beyond legal requirements and improving upon the already compliant performance of the existing EfW facility and alternative waste disposal methods. Through ownership and operation of the asset, NLWA can ensure standards that exceed those typically achieved elsewhere in the UK.
- 2.13. The new ERF incorporates advanced emissions control technologies, including Selective Catalytic Reduction (SCR), and enhanced flue gas treatment systems that go beyond normal practice. The facility is designed to achieve high emissions reduction performance, placing it among the best available in the UK and aligned with leading European practice. Emissions reduction and environmental benefits delivered by the new ERF include:
 - 2.13.1. NO_x emissions will be cut to less than 50% of existing facility levels using Selective Catalytic Reduction (SCR), the best available technology. This represents one of the most significant environmental improvements delivered by the project.
 - 2.13.2. Particulates; high-efficiency bag filters will remove more than 99% of dust, achieving particulate levels guidance.
 - 2.13.3. HCl and SO₂ acid gases; wet/dry scrubbers will neutralise corrosive gases, bringing emissions significantly below UK permitted levels and eliminating the spikes seen in older EfW plants.

- 2.13.4. Heavy metals; emissions of trace metals, including mercury and cadmium, will be kept well below regulatory thresholds through the use of activated carbon injection.
- 2.13.5. Dioxins and furans; modern combustion control, activated carbon and bag filters will reduce these toxic compounds to trace levels, well under UK limits.
- 2.13.6. Carbon monoxide (CO); improved combustion stability will keep CO consistently low, outperforming typical CO levels from UK ERFs and avoiding incomplete-burn emissions.
- 2.13.7. Organic compounds (VOCs); will be controlled through sealed waste handling and high-temperature combustion, resulting in very low VOC emissions.
- 2.13.8. CO₂; more efficient energy recovery and district heating will reduce fossil-fuel use.
- 2.13.9. Odour; waste bunker will be kept under negative pressure, and air is treated before release resulting in odour emissions being minimal and tightly controlled.
- 2.14. The ERF project has been developed to deliver significant direct and indirect emissions reductions. The new facility will not only exceed regulatory requirements but also provide a level of environmental improvement that is unlikely to be delivered through private sector investment alone. It will contribute to cleaner air, reduce climate impacts, and provide a modern platform for the long-term decarbonisation of north London's residual waste management. Additional environmental benefits include avoiding methane generation from landfill and reducing waste haulage distances.
- 2.15. **Heat Network:** The ERF has been designed to support district heating networks, providing a future source of low-carbon heat for local homes and businesses, helping to reduce reliance on fossil fuel heating. Existing infrastructure has already been installed to facilitate connection to the local heat network serving developments such as Meridian Water.
- 2.16. Taken together, these improvements will make the new ERF one of the highest-performing facilities of its type in the UK, delivering substantial environmental benefits for north London residents while supporting the transition to a lower-carbon future.
- 2.17. **Community Benefits:** The project also includes significant and ambitious social value commitments, with investment in skills, apprenticeships, employment

opportunities and community facilities including 100 apprenticeship years (reported in this way as some apprenticeships are multiple years). EcoPark House provides a permanent education and visitor centre, serves as a home for the Edmonton Sea Cadets, and supports public engagement with the circular economy and wider sustainability initiatives.

Public Consultation and Planning Process

- 2.18. Because of its scale and national significance, the project required a Development Consent Order (DCO). Between 2014 and 2015, NLWA undertook two extensive public consultations⁹. These included exhibitions, roadshows, community engagement activity, project websites, printed materials and direct consultation with residents, stakeholders and local organisations. More than 28,000 homes and businesses received information about the proposals. Feedback from consultation influenced a number of project design decisions, including:
- 2.18.1. Refinements to the design of EcoPark House.
 - 2.18.2. Inclusion of improved walking and cycling facilities.
 - 2.18.3. Selection of air-cooled condensers to avoid visible water vapour plumes.
 - 2.18.4. Enhanced commitments on emissions management and air quality controls.
- 2.19. Following consultation, a comprehensive DCO application was submitted in October 2015, supported by extensive technical, environmental, transport, health and waste forecasting evidence. The Planning Inspectorate conducted a six-month examination process involving statutory bodies, local authorities, technical stakeholders and members of the public. Following examination, the Inspector recommended approval, and the Secretary of State granted the Development Consent Order on 24 February 2017.
- 2.20. Alongside the planning process, members reviewed alternative waste management options. Following detailed analysis of costs, risks and environmental impacts, members confirmed that delivery of the North London Heat and Power Project represented the preferred long-term solution for managing north London's residual waste.

⁹ The Consultation Report can be viewed at: <https://northlondonheatandpower.london/project/development-consent-order-archives>

ERF Main Contractor Procurement

- 2.21. The ERF procurement was a major public procurement undertaken between 2020 and 2021 to appoint an Engineering, Procurement and Construction (EPC) contractor for a new Energy Recovery Facility at Edmonton EcoPark.
- 2.22. The Authority adopted the National Agreement for the Engineering Construction Industry (NAECI) for the ERF project to ensure nationally recognised employment standards were applied from the outset. Around 70% of the ERF's construction activities fell within NAECI scope, making formal registration the most appropriate way to safeguard pay, welfare, safety, and dispute-resolution arrangements. This decision reinforced the Authority's commitment to being an ethical client and provided visible assurance to stakeholders that workforce welfare and safety standards would be prioritised throughout delivery.
- 2.23. After assessing a range of delivery models, NLWA selected a single-lot lump-sum EPC contract, via Competitive Dialogue. The chosen form of contract was the IChemE Red Book as the contract basis for design, construction, commissioning and performance testing. A key feature of the procurement strategy was a balanced approach to risk allocation.
- 2.24. Overall, the strategy was intended to promote stronger market competition, transparent and competitive pricing, price certainty through a lump-sum contract, guaranteed operational performance and more effective management of delivery and integration risks over the project lifecycle. For example; the bidder would ultimately accept most NAECI-related delivery risks in an approach which aimed to provided clarity, fairness, and stability for both parties as the project moved into delivery. Further details can be found in the Authority report publicly available on NWLA's website: [03 ERF Procurement.pdf](#)
- 2.25. A thorough public procurement was carried out between July 2020 and December 2021 in line with legal requirements to secure a suitable delivery partner for the Energy Recovery Facility Project. Due to various factors including various world events, the highly complex procurement resulted in a single-bidder. NLWA took the appropriate advice, and the project team executed a rigorous benchmarking exercise, proving the proposal demonstrated value for money. The contract was ultimately awarded to ACCIONA in January 2022 following a competitive dialogue process, extensive market engagement, independent assurance reviews and a detailed value-for-money assessment.
- 2.26. NLWA's procurement strategy was based on:
 - 2.26.1. Compliance with the Public Contracts Regulations 2015
 - 2.26.2. Achieving value for money for North London residents

- 2.26.3. Maintaining market competition where possible
 - 2.26.4. Allocating risks to the party best able to manage them
 - 2.26.5. Securing long-term operational performance guarantees; and
 - 2.26.6. Ensuring fair employment practices through adoption of NAECI standards.
- 2.27. The procurement took place during a period of significant market volatility following Brexit and Covid-19. Energy-from-waste suppliers were facing inflationary pressures, supply chain uncertainty and constrained contractor capacity. Given the scale and complexity of the build; a six-month period was allowed for contractors to prepare materials for their bid submissions. As a result of various factors; NLWA faced a single bidder situation. Legal advice confirmed the procurement could continue with ACCIONA as a single bidder. However, additional steps would be required later in the process to demonstrate value for money. This decision and a risk analysis were presented to Members as part of the approval report.

What NLHPP has already delivered

- 2.28. While the ERF is the current focus, in 2024 Edmonton EcoPark saw the opening of facilities which represent a major public investment in recycling, reuse and community engagement. They provide practical infrastructure to support waste reduction and recycling, while creating opportunities for environmental education, skills development and community participation that will benefit north London residents for decades to come. These are:
- 2.28.1. A Resource Recovery Facility (RRF) to manage bulky waste and other material and maximise recycling from them. The RRF facilitates the bulking of recycling and organic waste for onward transport, extracts recyclables from residual waste, and prepares bulky waste for energy recovery. In its first year of full operation, around 170,000 tonnes were processed through the facility. The RRF is also equipped with a large solar panel array on its roof allowing the facility to substitute power from the national grid with a sustainable energy source.
 - 2.28.2. A public Reuse and Recycling Centre (RRC). This well used state-of-the-art facility allows residents to bring their recycling directly to the EcoPark 12 hours a day, seven days a week, and accepts more than 25 types of waste for recycling or reuse. Many of the features have been selected to enhance the safety of residents in the building.
 - 2.28.3. EcoPark House, the new education and community centre and home of the Edmonton Sea Cadets welcomed its first visitors in December 2024 and was formally opened in June 2025. The centre is well used and has welcomed over 1,000 school children in the last year.

- 2.29. The Edmonton Sea Cadets have recognised that EcoPark House provides them with an excellent long-term base and they currently occupy the ground floor of EcoPark House. Since opening, the base has welcomed cadets from across North London, including Enfield, Haringey and Waltham Forest. This summer, Edmonton Sea Cadets has provided opportunities for local young people, including those who may not otherwise have access to boating and outdoor adventure activities. Through rowing, power boating and water safety training, cadets develop valuable life skills including teamwork, leadership, resilience, confidence and personal responsibility. By providing safe, structured and engaging activities on the water, Edmonton Sea Cadets continues to make a significant contribution to the development of young people throughout North London while promoting maritime skills, water safety and community engagement. Please see figure 1 below.



Figure 1: Sea Cadets on the water

3. **GOVERNANCE**

- 3.1. As indicated above, NLWA has the statutory responsibility to make disposal arrangements for waste delivered to it by the constituent boroughs. NLWA is therefore the legal entity which promoted the application for the Development Consent Order and is the contract awarding authority and client for all contracts to construct and operate the new facilities. Decisions in relation to the project are therefore made by the Authority's Members within the context of the Authority's Standing Orders. Decisions are informed by advice and recommendations from Authority officers, and it is officers' responsibility to implement decisions with delegations as determined by Members.
- 3.2. While the governance is clear that responsibility lies with the Authority, NLWA is funded by constituent boroughs, and the boroughs rely on NLWA to provide continuity of service and cost effective carrying out of NLWA's responsibilities. There are therefore longstanding arrangements at officer level involving

particularly finance directors and environment directors under which NLWA officers keep borough opposite numbers informed of developments, take challenge and advice and consult in the run up to key decisions. The Authority has finance, legal and environmental advisers appointed from the boroughs and they have chaired the groups which have coordinated dialogue and information sharing on the project.

- 3.3. NLWA officers are accountable to Authority Members and do not have a formal reporting line to boroughs. However, Members have agreed that officers should accept invitations to attend scrutiny committees in boroughs and other meetings organised by boroughs as appropriate to ensure that there is transparency in NLWA's activities.

4. DELIVERY ARRANGEMENTS FOR THE NEW ERF

- 4.1. After DCO consent was obtained, NLWA set up a dedicated programme delivery team, led by NLWA officers as 'the client', for delivery of the NLHPP Programme. The Authority's programme delivery team is an integrated multidisciplinary team encompassing delivery, management, technical, legal, financial and commercial.
- 4.2. NLWA officers are supported by a range of expert advisers, including project and programme management, engineering, architecture, planning, finance, communications, and legal. This allows NLWA officers to take forward its client responsibilities, implement decisions under delegation and advise Members based on input from well-informed views, with a clear line of accountability. The NLHPP team is led by an acting Programme Director who is supported by approximately 60 full-time equivalent staff working on NLHPP, principally on the ERF.
- 4.3. The acting Programme Director regularly reviews the requirement and managing resourcing. The embedded team is made up of advisers who ensure the project is managed robustly, efficiently and provides a high level of assurance. These include:
 - 4.3.1. ARUP: Programme and project management, environmental, cost and commercial and project controls support. Deliver project and programme management, specialist advice, modelling, and short-notice call-off expertise. Manage project controls including risk, schedule, cost and commercial management and reporting.
 - 4.3.2. Ramboll: Engineering assurance and specialist technical input to support structural, civil and process engineering reviews across NLHPP assets. Ensures the ERF will be commissioned correctly and operate efficiently.
 - 4.3.3. Grimshaw: Architectural services who check visual identity and compliance ensuring the ERF interfaces correctly with the wider EcoPark and adherence to Development Consent Order.

- 4.3.4. WSP: Waste and engineering adviser. Support for transport, utilities, compliance and technical assurance.
 - 4.3.5. AECOM: Stakeholder Management and Social Value support and advice.
 - 4.3.6. Stephenson Harwood: Legal support, in conjunction with NLWA Legal team. Provide contract, procurement, dispute and governance advice, including contract interpretation.
 - 4.3.7. Willis Towers Watson: Insurance adviser — ensures appropriate insurance structures, risk transfer, and market-tested coverage for NLHPP.
 - 4.3.8. LEL: who currently operate the existing Energy from Waste (EfW) plant and will operate the ERF are embedded in the project and advise on the operability of the new plant, to ensure commissioning runs smoothly.
 - 4.3.9. Colleagues from NLWA: embedded in the delivery team; with a dedicated Health and Safety manager, Asset Management, Strategy and Services, Finance and Legal heavily embedded.
 - 4.3.10. Other specialists are engaged when required, currently NLWA have a NAECI specialist adviser who liaises and upskills the wider team, to optimise opportunities.
- 4.4. The team work together to undertake the duties as required in the contract and consider and advise the Programme Director accordingly. Decisions are taken within the project, escalated to NLWA or when required taken at full Authority meetings. The management is arranged in line with best practice and reviewed regularly.

NLWA and ACCIONA responsibilities

- 4.5. There is a single Engineering Procurement and Construction (EPC) contract covering all civil engineering and technical requirements, so ACCIONA is responsible for delivering the project as a complete design-and-build solution; design, engineering, procurement, construction, commissioning, testing, operator training and handover requirements for the new ERF including all buildings, infrastructure and works. NLWA will retain responsibility for the operations of the waste management facilities thereafter and LondonEnergy Ltd (the Authority's wholly owned public company) will operate the new facility.
- 4.6. NLWA also has responsibilities; the Authority has specified the requirements of the project, and it is ACCIONA's responsibility to secure the operation of the facility to meet the Authority's specification. NLWA's main contractual responsibilities are to provide defined documentation, facilities and services for the required for ACCIONA to carry out and complete the works, including ground

condition surveys and records and permits. There are also deliverables such as access to the site, welfare facilities, temporary services, insurance, utilities connections, and groundwater monitoring. Also, at the time of commissioning the new ERF; NLWA will supply the waste for the take-over tests and specified operational staff in the lead up to NLWA taking the plant over. Also to provide some training and the delivery of a Schools Programme.

4.7. In line with the form of contract; NLWA robustly manages the project and has exemplar record keeping. As part of this process, NLWA works with ACCIONA on early issues (Early Warning Notices), decide on entitlements to payments and engages in the contractual communication process 'General Communications' where issues are raised and responded within the contractual bounds.

4.8. Along with the contract, NLWA has:

4.8.1. **Assurance processes:** NLWA's professional team carefully check progress and provide monthly assessments and reports to enable senior leadership decision makers to have informed discussions with ACCIONA and fully understand progress and issues. To ensure the ERF will perform well through commissioning and operations, NLWA uses industry best advisors to perform duties such as approve the technical designs.

4.8.2. **Statutory obligations:** As the client for the project, NLWA must discharge a range of statutory duties and regulatory obligations throughout the delivery of the programme. These include responsibilities under the Construction (Design and Management) Regulations 2015, environmental permitting and planning requirements, health and safety legislation, procurement law, equalities duties, and other applicable legal and regulatory frameworks. NLWA maintains appropriate governance, assurance and oversight arrangements to ensure these obligations are met and that the project is delivered in compliance with all relevant legislation.

5. CONSTRUCTION OF THE ERF

5.1. Construction on site focuses on the ERF delivery, which is 60% complete. The ERF is multi-building, designed to treat up to 700,000 tonnes of north London's residual (black bag) waste per year. Waste will be processed through two combustion lines with boilers, and export electricity and heat. There are several other components required with much work being delivered in tandem; logistical planning remaining a complex challenge. Health and Safety (H&S) is of the highest importance for both ACCIONA and NLWA, and the excellent safety record continues. However, both ACCIONA and NLWA are not complacent, with the site labour levels increasing additional focus is being placed on various aspects of H&S. A plan of the ERF site and details of the sequencing is below.

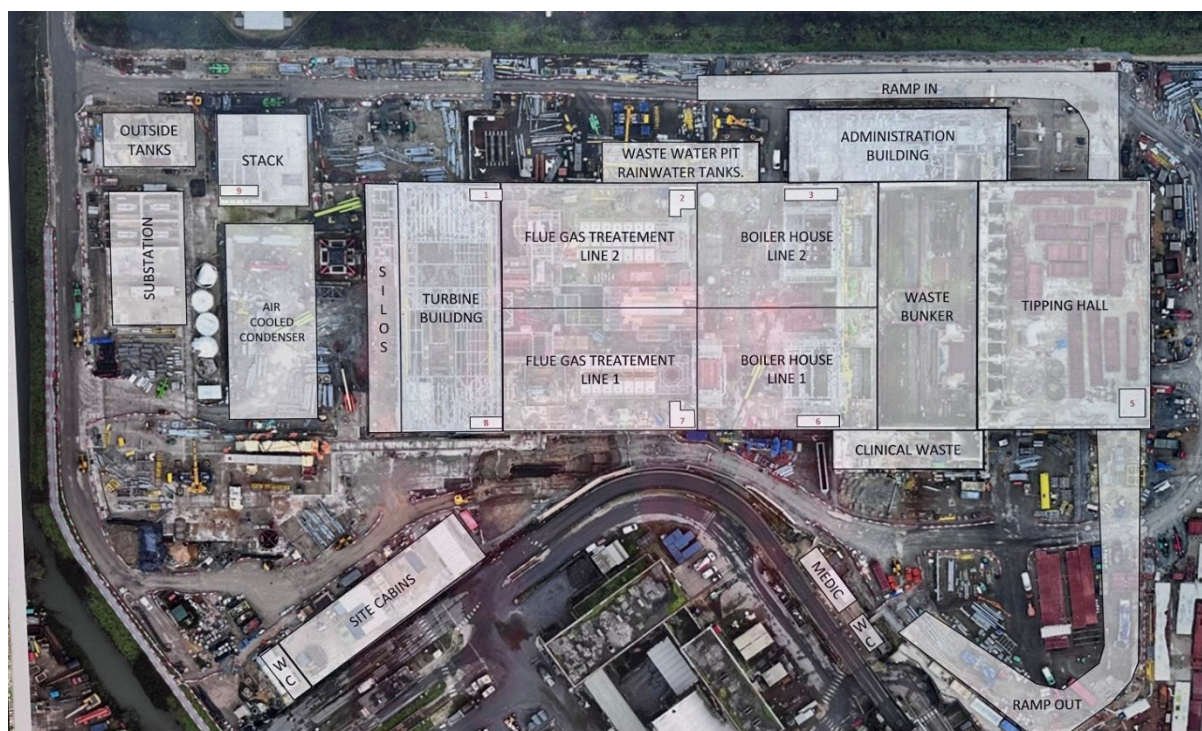


Figure 2: Schematic of ERF

Completed works

- 5.2. Since commencing in 2022; site clearance, welfare facilities, major utility diversions, ground preparation is complete. Groundwork and piling followed, with new access roads and ramps completed as well as the provision of a new transport yard off site for LEL's fleet to free up space at the EcoPark. Off the site, the engineering component has taken place as the plant is carefully detailed and plans prepared ahead of procurement and fabrication; this is largely complete. The procurement of the different materials and plant is progressing, with storage at the site and off-site at dedicated laydown areas.

Current works

- 5.3. Once preparatory works were complete; buildings commenced with the tipping hall, to which borough vehicles drive up, tip their load, then exit, now largely complete. The bunker, where waste is dropped, goes 14-metres deep, which is about the depth of a 4-storey building. The bunker has the concrete and steelwork complete with the fit out of required kit taking place now.
- 5.4. The administration building which is adjacent to the plant is progressing well with temporary cladding in place to allow for internal works. This building includes the control room for operations and office space for LondonEnergy Ltd staff. It will also include a visitor's area to support public tours. Under the building is where bottom ash from the incineration process will collect. This by-product is primarily used as a sustainable alternative to virgin materials in construction and civil engineering. It

serves as aggregate in concrete, asphalt, and concrete blocks, and is widely used for road construction, embankment fill, and landfill capping.

- 5.5. The team is heavily focused now on installing the two boilers, which are on the critical path, that will power the plant and as well as installing the equipment to remove air pollutants. Please see photo below in Figure 4.
- 5.6. Work on the Flue Gas Treatment Process building is progressing. Half of this building will be taken up by emissions control technology; best-in-class and proven technology for controlling particulates. Most of the specialist equipment needed to process waste and clean emissions has already been manufactured and is ready for installation. Critical process equipment installation has already begun, including assembly of the economiser for one of the two boilers and the bag filters within the Flue Gas Treatment (FGT) system; marking a major transition from civil construction to operational systems.
- 5.7. The substation is where the transformers will sit; converting the energy made by the ERF to be used locally on site, through private wire deals negotiated and sold to the grid. The stack will rise to approximately 100 metres above the ground when complete. It sits on deep pile foundations that go nearly 30 metres below ground and will be fully cladded. Other important supporting infrastructure includes
- 5.8. Water storage tanks store the facility's incoming water and feed the boilers that generate steam and electricity. They support cooling, cleaning, and treatment systems to ensure the ERF can operate safely and continuously. The water storage tanks store the site's main water supply for boiler feedwater to generate steam and power, cooling, cleaning, and other essential plant processes.
- 5.9. Significant progress has been made on the turbine hall walls ahead of the steam turbine generator's arrival. The turbine generates electricity by using steam produced from waste heat. A major milestone was met in early August with the delivery of the steam turbine to site.
- 5.10. At the southern end of the site the silo deck slab has recently been completed, and silo installations have been completed, as seen in figure 3 below. These residue silos provide the powdered additives which help clean the flue gases of heavy metals, dust, dioxins and sulphur within the semidry reactor and filter baghouse resulting in very low emissions to air. Other works continue to support the facility including the substation, drainage networks, the firewater ring main, and road sections continue to progress.

Works yet to be completed

- 5.11. Complete the assembly the boilers, flue gas treatment (FGT) systems, turbine and supporting infrastructure. Integrate the electrical, control, safety and automation systems. Cold commissioning will test the systems without waste. Hot

commissioning will then use waste to fire the boilers and will include emissions testing, optimisation and reliability trials. Finally, the turbine will be connected to the national grid, and the heat network will be commissioned, and transition to full operations will be complete.

- 5.12. Site demobilisation including the removal of temporary cabins, medic, and construction compounds will allow for final landscaping and the existing EfW plant will be decommissioned and demolished. There is also a smaller project to widen the southern access road which is programmed later to optimise the delivery.



Figure 3: Silos (blue) in place, and stack progress July 2026



Figure 4: Left Boiler Line 1, right Boiler Line 2

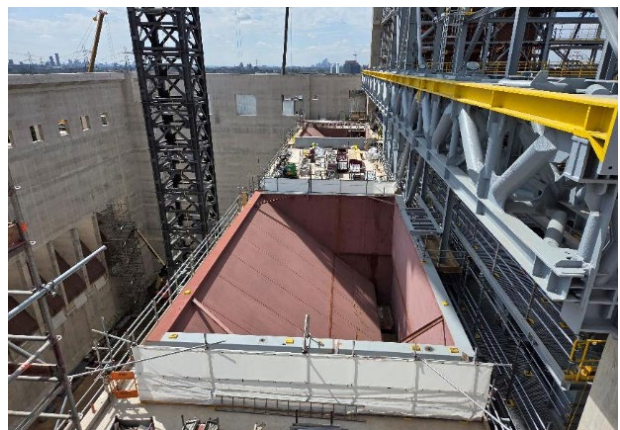


Figure 5: Silo valves and feeders, right waste hoppers for boilers

6. DELIVERY CHALLENGES

- 6.1. Having been awarded the contract in January 2022, the first months of ACCIONA's activity was to pull together and mobilise their team and take forward early work with their suppliers including beginning design work with their sub-contractor. Construction activity began on site in September 2022. The first contracts were for civil engineering activities with the main contractors being employed Galldris (based in Enfield), Billington (a FTSE 100 company) and since construction ERF began in September 2022, significant progress was made on the civil engineering, concrete and structural works. However, during late 2023 and early 2024, concerns emerged regarding the mobilisation of specialist mechanical and electrical (M&E)

works, which are critical to completing and commissioning the facility. ACCIONA reported difficulties attracting contractors and these challenges began to affect programme confidence and as reported publicly; raised concerns about achieving the contractual completion date.

- 6.2. The NLWA client team maintained active oversight, assessed the reporting which came through from ACCIONA and used the internal professional advisors to fully understand the situation and advise on options. As delivery concerns increased, the Authority intensified scrutiny of procurement activity, labour mobilisation and programme assumptions, seeking assurance that Acciona could deliver the project successfully under the existing contractual arrangements. By mid-2024, delays of approximately four to five months were being reflected in programme reporting, and confidence in the contractual completion date had reduced.
- 6.3. In June 2024, NLWA and ACCIONA agreed to enter into discussions to continue progressing construction while exploring potential solutions to the emerging delivery challenges and attempting to resolve growing commercial disagreements.
- 6.4. Discussions concluded in January 2025 without agreement on any proposed revised contractual arrangements. NLWA's position was that any revised arrangements must improve delivery certainty, maintain appropriate contractor accountability and demonstrate value for money for boroughs. To inform future decisions, NLWA commissioned an audit of ACCIONA's performance in February 2025.
- 6.5. The audit examined contractual compliance, project management, engineering, procurement, risk management, programme delivery and cost to complete. The findings, reported to members in June 2025, identified that the project was likely to complete later than originally planned and at a higher cost than anticipated, while also confirming the need for improvement in areas of delivery and management.
- 6.6. Alongside the audit, borough engagement was refreshed with a borough steering group established to support and provide independent challenge, oversight and advice to the Authority's team. Following an independent review of available options, and with the support of Authority Members, a senior stakeholder group led by the Clerk took on an intensive supporting role to lead senior level dialogue and negotiations with ACCIONA in late 2025 and early 2026 and review the best route forward for delivery of the facility.
- 6.7. NLWA have continued to work with ACCIONA to seek a mutually acceptable position to improve the delivery position. This is to increase programme and cost certainty and resolve disputes and contractual disagreements between the Authority and ACCIONA. Discussions have been challenging, reflecting the importance of the issues commercially and logistically. However, there is the potential for a constructive resolution for Members to consider in the near future.

7. COST AND RISK POSITION

- 7.1. Due to the scale and complexity of the North London Heat and Power Project, delivery was divided into a series of construction projects each with its own scope and budget, which collectively make up the overall programme.
- 7.2. The programme includes construction of the Energy Recovery Facility (ERF), which is the largest and most significant element of the project, alongside enabling works, site infrastructure, utilities diversions, access improvements and the future decommissioning of the existing Energy from Waste (EfW) facility. The earliest projects focused on site preparation, creating construction access routes and diverting utilities. The first permanent operational facilities delivered were those within EcoPark South, comprising the Reuse and Recycling Centre (RRC), the Resource Recovery Facility (RRF) and Education Centre, which were completed in 2024. Other completed projects include the laydown areas, northern access works, transport yard relocation, sewer diversions and Northern Area Clearance. The primary focus of the programme is now the completion of the ERF, supported by the ongoing delivery of the Utilities Corridor and DNO Main Services, Southern Access Widening, and the planned decommissioning and demolition of the existing EfW facility.
- 7.3. Alongside these projects, a number of programme-wide activities and costs continue to be managed centrally to support delivery of the remaining works.
- 7.4. The overall programme budget comprises a range of cost categories. In addition to construction costs associated with individual projects, the budget includes allowances for both client and contractor risks, contingency costs, project and design fees, technical and professional advisors, programme management, and other development and delivery costs, including third-party and London Energy Limited (LEL) costs. Third-party costs are costs incurred by external organisations in support of the programme, including utility providers, statutory bodies, landowners and other organisations whose services or works are required to enable project delivery.
- 7.5. While some costs are directly attributable to specific projects and are managed at project level, others support the programme more broadly and are therefore managed centrally. Together, these costs provide a complete picture of the expected cost of delivering the programme.
- 7.6. To support effective oversight, NLHPP programme costs and risks are monitored, reported and forecast monthly, providing visibility of expenditure, key risks and the expected overall cost of delivery.
- 7.7. Officers propose that future Programme Committee meetings receive a regular ERF update report, providing an overview of expenditure during the period, progress

against delivery plans, key achievements, and the implications for the programme's overall budget and the expected final cost.

8. EQUALITIES IMPLICATIONS

8.1. There are no equalities implications.

9. COMMENTS OF LEGAL ADVISER

9.1. The Legal Adviser has been consulted in the preparation of this report and comments have been incorporated.

10. COMMENTS OF THE FINANCIAL ADVISER

10.1. The Financial Adviser has been consulted in the preparation of this report and comments have been incorporated.

List of documents used:

None

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APPENDIX A**GLOSSARY OF ABBREVIATIONS**

Abbreviation	Definition
AFR	Accident Frequency Rate
BPIC	Black People in Construction
CDM	Construction Design and Management
EDI	Equality, Diversity and Inclusion
EfW	Energy from Waste
ERF	Energy Recovery Facility
HSE	Health, Safety and Environment
ICE	Institute of Civil Engineering
KPIs	Key Performance Indicators
LEL	LondonEnergy Ltd
NAECI	National Agreement for the Engineering Construction Industry
NLHPP	North London Heat and Power Project
PIM	Project Insights Manager
POWRA	Point of Work Risk Assessment
PPE	Personal Protective Equipment
PPM	Project and Programme Management
RFPF	Recycling and Fuel Preparation Facility
RIDDOR	Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013
RRC	Reuse and Recycling Centre
RRF	Resource Recovery Facility