



PROGRAMME COMMITTEE  
PROJECT BRIEFING

# NLHPP Update and Reports

16 March 2023

# 1



# North London Heat and Power Project

Document Details	
Document Number	NP-ARP-XXXX-XXX-RP-ZZ-090552

	Owner's Organisational Approval	Check & Review	Approval for Use
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Date	06/03/2023	06/03/2023	06/03/2023

Revision Record		
Revision No.	Date	Description of Revision
P02	08/03/2023	Programme Committee Project Briefing.

## **1. INTRODUCTION AND PURPOSE**

- 1.1. The North London Heat and Power Project (NLHPP) is the programme of works authorised by Development Consent Order (DCO) 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 and transfer of waste, incorporating a public Reuse and Recycling Centre, EcoPark House (EPH), a visitor centre which will be used to provide community / education space and back up office space. In preparing for and carrying out the works in the NLHPP programme, the management team is working closely with LondonEnergy Ltd (LEL) the operators of the EcoPark and the current EfW plant.
- 1.2. This status report provides Members with an update on progress of the NLHPP. The report structure provides a narrative in the main body with supporting information in appendices.

## **2. PROGRAMME DIRECTOR'S SUMMARY**

- 2.1. This report encompasses project activities throughout February 2023.
- 2.2. The project continues to be on track to deliver to its overall cost and programme objectives defined in the baseline agreed in March 2019, aimed at takeover of the ERF in 2026.
- 2.3. Acciona continue to progress well with critical activities in line with their programme. Off-site, procurement of key mechanical, electrical and process equipment is progressing well. Construction activities remain ahead of schedule. However, the piling programme was temporarily halted at the beginning of February following the discovery of some unexpected ground conditions which threatened the ability to pile safely in a localised section of the site. This necessitated remedial work to provide a stable surface for the piling rigs. Piling work will recommence when it is demonstrably safe to do so.
- 2.4. Acciona have recently appointed Byrne Brothers to carry out the permanent civil engineering and reinforced concrete works. To accommodate the growth in construction workforce, Acciona have expanded the office accommodation and welfare provision in the Laydown Area.
- 2.5. Elsewhere on site, the RRF team have successfully completed the Western Road construction and handed it over to LEL. This has enabled the EcoPark's southern entrance to be re-opened to waste operational traffic. Inside the RRF, the internal lighting in the tipping hall has been tested and commissioned. This is a significant milestone in the commissioning programme with LEL. The handover of the facility to LEL to start receiving waste has suffered a delay and is now forecast for mid-

June, in light of greater clarity around the time needed for completion of the Supervisory Control and Data Acquisition (SCADA) system - the centralised controls system for all building functions.

- 2.6. To enable handover of the second phase of the ERF site to Acciona which involves demolition of the Temporary Bulky Waste Recycling Facility (TBWRF), a plan involving the off-siting of the management of bulky waste was successfully set to work, enabling the start of decommissioning of the TBWRF at the end of February. Proceeding with the timely demolition of the TBWRF also required an interim technical proposal for maintaining an ash handling capability at site. The Environment Agency have agreed to the interim proposal. These solutions have been achieved through close co-operation and communication between LEL, the NLWA and the Boroughs.
- 2.7. Following the launch of Acciona's RE-Power Communities funding initiative, fifteen successful organisations in Enfield, Haringey, and Waltham Forest were awarded funding and volunteering hours by Acciona. The successful organisations in this first round of awards include local groups which support disadvantaged young people at risk, charities working with people with disabilities and those working to improve greenspaces. Organisations supporting career and training development were also successful, as were initiatives that provide food packages to support local families who are struggling financially due to the cost-of-living crisis. The second round of funding will be carried out in Summer 2023 and open to applications from across all seven north London boroughs.
- 2.8. In relation to our collective commitment to carbon reduction, the pallet loop scheme is now established on the project. The Pallet loop scheme is a deposit-based supply chain solution scheme that enables the recovery, repair and reuse of pallets in the construction sector. Damaged or unwanted pallets are collected by Pallet Loop for repairs and recirculated as new pallets. This reduces the need for use of virgin timber, reduces construction waste, contributes to the circular economy and saves carbon associated with production of new pallets. The EcoPark South (EPS) project is currently using pallet loop for the collection of pallets.
- 2.9. Health, Safety and Wellbeing performance was good during the reporting period, with construction activities well managed, coordinated and controlled.

### **3. SOCIAL VALUE**

- 3.1. In accordance with the Programme Committee's desire to have a more in-depth review on social value, this has been provided in a separate report on the agenda.

### **4. COMMUNICATIONS AND STAKEHOLDER ENGAGEMENT**

- 4.1. Across the period there has been increased engagement with local groups, and the communications team continue to offer opportunities for briefings.

- 4.2. Following the launch of Acciona's RE-Power Communities, 15 organisations delivering community initiatives in Enfield, Haringey and Waltham Forest were selected from 30 applications. The organisations were announced on Wednesday 9 February. Borough officers, local ward councillors and Members of Parliament have been notified that these local organisations were successful. Continued social media presence on the opportunities with RE-Power Communities has been shared and will continue as initiatives are delivered.
- 4.3. The latest Community Liaison Group meeting was held on Wednesday 15 February with representatives from the local area participating. The group discussed the recent awards of RE-Power Communities and the most recent construction updates from the EcoPark South and Energy Recovery Facility projects.
- 4.4. The next community newsletter was issued in February to 28,000 households near the site for the Spring edition. There was a specific focus on the local groups that benefited from RE-Power communities' grants and how local women can sign-up for women in construction training placements that are being promoted with Acciona. A copy of the newsletter can be found on the project website community page at [northlondonheatandpower.london/community](http://northlondonheatandpower.london/community).
- 4.5. National Apprenticeship Week and National Careers Week have been key opportunities to promote current apprentices, training placements and schools engagement with the local community. Social media showcases and profiles of existing employment opportunities have been made and the team continue to engage with boroughs directly to share about open opportunities.
- 4.6. EcoPark tours have continued to showcase the progress onsite across the winter period. Two attendees visited in January and further options are available across February and March for Councillors to visit and find out more about the developments onsite.
- 4.7. The communications team continue to engage with borough communication colleagues to convey key opportunities and successes on the North London Heat and Power Project through their networks.

## **5. PROJECT DELIVERY SUMMARY**

- 5.1. This section summarises progress in delivering the new facilities that comprise the North London Heat and Power Project which are:

the Energy Recovery Facility (ERF),  
the Resource Recovery Facility (RRF) and  
EcoPark House.

The overall summary below highlighting progress on each and other supporting works is followed by a short project report on each facility.

- 5.2. The construction progress of the ERF by Acciona has been affected in the short term by the emerging of voids along the piling line. Piling has stopped whilst this is being investigated and implications understood. Overall Acciona reports that it remains on track for takeover of the ERF by NLWA in the autumn of 2026. Acciona have recently appointed Byrne Brothers to carry out the permanent civil and structural engineering works. The office space and welfare provision in the Laydown Area has been expanded to accommodate the growth in construction.
- 5.3. Waste management activities have been moved off site as planned to enable LEL to vacate the Temporary Bulky Waste Recycling Facility (TBWRF). Decommissioning by LEL has completed and the demolition programme commenced at the beginning of March. Good progress has been made with the civil engineering infrastructure that enables weighbridges currently in the ERF construction footprint to be relocated. These are key steps towards giving Acciona the second phase of site access in June 2023.
- 5.4. The challenge of providing continuity of bottom ash processing by LEL on site has made progress with solutions identified and agreed with LEL. Designs for temporary facilities are being completed and instructions given to Taylor Woodrow to construct.
- 5.5. Acciona continues to place orders for the process equipment such as the steam turbine which is now on order. Having key suppliers appointed enables Acciona to validate their complex sequence of planned site installation dates.
- 5.6. The Western Road construction by Taylor Woodrow has been completed, enabling the EcoPark's southern entrance to be re-opened to traffic. Inside the RRF, the internal lighting in the tipping hall has been tested and commissioned. This is a significant milestone in the commissioning programme. The construction activity is focussing on the external working and good progress has been made with the installation of the underground heating pipes that will supply Energetik's District Heating Centre from the ERF in due course.
- 5.7. Plans have been agreed with LEL to commence trial operation of the RRF in June 2023 and with a view to completing performance tests in September 2023. The provision of the RRF's automated systems and building control system is driving the availability of the facility and preventing an earlier completion date. The supplier's progress is being closely monitored by both Taylor Woodrow, as the Principal Contractor, and the NLHPP project team.
- 5.8. Cadent have started to mobilise themselves for the installation phase of their work to provide the new incoming gas main for the ERF, following their proposed route to the EcoPark through the local area. This work will be taking place over the next year.

5.9. Further details of progress of each major element of the project are provided in the following tables.



## Energy Recovery Facility (ERF)

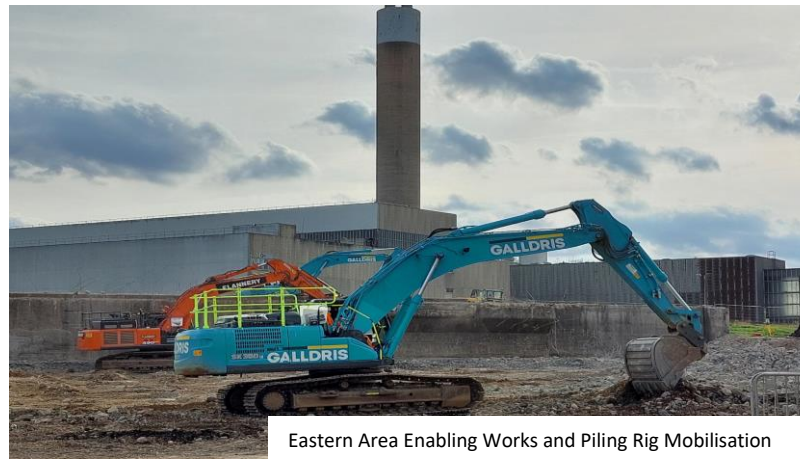
### Summary

Acciona continues to deliver the ERF project's critical activities against the approved programme, which remains on plan to achieve "take-over" into service in 2026. A successful return to work following the Christmas break has been achieved, with no incidents to report. During this period, the 'Mates In Mind' training sessions have continued with sessions delivered to office and contractor group with positive feedback.

The first round of RE-Power Community Project applications have been awarded. 15 training placements for the Women in Construction Programme from across the NLHPP Project Team have also been advertised with a reception for interested candidates held at site on 7<sup>th</sup> March.



Rig within the boiler building



Eastern Area Enabling Works and Piling Rig Mobilisation

### Successes and Milestones

Joint risk management between Acciona and the NLHPP project team continues to mature, with the second joint risk review been held during January 2023. The Site Working Group, chaired by LEL and attended by Acciona continues to effectively manage the EcoPark's logistics, traffic, operation and construction interfaces. A key achievement of this group has been the establishment of the transition plans for the TBWRF's decommissioning and demolition to enable handover of the remaining sections of site to Acciona.

The execution of the piles by Van Elle is progressing slightly ahead of schedule, even though weather conditions have affected the piling mats. During the period, the drainage of the Northeast zone and piling mat of the East zone has been completed and the formal handover of zone 4b to Acciona took place.

There has also been improvement in the parking arrangement by Acciona to accommodate Taylor Woodrow's extended occupation within the laydown area. The steam turbine is now on order and Acciona and the NLHPP's Technical Assurance Team continue to progress the technical specifications and orders for several critical items, which includes the stack, water treatment plant, waste and ash cranes and various BOP systems.

### Look Ahead

The mobilisation of the main civil works mobilisation will commence in March.

The procurement of the Air Cooled Condensor, lifts, water treatment plant, waste and ash cranes, deaerator, district heating heat exchanger and condensate preheaters will be progressed.

Van Elle will continue with the main piling works associated to the incinerator bottom ash and waste bunkers and boiler building.



## Resource Recovery Facility (RRF)

### Summary

The RRF is forecast to start receiving waste in June 2023. In the period, the Western Road was completed and handed over to LEL which was a significant achievement for the operation of the Ecopark provided good lessons learned for the subsequent handover of the RRF.

Across the period, the tipping hall lights were switched on and signified the project starting to commence the important Testing and Commissioning phase.



RRF drone shot



Handover of the West Road

### Successes and Milestones

The Western Road was successfully handed over to NLWA/ LEL which in turn enables LEL to bring in waste vehicles from the south gate.

The lighting to the tipping hall were switched on.

Commencement of the installation of the district heating pipework which will connect with the Energetik network. A successful site visit by the Environmental Agency took place in February 2023 to observe how the RFPF will manage noise and odour control.

Improved tipping hall roller shutter door protection has been designed following trialling at the TBWRF.

The off-siting of waste from the TBWRF (which decouples handover of the second phase of the ERF site from the RRF completion) was successfully commenced in February 2023.

Using the Building Research Establishment Environmental Assessment Method (BREEAM), RRF has so far attained a rating of Very Good as planned.

### Look Ahead

Commissioning of the odour control system and training of LEL commenced in February 2023.

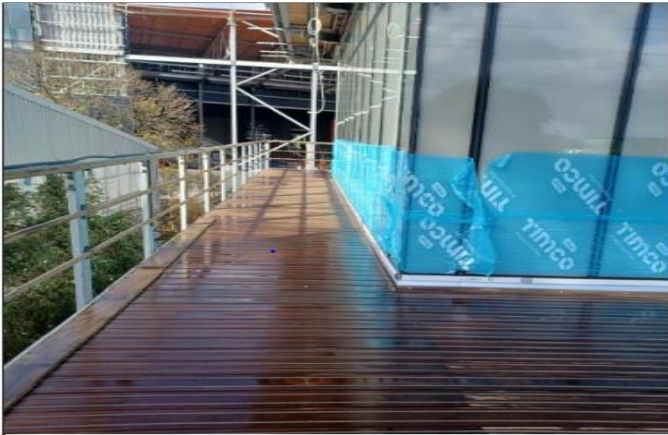
Handover of the RRF to NLWA and LEL is likely now to be June 2023.

## EcoPark House

### Summary

The construction of EcoPark House remains on plan to be completed in June 2023. Good progress has been made with both external and internal fit out of the building with MEP works making good progress.

The building will be independently powered “off-grid” and the equipment to enable this innovative solution has been delivered.



EcoPark House Timber Decking on Eastern Terrace.



EcoPark House glazing frames to classrooms

### Successes and Milestones

The green roof of the RFPF has been fully planted and the installation of the off-grid system is progressing well.

The external decking to the first-floor terrace has been installed.

The installation of the underfloor heating and raised access flooring has commenced.

Using the Building Research Establishment Environmental Assessment Method (BREEAM), EcoPark House has so far attained a rating of Very Good as planned.

### Look Ahead

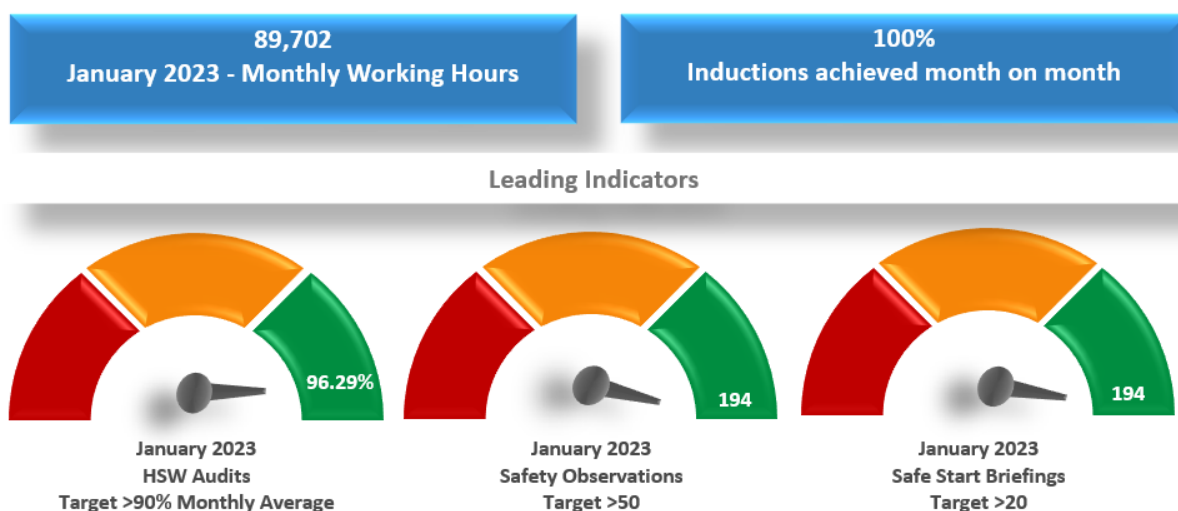
Commencement of testing and commissioning begins in March 2023.

The “off-grid” power supply is expected to be switched on in April 2023.

Completion of EcoPark House is planned to be June 2023

## 6. HEALTH, SAFETY AND WELLBEING (HSW)

- 6.1. Confidence in HSW compliance remained good for the reporting period, with construction activities well managed, coordinated and controlled. There is a continued drive towards the highest standards, and this is reflected in good metrics for leading indicators (Health & Safety Audits, Safety Observations and Safe Start briefings). This is despite the fatality at the end of 2022, which continues to be investigated after the safe restart of work.
- 6.2. The Accident Frequency Rate (AFR) for reportable injuries in accordance with Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 2013 is at **0.096** for all projects. RIDDOR accidents must be reported where they result in an employee or self-employed person being away from work, or unable to perform their normal work duties, for more than seven consecutive days as the result of their injury.
- 6.3. The Lost Time Injury (LTI) Accident Frequency Rate (a performance metric that mirrors the RIDDOR description noted but uses a 3-day recordable injury baseline to measure performance for all projects) is also AFR **0.096**.
- 6.4. **Key Performance Indicators**



- 6.5. **HSW Audits:** Each construction area is inspected weekly with a minimum of 4 visits per live project during any month. The NLHPP targeted average compliance score is set at +90%. The recorded monthly average audit score for January 2023 period averages 96% reflective of the good levels of HSW performance. These in-depth inspections review contractor health, safety, and wellbeing compliance in specific areas for example: work at height, lifting operations, excavations, worker welfare etc.
- 6.6. **Safety Observations:** The total number of observations remain high with a total 194 recorded for January 2023, a good increase from the previous month. Within

these figures 43 positive behaviours and interventions were recorded which is reflective of the proactive initiatives (safe start briefings, audits etc) that are in place across the programme. We continually encourage reporting of observations (positive and negative) to support our drive for continual improvement. All observations are recorded and tracked to a satisfactory completion.

6.7. **Safe Start Briefings:** The number of prestart briefings delivered daily to the workforce remain consistently high and are primarily aimed at awareness of work hazards and ongoing daily site activities. These briefings are also utilised to undertake toolbox talks specific to the type of work being undertaken on the project.

6.8. **The HSW Working Group** met in the period and assigned several actions against previously agreed objectives, initiatives, and themes. The next session in February will focus on progress of actions set alongside review, closure and introduction of any further objectives.

## 7. ENVIRONMENT AND SUSTAINABILITY

7.1. The project continues to focus on environmental and sustainability considerations, working to successfully manage environmental risks and identify opportunities for enhancing sustainability performance.

7.2. There has been continued good performance against Environment and Sustainability (E&S) Key Performance Indicators (KPIs) with minimum targets either met or exceeded for EcoPark South Project, as shown below. Performance data across all KPIs are not yet available for the ERF; however the available ERF KPI information has been presented.



7.3. **Environmental Observations:** Our contractors continue to champion environmental and sustainability issues on site, through raising environmental observations and exceeding their monthly minimum target of two observations per contractor. Overall, 26 environmental observations were raised for EcoPark South and the ERF (7 positive and 19 negative). The high number of observations raised is consistent with previous months.

- 7.4. **Environmental Training:** Environmental training is provided to those working on site to reinforce positive site management procedures and any particular areas of focus for the project at that time. This training is predominantly provided through toolbox talks on site. Two toolbox talks were provided by Taylor Woodrow, covering waste electrical equipment and spill kit management. No ERF data on environmental training is currently available.
- 7.5. **Sustainable Materials:** Across the project 100% of timber delivered to site has been from recycled or sustainable sources as defined by Forestry Stewardship Council (FSC) standards. The target for this KPI is 100% of timber procured is from recycled or sustainable sources.
- 7.6. **Environmental Site Inspections:** Surveillance visits have identified that, in general, environmental items were being well managed in line with good practice. There were some areas for improvement in relation to use of spill kits and ensuring waste is appropriately segregated. The toolbox talks held respond specifically to the need for increased awareness of correct site practices in relation to these issues.
- 7.7. **BREEAM:** In line with our sustainability commitments, the project is required to achieve 'Very Good' (55%) rating in the Building Research Establishment's (BRE) Environmental Assessment Methodology (BREEAM) rating system, which provides a sustainability framework to deliver high sustainability performance across buildings whilst also creating positive environmental and social impact. Both EcoPark House and the RRF have currently achieved this rating and are targeting Excellent. The ERF is working towards this commitment.
- 7.8. **Environment and Sustainability Working Group:** The project E&S Working Group provides a forum to engage with contractors, to identify environment and sustainability improvements throughout construction delivery and provide a platform for communication. A waste focussed workshop was held in January 2023 to explore in more detail the waste-related lessons learned identified during the previous workshop. Discussions centred around waste management and circular economy opportunities, lessons learned and best practice. Input was provided by the NLHPP waste specialist, Taylor Woodrow and Acciona environment managers and project managers. Identified opportunities will be followed up.
- 7.9. **Sustainability Innovations, Opportunities and Best Practice:** Acciona are considering more than 60 potential innovations, opportunities and best practice. These largely relate to opportunities for reducing the embodied carbon associated with design of the ERF. The most feasible and deliverable opportunities will then be implemented on the project. No additional opportunities have been identified at present by Taylor Woodrow, however the contractor remains on track to achieve the project KPI which targets a minimum of 2 sustainability innovations, opportunities or best practice suggestions per contractor per quarter.

**8. EQUALITIES IMPLICATIONS**

- 8.1. There are no impacts on equality to be noted arising from the content of this report.

**9. COMMENTS OF THE 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.

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