

8. North London Heat and Power Project

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Overview

- 8.1** The North London Heat and Power Project (NLHPP) (the Project) addresses the need to replace the existing energy from waste (EfW) facility at the Edmonton EcoPark, which is reaching the end of its operational life. The Project includes design, construction and commissioning of an energy recovery facility (ERF), a resource recovery facility (RRF) to maximise the recycling of materials from bulky waste and other materials (including a new public reuse and recycling centre), and EcoPark House, which will provide a visitor centre and community space for local residents. EcoPark House will also be the home to Edmonton Sea Cadets.
- 8.2** The ERF will have a capacity for processing 700,000 tonnes of waste each year and will generate around 78 megawatts of energy (MWe). The energy will be directed to provide electricity to the national grid and to deliver heat to a local district heat network.

Benchmarking against the Project baseline

- 8.3** During 2020-21 the Project progressed well against baseline targets for cost schedule performance and remains on target.

Progressing the procurement programme

- 8.4** During 2020-21 the Authority has awarded, on programme, the construction contract for EcoPark South to Taylor Woodrow, and the site preparation contract for Northern Area Clearance to DSM Demolition.
- 8.5** The procurement for the ERF progressed with three construction companies being successfully shortlisted to the Invitation to Submit Detailed Solutions (ISDS) stage. The ISDS stage continued throughout 2020 and into 2021 with evaluations beginning in April 2021, and the subsequent dialogue stage planned to commence in June 2021. A contractor for the ERF is set to be named in early 2022.



Progressing the construction

- 8.6** The first major phase of construction started in January 2021 with Taylor Woodrow beginning works on EcoPark South, which includes the RRF, public reuse and recycling centre, and EcoPark House. Following mobilisation at the EcoPark, Taylor Woodrow carried out demolition and groundworks, with piling works commencing in March 2021, which reduced embodied carbon on this set of works by 10%.



Image 1: Piling works being undertaken on EcoPark South, North London Heat and Power Project

- 8.7** Enfield-based company Galldris Construction Ltd completed construction on three contracts: the temporary Transport Yard located adjacent to the EcoPark at Hawley Road, the northern access entrance from Deephams Farm Road and the sewer diversion enabling works.



Image 2: Completed new temporary Transport Yard

- 8.8** Buckingham Group Ltd. completed construction on the Laydown Area, which is being used by contractors to assemble materials before transporting them to the EcoPark. It also houses the workforce in newly built office and welfare facilities. Taylor Woodrow is the first contractor to use the Laydown Area; they began mobilising their workforce onto the site in January 2021.

- 8.9 Barhale, the contractor appointed to divert the Angel and Chingford sewers beneath the future RRF and public reuse and recycling centre, used an innovative construction technique, which successfully prepared the sewer ahead of schedule. The innovative approach also enabled Barhale to recycle water during the process, using 65% less water required to complete the work. The main sewer diversion is being carried out in May 2021.

- 8.10 Traffic management plans were developed and implemented for the EcoPark to manage construction and operational traffic in unison. Plans are continually reviewed and phased to update the routes, taking account of areas with a high volume of activity across the site.

- 8.11 An environmental assurance team has been introduced across the 2020-21 period to ensure NLHPP delivers a low-carbon energy from waste project, which delivers on environmental commitments and maximises enhancement opportunities, as well as to be a good neighbour by minimising impacts on our local communities.

- 8.12 In April 2021, a waste management review and audit was completed on all projects across the NLHPP programme to date. It focussed on compliance with waste duty-of-care requirements, and the project KPI of a minimum of 85% landfill diversion for all non-hazardous waste. The review indicated that contractors have processes in place to meet waste duty-of-care requirements, and across the project, the waste KPI is being exceeded with more

than 99% of waste diverted from landfill.

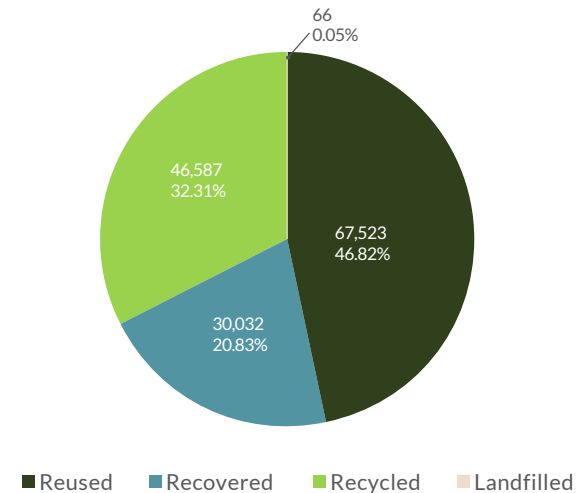


Chart 8: The waste management route (in tonnes and percent) across the project programme through April 2021

Managing the impact of COVID-19

- 8.13 The Project has had to address the impact of the COVID-19 pandemic and the evolving government advice in relation to both construction activity and the ongoing pre-construction development of the Project, including procurement of major contracts.

8.14 In relation to the pre-construction work the Project team adapted well to remote working through virtual communication/ collaboration techniques, maintaining the programmes for procurement of the ERF and the EcoPark South contracts.

8.25 In relation to construction activity the Project team carefully considered the risks to the Project around future safety and efficiency of operation. A COVID-19 taskforce was established with the contractors to develop the means by which an acceptable level of workforce safety could be achieved, taking into account:

8.15.1 Safe travel and accommodation, where required, for the workforce, including an improvement in the safety of public transport.

8.15.2 The ability to develop a coherent programme of on-site construction activities whilst complying with the current Safe Operating Procedures.

8.15.3 The availability of supervisory staff, materials, plant and services needed to support the programme.

8.15.4 The ability to develop risk assessments and method statements that do not compromise other health and safety requirements as a result of workforce availability and restrictions on close working.



Focusing on Health, Safety & Wellbeing

8.16 Health Safety & Wellbeing (HSW) has gone through a transition in the 2020-21 period with the introduction of a new team, focused on bringing best practice provisions to the Project.

8.17 A HSW coordination manual has been developed and incorporated into the programme and contracts. The manual outlines the HSW requirements of all NLHPP partners and suppliers in meeting the best practice standards aspired to. It sets out the roles of all parties, collaboration standards and how monitoring will be provided in pursuance of continual improvement.

8.18 HSW forums have been formed to engage and act upon feedback from the programme suppliers and partners. A HSW workers engagement forum feeds into the HSW working group, in turn making recommendation to the Senior Leadership Team on initiatives and improvements.

8.19 A HSW reporting tool has been developed in conjunction with the Information Management team. The tool front end collates HSW information from the NLHPP team, suppliers and partners on incidents, observations, KPIs, H&S audits, COVID-19 cases, and safety leadership tours. This information is then represented in dashboards confirming the level of compliance, positive and negative trends, and engagement, which inform the ongoing HSW initiatives / campaigns on the programme.

8.20 HSW has carried out the strategies developed from the COVID-19 taskforce, ensuring that the Project response to the pandemic is rapid and successful. Response strategies are intended to provide lines of defence to prevent spread of the virus and are continually reinforced among the project team. Strategies include:

8.20.1 Launch of 'beable' wearable proximity tracking and alert systems, which encourage users to maintain the two-metre social distancing guidance and tracks other devices, which come in proximity

8.20.2 Establishment of COVID-19 rapid antigen testing on-site for workers and visitors through Clarity Healthcare

8.20.3 Introduction of COVID-19 risk measures including, temperature checks, additional PPE, extra hand sanitiser, handwashing stations, and staggered work breaks

Developing the programme management capability

8.21 Having made the Project leadership appointments and established the structure of the integrated programme management team in the previous year, the Programme Director has focused on the proven requirements for the Authority to be a capable client owner to manage the delivery of the Project.



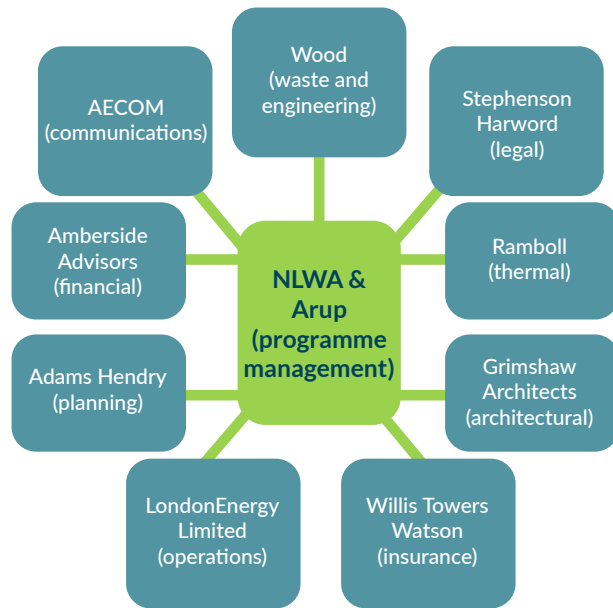


Figure 1: Programme management structure – North London Heat and Power Project

8.22 The Authority maintains a strong client-led programme management strategy using specialist advisory support, concentrating on:

8.22.1 Strong skills, behaviour and leadership: connecting with the vision; establishing clear decision-making channels; improving communications across the wider team; enabling a collective approach to problem-solving; and a focusing on the behaviours of leadership team.

8.22.2 Strong governance and alignment: maintaining effective project reporting and governance with clear accountabilities; working to a realistic performance baseline; prioritising stakeholder engagement within the community and boroughs; focusing on social value and employment relations.

8.22.3 Creating the right commercial environment: site preparation works were designed and contracted in multiple packages to encourage local supplier involvement; engaging and consulting with the prospective supply chain; using a progressive target cost outcome-led contract for the EcoPark South contract; developing a strong cost and commercial management capability within the client team.

8.22.4 Digital transformation: delivering the digital strategy for the Project which has prioritised establishing (i) a 'data hub' in a common data environment enabling 'single version of the truth' across all companies involved in the project, (ii) a Project communications portal to facilitate effective communications across the wider teams involved in the Project, and (iii) the use of a geographical information system (GIS)-based system for the capture and communication of technical information.

8.22.5 Championing a collaborative and inclusive culture: creating an Inclusion Strategy and implementation plan which set out the Project's priorities for building and maintaining an inclusive culture; developing a Collaborative Behaviours Framework that defines eight behaviours for contributing to effective collaboration on the Project; conducting virtual All-Hands Events to engage the entire Project team in real time to recognise and celebrate the diversity of talent and expertise on the Project; and launching a Reverse Mentoring Programme to exchange skills, knowledge and understanding across different organisations, helping colleagues stay socially connected whilst working from home.

8.22.6 Innovation: establishment of an innovation and continuous improvement awards scheme, Val:YOU, to record ideas and review ways to improve working practices and working together, encouraging submission of ideas to be recognised across the programme.

Increasing stakeholder engagement

8.23 As a public authority promoting a major construction project, it is a key priority to ensure that information about the Project is readily available to interested groups and individuals, and that information is accurate. During the year, the Authority has:

8.23.1 continued to keep the NLHPP website (northlondonheatandpower.london) updated. It includes extensive Project information, videos, frequently asked questions (FAQs) and information on Project announcements. It also provides clear information about what is planned for the EcoPark site, including the brochure northlondonheatandpower.london/project/;

8.23.2 responded to letters and emails from individuals or groups, addressing the specific points raised by them in connection with the Project; and

8.23.3 used social media to ensure that key facts about the Project are in the public domain. In the period April 2020 to March 2021 335 tweets were issued from the NLHPP twitter handle, with the following impact:

8.23.3.1 132,737 impressions (number of times a user saw an NLHPP tweet)

8.23.3.2 5,070 engagements (number of times a user interacted with an NLHPP tweet including retweet, reply, 'favourite')

8.23.4 Topics covered in social media posts included:

8.23.4.1 Procurement (contract awards, Meet the Buyers event)

8.23.4.2 ERF – emission controls, low-carbon energy

8.23.4.3 Wise up to Waste (waste prevention and recycling campaign) activities

8.23.4.4 Climate Emergency messaging

8.23.4.5 Project facts, newsletters, website details

8.23.4.6 Innovation on the project – for example, pioneering construction technique fast tracks the sewer diversion programme; innovative piling works reduce embodied carbon

8.23.4.7 Construction update video

8.23.4.8 Building benefits (social value benefits campaign) – apprenticeships and training, local and small business participation, job opportunities

8.23.4.9 Community engagement – regular Community Liaison Group meetings

8.24 During 2020-21, 43 press releases were issued to the media at key points in the Project. This includes 32 proactive and 11 reactive press releases.

8.25 In the same period, the Authority produced and circulated two community newsletters to 28,000 homes and businesses, and one construction newsletter to 19,000 properties near the EcoPark. All newsletters can be found on the Project website here: northlondonheatandpower.london/community/

8.26 During the pandemic, NLWA put community roadshows on hold, but maintained public engagement virtually through ongoing Community Liaison Group meetings, and digital engagement through social media and e-newsletters.

Employment relations and social value

8.27 The Project is delivering life-changing employment opportunities through its apprenticeship programme. During construction, the programme will provide at least 100 apprenticeships in highly skilled roles across civil engineering, quantity surveying and business administration. During 2020-21, the Project saw 13 apprentices go through the programme with another recruitment drive taking place this summer 2021.

8.28 Throughout the Project, at least 225 on-site training placements are being delivered to help equip local people with the skills required to start a career in construction. In total, 34 trainees have undertaken placements, gaining valuable experience onsite and working towards obtaining a Construction Skills Certificate Scheme (CSCS) card with Project contractors.



1.37 Image 3: NLHPP apprentice Hakeem Badmus from Enfield joined the DSM Demolition team

8.29 The Science, Technology, Engineering and Maths (STEM) - based schools programme had to be halted due to ongoing restrictions on engagement with schools, but the Project team plans to roll-out an effective outreach programme in September 2021 as restrictions ease.

8.30 NLWA continues to maintain fair and ethical obligations as set out by the Employment Relations Code of Practice (ERCOP), which was developed in order to ensure that the Authority's ethical position on employment relations was addressed by the contractors. The Project team took steps to include the main requirements of the draft ERCOP in contract clauses, and monitors the contractors' compliance with the requirements, including the application of the London Living Wage. The tender documents for the construction contract for EcoPark South included a requirement that the contractor comply with the ERCOP, which is also included as a contract document.

8.31 NLWA is committed to creating as many local supply chain opportunities as possible and continues to work with contractors to reach a 10% spend with local businesses in Enfield, Haringey, and Waltham Forest. Several local businesses have been recruited to work on the Project, including:

James Clear-Tournas (Enfield-based) – welfare facilities IT consultant

New Life Catering (Walthamstow based) – welfare facilities canteen caterers

Embassy Demolition (Enfield-based) – demolition works sub-contractor for the transport yard, Sea Cadet buildings, southern weighbridges and weighbridge building

J O'Doherty Haulage and Waste Disposal (Enfield-based) – demolition works sub- contractor worked alongside Embassy Demolition