

North London Heat and Power Project,**in the London Boroughs of Enfield****Pre planning Consultation Phase 1-Planning Inspectorate****National Infrastructure Project – pre-application consultation phase 1**

Planning Act 2008, Overarching National Policy Statement for Energy, July 2011, and National Policy Statement for Renewable Energy Infrastructure, July 2011.

The proposal

The North London Waste Authority proposes to replace the existing Energy from Waste (EfW) facility at the Edmonton Eco-Park with a new Energy Recovery Facility (ERF). The facility would generate in excess of 50 megawatts of energy.

The applicant

The applicant is the **NLWA**.

Strategic issues

The proposed increase in **waste** through-put capacity (management) and the energy gains to be achieved through a **decentralised energy system** are key to this proposal. The facility is supported as it is recognised that the new ERF is a strategic facility for London's non-recyclable waste. The energy generated will be able to support the future development within the north and north east of London, as proposed within the **Lee Valley Heat Network**, the **Upper Lee Valley OAPF** and current discussions between Enfield Council, Haringey and Waltham Forest Boroughs. **Transport by river** will need to be addressed by the applicant amongst the other necessary environmental assessments (**air quality/noise/flood risk**) that will be required to ensure that its commissioning has minimal impact to the **environment** (people and species). GLA officers welcome the opportunity to work in partnership with the NLWA in its work relating to the **Development Infrastructure Funding** (DIF) Study.

Context

The planning process:

1 The North London Waste Authority (NLWA) is seeking to gain a Development Consent Order for the development of a new state-of-the-art Energy Recovery Facility (ERF) to replace the current ageing facility which was opened in 1970 and has a projected remaining operational life to circa 2025. The Authority is the UK's second largest waste disposal authority handling approximately 2.5% of the total national municipal waste stream.

2 The facility would replace the existing EfW facility and would generate in excess of 50 megawatts of energy. This level of energy generation triggers the need for an application to be

made to the Planning Inspectorate through the Development Consent Order (DCO) process, rather than a typical planning application that is determined by the Local Planning Authority.

3 Section 42 (c) of the 2008 Planning Act places a requirement on applicants of schemes that will be submitted to the Planning Inspectorate to consult with the Greater London Authority. Section 49 of the Act requires the applicant to have regard to any response. The NLWA is currently undertaking the first stage of consultation on this proposal. This report forms the Mayor's response to that consultation.

4 Once an application has been submitted to and accepted by the Planning Inspectorate the applicant must consult the GLA again (Section 56 (2) (c) of the Act). The GLA can then make representations to the Planning Inspectorate. The Planning Inspectorate is also required to invite the GLA to submit a local impact report (Section 60 (2) (B) of the Act). If the GLA makes representations it may request to appear at a hearing to examine the application.

The construction timeframe:

5 The NLWA is undertaking two rounds of consultation between November 2014- January 2015 and then between May-June 2015 as part of the statutory planning process, before it submits an application to the Planning Inspectorate (PINS) in September 2015. NLWA anticipate that a decision to grant or refuse permission will be made by December 2016.

6 The earliest construction could commence is 2018/19, but it may commence slightly later. It is estimated that the scheme would take approximately three years to complete, including a six month commissioning period. The existing EfW has a life capacity up to 2025. The new ERF would have a design life of 25 to 30 years but that is likely to be extended through ongoing maintenance.

Site description

7 The site currently operates as a waste processing facility and contains a central 'Energy from Waste' (EfW) incinerator, a composting facility, bulky waste and recycling facilities and Enfield Council's refuse vehicle depot.

8 The Edmonton Eco Park is within the Upper Lee Valley Opportunity Area and is bounded by industrial uses to the north, the Lea Navigation and the Lee Valley Regional Park (including the King George V and William Girling reservoirs, both of which are Sites of Special Scientific Interest) to the east, Advent Way to the south and Salmons Brook and Ely Industrial Estate to the west. The site is accessed from Advent Way, which leads to the A406 North Circular Road, part of the Transport for London Road Network (TLRN). The site lies some 1.5km from the nearest section of the Strategic Road Network (SRN) at the A1010 Fore Street.

9 Whilst Angel Road National Rail station lies approximately 500m to the south west, the walking environment between this station and the site is very poor. Currently frequency of service throughout the day is also poor (2 trains per hour - tph).

10 Infrastructure upgrades to deliver 4 trains per hour service are, however, funded and will be delivered by 2019. Local bus routes include the 34, 341 and 444 run within 450m of the site, although the quality of the pedestrian routes between the site and bus stops served by these routes is again very poor. The site has a public transport accessibility level of 1b within the range of 6 (highest) and 1 (lowest).

Details of the proposal

11 The proposal comprises an electricity generating facility using waste as a fuel and capable of an electrical output of around 50 Megawatts. The ERF will have a capacity to process up to 700,000 tonnes per annum (at a peak), which with current recycling rates means that the new facility would be capable of handling all waste generated in the constituent North London Boroughs.

12 While a recycling rate of 33% is currently being achieved, the Authority's target is to increase this to around 50% by 2020/21. This will offset any increase in non-recoverable waste due to growth. The ERF is expected to be linked to the Lee Valley Heat Network (LVHN), providing heat to homes in Enfield and Haringey.

13 The main plant would comprise:

- two process lines, with each line having a moving grate, furnace, boiler and a flue gas treatment plant and stack;
- a steam turbine and generator set;
- "heat off-take" equipment within the ERF with an initial heat supply through a connection to a separate heat network centre located on the site. The system will be designed to be capable of providing heat in the region of 40 MW which will provide benefit to north and east London;
- a waste bunker with sufficient capacity to hold a minimum equivalent of 5-7 days of processing capacity;
- two overhead cranes in the bunker hall;
- air or water cooled condenser(s);
- a plant control and monitoring system;
- an emergency diesel generator;
- a tipping hall and one way access ramp;
- fuel preparation plant (FPP);
- bulky waste recycling facility (BWRP); and
- household waste recycling centre (HWRC).

14 Ancillary elements would include a weigh bridge; and hard and soft landscaping directly related to the main building works. The project is expected to include the following associated development:

- upgrade of the electricity connection to the National Grid;
- new site access from the Lee Park Way;
- new internal roads and parking areas;
- administrative buildings and visitor centre;
- the decommissioning of the existing Edmonton EfW facility and making the site good (timed to take place following commissioning of the new ERF and with a transition period of up to a year).
- re-location of the LondonWaste Limited (LWL) vehicle depot and servicing.

15 The buildings would be located either side of the existing plant. The detailed design does not form part of this consultation although the flue options are presented.

Strategic planning issues and relevant policies and guidance

16 The relevant issues and corresponding policies are as follows:

- Principle of development *London Plan;*
- Waste *London Plan; the Municipal and Business Waste Management Strategies;*
- Energy *London Plan;*
- Air quality *London Plan; the Mayor's Air Quality Strategy;*
- Ambient noise *London Plan; the Mayor's Ambient Noise Strategy;*
- Transport *London Plan; the Mayor's Transport Strategy; Land for Industry and Transport SPG*
- Crossrail *London Plan; Mayoral Community Infrastructure Levy;*

17 For the purposes of Section 38(6) of the Planning and Compulsory Purchase Act 2004, the development plan in force for the area is the Enfield Core Strategy, November 2010, the Enfield Development Management Document, November 2014 and the 2011 London Plan.

18 The following are also relevant material considerations:

- The National Planning Policy for Waste (October 2014)
- The Further Alterations to the London Plan- 'intend to publish' version as submitted to the Secretary of State - December 2014
- The Upper Lee Valley Opportunity Area Planning Framework, July 2013
- The Edmonton Eco Park Planning Brief, Supplementary Planning Document, May 2013
- Central Leaside Area Action Plan (submission version- consultation period, 5 January - 16 February 2015)

Principle of development

Policy safeguarding

19 The site carries strategic importance as an 'existing' waste site, which is safeguarded by policy 5.17 of the London Plan. The site is also safeguarded for waste use in the Enfield Core Strategy (policy 22-*"Delivering Sustainable Waste Management"*). The policy states that the Council will continue *"to support the use of the Edmonton Eco-Park as a strategic waste site and working with the North London Waste Authority and the site operator to maximise the use of the site with more sustainable and efficient waste management processes including the future decommissioning of the current incinerator. This includes exploring opportunities for local energy provision to support new development at Meridian Water to the south."* The Council's Edmonton Eco-Park Planning Brief SPD also promotes the on-going use of the existing site to manage and generate heat and power. These policies are supported in strategic planning terms. The Council's Central Leaside AAP also states, the redevelopment of the EcoPark site, through a design-led approach will *"provide a distinctive and well-functioning environment with a high quality of design, landscaping (including ecological enhancement), materials and finish, integrated with proposals in the wider area of regeneration."*

Retention of waste use

20 The proposed ERF will have the capacity to manage a greater waste through-put than the current EfW facility and is supported. It is understood that the NLWA proposes to retain areas of the site that are not utilised for other potential waste management activity in the future; though this is likely to form part of a further application post approval of this proposal.

21 Overall, the NLWA proposal for a heat and power facility is supported in strategic terms because of the wider sustainability gains that it will achieve, not only for the north London, Upper Lee Valley area but also since it will contribute towards net self-sufficiency in London. The proposal will provide additional recycling capacity, whilst making use of the existing brown field land, and manage waste as close to its source as possible. The proposal has the potential to achieve the carbon intensity floor target (addressed in the energy section of this report, below) and deliver low carbon heat through connection with the planned Upper Lee Valley Heat Network.

Energy

22 GLA officers have been working with the NLWA and Enfield Council (and to a lesser degree with Haringey and Waltham Forest Boroughs) to develop a strategic heat network throughout the Lee Valley Heat Network area, taking heat from the existing EfW plant and supply affordable low carbon heat for heating buildings and industry. Heat networks require substantial levels of investment and having a 40 year plus life, the new ERF will give the network investors confidence that heat will be available following the closure of the existing plant.

23 The new plant should be designed and built as a combined heat and power plant enabling heat to be supplied to the network in the most economic way. The facility should meet the carbon intensity floor of 400 grams of CO₂ eq per kWh of electricity generated (as outlined in the Further Alterations to the London Plan Policy 5.17).

24 Of those elements of the development that are covered by Part L of the Building Regulations (e.g. administrative buildings, offices, and visitor centre) should demonstrate how they are minimising carbon dioxide emissions to meet the targets in Policy 5.2 of the London Plan (guidance available <https://www.london.gov.uk/priorities/planning/strategic-planning-applications/preplanning-application-meeting-service/energy-planning-gla-guidance-on-preparing-energy-assessments>)

Air Quality

25 The ERF plant will be 50 megawatts (MW) in size, and is therefore very large. However it will have fairly low emissions for the size as a selective catalytic reduction (SCR) system is proposed. Due to the size, the facility will be regulated by the Environment Agency.

26 The Environmental Impact Assessment Scoping Reports provide details of the air quality assessment that will be undertaken. It appears to be comprehensive and includes best practice. Emissions from the stack, and as a result of traffic serving the facility will be considered. GLA officers will be able to comment in more detail when the Environmental Statement has been prepared.

Air quality, noise and other potential environmental impacts

27 The applicant will be required to undertake noise and air quality assessment work to demonstrate the proposal is acceptable in strategic policy terms. The applicant should ensure that the requirements of London Plan policy 5.17 and in particular 5.17e/f and D are fully addressed to ensure that environmental impacts are mitigated. The proposal to replace the waste function at the Eco-Park, alongside the other ancillary land uses proposed, and future development in the area

(adjacent sites); should ensure that the waste management site is '*designed to minimise the potential for disturbance and conflict of use.*'

Flood risk and surface water management

28 The proposals are at an early stage and state that flood risk will be considered in detail within an Environmental Impact Assessment (EIA). This will need to include a detailed flood risk assessment noting the risk of fluvial flooding from the nearby River Lee and Salmons Brook systems, the risk of surface water flooding and the risk of reservoir flooding from the range of raised reservoirs along the Lee Valley. It is unlikely that any of these risks will present an in principle barrier to the proposed development, but it is likely that some aspects of the design will need to reflect the risks present.

29 In the case of surface water management, London Plan Policy 5.13 and the sustainable drainage hierarchy contained within that policy should be applied to limit surface water discharge to the drainage system. Given the anticipated use of water on-site, the Mayor will expect that full consideration is given to a rainwater harvesting system, this should also present the opportunity to realise some cost savings over the lifetime of the proposed plant.

Water transport

30 The use of water transport should be investigated, in line with London Plan policy 7.26 and the Mayor's Transport Strategy. This should be investigated both in relation to the demolition/construction phase and to the operational waste delivery phase. The operational use of barges has been investigated at several points during the lifetime of the current plant but no successful delivery system has ever been put in place. The Mayor will look to the new plant to deliver a more viable approach to waterborne delivery of waste materials to/from the site.

Transport for London (TfL)

31 TfL has provided advice on the scope of a Transport Assessment for this proposal on 9th September 2014, which can be summarised as follows:

- Construction programme and impact on operation of the Transport for London Road Network (TLRN) A406 North Circular Road needs to be assessed.
- Vehicle access to the site during operation/ construction – TfL to review specific proposals from a road safety and traffic impact viewpoint.
- Identify area of interest for the TA based on initial traffic assessment.
- Car parking including electric vehicle charging in accord with London Plan requirements.
- Cycle parking and facilities for cyclists (showers, lockers) also in line with London Plan standards.
- Opportunities to improve local cycle/ pedestrian routes to site to encourage these modes of travel.
- Measures to encourage use of water for freight.
- Delivery and servicing plan.
- Measures to reduce traffic impact on wider highway network.
- Construction logistic plan will be needed.
- Travel plan for operation and construction stages.
- Section 106 agreement or other agreement for any necessary offsite mitigation measures.

32 TfL will be able to provide definitive advice on the impact of the proposals once the Transport Assessment is completed to its satisfaction. There is also a note on the feasibility of

water transport; currently NLWA is suggesting that water freight will not be feasible. TfL would need to review the technical basis of this advice. TfL notes over a 25 years project life-cycle that the environmental benefits of water use would be significant and in the environmental appraisal capital costs need to differentiate from operational costs. TfL remain supportive of water transport as a matter of policy and potential mitigation in context of this site and wider north London role, and aspirations to regenerate the Upper Lee Valley.

33 TfL has operational land interests in the site. TfL would need to assess if any consent granted under the Development Consent Order, impacts on TfL freehold land interest, it's easement and whether these constitute a breach of restrictions that protect TfL interests. TfL restrictive covenants allow for hard standing for access or car parking but no other development or construction is allowed.

Conclusion

34 Having reviewed the consultation documents, GLA officers are of the view that the proposed facility will be an asset to London in achieving net self- sufficiency and will allow for energy gains to be achieved, as proposed by the Council's Lee Valley Heat network proposals. Strategically, the proposal will facilitate the objectives set out in the Upper Lee Valley OAPF and the London Plan. The likely cumulative impacts from waste and energy processing; transportation and air quality /noise/flood risk impacts will need to be assessed once the NLWA has undertaken the necessary environmental and transport related assessment reports. These will also be assessed by the Environment Agency. Transportation of waste by river will need to be assessed by the applicant, as set out within the water transport /transport sections of this report. There are immense energy gains to be achieved from this proposal, not to mention waste diversion from landfill. The NLWA should continue to work with GLA officers in developing this proposal further to secure optimum decentralised energy opportunities from the energy/heat that will be generated at this site.

35 GLA officers would also welcome partnership involvement in the NLWAs work relating to the Development Infrastructure Funding (DIF) study it is currently undertaking with TfL, London Boroughs of Enfield, Haringey, Waltham Forest and Hackney. This study will be looking at opportunities to deliver the infrastructure that supports major new housing and employment projects in the Upper Lee Valley, including heat and power networks based around this project-as set out in the Upper Lee Valley Opportunity Area Planning Framework (ULV OAPF). (Please contact Martin Jones- tel: 020 7983 6567, email: martin.jones@london.gov.uk for further detail).

for further information, contact GLA Planning Unit:

Colin Wilson, Senior Manager – Planning Decisions

020 7983 4783 email colin.wilson@london.gov.uk

Justin Carr, Strategic Planning Manager (Development Decisions)

020 7983 4895 email justin.carr@london.gov.uk

Sukhpreet Khull, Case Officer

020 7983 4806 email Sukhpreet.khull@london.gov.uk
