

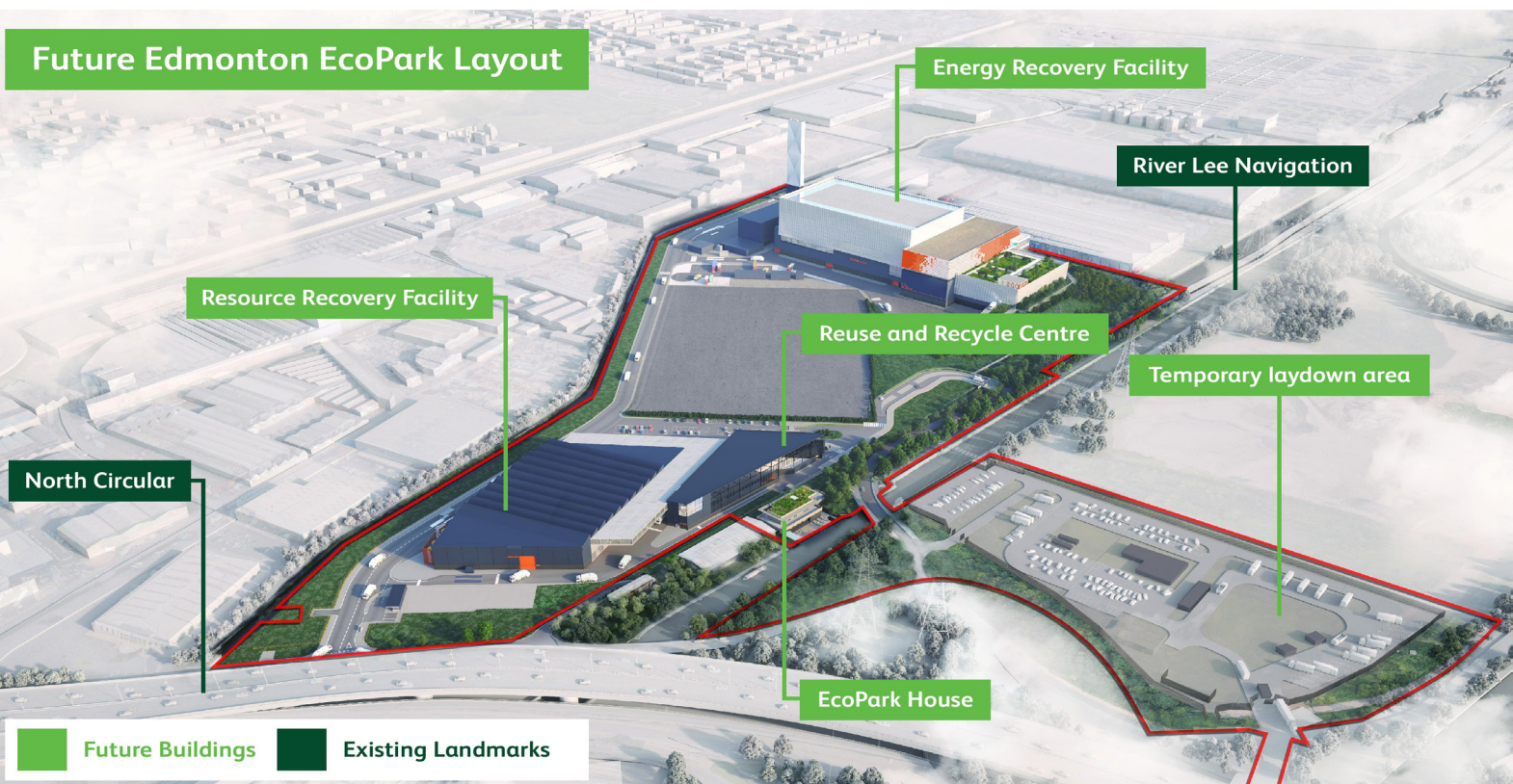
North London Heat and Power Project Vision:

“To create a waste management facility in which local communities take pride, which demonstrates value and is a model for public sector project delivery.”

Introduction

- The North London Heat and Power Project is our plan for a new **world-class facility** that will replace our existing energy from waste plant and enable the recovery of energy from north London’s non-recyclable waste.
- After nearly 50 years in operation, the current facility at Edmonton EcoPark is reaching the end of its useful life and we now need to **invest in a replacement**.
- As part of the DCO planning application, NLWA carried out an extensive consultation in 2014 and 2015 where the **local community had their say to shape the proposals**.
- We carefully analysed a range of alternatives for dealing with the volume of waste produced in north London at Edmonton EcoPark - such as landfill, using other existing facilities, advanced thermal treatment (gasification and pyrolysis), mechanical biological treatment, and anaerobic digestion. The new facility delivers the best value for residents and is **the only proven, sustainable and cost-effective solution** to treat north London’s non-recyclable waste at Edmonton EcoPark.

Future Edmonton EcoPark Layout



Increasing recycling and reducing waste:

- NLWA's waste management strategy is underpinned by the principles of the **circular economy** – to reduce waste, increase recycling and prevent landfill. We recycle around 190,000 tonnes of our residents' waste each year, as well as repurposing around 18,500 tonnes of metal and 89,000 tonnes of ash from the Energy from Waste plant at Edmonton EcoPark, re-using the ash to make roads, pavements and construction material.
- As part of the NLHPP we're building a flagship center known as the **Resource Recovery Facility** which will allow for thousands of tonnes of metal, plastic and wood to be recycled. It will also mean for the first time ever residents can bring their recyclable materials directly to Edmonton EcoPark.
- Our award-winning **waste prevention programme** saves 10,000 tonnes of resources going to waste each year.
- We're also **calling on the Government** to do more to increase recycling - councils need the powers to make recycling compulsory and enforce against irresponsible waste disposal, and it needs to press ahead with proposals for deposit return schemes to make producers more responsible for the packaging they produce.
- There's no evidence that energy recovery stops people recycling. Across Europe and the UK, high **recycling rates go hand-in-hand with energy from waste facilities**. Energy from waste facilities are used by several UK councils with high recycling rates, such as South Oxfordshire District Council and Stratford-upon-Avon, both above 60%.
- Germany recycles over 60% of their waste and has 96 energy-from-waste facilities for treating the majority of the rest. In the the UK we have far less with only 41 energy-from-waste plants leaving 25% of the UKs waste going to landfill.



Managing north London's non-recyclable waste:

- Even after promoting waste prevention and recycling, there will remain thousands of tonnes of waste generated which cannot be recycled or reused for the foreseeable future. It's also our responsibility to **treat this 'residual' waste in a sustainable way**.
- Our new facility is the only proven, sustainable and cost-effective solution to treat up to 700,000 tonnes of north London's non-recyclable waste at Edmonton EcoPark.
- **Sending waste to landfill costs more and has a greater impact on the environment** – it releases methane, which is a highly damaging greenhouse gas 25 times stronger than carbon dioxide.

Tackling the Climate Emergency:

- The replacement facility is a crucial part of our action to **tackle the Climate Emergency**, alongside supporting our campaigns to prevent waste and boost recycling.
- Using our new facility will have the carbon impact of **saving the equivalent of 215,000 tonnes of carbon dioxide** each year by diverting waste from landfill. That's like taking 110,000 cars off the road each year.
- Designing our facility to provide heat gives us cleaner energy with **carbon efficiency rates at 25% better than the Mayor of London's target** (known as the Carbon Intensity Floor target, which ensures that energy generated from waste activities is no more polluting in carbon terms that the energy source it replaces).



Generate low-carbon heat and power to supply up to 127,000 homes



Perform at 60% better than permitted safe levels for NOx



Save 215,000 tonnes of CO2 equivalents a year rather than disposing to landfill

Moving towards a Net Zero carbon economy:

- Achieving **Net Zero requires a move away from burning fossil fuels** by 2050 through a quadrupling in low carbon power generation, such as that provided by our Energy Recovery Facility.
- The ERF will generate **78 megawatts** of electricity which can supply **low-carbon heat and power for up to 127,000 homes**. This displaces the need for more carbon intensive power and heat generation from virgin fossil fuels in coal and gas fired power stations.
- We further support the aims of Net Zero in the decarbonisation of household heating through our **provision of district heating** to a densely populated urban area. Our facility allows for the potential to heat Meridian Water, Enfield Council's flagship housing development.

Building a safe and clean facility:

- As a public authority our responsibility to **protect the health of our residents** is at the forefront of everything we do.
- We have designed the facility to perform better than known and anticipated emissions standards required for energy recovery facilities, meaning **the facility will always meet Environment Agency's strict standards** as they change over time.
- NLWA is going beyond statutory requirements to ensure that the new facility is one of the cleanest and safest in the world. Cutting-edge technology known as **Selective Catalytic Reduction** is being invested in for the removal of nitrogen dioxide (NOx), the same technology used in the Amager Bakke facility in Copenhagen. While the current facility operates at 20% better than permitted levels of NOx emissions, the new facility will **perform at 60% better than the required safe levels**.
- Public Health England, which advises the Government nationally, says modern and well-regulated Energy from Waste facilities like ours make only a small contribution to overall pollution levels, which are primarily caused by cars.
- Our published analysis for the NLHPP shows clearly that **no concentrations of pollutants will breach any air quality standards or add to existing pollution levels in any detectable way**.

We're delivering a project for the community:

- Our project is part of the **ongoing regeneration of Edmonton**. Our job-generating project is an exciting part of the area's future, supporting an impressive training programme for over **100 apprenticeships and 225 skills training opportunities** for the local community.
- Building a new education and community centre called EcoPark House, which will help local people learn about the circular economy values of reducing, reusing and recycling their waste, and in doing so reduce their impact on the environment.
- Generating 78 megawatts of power from waste which can supply electricity and heat for up to 127,000 homes - more than all the households in Waltham Forest.
- Treating waste as one of the largest waste authorities in the UK for over **2 million residents** in the most cost-effective way.



Indicative image of EcoPark House