

LEITH RENEWABLE ENERGY PLANT

RENEWABLE ENERGY - CONTRIBUTING TO SCOTLAND'S LOW CARBON FUTURE

About the application

This exhibition **explains the Leith Renewable Energy Plant application that has been submitted to the Scottish Government for determination and tells you how to make comments.** The Leith Renewable Energy Plant will generate the equivalent of 54% of the electrical needs of the City of Edinburgh, using sustainably sourced biomass fuel. Its output is 200 megawatts of electricity and 60 megawatts of heat.

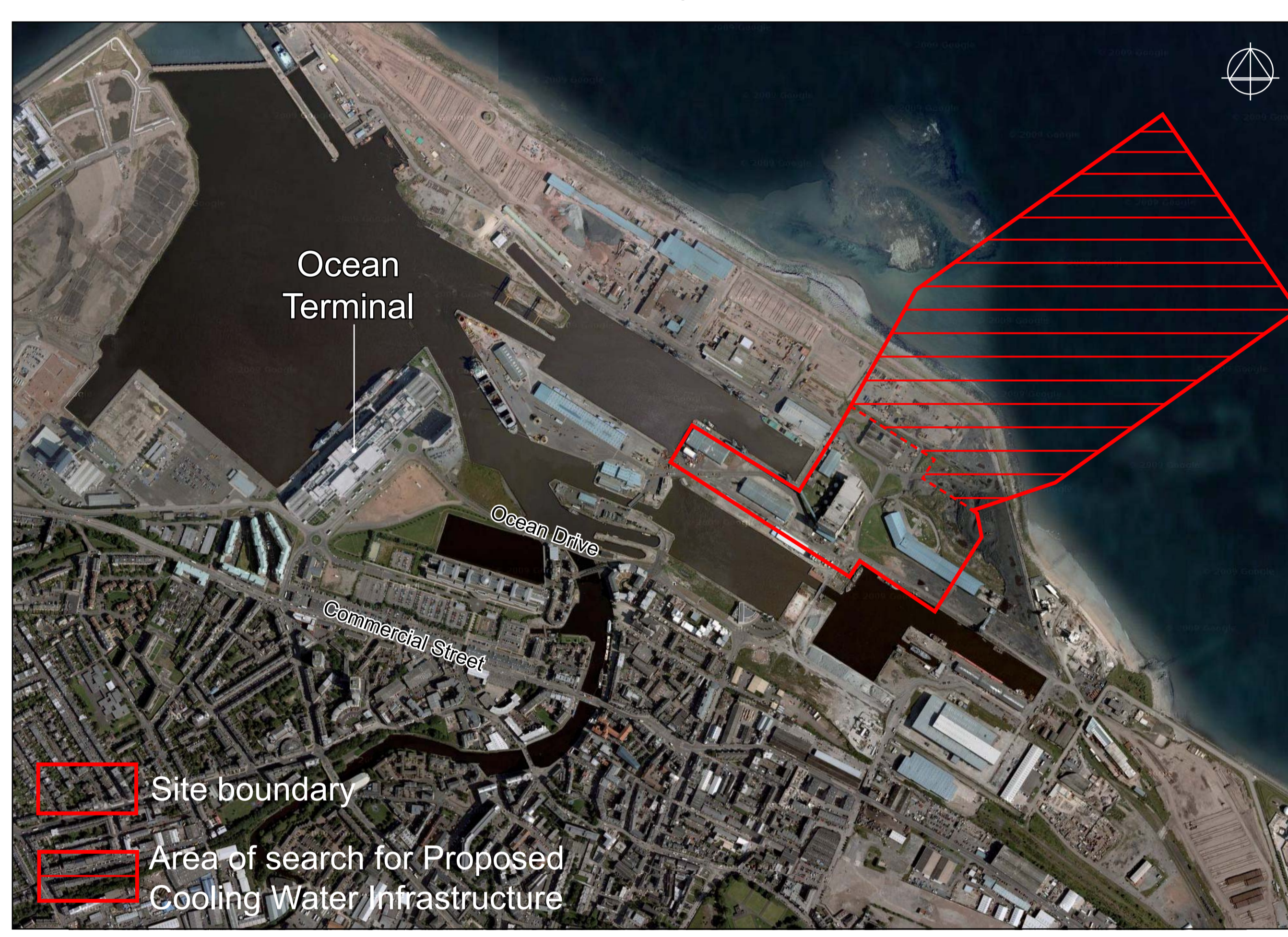
Renewable energy in Scotland - Leith's role

Leith has the potential to become a centre for the renewable energy industry in Scotland. The Leith Renewable Energy Plant will provide a **significant contribution** to:

- **Decarbonising the energy mix in Scotland** by generating baseload renewable electricity;
- **Meeting the Scottish Government targets of 80% of electricity and 11% of heat demand to be met from renewable sources;** and
- **Creating jobs and new economic activity in Leith** and the wider area through energy production and associated fuel handling in the port.

The site

The proposed Leith Renewable Energy Plant will be located within the operational area of the Port of Leith. The site is currently used for port activities and includes the Imperial Dock Grain Silo. The site extends to approximately 12 hectares.



What does this mean for Leith?

Advantages for Leith and the wider area are:

- Leith has the potential to become a centre for the renewable energy industry;
- The Leith Renewable Energy Plant will save **89% to 91% of the carbon emissions** of a traditional coal fired plant;
- The plant will provide **300-500 construction jobs** and **45 permanent operational jobs**;
- Additional jobs will also be created **handling fuel at the port**;
- There is potential for **education and training opportunities**;
- There will be **contracting opportunities** for local suppliers;
- There is an opportunity to supply **renewable electricity and heat** to existing and potential future customers; and
- The plant is amongst the **largest infrastructure developments planned in Scotland** in the next ten years.

The applicant

The applicant is Forth Energy, a joint venture between SSE and Forth Ports. The applicant and a team of specialist advisors have worked with City of Edinburgh Council and key stakeholders including members of the local community to prepare this application.

Public engagement

A high value has been attached to ensuring that local people have a genuine opportunity to engage in the consenting process for the Leith Renewable Energy Plant.

Forth Energy is committed to engaging with stakeholders and discussing the proposed development. A public exhibition introducing the proposals was held from 11th to 13th February 2010. A follow up event on 10th, 12th and 13th of November 2010 discussed the emerging development proposals and answered the questions asked at the first event.

Forth Energy has also met representatives from the Community Councils who have provided further comments and ideas. A statement setting out the engagement process accompanies this application. Thanks to all who have participated so far.

Why Biomass?

Biomass is a low carbon source of renewable energy that offers significant benefits over traditional fossil fuels. The Leith Renewable Energy Plant will generate continuously, providing a reliable source of renewable electricity and heat.

Key findings from the Environmental Impact Assessment

We have undertaken a full Environmental Impact Assessment (EIA) of the proposal. The purpose of the EIA process is to identify any significant effects the development could have on the environment and propose mitigation measures, where required, to reduce the impact of the development. This process ensures that the decision-maker is informed about the effects and proposed mitigation measures before making the decision.

The Environmental Impact Assessment has addressed the following areas;

- **Air quality**
- **Traffic and Transport**
- **Noise**
- **Ecology**
- **Hydrology, Hydrogeology, Geology and Soils**
- **Cultural Heritage**
- **Socio-economics**
- **Aviation and Telecommunication Systems**
- **Landscape and Visual Impact**



KEY FINDINGS OF THE ENVIRONMENTAL IMPACT ASSESSMENT

Area of assessment and outcome	Method	Findings
Air quality No significant effects following mitigation	Assessment of the impacts of dust, vehicle emissions, emissions from combustion and effects on human health; effects of acid and nitrogen deposition on designated natural habitats and the frequency of visible moisture plumes has been undertaken.	Dust emissions will be controlled through mitigation measures incorporated into the design and with appropriate future monitoring; traffic emissions were found not to be significant; The contribution from the plant to air quality is negligible for all pollutants; the plant will be monitored in operation by the Scottish Environment Protection Agency; there will be no significant adverse impact on human health and limited effects on designated natural habitats; information is presented as to when moisture plumes will be visible.
Traffic and Transport No significant effects following mitigation	The proposed transport routes, access, estimated traffic volumes and potential effects of traffic have been assessed and a detailed Transport Statement prepared.	Operational routes will be agreed, abnormal loads are expected to be delivered to the port by ship, minimising impact on the road network and the majority of fuel will be delivered by ship. The Transport Statement which is submitted as part of the application has confirmed the suitability of the road network to accommodate the likely volumes of traffic expected as a result of the proposed development during all stages of its lifecycle.
Noise No significant effects following mitigation	Existing noise levels have been assessed, and computerised noise modelling has been undertaken, and assessed in relation to recognised British Standards and the Scottish Environment Protection Agency guidelines.	Mitigation measures have been incorporated into the site layout and design to minimise noise during operation of the plant. Further detailed modelling for specific items of plant will be undertaken at the detailed design stage of the project to ensure that appropriate noise control measures are designed in at this stage, and noise is minimised. Once this process has been completed, no significant effects are anticipated.
Ecology No significant effects following mitigation	The effects on both terrestrial (on land) and aquatic (in water) ecology have been assessed, through desk studies and field surveys. Aquatic effects are mainly related to the removal and discharge of cooling water to and from the Firth of Forth.	The Firth of Forth is protected by the following designations; a Ramsar Site, Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI). The development is unlikely to result in significant impacts on terrestrial or aquatic ecology. For instance, water uptake and discharge points will be designed to protect marine life. Cooling water will be returned to the Firth of Forth at a maximum of 10 C above the usual temperature, diffusers will be fitted at the discharge point to ensure rapid mixing with the surrounding water. Further mitigation measures are proposed to ensure that any impacts, however non-significant are reduced.
Hydrology, Hydrogeology, Geology and Soils No significant effects following mitigation	An assessment of existing conditions and a flood risk assessment have been undertaken, and further investigation into any existing ground contamination will be undertaken at detailed design stage.	No significant environmental effects have been identified in terms of impacts to the hydrological or hydrogeological environment. Sensitive equipment will be raised above projected flood levels, and a drainage system will be installed taking into account the future projected impacts of climate change, and an Environment Management Plan will be put in place to control potential impacts to surface water, in line with good practice measures promoted by the Scottish Environment Protection Agency. Licensing will be required for the uptake and discharge of water from the Forth to ensure no significant negative effects.
Cultural Heritage One significant effect on surrounding area due to demolition	Relict features pre-1860, selected later features of historic interest and all designated cultural heritage features have been assessed through desk study and site visits.	The construction of the proposed Renewable Energy Plant will involve the demolition of the Category B Listed Imperial Dock Grain Elevator and the sub-station/ switch house. In mitigation, these buildings will be fully recorded before demolition. Residual direct impact on the Imperial Dock Grain Elevator will remain of major significance. The predicted operational impacts are on the settings of the Martello Tower, the Dockside/ Historic Harbour, the Artillery Mounds on Leith Links, the Edinburgh Old and New Towns World Heritage Site, Edinburgh Castle and the Calton Hill Monuments. The residual impacts on the other cultural heritage features will be of negligible significance.
Socio-economics Positive economic effects	The social and economic effects are assessed within the local community and wider area.	There will be a number of positive benefits to the local economy including 300 to 500 construction jobs, peaking at around 700, 45 operational jobs, up to 20 port-related jobs and £32 million Gross Value Added per annum to the local economy (a measure of the output and profits of those employed).
Aviation and Telecommunications Systems No significant effects following mitigation	Effects on airport operations and TV reception have been assessed.	The stack height has been set at 120 metres for air quality reasons; this does not impact upon aircraft approach to the airport. Modelling shows up to 100 existing properties' TV reception may be affected, and mitigation measures will be proposed to remedy these effects.
Landscape and visual Some significant effects, which can be reduced through architectural treatment	Potential impacts on the wider landscape and local visual receptors (e.g nearby businesses, residences and roads) have been assessed, and the visual influence of the taller elements of the proposal has also been assessed within the wider landscape using a recognised method to identify a 'Zone of Visual Influence'.	The proposal will result in a small number of significant landscape impacts within the local area, generally within 5km of the site. From the wider surroundings the impacts are not significant. These can be reduced, although not entirely eliminated, through architectural treatment at the detailed design stage of the project. Architects have been commissioned at this stage to consider the design concept and illustrate how the plant could look.



COMMENTING ON THE APPLICATION



Artist Impression of Leith Renewable Energy Plant

The application

The application documentation includes the following:

- Planning Statement
- Design Concept Statement
- Sustainability Statement
- Environmental Statement (setting out the findings of the Environmental Impact Assessment process)
- Transport Assessment
- Combined Heat and Power Feasibility Statement
- Fire Prevention Method Statement
- Statement of Participation

You can view the full set of documents online at;

www.forthenergy.co.uk

Your comments on this application are welcomed, and in future there will be further opportunities for participation as detailed proposals are prepared for the design of the renewable energy plant's buildings.

Commenting on the application

The application and supporting documents can also be viewed at Leith Library, McDonald Road Library, Ocean Terminal and City of Edinburgh Council's offices at Waverley Court. The documents will be available via the following Community Councils, who will be provided with a copy of the pack;

- Leith Harbour and Newhaven Community Council
- Leith Links Community Council
- Leith Central Community Council
- Trinity Community Council

Forth Energy submitted its application to the Scottish Ministers on 31st January 2011. Comments on the proposals should be made directly to the Scottish Government Energy Consents Unit, by Friday 11th March 2011.

About this exhibition

This exhibition will be available to view at the following locations;

Monday 31st January to Monday 7th February:	Leith Library 28-30 Ferry Road, Leith, EH6 4AE • Mon to Thurs: 10am to 8pm • Fri: 10am to 5pm • Sat: 9am to 1pm
Tuesday 8th February to Monday 21st February:	Ocean Terminal Ocean Drive, Leith, EH6 6JJ • Mon to Fri: 10am to 8pm • Sat: 10am to 7pm • Sun: 11am to 6pm
Tuesday 22nd February to Friday 11th March:	City of Edinburgh Council Urban Room, Waverley Court, Market Street, Edinburgh, EH8 8BG • Mon to Thurs: 8.30am to 5pm • Fri: 8.30am to 3.40pm

How to comment on the application...



by post

online

Write to:

Scottish Government
The Energy Consents and Deployment Unit
4th Floor
5 Atlantic Quay
150 Broomielaw
Glasgow
G2 8LU

Comments can also be made by email directly to the Scottish Government at the address below;

leithbiomass@scotland.gsi.gov.uk

Next steps

