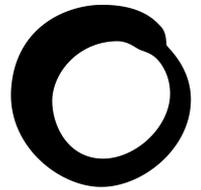


Our Ref: FOES/FE/LE



**Friends of
the Earth
Scotland**

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

11 March 2011

**Leith Renewable Energy Plant application to the Scottish Government for
determination under Section 36 of the Electricity Act (1989)**

Dear Sir / Madam

Friends of the Earth Scotland welcome the opportunity to comment on the proposals by Forth Energy to develop a biomass plant at Leith.

Friends of the Earth Scotland is an independent Scottish charity with a network of thousands of supporters and active local groups across Scotland. We are part of the largest grassroots environmental network in the world, uniting over 2 million supporters, 77 national member groups, and some 5,000 local activist groups - covering every continent.

Whilst we acknowledge the intentions of the developer to contribute to Scotland's climate change and renewables targets, this proposal appears to us to run counter to Scottish Government policy on biomass energy – which prioritises the use of biomass for small-scale heat or CHP. We support this policy stance, particularly in the light of evidence which suggests biomass combustion for electricity generation increases net carbon emissions for a period of at least several decades.

The present proposal is too large in scale, and appears to rely on imported biomass of questionable sustainability. It is also unambitious in its suggested heat capture of only 30MWth. Friends of the Earth Scotland believes that biomass installation should always be considered and specified in terms of the thermal output, not electrical. On that basis the size of this proposal should be considerably revised downwards.

Our additional comments on the suite of Forth Energy's proposals follow:

Biomass Sourcing

The Forth Energy website gives no definitive statement as to the origins of the wood, but indicates it is likely to come from the Baltics, Scandinavia and the Americas. Current evidence suggests that North America can no longer meet its own demand, and this would therefore suggest wood may be more likely to be sourced from South America where primary and old-growth forest remains at high risk from the extension of logging and the establishment of plantations. This concern is accentuated by the fact that eucalyptus is listed as being an intended fuel, but it is not grown commercially in the European or North American areas listed.

A minority is also suggested as being sourced from the UK. This raises concerns of displacement of wood that could be used for other purposes such as fibreboard manufacture



**Scotland's champion
for our environment.**

Friends of the Earth Scotland
Thorn House, 5 Rose Street, Edinburgh EH2 2PR.
Tel 0131 243 2700 | Fax 0131 243 2725
info@foe-scotland.org.uk | www.foe-scotland.org.uk

A Scottish Charity: SC003442

(which would actually lock up the carbon for a prolonged period). There would also be concerns about land being used for biomass that might be better put to use for other purposes. Of course both of these concerns apply equally, if not more, to international sources.

There are four different agencies that certify sustainably produced wood (FSC, PEFC, SFI & CSA), of which all but FSC have “attracted near universal condemnation from NGOs” (Forth Energy consent application). If the application is to be permitted Friends of the Earth Scotland would advocate the use of planning obligations on Forth Energy to ensure that the wood sourced for the Leith Biomass plant meets at least Forest Stewardship Council (FSC) certification standards, as well as being sourced from specific geographic locations that exclude regions where deforestation or conversion of primary or old-growth forest continues.

Given what is a reoccurring problem from energy companies – e.g. MGT Power, recently received planning permission for a 295 MW power station in Teesside. Before planning approval, they were speaking about sourcing most of the wood from North America but shortly afterwards they signed a supply agreement for large quantities of wood pellets from Brazilian eucalyptus plantations. We would also seek obligations that Forth Energy would not change supply without public consultation and information sharing.

Sustainable supply?

With regard to displacement, we have concerns with two aspects of the supply chain. Firstly if Forth Energy do only source sustainable, certificated woody biomass, then what other uses that the wood could have gone to are being displaced? Secondly, if Forth Energy are purchasing large amounts of sustainable, certified product, then what will the next biomass plant buy? We accept that Forth Energy are not responsible for the actions of other operators, but pose these questions as an indication of the complexity of guaranteeing sustainable supply and therefore the necessity of ensuring that any biomass plant proposals are the best options available for producing the energy proposed in the location or for that population.

We would also express concern that world supply of certified wood may be outstripped by demand. We are skeptical of the claims that there is adequate supply, and fear that demands to import biomass for energy generation in the UK and elsewhere will simply add to unsustainable pressures on forests and indigenous peoples (and other species) that rely on them. Research for Confor suggests that the aggregate effect of current proposals for biomass energy in the UK alone would require double the current total of global trade in biomass for energy by 2020. New plantations do not grow that quickly, so such an increase in demand would almost certainly be met by unsustainable logging.

Carbon balance

In considering the lifetime payback of CO₂ of the plant, recent research has suggested that biomass only attains carbon neutrality over a span of decades if not centuries. Again, the issue is complex and not necessarily for Forth Energy to resolve, but clearly the plant should only be permitted to proceed if the Scottish Government is convinced that it will provide a material carbon benefit in a suitable time frame to contribute to Scottish emissions reductions targets.

Especially with the minimal heat recovery suggested, the overall carbon benefits may still be fairly marginal, with a significant lag (years to decades) before the plant becomes genuinely carbon neutral as trees regrow¹.

¹ See for example <http://www.birdlife.org/news/news/2010/06/carbon-bomb.html>; or <http://www.manomet.org/node/322>.

The shipping of the wood does not seem to have been included in the Environmental Statements; obviously this would not be insignificant. Neither have Forth Energy assessed the implications of the transportation of waste (i.e. ash) or what has to be done with ash landfill/fertiliser. Whilst not a major contributor to the carbon emissions associated with the plant, we would still expect to see figures for this quantified and included in the lifetime CO2 estimates.

According to the developers, the Leith plant is predicted to cut carbon emissions by almost 90% over the life cycle of the plant (compared to a coal fired station). The research cited above casts serious doubt on this claim, but even if it is accepted, it is not clear why coal-fired electricity has been chosen as the comparator (except that it allows the developer to cite a large figure).

It would be more relevant to make a comparison with gas-fired CHP or with small-scale biomass plants in line with Scottish Government policy on renewable heat.

Heat recovery

We note that the proposal suggests that waste wood might be part of the feedstock. Thus the plant will also have to comply with the Waste Incineration Directive, and consequently with the Thermal Treatment Guidelines (for such waste treatment facilities) produced by SEPA. There is no indication that the developer has sought to comply with the latter requirements.

The proposal is for 200MW of electricity and only 60MW of heat. The main benefit of biomass plant is in the heat recovery. This balance between electricity and heat generation is unacceptably low.

We would suggest the developer be placed under an obligation to have contracts in place for receipt of the heat generated before the development is permitted to proceed and conditions to ensure that the plant should be developed only to the scale required to meet that heat demand.

Cumulative local impacts

The application does not deal adequately with the questions of cumulative impact arising from air pollution, noise and other local impacts. We would especially highlight the statement "In addition, the site has good road links for deliveries of biomass fuel sourced from UK suppliers and for ash removal" – the plant at Leith is in a residential area that is already blighted by over-use of roads which were not built to sustain 21st century traffic levels nor the sort of industrial traffic that is already present in the Leith area. It is unacceptable that Leith residents should be further burdened with additional road traffic. Edinburgh is already failing to meet EU Air Quality Directives, and faces the possibility of traffic banning in order to lessen this pollution. Permitting a development that would substantially add to that air pollution would be a retrogressive step.

Nor does the application adequately address the cumulative impacts arising from thermal and water pollution on the Firth of Forth.

We would add that we are aware of significant local opposition to this proposal and a level of dissatisfaction with Forth Energy's response to local concerns. This does not bode well for a development in the heart of a residential neighbourhood. If the planning system is to work effectively it is essential for the public to have faith in that planning system. It will be essential for further local consultation to take place if any decision other than outright rejection is made in respect of this proposal.

Please treat this letter as a formal objection to the proposal, as well as an indication of the conditions and obligations we consider necessary to mitigate the factors on which our objection is based.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Juliet Swann', written in a cursive style.

Juliet Swann
Head of Projects and Campaigns