18th December 2013
Open Letter to HM Treasury

Prequalified biomass and waste incineration projects must be rejected from the UK Guarantee Scheme

We are deeply concerned about the announcement that further large import-reliant biomass electricity developments as well as waste incinerators have been short-listed, or 'pre-qualified', for public loan guarantees under the Government's UK Guarantee Scheme.

A £75 million loan guarantee has already been granted to Drax for its partial conversion to biomass. According to Secretary of State Vince Cable[i], support for Drax's biomass investment is preventing the power station from shutting down – i.e. far from replacing coal, the loan guarantee help to ensure that more coal will be burned long-term[1]. Furthermore, investigations by reporters and US conservation NGOs Dogwood Alliance and The Natural Resources Defense Council (NRDC) have linked wood pellets sourced by Drax to the clearcutting of biodiverse and carbon-rich ancient wetland forests in the southern US[ii].

We also believe that the Drax Guarantee is unlawful on the grounds that the UK has infringed the requirements of Article 108 of the Treaty on the Functioning of the European Union by failing to notify the European Commission in advance of granting the guarantee. Friends of the Earth has filed a complaint with the European Commission concerning this matter.

We are concerned that if these additional guarantees for such contentious projects are put in place without prior clearance by the European Commission, they may breach EU law also and be liable to investigation.

Now, public loan guarantees have been proposed for the following biomass electricity and waste gasification-incineration projects:

- The proposed partial or full conversion of Eggborough Power Station to biomass: A full conversion of Eggborough would require pellets from up to 15.8 million green tonnes of wood to be burned every year;
- A 100 MW electricity-only biomass power station in Avonmouth, proposed by Helius Energy: An average dedicated biomass power station of this size requires around 1 million green tonnes of wood a year to be burnt;

[1] Although Vince Cable's statement cited in the Financial Times related specifically to the Green Investment Bank's loan to Drax, it demonstrates his understanding that Drax's partial conversion to biomass is a prerequisite for the power station avoiding having to close in the near future. The public loan guarantee given to Drax under the UK Guarantee Scheme not only related to the same biomass development but resulted in the Green Investment Bank loan being reduced by 50% (http://www.businessgreen.com/bg/news/2263887/drax-secures-gbp75m-treasury-loan-guarantee-to-switch-from-coal-to-biomass).

- A 60 MW biomass and waste power station at Tilbury, proposed by Tilbury Green Energy/Express Energy Holding UK: Planning conditions stipulate that the power station can burn up to 300,000 tonnes of Municipal Solid Waste (MSW), Commercial & Industrial (C&I) Waste and Solid Recovered Fuel (SRF) and up to 350,000 tonnes of virgin and waste wood a year, with up to 50,000 tonnes of waste wood being delivered by road annually (the likely upper limit on domestic waste wood use)[iii]; and

- An unspecified number of MSW and C&I waste gasification-type incinerators by Chinook Energy.

We urge the Treasury to reject proposals to grant public loan guarantees to the projects listed above. We also call upon the Treasury to ensure that only genuinely sustainable and low-carbon renewable energy projects are supported.

Below is a list of our key concerns about the projects in question:

1) **A full conversion of Eggborough Power Station** would require just under 16 million green tonnes of wood a year, while the Avonmouth power station would require around 1 million green tonnes annually. Both will be entirely or primarily reliant on imports and together they will burn imported wood equivalent to nearly 1.7 times the total amount of wood produced in the UK annually. The scale of those additional demands poses a serious indirect if not direct threat to forests overseas;

2) Eggborough Power Plc has publicly stated that they are planning to fully or partially convert to biomass in order to **avoid having to close their power station** under the Industrial Emissions Directive. This means that biomass conversion will not replace coal but extend the lifetime of an old, inefficient, polluting and high-carbon power station and likely allow more coal to be burned long-term, too.

2) Information supplied by Drax to DECC shows that the only type of biomass that can be burnt in coal power stations in significant quantities is wood from slow growing trees with low bark content (which rules out most sawmill residues).[iv] This means that **the conversion of Eggborough to biomass would rely on whole trees likely from the southern US and Canada**. Peer-reviewed studies have shown that electricity from burning whole trees from temperate and boreal regions incurs a carbon debt of at least several decades even when compared to generating equivalent amounts of electricity from fossil fuels.[v] Helius Energy has published **no information about their sourcing intention** for a plant in Avonmouth. They could source the same type of wood as Drax does at present – or they could source wood from monoculture plantations in South America or Africa, where trees grow faster but where plantation expansion is commonly linked to land-grabbing, forest and other ecosystem destruction and freshwater depletion and pollution. The same may apply to a significant proportion of the feedstock for the proposed Tilbury Green Power Station, too, though it is not known which proportion will be biomass and how much will be non-biogenic waste;

3) Each of the projects listed above involves **electricity-only power generation** without heat capture and thus they would operate at low efficiency levels;

4) Waste incineration by Tilbury Green Power and gasification-type waste incineration by Chinook Energy will **undermine the waste hierarchy by reducing incentives for recycling, wasting valuable resources and increasing greenhouse gas emissions, as well as creating toxic emissions**. So far, of the few gasification-type incinerators in the UK: Scotgen's Dargavel plant recently had its environmental permit withdrawn by Scottish Environmental Protection Agency following hundreds of permit breaches, whilst the Isle of Wight facility has been closed on more than one occasion by the Environment Agency also due to permit breaches[vi].

Treasury support for these infrastructure projects runs contrary to two main criteria of the HM Treasury's National Infrastructure Plan 2011 [vii], namely

- "achieving a secure, diverse and reliable energy supply for the UK while reducing the carbon intensity of electricity generation at least cost to consumers; "

As recent scientific studies have shown the burning of woody biomass in power stations can result in higher carbon emissions than burning coal.[viii] This has been confirmed by work currently being finalised by DECC's Chief Scientific advisor David MacKay.

- "reducing waste sent to landfill, increasing recycling rates and moving towards a zero-waste economy."

  Support for waste incineration would run contrary to this principle as it would move waste from landfill to incineration – in violation if the waste hierarchy. The UK already burns around 25% of waste - any additional capacity would reduce the capacity for recycling, not increase it.

Sincerely,

UK wIn

Friends of the Earth

www.campaignagainstclimatechange.net

biofuelwatch

[i] Green bank directs 2.3 billion into UK energy projects, Financial Times, 9th May 2013, http://www.ft.com/cms/s/0/d46bfe86-b7e9-11e2-bd62-00144feabdc0.html

[ii] See for example http://www.nrdc.org/media/2013/130827a.asp and http://online.wsj.com/news/articles/SB10001424127887324082604578485491298208114

[iii] Section 73 application to vary certain fuel source conditions in respect of the biomass and energy from waste fuelled generating station, Tilbury Docks, Planning Statement, RMPL for Tilbury Green Power, August 2011

[iv] http://biofuelwatch.org.uk/docs/DECC%20FoI%20EIR%2013-0340%20Q1%20Documents%20Drax%20etc%209May%202013.pdf and http://www.biomassenergycentre.org.uk/portal/page?_pageid=77,19137&_dad=portal&_schema=PORTAL

[v] See http://www.rspb.org.uk/Images/biomass_report_tcm9-326672.pdf, http://www.rspb.org.uk/Images/Searchinger_comments_on_bioenergy_strategy_SEPT_2012_tcm9-329780.pdf and scientific articles listed at http://www.biofuelwatch.org.uk/resources-on-biomass/

[vi] http://www.sepa.org.uk/about_us/news/2013/sepa_revokes_scotgen_dumfries.aspx and http://www.letsrecycle.com/news/latest-news/waste-management/energos-isle-of-wight-plant-fails-further-emissions-tests

[vii] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/188337/nip_2011.pdf

[viii] Joint Research Centre of the European Commission, Carbon accounting of forest bioenergy, 2013 http://iet.jrc.ec.europa.eu/bf-ca/sites/bf-ca/files/files/documents/eur25354en_online-final.pdf