

Dear Sir/Madam,

Re: Bespoke Installation Permit Application for the Tansterne Biomass Power Plant, submitted by GB Bio Ltd, application number EPR/WP3738DE/A001

I am writing on behalf of Biofuelwatch to object to and comment on GB Bio Limited's application for a Bespoke Installation Permit for a waste incineration plant which would burn waste wood.

GB Bio Ltd was granted planning permission on 14th February 2011, following their successful appeal against East Riding of Yorkshire Council's refusal of their application. This decision was based on a planning application which stated that the power plant would be exclusively fired with straw. One of the planning conditions (Condition 24) stipulated: "*Only straw shall be used as a fuel for the power station, unless otherwise agreed in advance in writing by the local authority*". Straw is defined as a biomass residues, not waste, and burning it does not fall within the scope of the Waste Framework Directive and any waste related policies.

We do not know whether the local authority has approved the use of waste wood, or whether GB Bio Ltd intends to request such approval at a later stage. However, it is clear that compatibility with local and national waste policies and with the Waste Framework Directive was not considered during the planning process, given that B Bio Ltd announced their decision to burn waste after planning consent had been granted.

We note that Schedule 9 of the Environmental Permitting (England and Wales) Regulations 9 states:

4. The regulator must exercise its relevant functions— (a)for the purposes of implementing Article 4 of the Waste Framework Directive; and (b)so as to ensure that the records referred to in Article 14 of the Waste Framework Directive are kept and made available to the regulator on request.

Article 4 of the Waste Framework Directive sets out the Waste Hierarchy Principle. It states:

Waste hierarchy

1. The following waste hierarchy shall apply as a priority order in waste prevention and management legislation and policy:

- (a) prevention;
- (b) preparing for re-use;
- (c) recycling;
- (d) other recovery, e.g. energy recovery; and
- (e) disposal.

2. When applying the waste hierarchy referred to in paragraph 1, Member States shall take measures to encourage the options that

deliver the best overall environmental outcome. This may require specific waste streams departing from the hierarchy where this is justified by life-cycle thinking on the overall impacts of the generation and management of such waste.”

GB Bio Ltd claims in its permit application that the power station would be compatible with the Waste Hierarchy Principle, however we believe that this claim is not backed by any credible evidence.

GB Bio Ltd’s claim about compliance with the Waste Hierarchy Principle relies on a comparison with “*three primary measures for the alternate disposal of the biomass waste used as the primary fuel source for this process*”: Recycling, anaerobic digestion, and landfill. We agree that anaerobic digestion is not a suitable alternative for waste wood use, and landfill is clearly at the bottom of the Waste Hierarchy. However, we strongly disagree with the developer’s claims about wood waste recycling. GB Bio Ltd states:

The site utilises 173,680 tonnes per annum of biomass in the fluidised bed combustors. If this material was to be turned back into a useable product this would generate 21.0 kgCO₂e per tonne of wood based on data from [ghg-conversion-factors-016update_MASTERDECC_Standard_Set](#). This would result in the following emissions of $173,680 \times 0.021 = 3,647$ tonnes which is comparable to the total emissions from the proposed site activity. However, this does not take into account the fact that at the end of the recycled products lifetime it would still need to be disposed of and would generate further carbon dioxide equivalent emissions which would mean that it would have a higher impact overall.

The document referred to by the developer can be downloaded from gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2016. It is called “Greenhouse Gas Reporting – Conversion Factors 2016”, and 21 kg/CO₂e is the default figure for construction waste wood recycling, composting and combustion. However, the document states:

These factors cannot be used to determine the relative lifecycle merit of different waste management options. This is because the benefits of energy recovery and recycling are attributed to the user of the recycled materials, not the producer of the waste, in line with GHG Protocol Guidelines.

The Government (Department for Business, Energy & Industrial Strategy) has thus made it clear that the figures cited by GB Bio Ltd must not be used for the purpose of establishing whether a development complies with the waste hierarchy.

We believe that a detailed analysis of alternative uses for waste wood and of the relative greenhouse gas impacts is essential for determining whether a proposal complies with the Waste Hierarchy principle. Such evidence is lacking in this case.

We further note that GB Bio Ltd seeks to burn Grade A-C waste wood. Grade A and B waste wood are in high demand for recycling purposes, mainly panelboard production, but also (in the case of Grade A waste wood) animal bedding and horticultural mulches¹. For lower grades of waste wood, i.e. Grades C and D, Defra suggests that energy from waste is a more suitable option under the Waste Hierarchy than recycling². However, this would not apply to a proposal for burning Grade A and B waste wood, too.

The greenhouse gas benefits of recycling suitable waste wood to panelboard have been documented in at least one peer-reviewed study³.

We further note that the developers have submitted no concrete information about the conversion efficiency of the proposed power plant. They merely include general information about Fluidised Bed Combustion being more efficient than, for example, grate firing. However, a detailed energy balance would be important for ascertaining the greenhouse gas impacts and compatibility with the Waste Hierarchy principle.

We therefore hope that the permit application will be rejected based on the insufficient information provided by the applicant in relation to the Waste Hierarchy principle. Should the developer supply more detailed information in future, then we would ask for the consultation to be re-published and reopened. Many thanks in advance.

Yours faithfully,

Almuth Ernsting
Biofuelwatch

¹ www.woodrecyclers.org/wp-content/uploads/2015/04/PAS111.pdf

² www.gov.uk/government/uploads/system/uploads/attachment_data/file/69403/pb13530-waste-hierarchy-guidance.pdf

³ E.g. Recycling of wood for particle board production: accounting of greenhouse gases and global warming contributions, H Merrill and TH Christensen, Waste Management & Research, November 2009