

Dear Sir/Madam

Re: Application for a biomass gasifier by Plymouth Biomass Ltd/REACT in Ernesettle, Ref 14/01637/FUL

Thank you for giving Biofuelwatch the opportunity to respond to the two new documents submitted by REACT. Having studied both documents carefully, I would like to confirm that we maintain our objection to the application on the grounds set out in our original objection. However, we would like to provide additional comments.

Air quality:

We have looked at the Air Quality Assessment submitted by REACT, their clarifying comments and data from nearby air quality monitors.

From Saltash Town Council's objection letter and from speaking to a local resident, we understand that the low-lying areas close to the River Tamar – including Ernesettle as well as Saltash - are frequently affected by sea fog which causes natural inversion and traps air pollutants.

We believe that those special climatic conditions would merit monitoring PM10 levels in Ernesettle, rather than 2012 PM10 figures from Central Plymouth and Exeter Street being chosen as the basis for predicting levels in Ernesettle, as URS did when carrying out the Air Quality Assessment for REACT.

Furthermore, given that Saltash is less than one mile from the site, we are concerned that URS has chosen no receptors there for the purpose of their Air Quality Assessment.

Waste hierarchy:

The EU Waste Framework Directive, the National Planning Policy for Waste and the Waste Management Plan for England all emphasise the 'waste hierarchy' principle.

This means that waste – including waste wood – must be used as high up the waste hierarchy as possible.

Claims contained in the new planning documents related to the waste hierarchy:

1) The developers claim:

"As set out in Appendix 1 of the Need Statement submitted with the Planning Application, the Applicant has identified an available source and supplier of c.80,000 tonnes of C Grade feedstock. In addition, the Applicant has since identified another supplier willing to supply the facility. That supplier has operations in the Plymouth, St Austell and Exeter areas. A copy of correspondence with that potential supplier is included as Appendix A to this document."

If REACT were unable to secure sufficient waste wood then the biomass gasifier would not be economically viable – but economic viability of a development is not a planning consideration. What matters is whether the development might result in waste wood being moved down rather than up the waste hierarchy. We see nothing in the new planning documents to allay our concerns that the power station, if approved and built, could well result in waste wood being diverted from other users, including the wood panel industry. This appears to be confirmed by the following statement which the potential supplier identified in Appendix A, Wood Yew Trees, makes on their own website:

"We supply most of our wood chip to Norbord of South Molton, who are one of the leading chip board manufacturers in Europe and also produce many flat pack furniture items that are retailed in the high street by some of the large DIY chains. The wood chip not used by Norbord is used for either cattle or poultry bedding, absorbent bio-compound or biomass fuel so everything we receive is recycled into a usable product"¹.

Furthermore, Wood Yew Trees state on their website that they handle 1,000 tonnes of waste wood a week, i.e. a maximum of 52,000 tonnes a year² – far below the 100,000 tonnes that REACT would require. Based on the information published by Wood Yew Trees we cannot see how they could become a significant supplier of REACT's without the wood hierarchy principle being contravened.

2) We note that REACT states that they have identified an available supplier of 80,000 tonnes of waste wood, other than Wood Yew Trees – but that they do not specify that this would be a local supplier or even a supplier from the South-West. According to WRAP's 2011 report, waste wood arisings in the South-West are well below those in many other parts of England. The largest quantities of waste wood arisings are found in the South-East and London, followed by the North-West, Eastern England and the West Midlands. Furthermore, biomass power stations elsewhere in the UK are already procuring waste wood from a long distance.

We have been unable to find any information through web searches to confirm or refute REACT's claim that one company is exporting 40,000 tonnes of waste wood from Plymouth. As shown below, the UK is a net importer of waste wood, even though some companies nonetheless choose to export waste woodchips for economic reasons. If 40,000 tonnes of woodchips are indeed being exported from Plymouth, we believe it would be important to establish whether those would be available to REACT. Might this be wood already committed to O-Gen's biomass plant which we understand is not yet operational? Or might it be sold abroad under a long-term contract to which the supplier is tied?

3) In one of their new documents the developer claims: *"Grade C waste wood is 'lower grade' waste wood and cannot be practically recycled, meaning that the only other option for the management of the fuel source would therefore be disposal."*

As we pointed out in our original objection, this is contrary to what Defra states. According to Defra, Grade C waste wood includes Grade A and B waste wood which can be used for a wide range of purposes, including wood panel production³.

The developer further states: *"The demand for Grade A and B waste wood from the reprocessing sector means that its price is higher than for Grade C waste wood, which has minimal existing outlet in the UK. Grade A and B waste wood is therefore considerably less attractive for use in a recovery facility than Grade C waste wood."* In other words, they suggest that competition for waste wood between biomass plants and other purposes such as wood panel production is unlikely to occur for economic reasons. We are not aware of any evidence that would back up this assumption. WRAP's Waste Wood Market Report 2011, "Realising the Value of Recovered Wood"⁴ states:

¹ <http://www.wood-yew-waste.com/index.php/about-us>

² <http://www.wood-yew-waste.com/index.php/awards>

³ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/82571/consult-wood-waste-researchreview-20120731.pdf

⁴ http://www2.wrap.org.uk/downloads/Wood_MSR_Final_Aug_2011.437367a3.11101.pdf

"A recent study by John Clegg Consulting suggested that the demand for recovered wood from biomass plants could rise to over 4 million tonnes by 2015 (ie more than the UK's entire supply of waste wood). Moreover, there are likely to be severe regional imbalances between supply and demand. For example, demand from Scottish biomass facilities is forecast to increase by approximately 1 million tonnes by 2015. But, as Graph 5 illustrated, current wood waste arisings in Scotland are estimated to be just 345,000 tonnes. Although it might be possible to overcome regional shortfalls by inter-regional movements of recovered wood, it does suggest that the market for recovered wood is likely to become much tighter."

A 2012 Defra report states:

*"+ Government incentives encouraging electricity generation from renewable sources, such as biomass, causes concerns, particularly in the panel board industry, that such incentives impair their ability to compete for recovered wood;...
+ There is friction in the market caused by the fact that local authorities prefer to recycle wood waste but there is increasing demand for wood waste as a fuel in biomass energy generation plants;
+ Wood waste might no longer be a viable option for animal bedding and landscape uses as wood waste value continues to increase; ...
+ Wood waste reprocessors and aggregators are concerned that demand for Grades A and B exceeds supply resulting in rising costs for reprocessors; ...
+ The UK is net importer of wood waste.
+ Increasing gate fees and imports suggest that there is strong demand for wood waste, meaning that the market can absorb an increased level of recovery, and supply might actually outstrip demand."*

There is thus strong evidence that biomass power plants are competing for feedstock with the wood panel industry and other users of recycled woodchips. This illustrates the risk of REACT's proposed biomass gasifier resulting in waste wood being moved down the waste hierarchy, in breach of national planning policies.

As we argued in our previous objection letter, the continued, albeit declining, landfilling of a proportion of waste wood across the UK is due not to a lack of demand but to a lack of comprehensive segregated waste wood collections. Further increasing the demand for waste wood for biomass electricity would not address this problem. And given that the UK is a net importer of wood waste, continued exports simply show that companies will sell waste wood to whoever offers the best price which, in some cases, may be a customer abroad.

Efficiency and sustainability:

REACT have supplied no information that would contradict our conclusion, set out in our previous objection letter, that, run as an electricity-only power plant, the gasifier would achieve a mere 20% efficiency – quite a bit lower than what an MSW incinerator would need to achieve in order to be classified as 'energy recovery' rather than 'waste disposal' under the Waste Framework Directive.

However, we note that REACT now claims: *"The Proposed Development meets the 'Good Quality' CHPQA standard."* Yet at the same time, they say: *"Until such time as Plymouth Biomass Limited and the other parties can have a degree of certainty about their projects, one can no more than speculate at the potential for beneficial heat use and highlight its potential advantages. Plymouth Biomass Limited has made undertakings in its draft Section 106 Agreement Heads of Terms to undertake additional feasibility studies to further this matter in due course."* Those statements are mutually contradictory. It is not possible to obtain CHPQA certification without submitting details

of the amount of 'useful heat' that will be supplied annually⁵. Without a definite customer for a sufficient proportion of the heat generated, no plant can qualify as CHP, let alone 'good quality CHP'. Clearly, REACT has not identified any definite heat customer.

Noise:

The applicant states: "*Normally in biomass facilities of this type, the main noise is caused by wood chipping. In the case of the Plymouth Biomass Facility, biomass in the form of wood will be delivered prechipped so there will be no need for chipping in the facility.*"

We would like to point that serious ongoing concerns over noise have been expressed by residents who live close to an operational biomass power station in Markinch, Scotland. Yet no woodchipping is carried out on or near the site of that power station⁶.

Best regards,

Almuth Ernsting
Biofuelwatch

⁵ https://www.chpga.com/guidance_notes/Simple_Guide.pdf

⁶ <http://www.fifetoday.co.uk/news/local-headlines/behind-the-scenes-at-new-markinch-biomass-plant-1-3344731> - we can provide more detailed information such as minutes of a recent public meeting in Markinch hosted by two local Community Councils.