Friends of the Earth Chepstow

Chepstow Friends of the Earth
Response to
Welsh Assembly Petitions Committee's
Enquiry into
Prosiect Gwyrdd and Welsh Waste Policy Petition

Chepstow Friends of the Earth (FoE) is an environmental campaign group which was established in 1992 and is affiliated to Friends of the Earth England, Wales and Northern Ireland. Amongst other issues, we have actively campaigned on waste and recycling for the past 19 years and welcome this opportunity to share our views with the Welsh Assembly Petitions Committee. We would be happy to give evidence in person if requested by the Committee but would ask the Committee to obtain our permission before including extracts from this submission in any report they produce.

1. What, in your view, is the best method of disposing of non-recyclable waste?

Our preferred method of treating residual waste is Mechanical and Biological Treatment (MBT) with the residue going to landfill as that does not destroy any resources which future generations may find a way of utilising. Even if there is not yet a consensus that we have reached Peak Oil, rising commodity and energy prices indicate that our "waste" is increasingly a valued resource which it is economically viable to reuse or recycle. Any residual waste treatment facility which is built must therefore be able to adapt to an input stream which is reducing and variable, especially in calorific value.

- The treatment facility should either be modular (so units can be shut down when not required) or process waste in batches, again so it can be shut down when not required.
- The rapidly-changing recycling scene also means that waste producers or collectors should not have to commit to long-term contracts with a facility. One only has to look at the transformation of our waste services over the past decade - when our recycling rate increased 20-fold - to realise how absurd it is to sign a waste contract for more than 10 years.

Modern waste treatment technologies – MBT, pyrolysis, gasifiers and autoclaves - recognise these facts and are designed accordingly. For example, the New Earth Solutions MBT plant which opened in Avonmouth in 2011 has the capacity to treat 200,000tonnes/year of residual waste, cost £25million[1] to build and has a 9-year contract with Bristol, Bath and North Somerset for their residual waste.

2. What are the advantages and disadvantages (in terms of the environment, health, local economy etc) of incineration?

The only advantage of an incinerator is that it will provide a reliable revenue stream for a large waste company (probably multi-national) and the bankers which fund it. This income will be supplied by the local authorities – and ultimately their rate-payers – who were foolish enough to sign long-term contracts to supply waste to the incinerator.

[1] In contrast, the Viridor incinerator in Cardiff will cost £220million.

The many disadvantages of incineration include:

- Expensive to build[2] so require long 25-30 year contracts with waste producers/collectors to finance construction.
- Not adaptable to reducing or variable waste streams because they are not modular or batch-mode operations. Instead, they require a steady supply of high calorific-value waste to keep them operating continuously.
- Lead to the incineration of recyclable material because of the tonnage quotas contained in their supply contracts (see above).
- May be a health hazard because of the dioxins, heavy metals and ultra-fine particles they emit in to the air.[3]
- Are bad for climate change because they emit large amounts of Greenhouse Gases. Incinerators are a relatively inefficient way of generating heat and electricity as their primary purpose is to destroy waste and minimise air pollution. They create 33% more greenhouse gases per unit of energy produced than a gas-fired power station and a recent DEFRA report[4] ranked them as some of the worst options for waste disposal from this point of view.

In summary, there are environmental, social and financial reasons why incinerators are not the right way to treat our residual waste.

3. Do you think it's a good idea for local authorities to collaborate on waste policy, which could lead to resource savings, or [is] it more important for them to find the most appropriate solution for their locality? What are the reasons for your answer?

In principle Chepstow Friends of the Earth has no objection to Councils working together to achieve economies of scale on a procurement. Sharing legal and consultants' fees can keep their costs down and aggregated tonnages can improve their negotiating position with contractors. Indeed, centralised procurement does not even have to mean a centralised solution as a requirement for waste to be treated locally could have been included in the tender specification, in line with the proximity principle.

However Chepstow FoE objects to the way the Prosiect Gwyrdd procurement has favoured large waste companies and long contracts which, as explained above, is not in the interest of <u>any</u> of the local authorities involved in the procurement. From the beginning, Prosiect Gwyrdd has let it be known they were willing to sign a long-term, 25-year contract[5] rather than signalling a desire for a shorter one. There was also a requirement that bidders were large enough so that the Prosiect Gwyrdd contract would

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[2] See footnote 1. £220m is 9 times the cost of a similar scale MBT plant.

[3] "Systematic review of epidemiological studies on health effects associated with management of solid waste" by Daniela Porta, Simona Milani, Antonio I Lazzarino, Carlo A Perucci and Francesco Forastiere published in *Environmental Health,* 2009.

[4] *The Economics of Waste and Waste Policy*, Waste Economics Team, Defra June 2011

[5] See paragraph 4.2.6 in the Prosiect Gwyrdd Outline Business Case (http://www.caerphilly.gov.uk/prosiectgwyrdd/pdfs/business_case.pdf)

be less than 10% of their turnover[6]. This ruled out the smaller, more innovative companies at the initial, pre-qualification stage of the procurement. Large, established companies tend to favour large, established solutions – a good definition of an old-fashion incinerator.

Chepstow FoE has also urged Prosiect Gwyrdd [7] to reduce the size of the facility(ies) they are procuring. Despite clear evidence from the Waste Dataflow figures that waste arisings had been falling in Wales since 2005, the Outline Business Case (OBC) published in 2009 predicted waste arising would continue to grow by at least 1%. In fact, the Waste Dataflow data now available on the StatWales website[8] supports our recommendation.

	Apr-Jun 2006	Apr-Jun 2011	Reduction
Residual waste per person for PG area (kg)	490.4	287.5	41.4%
Residual Waste per dwelling for PG area (kg)	1,121.3	648.1	42.2%
Municipal waste arisings for PG area (tonnes)	125,800	111,700	11.3%

The reason for predicting these higher tonnages is explained in an appendix to the Outline Business Case:

"For Cardiff, the project is based on [Municipal Solid Waste] MSW growing at 1.5% per year to 2015, reducing to 1% thereafter. Cardiff produces the greatest tonnage of waste of all five Prosiect Gwyrdd partners, and it is considered that using a lower growth rate for projection purposes could put the project at risk."[9]

A smaller amount of waste might make an incinerator unviable but the newer waste treatment technologies mentioned above do not require the same economies of scale to be viable. This again shows a desire to bend the procurement to ensure incineration as the solution. Based on the figures above, Chepstow FoE now feels Prosiect Gwyrdd should be procuring treatment for 110,000tonnes/year of waste, not 220,000 tonnes.

In summary, while Chepstow FoE is not opposed to joint local authority procurements, we feel that the Prosiect Gwyrdd procurement has been seriously flawed and biased in favour of incineration. It has inflated its tonnage estimates, ruled out smaller, more innovative companies and declared its willingness to commit to a long, 25-year contract. For the reasons described above, Chepstow FoE believes an incinerator is not the best value – either economically, socially or environmentally – for the region's residual waste.

[6] See criteria for scoring Questions F1- F3 in Appendix 6 of the Prosiect Gwyrdd Pre-Qualification Questionaire.
[7] See "South East Wales Friends of the Earth Waste Group: Response to Prosiect Gwyrdd Outline Business Case", circulated March 2009.
[8] http://statswales.wales.gov.uk
[9] Appendix 4b of P.G. Outline Business Case.