



## The National Non-Food Crops Centre

Biocentre  
York Science Park  
Innovation Way  
Heslington  
York YO10 5DG

Tel: 01904 435182  
Fax: 01904 435345

[enquiries@nnfcc.co.uk](mailto:enquiries@nnfcc.co.uk)  
[www.nnfcc.co.uk](http://www.nnfcc.co.uk)

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Sarah Banwell  
Room 4/04 Kite  
Temple Quay House  
2 The Square  
Temple Quay  
Bristol BS1 6PN

Dear Mr Blackie

**Bishop's Castle Biomass Power Limited – ref APP/K3225/A/08/2086011/NWF**

Many thanks for contacting us with regard to the above project.

As the UK's National-Non Food Crops Centre (NNFCC), working to help introduce renewable fuels and materials into the marketplace and to provide independent information and advice to agriculture, academia, Government, industry, the media and the public, we are encouraged by this proposal at such an important time for the UK renewables sector.

Renewable energy generation is currently high on the list of priorities for UK government, making a significant contribution to reducing the effects of climate change and the mitigation of carbon dioxide levels in the atmosphere. Under the Renewables Obligation (RO), the Government has committed to generating increasing levels of power from renewable sources over the next 20 years. Indeed, the Government has further encouraged the development of newer renewables technologies, including that to be built at Bishop's Castle, by increasing the support provided. From April 2009, the Renewables Obligation is expected to be modified so that a dedicated biomass power plant will receive 50% extra support compared to that received today (i.e. 1.5 RO certificates per MWh sold). This rises to an additional 100% support (2 RO certificates per MWh sold) for a combined heat and power (CHP) biomass power station where energy efficiencies can be increased from about 30% for non CHP power plants to about 80%. There is, therefore, significant advantage, both economically and environmentally, to locate this power plant at an industrial park where effective and efficient use of heat can be made year round. It should also be noted that a potential safety and convenience benefit of locating such a CHP plant at an industrial park is that the park designers could possibly provide some degree of road de-icing facilities by running heat pipes under the roads.

Alternative sources of power generation also provide the UK with a more diverse energy supply portfolio, thereby improving energy security. This is especially important as we approach a period of power station decommissioning during the next decade.

With respect to wood fuel supply, the Forestry Commission has estimated that the woody biomass available in the UK is currently about 3.3 million oven dry tonnes/year, from which approximately 2 million odT/yr are used by competing markets, leaving approximately 1.2 million odT/yr of wood residues available for the generation of energy – this compares with the 20,000 odT/yr demand of the proposed Bishop's Castle Power Plant. This represents approximately 6.8 TWh/year of energy per year, using a gross calorific value (GCV) of 20 GJ/dry tonne. In addition, in its latest report "A Woodfuel Strategy for England", the Forestry Commission is planning to bring on stream an extra 2 million odT/yr of virgin wood by 2020. The resource will come from presently under-managed woodlands in England.

Wood burning technology is becoming increasingly popular across the UK, ranging from small, school scale units such as at Redlands Primary School in Nottinghamshire to large power stations such as the 32 MW Wilton 10 power station which uses 300,000 odT/yr of wood fuel (40% of which is recycled wood, a 10.5 million tonnes/year resource in the UK). We feel that this project is a real opportunity for Shropshire and look forward to finding out more about the project in due course.

Yours sincerely

DR GERAINT EVANS

Technology Transfer Manager