

Environment and Sustainability Committee

E&S(4)-09-12 paper 3

**Inquiry into energy policy and planning in Wales –
Evidence from Eco2**



National Assembly for Wales

Environment and Sustainability Committee

Inquiry into Energy Policy and Planning in Wales

Written evidence of

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20 February 2012

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GLOSSARY OF TERMS

Eco2	Eco2 Limited
kgCO ₂	kilograms of carbon dioxide equivalent (i.e. the sum of the greenhouse gases carbon dioxide, nitrous oxide and methane, with the latter two converted to their equivalent amounts of carbon dioxide when considered in terms of global warming potential)
miscanthus	an annual crop that may be grown as an energy crop in the UK
MW	mega watt (i.e. 1 million watts)
MWh	mega watt hours
tCO ₂	tonnes of carbon dioxide equivalent (produced by dividing kgCO ₂ by 1,000)

1 ECO2 LIMITED

1.1 Introduction

1.1.1 Eco2 Limited (“**Eco2**”) is a UK-owned business based in Cardiff. The company was set up in November 2002 and has already enjoyed considerable success with projects in a wide range of technologies from onshore wind, landfill gas and biomass. Eco2 is also a shareholder in Tidal Energy Ltd, a company that is developing a tidal energy technology.

1.1.2 Our approach recognises the need to balance commercial issues with the environmental benefits deriving from renewable energy projects. This balance needs to be demonstrated at both strategic and local levels. Eco2 works closely with all key stakeholders, including local authorities, local community groups, planners, environmental groups and government departments. Eco2 always aims to engage with these stakeholders at a very early stage.

1.2 Renewables Experience

1.2.1 Eco2 is led by a team that already had an established track record in the development, construction and operation of a broad range of renewable technologies including onshore wind, biomass, landfill gas, small scale hydro and marine. In particular the team has extensive experience of biomass development with over 310MW of biomass power projects throughout the world over the last fifteen years.

1.2.2 When Eco2 was established in November 2002 its core focus was the development onshore wind projects in the UK. Whilst the company did have some significant success in developing onshore wind the difficulty and unpredictable nature of obtaining planning consent resulted in the company broadening its development activities into other areas such as landfill gas and more recently biomass.

1.2.3 In 2006 Eco2 made the strategic decision to concentrate its efforts mainly in the development of biomass projects. Eco2 is currently developing a portfolio of 10 biomass plants, generally straw or wood-fired. These projects are located mainly across the UK and Spain.

1.2.4 Specific biomass experience includes:

- (a) Western Wood Energy Plant, 14MWe wood fired (see Section 3.1)
- (b) Sleaford Renewable Energy Plant, 40MWe straw fired (see Section 3.3)

2 EVIDENCE

2.1 General implications

Question:

What are the implications for Wales if responsibility for consenting major onshore and offshore energy infrastructure projects remains a matter that is reserved by the UK Government?

- 2.1.1 It need not be the case that this is a disadvantage for Wales because England and Scotland have a much higher success rate in the planning process than decisions made in Wales. Renewables UK statistics show that the average determination period in Wales is over double that of England and Scotland and the success rate is half. Eco2's view is that this stems from an inefficient consultative process and an inability to make objective decisions at the end of it. Unless the fundamental reasons why Wales is poor at making positive decisions in a timely manner is addressed there is a danger that in transferring such decisions to the Welsh Government that the success rate of major onshore and offshore energy infrastructure projects will actually fall.

2.2 Affect on achievement

Question:

How does this affect achievement of the Welsh Government's aspirations for various forms of renewable and low carbon energy as set out in the Energy Policy Statement?

- 2.2.1 Clearly decisions being made outside of Wales partially remove Welsh Government's ability to determine projects. However, any objection from Welsh Government or the host local authority would result in public inquiry in any event.

It could be an advantage that difficult decisions which historically have been shown to be more difficult to make in Wales continue to be made in Westminster.

2.3 Affect on delivery

Question:

How does this affect delivery of the Welsh Government's target for a 3% reduction in Green House Gas emissions per annum from 2011?

- 2.3.1 Eco2's view is that the Welsh Government is more likely to achieve its Greenhouse Gas emissions target from 2011 with the present system unless radical changes are made to the consultative process in Wales.

2.4 Impact of consenting decisions

Question:

What will be the impact if consenting decisions on major infrastructure projects and associated development are not all taken in accordance with Welsh planning policy?

- 2.4.1 Whereas there is a small chance that projects which would have been rejected at Wales level will gain consent, there is a far higher chance that projects which are desirable to the Welsh Government will not get consented in a timely manner.

2.5 The petitions

Question:

[What comments can be added regarding] the two petitions about Welsh Government planning guidance as it relates to onshore wind energy and the impact on local communities and infrastructure?

- 2.5.1 The situation regarding the two petitions was entirely predictable and stems from a flawed sieving exercise in the establishment of the Tan 8 areas. Too high a priority was given to forestry areas and too little to grid and road infrastructure. Had the original exercise taken into consideration these issues far more of the Tan 8 areas would have been close to industrialised areas.

2.6 Role of consenting agencies

- 2.6.1 The one agency not mentioned is the Countryside Council for Wales. Our experience is that they are very difficult to deal with and inevitably end up in objecting to windfarm applications.

3 BACKGROUND INFORMATION

3.1 Onshore Wind Developments

3.1.1 As stated above when Eco2 was formed in 2002 the business strategy was centred on onshore wind. Eco2 concentrated its efforts on projects in Wales and Scotland on the basis that Eco2 had local contacts in both countries, the prospects of receiving planning permission in Scotland were very good and the Welsh Government were just about to release its strategy to promote the development of onshore wind in Wales.

3.1.2 Eco2's Scottish onshore wind development experience is:

(a) Dummuie

The Dummuie project was the first project submitted for planning by Eco2. Although the initial planning application was turned down at committee the project was successful in obtaining permission following a written representation inquiry with the Scottish Executive. The project was awarded planning in September 2004; the whole planning process took twelve months from original application. The project was built in 2005 and has been operating well.

(b) Hatton

The project was submitted for planning in November 2006 and was awarded planning in July 2007. The first turbine was erected in November 2011 and is now operating. Total time for determination 8 months.

(c) Bogenlea

The project planning application was submitted in May 2009 and was awarded at committee in December 2009. The project construction will commence this year. Total time for determination 7 months.

3.1.3 Eco2's Welsh onshore wind development experience is:

(a) Betws

The project was started in 2003 and after extensive consultation all associated parties the planning application was formally submitted in May 2005. Following and extended planning process was awarded planning permission by Carmarthen CBC in June 2007. Despite no objection from CCW during the planning process CCW requested that the Welsh Government call the in the project and this was done in October 2007. A two week public enquiry was held in September 08 and the Inspectors report was provided to the Welsh Government in November 2008. The Welsh Government issued its formal decision was issued in June 2009. Total time for determination 49 months.

(b) Pendragon Fach

An application for four turbines was submitted in July 2006. The project was originally much bigger as the site resource is excellent and it was expected that this area would be the TAN8 area for east Wales. The smaller application was structured to comply with TAN8 policy. The project was determined by Blaenau Gwent CBC in January 2009. The project was recommended for approval by the planning officer but was subsequently turned down at committee. A two week public inquiry was held in April 2010 and the project was eventually issued with a refusal notice in July 2010. Total time for determination 48 months.

(c) Glyncorrwg

The planning application was submitted for this project in May 2007 and was turned down at planning committee in December 2007. It was Eco2's intention to appeal this decision as the project was situated in a Tan 8 area and it was felt that the planning issues that resulted in the refusal could have been addressed. However, the TAN8 tender process resulted in all Forestry Commission access rights being controlled by the developer of Pen y Cymoedd project. Eco2 has therefore been unable to secure an access agreement for the Glyncorrwg project and it is not possible to justify the costs of re-submission until these arrangements can be agreed.

(d) Fochriw

This project was approved by Caerphilly CBC within 11 months of submitting the application. Eco2 is currently working on constructing this project.

3.2 Western Wood Energy Plant

- 3.2.1 The Western Wood Energy Plant is Wales' first commercial scale biomass project and generates 14MWe by burning forestry wood and clean wood processing residues in a state-of-the-art combustion plant. The power station situated in Margam, South Wales is now fully operational following a successful two year construction period. With high load factors it is one of the best performing biomass sites in the UK. It also took the honours in the category of Sustainability at the LABC Building Excellence Awards 2009.
- 3.2.2 The plant is owned by Western Bioenergy Ltd. Good Energies (UK) LLP is the principal shareholder and local company, the Western Log Group owns the minority interest.
- 3.2.3 The Western Wood Energy Project was first envisaged by the Western Log Group which has been involved in the timber industry for many years.

- 3.2.4 Eco2 joined the project in 2004 as a joint venture partner, bringing with it the expertise necessary to put together a suite of construction and finance contracts. Eco2 now manages the fuel logistics and administration at the site.
- 3.2.5 Good Energies (UK) LLP, a leading global investor in the renewable energy and energy efficiency industries, provided the equity and secured debt finance from the Bank of Tokyo Mitsubishi to allow the construction to commence. The project's renewable energy credentials also allowed it to secure substantial grants from the Welsh European Funding Office and the DTI Bioenergy Capital Grant Scheme.
- 3.2.6 Construction commenced in October 2006 for the two year build phase, the first electricity was generated in July 2008 and the plant became fully operational and was handed over to Western Bioenergy Ltd in November 2008. The plant is operated by the Western Biomass Operating Company Ltd, a subsidiary of the build consortium who won a five year operating concession in open tender.
- 3.2.7 The Forestry Commission is the largest single fuel supplier to the plant and is one of a number of companies who have entered into long term supply agreements with Western Bioenergy Ltd. The majority of the fuel is sourced from the Welsh forests and timber industries.
- 3.2.8 The Plant is designed to only use clean wood as fuel; no contaminated material (for example, treated or painted timber) is accepted under the terms of the operating permit. By burning this sustainable fuel, some 47,000 tonnes per year of carbon dioxide from fossil fuel are avoided.

3.3 Sleaford Renewable Energy Plant

- 3.3.1 The Sleaford Renewable Energy Plant is a straw-fired power station to be located in Lincolnshire, in the heart of the "bread basket" of England.
- 3.3.2 The project was granted planning permission in November 2008 and will generate 38MWe using proven, efficient technology specifically designed for the clean combustion of straw.
- 3.3.3 In December 2011, Eco2 successfully sold the Sleaford project to specialist investment fund BNP Paribas Clean Energy Partners, in a landmark £170million deal.