# **Environment and Sustainability Committee**

E&S(4)-11-12 paper 3

Inquiry into energy policy and planning in Wales - Paper from the Minister for Business, Enterprise, Technology and Science

#### 1. Introduction

I would like to thank the Environment and Sustainability Committee for its invitation to provide evidence on matters concerning the BETS Energy and Environment (E&E) sector that have been raised in the evidence taken by the Committee so far in its inquiry into energy policy.

## 2. The Importance of the Energy and Environment Sector

The Energy and Environment Sector (E&E Sector) is very important to the Welsh economy, representing a greater proportion of employment and value to Wales than it does to the UK as a whole. Of the original six priority sectors in Wales, it had the largest increase in employees (33%) between 2005 and 2009, and, in 2008, the highest birth rate for new firms. There is potential for £50billion of investment in low carbon electricity production in Wales over the next 10–15 years<sup>1</sup>.

The Energy Sector is recognised as having an important role across the wider economy in opportunities for a sustainable economy, delivering resource efficiency and driving forward the low carbon, low waste agenda in other key sectors. This enabling role extends to wider socio-economic benefits in that the sector has a direct impact on communications, transport links and property infrastructure.

The Sector is well placed to take advantage of both UK initiatives, such as the Green Investment Bank, Feed in Tariffs and Green Deal, and Welsh Government programmes like ARBED and Regeneration Areas.

The potential of the Sector is great because it can deliver long term, secure, well paid and skilled jobs. The challenge for Wales is to compete in a global market for investment, where increasing European and UK regulations squeeze competitiveness during tough economic conditions, coupled with the very delicate balance to achieve truly sustainable development.

Energy and Environment is one of my identified priority sectors. A dedicated team is in place in my Department to support and grow

<sup>&</sup>lt;sup>1</sup> "A Low Carbon Revolution – The Welsh Government Energy Policy Statement" 2010

the Sector, taking a whole Government approach to build a positive business environment through addressing five priorities:

- Investing in high-quality and sustainable infrastructure;
- Making Wales a more attractive place to do business;
- Broadening and deepening the skills base;
- Encouraging innovation;
- Targeting the business support we offer.

The E&E Sector Panel was established in March 2011, and provides advice to me to ensure that Wales is at the forefront of the transition to a low carbon, low waste economy in order to secure maximum economic, social and environmental benefits for the people of Wales.

## 3. Renewable Technologies: Marine

We have an abundance of renewable energy sources in Wales, particularly around wind, wave and tidal. The renewable energy sector<sup>2</sup> supported around 13,000 jobs in Wales in 2009/10<sup>3</sup> and has increased considerably in recent years with renewable generation increasing by 58% between 2004 and 2010.

Marine wave and tidal are emerging markets which are clearly on the assent. In 2010 there were 800 people employed in the sector in the UK, but the medium growth projection for 2020 is that wave and tidal will create ~7,800 direct full time equivalent posts (FTEs), and 4,600 indirect FTEs<sup>4</sup>.

Wales has already established itself as an important player in this market. Pembrokeshire has the highest concentration of wave resource (700km²) in Wales. A 1.2MW tidal energy demonstration project to be located at Ramsey Sound in 2013 with potential for a further 4 demonstration projects. The Welsh Government is supporting Marine Energy Pembrokeshire who facilitate the development of the marine energy sector locally. In North Wales, a consent application has been submitted for a £70m project to install a 10MW array of tidal stream turbines off the north west coast of Anglesey in 2015. The array would generate enough power for over 10,000 homes on the island.

The Welsh Government recently signed a Memorandum of Understanding with the Crown Estate to further explore the opportunities to open up areas of the Welsh coastline for wave and tidal arrays.

<sup>&</sup>lt;sup>2</sup> Defined as including biomass, geothermal, hydro, photovoltaic, renewable energy consultancy, wave and tidal and wind

<sup>3</sup> http://bis.gov.uk/policies/business-sectors/low-carbon-business-oportunities/market-intelligence/market-data 
<sup>4</sup> "Working for A Green Britain 2" Cambridge Econometrics July 2011: http://www.bwea.com/ref/reports-and-studies.

Wales is already a net exporter of renewable energy, and in 2010 the Welsh Government set aspirational targets of generating twice as much energy from renewable sources as we consume by 2025, an annual energy output in the region of 48 TWhr. Wales also has existing world-class academic and business expertise in the field. These include the Bridge Marine Science Group in Anglesey, an independent, not for profit maritime cluster providing global marine science expertise, and SEACAMS (Sustainable Expansion of the Applied Coastal and Marine Sectors) which is a unique venture, the first in the world to combine a range of marine and terrestrial environmental knowledge and expertise<sup>5</sup>.

This Sector therefore offers significant opportunities especially where ambitious targets will drive activity over the coming years. For example, the EU aims to source 20% of its energy through renewables by 2020. With significant investment expected in this Sector both within Wales and globally, I recognise that there are specific and substantial job creation opportunities associated with major developments, such as the Severn Barrage and my officials are tasked with facilitating any associated opportunities which may arise from them.

Renewable energy has been defined by the Sector Panel as a priority for my E&E Sector. Accordingly, lead officials in my Department are tasked with identifying and facilitating opportunities to grow the sector. They are actively seeking to work in a cross-Government and cross-agency manner with key stakeholders such as the Crown Estate.

## 4. Offshore Wind Developments

Offshore wind is expected to provide a large share of the UK's renewable energy targets. It has been estimated that a minimum of £35 billion investment will be required by 2020 and £100bn by 2030 if the UK is to achieve its offshore wind generation targets.

The North Wales coast hosts offshore wind farms from the Crown Estate's Licence Rounds 1 and 2, but Licence Round 3 will bring 2 (of 9) further wind farms to Welsh waters, namely Atlantic Array and Irish Sea. This presents Wales with the opportunity to grow installation and maintenance operations to service the new farms.

Around 1% of the capital expenditure of the entire offshore wind development is spent on port-related activities during installation which is between £10m and £15m for a 500MW wind farm. A 500MW development will see an investment of £5m in port related operations and maintenance activity. For example, in October

<sup>5</sup> http://www.seacams.ac.uk/

2011, the privately owned Port of Mostyn was chosen as a base to support and maintain the Gwynt y Mor wind farm, creating 100 jobs. The £50million RWE npower project will involve the construction of a pontoon and purpose-built operations and maintenance base to deliver 160 wind turbines sited about 10 miles (16km) off the coast near Colwyn Bay and Llandudno.

I recognise that whilst being crucial to sustain and grow the E&E sector in Wales, ports also form a vital part of the wider economic and transport infrastructure of Wales. Ports in Wales are important to economic development and are assets which need to be proactively developed for the overall benefit of the Welsh economy.

There were around 3200 people working in the UK offshore wind sector in 2011, representing rapid growth in the sector from just 700 in 2007. Renewables UK commissioned Cambridge Econometrics to construct three scenarios for employment growth in the offshore sector by 2020: the middle scenario of 23GW creates 29,700 direct FTEs and 17,500 indirect FTEs<sup>6</sup>. There is therefore an opportunity for Wales to supply a significant proportion of this workforce which will require considerable training and up skilling in areas such as operations, maintenance and construction. Furthermore, through building the capacity of the Welsh supply chain, businesses in Wales may be able to take advantage of opportunities across the UK.

Offshore Wind has been identified as a specific renewable energy priority by the Sector Panel and lead officials in my Department have been nominated to take this forward. Again, they are actively seeking to work in a cross-Government and cross-agency manner with key stakeholders. Activities to date have included successful supply chain events across Wales. We have also worked directly with the sector skills council, Energy and Utility Skills to meet the capacity requirements of Welsh supply chains.

A specific lead official has also been tasked with investigating strategic infrastructure requirements, including ports, associated with developing this important and growing sector. This activity involves close dialogue with business.

#### 5. Energy Intensive Users

Wales benefits from having key companies located across the country which are not only significant employers but also have long standing relationships with their respective communities. These companies are spread across industry sectors and include oil and gas, chemicals, building products, paper manufacturers and, significantly, steel making.

<sup>&</sup>lt;sup>6</sup> "Working for A Green Britain 2" Cambridge Econometrics July 2011: http://www.bwea.com/ref/reports-and-studies

Together with the First Minister, I met a cross section of these energy intensive users in February so as to better understand their concerns about the continued increase in the price of energy.

My E&E officials will be investigating and linking up with companies such as Tata Steel and other major energy users to investigate how the effect of high energy costs can be addressed and managed at site specific level.

## 6. BETS Energy and Environment Sector Panel

The Energy and Environment Sector Panel comprises six business people with expertise and established reputation in the sector The Panel provides expert advice to me on the opportunities and needs of the Sector in order to help develop and implement policies. The Panel is also key in providing advice on emerging Welsh Government and other policies pertaining to the E&E Sector in Wales.

The Panel has an ongoing role to play in shaping other economic development initiatives, including the development of Enterprise Zones and our new approach to trade and inward investment.

The Sector Team's activity is based on addressing issues and opportunities identified by the Sector Panel and the wider feedback from businesses across Wales, including our Anchor companies.

My Panel is passionate that Wales needs to clearly demonstrate that it is open for business with a can-do attitude. It believes that Government needs to provide steady, long term leadership with clear and consistent policy to gain the trust of investors. My Panel feels that a more simplified, streamlined and accountable planning and consenting process is required that is focused on the customer. Securing such leadership and clarity will stimulate private sector investment.

## 7. E&E Sector Team - Focus for Delivery

My E&E officials, working with the Sector Panel and through close collaboration with businesses, universities and public sector partners, have developed a framework defining the economic development focus for the E&E sector in Wales. It is intended that this framework will inform the team's activity and serve as a prospectus for facilitating and engendering cooperation within and outside the Welsh Government.

This framework defines the sub-sectors perceived to have the most opportunities and jobs in Wales. Furthermore, it defines six key enablers that will secure the growth of the sector.

Three of these have been identified as areas where the Welsh Government should have a role in influencing decision-makers and promoting the needs of Welsh business:

- Money Access to finance
- Grid Strategic infrastructure for growth
- Consent Regulatory framework, including planning

#### For the three others:

- Skills
- · Procurement and supply chain development
- Innovation and R&D

The Panel believes that direct intervention by the Welsh Government is required to facilitate the growth of domestic businesses and to ensure that Wales gets the most value from large projects in terms of job creation and local procurement.

My officials are involved in specific activities and interventions tailored to deliver benefits associated with the priorities defined by the Panel. These activities and interventions include: specific supply chain capacity building; supporting skills development; grant funding through the recently announced Wales Economic Growth Fund and other similar funding mechanisms; exploiting opportunities for sector specific R&D; spatially targeted support e.g. South West Wales and North West Wales; as well as more strategic influencing activity such as seeking to influence the shape and form of regulatory frameworks in Wales and European funding programmes from 2014 onwards. My officials also actively seek to operate in a cross–Government manner in order to maximise benefits associated with Welsh Government intervention in this field.

#### 8. Cross Government Working

My officials actively seek to work collaboratively to progress the priorities defined in the framework and regularly and closely engage with colleagues across Welsh Government, particularly within Sustainable Futures and DfES. Such collaboration is essential and has proven successful in identifying and progressing the opportunities associated with major projects such as the Anglesey Energy Island programme and Corlan Hafren.

Some of the key areas of collaborative activity to date are:

- Working with WEFO on the shape and form of structural funds 2014 onwards with a view of supporting the growth of the sector;
- Working with Planning colleagues on reviews taking place in respect of planning policy and energy;
- Working with colleagues across BETS, Local Government and Communities, and Sustainable Futures to define strategic infrastructure requirements for the Sector, with particular focus on ports;
- Working with DeSD on facilitating opportunities to develop a marine energy industry in Wales.