# **Environment and Sustainability Committee**

Inquiry into Energy Policy and Planning in Wales

EPP 248 - RSPB



# Evidence from the RSPB to the Environment & Sustainability Committee Inquiry into Energy Policy and Planning in Wales September 2011

The RSPB is Europe's largest wildlife charity, with over one million members, over 51,000 of them living in Wales. The Society manages one of the largest conservation estates in the UK, covering more than 140,000 hectares; 16,000 of these in Wales. The RSPB also works with a range of organisations, businesses and landowners to bring about habitat improvements for species of conservation concern. We work to protect and enhance habitats such as upland and lowland farmland, heather moorland, coastal heath, wet grassland, estuaries and reedbeds, and our reserves help to protect rare and threatened wildlife.

The RSPB welcomes the opportunity to submit evidence to this important inquiry into Energy Policy and Planning in Wales. In this response we have highlighted the key areas of policy interest for the RSPB in Wales. Over the last 10 years, in spite of government commitments, Welsh wildlife has continued to decline. Global climate change is compounding the long-standing threats to the natural world and putting ecosystems under increasing pressure. This paper reflects the position that the RSPB supports a mix of renewables and a move away from dependence on fossil fuels. This response highlights the importance of spatial frameworks to support the sustainable development of renewables whilst protecting Wales' important wildlife. The RSPB strongly supports Wales and UK's greenhouse gas reduction targets, and recognises the critical role that renewable energy will play in delivering them as part of a wider package that prioritises energy savings.

#### 1. Introduction

1.1. Climate change is already affecting birds and wildlife in the UK and globally, and it threatens to drive future biodiversity loss unless urgent action is taken to reduce emissions and keep the world within 'safe' levels of climate change<sup>1</sup>. One study published in the journal *Nature* indicates that climate change could cause up to 35% of species to be committed to extinction by 2050<sup>2</sup>. The RSPB therefore strongly supports the Welsh and UK governments' greenhouse gas reduction targets.

<sup>&</sup>lt;sup>1</sup> UNFCCC states that the average surface global temperature rise should not exceed 2C to avoid dangerous climate change.

Thomas et al. (2004) "Extinction risk from climate change" Nature 427 pp. 145-148

- 1.2. The Welsh Government's target to reduce emissions by 3% per annum depends on action to reduce energy consumption from the burning of fossil fuels across all sectors, together with the rapid introduction of low- and zero-carbon alternatives.
- 1.3. Reducing energy demand and increasing energy efficiency are top priorities, but alone they are not enough to achieve the greenhouse gas emission reductions needed; we also need to switch from fossil fuel energy sources to renewable energy.
- 1.4. The huge amount of new infrastructure needed to decarbonise our energy supply can, however, have a detrimental impact on wildlife if poorly located and/or designed, whether at sea or on land. The Welsh Government has committed to reversing biodiversity decline by 2020; we believe, therefore, that the Welsh Government has a duty to ensure greenhouse gas emissions targets are met without compromising Wales' natural environment.
- 1.5. The RSPB engages with applications for renewable and other energy infrastructure across the UK, advising developers how they can minimise the impact of their development proposals on wildlife. Where the environmental impacts of a proposed scheme are likely to be unacceptable, we will object, but our preference is to work with developers to remove any significant adverse impacts. This has meant that since 1990 we have placed sustained objections on only 5.9% of wind farm applications throughout the whole of the UK. In Wales, since the advent of TAN 8 the RSPB, as a de facto statutory consultee under TAN 8<sup>3</sup>, has not sustained any objection to applications within the SSAs.

### 2. Onshore Wind and Welsh Government Planning Policy

- 2.1. While we support a mix of renewables, the RSPB recognises that for the next 10-15 years, onshore wind power the most advanced and widely available of the new renewable technologies has the greatest potential to make a significant difference in Wales and globally, at an economic cost increasingly close to that of fossil fuels.
- 2.2. The RSPB supports the spatial planning approach exemplified within TAN 8 in relation to onshore wind, because we believe that this approach is appropriate to support crucial development of onshore renewable energy in Wales in the most sustainable locations.
- 2.3. TAN 8 supports the delivery of renewables targets, whilst ensuring that Wales' most important designated wildlife sites are protected. It thereby facilitates attainment of the Welsh Government's aims for sustainable onshore wind as set out in *A Low Carbon Revolution*.
- 2.4. In the creation of the Strategic Search Areas, the "sieving out" process identified Wales' very best wildlife sites with international designations<sup>4</sup>. This thus has the effect of securing these vulnerable sites from damaging windfarm development.
- 2.5. The spatial approach within TAN 8 provides a level of increased certainty for developers regarding the outcome of planning applications for proposals within SSAs.

# 2.6. Community Benefit

The RSPB welcomes the positive context for Community Benefit within TAN 8 which states that local issues could be addressed by means of extending or re-creating habitats of significant wildlife value<sup>5</sup>. However, experience over many years in Wales has shown us that the way in which this is quantified and deployed is somewhat ad hoc.

<sup>5</sup> Bullet point 2, paragraph 2.10, TAN 8

<sup>&</sup>lt;sup>3</sup> The RSPB is listed as a de facto statutory consultee under Annex C of TAN 8.

<sup>&</sup>lt;sup>4</sup> Special Protection Areas (SPAs) & Special Areas of Conservation (SACs)

Recommendation 1: Level of Community Benefit - At present, the Welsh Government has issued no advice or guidance about how the local planning authority should set a level of Community Benefit. Whilst setting levels would be challenging, the advent of the Community Infrastructure Levy (CIL) does set out a useful precedent and possible methodology, and the recent new guidance from the Welsh Government<sup>6</sup> is particularly welcome in this respect. Whilst we accept that there will need to be a debate about the actual level set (the current running average in Wales stands at approximately £2500/MW/per year), the process and methodology of setting levels should be addressed as a matter of urgency by the Welsh Government via a "Practice Guidance" note analogous to the "Planning for Renewable and Low Carbon Energy – a Toolkit for Planners" (July 2010).

Recommendation 2: Environmental Community Benefit - The RSPB would like to see greater clarity as to the nature of community benefit and enhanced outcomes for biodiversity. During the Third Assembly the Rural Development Sub-Committee recommended that the Welsh Government ensure that projects aimed at renewable energy generation and carbon or water management achieve multiple outcomes including contributing to biodiversity enhancement<sup>7</sup>. The Welsh Government's Sustainable Development Scheme includes healthy, biodiverse and productive ecosystems within its vision of a Sustainable Wales, and recognises that delivering sustainable development must include enhancing the natural environment. Furthermore, the developing Natural Environment Framework emphasises that the natural environment underpins Wales' economy. It recognises that achieving the vision for a Sustainable Wales depends on all Government policies taking the natural environment into account, and upon working with businesses and other partners. We suggest this aim would be supported by a commitment to allocate a proportion of all Community Benefit payments - for example one third - to projects to enhance the natural environment. This should also be achieved through guidance in the form of a 'Practice Guidance' note.

- 2.7. Whilst we recognise that the TAN 8 process sieved out the most important designated sites for wildlife in Wales we nevertheless consider that there are substantial wildlife resources of national or in some cases even international importance within the SSAs in Wales. Normal planning processes within the SSAs should give appropriate weight to these.
- 2.8. **Recommendation 3: "Masterplanning" approach -** The RSPB supports the introduction of a "Masterplanning" approach which "zones" areas within the SSAs for harmonised, landscape-scale habitat restoration. The RSPB has carried out a pilot project which aims to achieve this in SSA A ("Clocaenog Forest"<sup>8</sup>). This establishes broad habitat zones within the SSA which developer's habitat management/restoration proposals should be in conformity with. This is a simple but robust means of establishing an exciting future for the SSAs, and bringing wildlife back to them on a large scale. The previous Assembly's Rural Development Sub-Committee inquiry into the Uplands recommended this approach as its preferred means of landscape-scale wildlife restoration in respect of onshore wind<sup>9</sup>, a recommendation which was accepted in principle by the Welsh Government. The RSPB

<sup>&</sup>lt;sup>6</sup> "Community Infrastructure Levy (CIL): Preparation of a Charging Schedule" Welsh Government (September 2011)

<sup>&</sup>lt;sup>7</sup> Recommendation 16, "The Future of the Uplands in Wales" report, Rural Development Sub-Committee (April 2010).

<sup>&</sup>lt;sup>8</sup> Clocaenog Statement of Environmental Masterplanning Principles (SEMP)

<sup>&</sup>lt;sup>9</sup> Recommendation 13, "The Future of the Uplands in Wales" report, Rural Development Sub-Committee (April 2010).

recommends that a requirement on local planning authorities to follow this process be introduced via a "Practice Guidance" note.

The RSPB is willing to provide the methodology employed in this work to the Welsh Government and to local planning authorities at no cost and is keen to enter into more detailed discussions with the Welsh Government in relation to this.

- 2.9. Recommendation 4: Clarification of the Actual Geographic Extent of the SSAs Much confusion exists about whether or not a 5km "buffer" applies to the SSAs. TAN 8 is somewhat contradictory in this respect. Establishing a mechanistic 5km extension to each of the SSAs in all directions would bring a number of internationally and nationally important designated wildlife sites under the auspices of TAN 8, and thereby render them vulnerable to potentially damaging development. This lack of clarity should be resolved. The RSPB is keen to discuss the detail of how this could be achieved, in the interests both of wildlife and of the Welsh Governments renewable energy targets.
- 2.10. Whilst the RSPB supports the strategic spatial nature of TAN 8, we believe that it can be improved through provision of community benefits, both for the sake of wildlife, but also in order to help obtain wider support for onshore wind on the part of communities throughout Wales, and the wider public.

#### 3. Pylons and Undergrounding

3.1. The RSPB believes that it is important to address the issue of pylons and undergrounding on a case by case basis. There may be many instances for example where, from the point of view of important populations of bird species, undergrounding would remove material adverse impacts. However, there will be instances where undergrounding would have significant adverse impacts for wildlife by, for example, significantly damaging the hydrology of fragile wetland habitats.

#### 4. Marine Renewables

- 4.1. The RSPB strongly supports continued expansion of the tidal stream and wave industries because of the significant role they could play in delivering low-carbon energy and positioning Wales, and the UK, as a global leader in green growth. However, increased efforts are needed to understand further and mitigate the potential impacts these industries will have on marine biodiversity. Failure to do so will result in adverse environmental impacts, and public concern over these impacts, becoming a major barrier to further deployment.
- 4.2. The RSPB welcomes the Welsh Government commissioned Marine Renewable Energy Strategic Framework (MRESF), which was a spatial exercise aimed at mapping the available tidal stream and wave resource in Welsh territorial waters. This work incorporated marine conservation features, and recommended methodologies for surveying potential impacts on mobile species, including seabirds.
- 4.3. The MRESF incorporated CCW's natural environment and marine renewables energy mapping project, to which the RSPB contributed data. This work enables a high level assessment of the sensitivity of marine species and habitats to renewable energy device installation and associated infrastructure. CCW's spatial mapping products, in conjunction with the MRESF, are tools to guide appropriate planning, and steer development away from areas of high sensitivity. They should be incorporated in the forthcoming development of marine plans for Wales. This does not detract from the need for detailed site specific environmental information to inform Environmental Impact Assessments associated with any resulting development proposals.

- 4.4. Another critical component of the marine management framework, to enable timely sustainable development of marine renewables, is the completion of a network of well-managed marine protected areas, including sites for seabirds. Marine wildlife is in decline<sup>10</sup>, and development pressure is increasing. As well as being an environmental imperative, and the subject of international commitments, designation is a legal requirement under national and European legislation. Furthermore, knowledge about the location of important wildlife sites and their key features will enable developers to avoid making applications for projects that are likely to be controversial and therefore subject to lengthy delays.
- 4.5. The RSPB is concerned that the pace of potential marine renewable energy identification has outstripped the development of nationally important Marine Protected Areas within Welsh waters Marine Conservation Zones (MCZs), under the Marine and Coastal Access Act 2009. We believe that in order to deliver energy production within environmental limits, the identification of areas important for marine biodiversity should be carried out prior to the development of marine renewables. As such, we recommend that highly protected MCZs in Wales are designated on the grounds of highest ecological value as the principle driver, with current and proposed socio-economic activities considered later in the designation process. While the deployment of renewable energy is critical to Wales' success in lowering carbon emissions, we believe that the protection of marine biodiversity should be prioritised in the designation process.

#### 4.6. Recommendations:

- 5. The Welsh Government should work with the UK Government to ensure that support for tidal stream and wave power in Wales is increased, ideally, to the same level as currently received in Scotland.<sup>11</sup>
- 6. Rapid progress is needed to designate an ecologically coherent network of marine protected areas in Welsh territorial waters and secure appropriate management, ensuring identification of environmentally sensitive locations to enable proper consideration of marine wildlife interaction with energy development and other offshore activities, and reduce uncertainty for the marine renewables industry.
- 7. The Welsh Government should collaborate with the UK government and the marine energy industry to develop a coherent and comprehensive survey programme for marine wildlife.
- **8.** Public R&D should focus on technological innovation to reduce the environmental impacts of tidal and wave power, and a collaborative industry-stakeholder-government partnership should be established to monitor the impact of marine renewables on the environment.
- 9. The Welsh Government should work with the UK Government to ensure that UK national-level infrastructure assessments are made in relation to marine renewable developments in Welsh waters, to assess port infrastructure requirements and to develop a strategic approach that will minimise overall requirement and the overall impact on the natural environment.

1

<sup>10 &</sup>quot;Charting Progress 2: The state of the UK's seas", Defra (2010)

Renewables Obligation Certificates (ROCs) are designed to encourage generation of electricity from eligible renewable sources in the UK. The default is that one ROC is issued for each megawatt-hour (MWh) of eligible renewable output, although this will alter between different technologies. Offshore wind installations receive 2 ROCs per MWh, onshore wind installations receive 1 ROC per MWh. The Scottish Government applies 5 ROCs per MWh for wave and tidal renewables. This is higher than currently experienced in England or Wales.

#### 5. Tidal Range Renewable Energy Technology

- 5.1. The Welsh Government's *A Low Carbon Revolution* includes provision for the generation of 18TWh of electricity from tidal range technology by 2022, wholly or principally from the Severn estuary. Half of this would be attributed to consumption in England, but the Welsh balance of 9TWh represents nearly one-fifth of total projected Welsh generation from renewable sources.
- 5.2. However, following its Severn Tidal Power Feasibility Study (STPFS), the UK Government concluded last October that there was no 'strategic case at this time for public funding of a tidal scheme to generate energy in the Severn estuary'.
- 5.3. The RSPB engaged closely with the STPFS, and was on the Steering Group for the Strategic Environmental Assessment. Whilst we objected to the barrage proposals, which would have had an irreversible and detrimental impact on the unique and internationally important biodiversity in the estuary, and the hydrology and geomorphology of the estuary itself, we were open to innovative means of sustainably exploiting the energy resource in the Severn. We consistently called for greater resources and effort to be put behind developing these options, and asked that acceptable environmental impact be considered a priority for the feasibility study. Whilst we welcomed the Severn Embryonic Technologies stream of the study, it was under-resourced and formed only a small part of the overall study (£0.5million). The £20million STPFS indicated that costs would be 'excessive' compared to other low-carbon energy options, confirming the findings of an earlier inquiry into the costs of a conventional barrage which was prepared for the NGO steering group<sup>13</sup>. It also confirmed that a conventional barrage would be likely to result in enormous environmental impacts in the estuary and beyond.
- 5.4. We note that the Mersey barrage proposal by Peel Holdings followed a similar trajectory to that of the STPFS, with plans now shelved because of costs and opposition on the grounds of environmental impact. Whilst the RSPB supports the sustainable exploitation of tidal range power in principle, we conclude from these experiences that:
  - It is extremely difficult if not impossible for a conventional shore-to-shore high head barrage to be built without detrimental impacts on biodiversity and on the hydrology and geomorphology of an estuary, and therefore to comply with environmental legislation.
  - Innovative technologies may allow tidal range to be exploited sustainably, but further R&D is required to develop and commercialise them. We believe this should be the focus of the industry and any future government intervention.

## 6. Bioenergy

6.1. The RSPB supports sustainable solutions to the climate crisis. The recent growth of the bioenergy sector in the UK is set to be accompanied by a dramatic shift from burning domestic wood and waste to burning massive quantities of imported wood; indeed this shift is already underway. This could have very significant impacts on wildlife and the climate, and on Wales' global ecological footprint<sup>14</sup>. Imported biomass is putting temperate forests under increasing pressure and over extraction is already contributing to habitat decline. In 'A Low Carbon Revolution' the Welsh Government aims for half of the feedstock to deliver its target for energy generation through biomass to be imported. We consider this figure too high. The RSPB supports a sustainable bioenergy industry that with careful planning is able to bring unmanaged domestic woodlands back into management for woodfuel – good for

<sup>12 &</sup>quot;Severn Tidal Power Feasibility Study Conclusions and Summary Report", DECC (October 2010)

<sup>&</sup>lt;sup>13</sup> "Analysis of a Severn Barrage", Frontier Economics (June 2008)

<sup>&</sup>lt;sup>14</sup> The Sustainable Development Scheme cites living within environmental limits - using Wales' fair share of the earth's resources - as a key component of its vision for a Sustainable Wales

biodiversity including declining woodland bird species – along with s of waste organic material.	substantial additional use