

Appeal by Hendy Wind Farm Ltd against refusal of planning permission to construct and operate 7 wind turbines with a maximum tip height of 110m and maximum hub height of 69m together with ancillary development comprising substation, control building, new and upgraded access points and tracks, hard standing and temporary compound and associated works at land off A44, SW of Llandegley, Llandrindod Wells, Powys, LD1 5UG.

**Evidence of Jill Kibble Bsc (Hons) MA – Consideration of Socio-Economic Issues**

**on behalf of**

**Brecon and Radnor Branch of The Campaign for the Protection of Rural Wales**



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### **Witness Details**

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## SUMMARY

1. In order to predict the potential impact on tourism it is necessary to understand the nature of the attraction and the type of tourist.
2. There is a body of literature pertaining to the impact of windfarms on existing and potential tourists. Much of this is constrained by significant weaknesses in source, rigour and sampling techniques and was carried out when the scale of turbines and proliferation of windfarms could not have been anticipated. There is an unacceptable degree of extrapolation between unrelated areas and specific tourist groups and a dearth of substantive post construction research.
3. Analysis of tourism impact is highly site specific. Two more apposite studies focussed on rural Wales demonstrate that visitors who primarily come for panoramic, unspoilt views and outdoor activities, particularly walking and horse riding which are the main pursuits in the Hendy area, exhibit more adverse reactions to windfarms. Some 25% are less likely to return and in areas such as rural Powys, unlikely to be replaced by others. The numbers avoiding windfarms increase when considering walkers and equestrians specifically.
4. We demonstrate the high importance of tourism to the rural Powys economy, community infrastructure and the significant employment and diversification opportunities offered. This contrasts with the very limited and temporary local employment opportunities that windfarms have provided in rural Wales.
5. Both the Welsh and the Powys / Mid Wales Tourism strategy are ambitious in their 10% growth targets to 2020 assisted by reducing seasonality and adding value. The Powys UDP and emerging LDP both support this aim and recognise the overriding role of the unspoilt landscapes and providing for the protection of this key tourism asset along with the unparalleled access opportunities.
6. We draw on case law for adopting a precautionary approach to the potential for adverse impacts on tourism and detail Inspector and Ministerial decisions in similar

areas of Wales where considerations of tourism and the amenity of users of PRoWs have been given considerable weight.

7. NOMIS data indicates that Powys is an area of statistically full employment with a high percentage of entrepreneurial SMEs. We question the basis, extrapolation and reliability of data presented for employment created by Hendy. In the absence of a Welsh turbine construction industry (approx. 64% of capital costs) or local supply chains or workforce there will be minimal benefit from the construction phase. Real data shows that windfarms produce very few long term jobs and these may not be all local. The development phase has been outsourced from Powys significantly reducing local or regional financial benefit. The obverse is true for tourism providing local jobs, income and wider community benefit along with the potential for future growth.
8. The several tourism businesses proximate to Hendy are predominantly small and reliant on visitors enjoying outdoor activities. Even a small drop in visitors would be likely to result in businesses becoming unviable.

## Evidence

### 1. Tourism

1.1 In considering the potential effects of Hendy on tourism in the area, the ES places reliance on a literature review but fails to gather or consider specific tourism data for Mid Wales. This is readily available through the annual Visit Wales analysis of visitor surveys and Powys Booster data. An understanding of the Mid Powys tourism offer and the visitors who enjoy this area is a prerequisite to analysing potential impact.

1.2 The literature reviewed is familiar to CPRW and much of it has been discredited as out of date, relying on restricted sampling and a failure to disaggregate types of tourist. There has also been a dearth of robust post-construction research. When considering the literature review it needs to be remembered that :

- many are over 15 years old and of limited value as public attitudes to windfarms have changed considerably. Many respondents had not seen a windfarm; turbines are now three times higher so much more visible and intrusive; noise issues were not appreciated and wide spread proliferation in Wales was not anticipated
- few of the studies were peer reviewed and the vast majority commissioned by the renewables industry
- extrapolation of results from studies that are either spatially or temporally unrelated is entirely unjustified given the unique tourism characteristics of every area. Surveys must also reflect the interests and demographic of actual visitors to an area. These are accepted principles in tourism research although frequently ignored in windfarm impact assessments.

1.3 Accepting the limitations of the studies cited there are still a number of observable conclusions and trends:

- visitors who primarily come for the scenery and for activities such as walking, cycling and horse riding are more likely to react adversely to windfarms

- studies indicate that some 25 % of visitors would be less likely to return to an area with windfarms<sup>1</sup>. A reduction in income of this magnitude would represent the difference between survival and closure for most small businesses and cannot be discounted as insignificant.
- the number of visitors objecting to windfarms in the landscape is increasing
- the antipathy to windfarms in a landscape doubles when there are multiple windfarms

1.4 Clearly when considering Hendy, greater weight could be placed on the few studies that have been carried out in Wales: the NFO World Group research commissioned by the Welsh Tourist Board (1.14 below) and the Regeneris 2014 study for the Welsh Government (1.21-1.22 below). These refer to the rural Wales context and neither were commissioned by the Renewables industry.

1.5 The Hendy ES does not specifically identify the tourism profile of upland Radnorshire although by implication does not seek to refute the main reasons why visitors come. Visit Wales surveys show the importance of :

- the tranquil natural environment
- panoramic, unspoilt views and outstanding varied landscapes
- rich cultural heritage in a remarkably unchanged landscape
- the lack of detractors from the peace, rurality and spaciousness
- quiet roads and a sense of solitude
- opportunities for walking, riding, bird watching in a beautiful and tranquil environment

All attributes that would be highly sensitive to significant landscape change.

1.6 The Mid Wales Tourism Partnership are unequivocal in promoting the area as

- *a stunning natural environment and expansive countryside*
- *the most spectacular and unspoilt countryside in Europe, and*

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<sup>1</sup> Figure also borne out in surveys commissioned by the Renewables Industry e.g. 2013 survey of people in Wales avoiding areas with windfarms when going on holiday averaged at 26% (see ref 12 )

- *a Mecca for outdoor pursuits*

It is worth noting the following from the Mid Wales Regional Tourism Strategy<sup>2</sup> on which the Powys Tourism Strategy is based.

*' the Region has the capacity, scope and attributes to capitalise on the growth markets of the future and that it performs relatively well given the inherent constraints. The Region attracts around 18% of all tourism spending in Wales, 20% of holiday visitor nights and 25% of business nights.*

*The overwhelming 'rurality' of the Region makes it very different. Much of the Region is relatively remote, the communities are small and numerous but often very active, binding tourism and agriculture and community life with common interests in food, management of the landscape and access to the countryside for a range of recreational activities.*

*Tourism is **inordinately important** to the region, contributing to local prosperity and quality of life across Mid Wales. Tourism already supports a significant number of jobs and injects much needed revenue into the economy. Gwynedd, Ceredigion and Powys rank 2nd, 4th and 5th amongst the 22 counties in Wales in terms of Tourism Economic Intensity which relates Tourism GVA to overall GVA<sup>2</sup>. **It also supports the development of vital infrastructure and other economic activities.**' (our emphasis)*

12% of VAT registered businesses are tourism related providing a significant income to the region with Powys being the 5<sup>th</sup> largest provider of tourism of the 22 Welsh counties.

1.7 The Powys Booster (2012)<sup>3</sup> shows an exceptionally high rate of repeat visits at some 75% and those investing in holiday homes (10%). Statistical data also shows the significant numbers of higher spending all year round visitors to the area and the importance of walking, cycling and horse riding.

1.8 It is clear that hill walking and horse riding are principal attractions to this area and contribute to the overall income into Wales. Walking day visitors alone (excluding mountaineering) bring in at least £190 million pa to Wales representing some 18.6

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<sup>2</sup> The Tourism Company 2011 for Mid Wales Tourism

<sup>3</sup> Visit Wales Visitor Survey 2013 Powys Booster ( Cross Tabs set 1)

million leisure walking trips<sup>4</sup>. A significant proportion of visitors to Powys are day visitors and the Visitor Survey (2013) indicates that 28% of Powys visitors walk more than 2 miles in a day<sup>5</sup>. This may seem a small figure but is, perhaps surprisingly, large in UK terms.

1.9 Noteworthy with respect to Hendy is that the Rights of Way are promoted by Kington Walking Festival. This annual Festival is well established and attracts large numbers of walkers, the route over Hendy frequently features in their guided walks as their east - west route. The area thus represents to walkers from across the UK, the attractions of the countryside of Mid Wales and this experience would be one that could encourage further exploration or deter the walker completely.

1.10 Two Scottish studies / surveys are of relevance with respect to the typical Radnorshire visitor. Visit Scotland (2012)<sup>6</sup> concluded that windfarms cause a small but significant drop in visitor numbers but also a reduction in tourist value and this was particularly marked where visitors are walkers, cyclists, mountaineers or horse riders.

1.11 The Scottish Mountaineering Council <sup>7</sup> surveyed walkers' attitudes to windfarms. Of 1,000 long distance walkers and mountaineers, 68% believe windfarms have spoilt views and are far too numerous in Scotland. Even more significantly, 2/3<sup>rd</sup>s stated they would avoid, or had not revisited, places with windfarms. Given the importance of walking in Powys this would suggest that rather more visitors will be lost to the area than implied by other studies and again demonstrates the dangers of extrapolation from the opinions of those without an interest in the core activities of most Radnorshire visitors.

1.12 The BHS survey <sup>8</sup>of equestrians and windfarms is merely a survey but indicates that a significant number of experienced riders will avoid areas with windfarms or single

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<sup>4</sup> Jones, Munday, Riche: The Economic Impact of Walking and Hill Walking in Wales 2011 University of Cardiff

<sup>5</sup> op cit 3

<sup>6</sup> Investigation into the Potential Impact of Windturbines on Tourism in Scotland Visit Scotland 2011

<sup>7</sup> Mountaineering Council of Scotland Survey (March 20014) Windfarms and Changing Mountaineering Behaviour in Scotland

<sup>8</sup> BHS Wind Turbine Experiences Survey 2012-13



turbines. Respondents record incidents as a result of horses being 'spooked' by turbines with just over 40% reporting equine reactions varying from tenseness and mild anxiety through to panic and refusal to pass turbines. There is a general consensus of the horse as an ever unpredictable animal making it expedient to avoid turbines. It is self-evident that no riding business, of which there are a number in Powys utilising routes across Hendy for many of their horse trails, could responsibly justify recommending or guiding rides through windfarms<sup>9</sup>.

1.13 Rural tourism supports a wide range of enterprises and provides valuable farm diversification. As the Welsh Economic Research Unit concluded: *'Tourism, is inordinately important to Mid Wales contributing to local prosperity and quality of life...it also supported the development of vital infrastructure and other economic activities'*<sup>10</sup>.

1.14 The Welsh Tourist Board commissioned an in depth survey of Welsh visitors and their opinions of windfarms in 2003<sup>11</sup>. With the proviso that this data is now 15 years old, drilling down gives a clear indication of why the WTB became concerned regarding tourism in Mid Wales. The study utilises reliable research methodology based on actual interviews with a large body of rural and coastal visitors to Wales.

#### Key Findings

- a high level of concern regarding windfarm development was expressed by hill walkers, mountaineers and mountain bikers
- the three top reasons for visits to rural / coastal Wales were: unspoilt views of countryside and coastline ; chance to experience unspoilt nature, peace and quiet
- 35% thought that windfarms had a negative impact on the scenery increasing to 65% when shown 'before and after' photomontages;
- 51% of visitors thought windfarms spoil the look of the Welsh countryside whilst 34% disagreed;
- off-shore windfarms were more acceptable than on-shore, particularly if sited well away from the coastline;

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<sup>9</sup> For example witness statement of Mr Graham Williams of Freerein presented by CPRW Brecon & Radnorshire

<sup>10</sup> Jones C. Tourism Economic Activity in the Sub-regions of Wales (2010) Welsh Economic Research Unit

<sup>11</sup> Impact of windfarms on tourists in Wales NFO WorldGroup 2003 Presentation of key findings for WTB

- 22% would tend to avoid countryside with windfarms
- the majority of respondents stated they supported renewable energy.

As well as specific concern for Mid Wales, WTB expressed doubts regarding the image of Wales as offering unspoilt landscapes; the incremental effect of windfarms, and the impact on return visitors.

1.15 Successive attitudinal surveys carried out by, or on behalf of, the Renewable Energy industry have shown continuing support for the development of renewable energy but a steady decline in approval for on-shore windfarms. See for example survey carried out in 2013 for Renewables UK Cymru<sup>12</sup>

1.16 The specific imperative of the Mid Wales Tourism Partnership, as adopted by Powys in 2011 as their Tourism Strategy,<sup>13</sup> is to increase the value added and the number and length of stays and reduce seasonality. Improving the quality of the visitor experience is the key factor which will not be served by damaging the unspoilt tranquillity and quintessential rurality and sense of remoteness.

1.17 The former Minister for Business, Economy, Transport and Science, Edwina Hart, launched Partnership for Growth: The Welsh Government Strategy for Tourism 2013 – 2020. Her action plan to increase visitor spend to Wales included a target of 10% growth. Shortly after this she affirmed to a Mid Wales Tourism meeting that: *‘Mid Wales has so much to offer, an abundance of natural beauty, outdoor activities and breathtaking scenery’*<sup>14</sup>. A ‘windfarm landscape’ does not equate with this appraisal or with the imperative for growth. Landscape and the ability to access superb, unspoilt countryside are the greatest assets.

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<sup>12</sup> You Gov RenewablesUK Cymru Survey 2013 Support for wind power as part of a mix of renewables and conventional power was 54% in Mid and West Wales (nb the survey did not disaggregate on and off - shore wind but generally the latter is better accepted)

<sup>13</sup> op cit 2

<sup>14</sup> Edwina Hart AM at Vyrnwy Marketing Association Jan 25<sup>th</sup> 2013 (report) and Tourism Sector Statement WG 2016

1.18 Prof. Aitchison, who has carried out many tourism studies on behalf of the Renewable industry, admits in several studies (e.g. Llanbrynmair 2012)<sup>15</sup> that even without a substantial impact on current visitor numbers, there is a **likely impact on tourism growth** (*our emphasis*). This is a significant distinction where growth of 10%, not a standstill position, is the key driver.

1.19 A Judicial Review<sup>16</sup> upheld the decision of the Secretary of State that weight should be given to the potential for adverse effects on tourism, whether the issue was raised by a statutory consultee (in this case the Local Authority) or not. Obviously it is only after the event that positive, negative or neutral impact can be measured so, with the precautionary principle of planning in mind, it is the potential which must be weighed in the balance. CPRW maintains that given the attributes of the area and the visitor base that potential is significant.

1.20 Two Inspector windfarm appeal decisions in Wales are worthy of note given the similarity of the topography, amenity and visitor base. In both cases the Minister upheld the decisions.

1.21 **Bryn Llywelyn Appeal Decision**<sup>17</sup> The reasons for rejection gave weight to cultural heritage, the tourist economy, public amenity and landscape. Inspector Jones noted that:

*' Altering a wild, empty and quiet landscape to an upland windfarm landscape would significantly alter such experiences for those using the site and surrounding area for recreation/amenity purposes or seeking to appreciate the SAMs in their wider setting. **This would not be in the public interest**' (our emphasis). And that ' less confident riders would be reluctant to ride within a certain distance of the turbines, although they would not be precluded from doing so. It would also be against the public interest to permit proposals which would effectively discourage some members of the public from enjoying rights of access.'*

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<sup>15</sup> Aitchison (20012) for Llanbrynmair Tourism impact.

<sup>16</sup> Justice Lang : Thornholme judgement in the case of Wind Project Developments Ltd v SoS for Communities and Local Government and East Riding of Yorkshire Council in the High Court of Justice Dec. 2014 (para 72 in particular)

<sup>17</sup> Jan 2014 Inspector Emyr Jones: Land at Mynydd Llanllwni and Mynydd Llanfihangel Rhos y – Corn Commons

1.22 Inspector Jones goes on to state that a high proportion of tourists come because of: *'landscape, views, peace, quiet, tranquility and if that is lost or damaged there is no guarantee they would be replaced in the same numbers by those visiting for the first time irrespective of the presence, or because of the windfarm.'*

1.23 Inspector Jones gave little credibility to the claim made for areas with the characteristics of panoramic landscapes and tranquility (for example Aitchison<sup>18</sup> ) that visitors deterred by windfarms will be replaced by others whilst accepting the conclusions of Regeneris<sup>19</sup> that in such areas tourists deterred would be unlikely to be replaced.

1.24 Inspector Jones could not have definitive knowledge of positive or negative post-construction effects but still considered the balance of probability weighed against the application and the small amount of energy that would result. In this case the land was even in a designated Strategic Search Area.

1.25 Pentre **Tump Appeal Decision**<sup>20</sup>. Pentre Tump is in an area of upland Radnorshire of similar landscape characteristics and, indeed, proximate to Hendy and also an area enjoyed by walkers and riders. Inspector Nixon's determination gave significant weight to the amenity of walkers and riders, their tourism potential and impact on a local business. He considered the site to be:

*'prominently located in a range of views and vistas from different directions with many upland recreational routes leading in the direction of, or having views of the site. These routes and routes for pony trekking tours, including overnight stays.'*

1.26 Inspector Nixon further states: *'the turbines would be perceived as prominent, dominant or even overwhelming'* from these routes and *'the level of sensitivity which users of these routes will have to the character of their surroundings.'* He concludes *'that the*

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<sup>18</sup> RES Impact Assessment Study on Tourism for Mid Wales Conjoined Public Inquiry (Llanbrynmair)

<sup>19</sup> Study into the Potential Economic Impacts of Windfarms and Associated Grid Infrastructure on the Welsh Tourism Sector. A report for the Welsh Government prepared by Regeneris Consulting and The Tourism Company (March 2014).

<sup>20</sup> Appeal decision: Land at Pentre Tump New Radnor Powys (Jan 2014), Inspector Nixon

*proposed development would have a seriously adverse effect on the character and appearance of the upland landscape and the amenity of its users.'*

1.27 Exactly the same argument of dominance can be made for the Hendy site with the additional amenity of areas of open access as well as Public Rights of Way.

1.28 A Welsh Government commissioned study into the potential impact of windfarms on tourism in Wales <sup>21</sup> reported in March 2014. A number of case studies were used, including North Powys. Although not exhaustive and limited in area considered, the report nevertheless concluded that because of the nature of tourism and the tourist attraction there is greater sensitivity to windfarm development. The landscape and visitor attributes of north Powys are broadly analogous to this area of Radnorshire rendering a comparison meaningful.

1.29 The main conclusions of the Regeneris study appertaining to the north Powys area were:

- sensitivity to windfarm development varies across Wales and is site specific (as indicated in sensitivity tables pp120-130)
- the area has '*unique*' landscape characteristics within Wales and is seen as an '*alternative to busier parts*' of the country. Older people appear more 'sensitive' to windfarms. They, along with young professionals, make up a significant proportion of visitors. These groups tend to be higher spending, more discerning and to visit throughout the year (the very groups the Tourism Strategy is designed to attract).
- reviewing windfarm development in Wales concerns were expressed that Powys has more designated Strategic Search Area than other parts of Wales (figs 3.2 & 3.4) yet the nature of the visitor and the landscape attraction were more vulnerable to windfarms. The report states that this is : '*...considered to increase the potential for adverse reactions*' (p.120)

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<sup>21</sup> op cit 18

- There is no evidence that windfarms attract visitors. The report concedes that visitor centres near large South Wales conurbations may be viable. CPRW would comment there is limited evidence for this elsewhere in the UK and, for example, Delabole visitor centre closed with the loss of all jobs despite substantial investment.
- discouragement of other private sector investment as a result of windfarm development is a significant risk factor (p.137)

## 2. Employment from Windfarms

2.1 Powys is an area of high employment (at 98.3%, currently the highest in Wales).

Ceredigion and Powys have the highest number of employees at NVQ Levels 4 & 5 in Wales, rather refuting the ES statement of the area losing 'educated young people'. The main employment sectors are agriculture / forestry and tourism related business. Tourism provides an important second income and a means of farm diversification for many. There are more business start up retentions in Powys than the rest of Wales and most of the UK and the number of self employed workers and SMEs are high.

2.2 Wage levels are relatively low (although service and house prices are also commensurately lower) but the economy would be distorted rather than assisted by short term construction contracts. Powys Regeneration Strategy reflects the entrepreneurial, highly skilled nature of the workforce and the reaffirmed, overall strategy is about supporting existing businesses to continue to grow and thrive and to improve profit margins to address issues of low pay.<sup>22</sup> Diverting the economy into temporary, low paid construction work fails to support the strategic direction and risks distorting a stable and innovative economy. Generally neither the workforce nor the local supply chains would be available to service a front loaded windfarm project.

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<sup>22</sup> Powys Head of Regeneration and Planning presentation to community and business leaders February 2014

2.3 Recent research at Aberystwyth University<sup>23</sup> confirms the importance of tourism to rural economies. In England and Wales, total spending from visitors to the countryside is more than twice that of the income from agriculture. In Wales outputs from agriculture were just £1.2 billion GBP while tourism in rural areas was worth £2.5 billion<sup>24</sup>. In terms of farm tourism, research by the WRO (2010) found that farmers in Wales were engaged in the following farm tourism activities: 10% tourist accommodation 7% equestrian activities (including liveryes) 4% other leisure activities (including attractions) 4% retail.

2.4 The economic impact of tourism is measured periodically using standardised economic models. The most recent estimates given below clearly demonstrate the significance of the tourism sector to Powys<sup>25</sup>:

Staying visitors	1,397,000
Day visits	2,864,000
<b>Total visits</b>	<b>4,261,000</b>
Expenditure direct	£239m
Expenditure indirect	£96m
<b>Total expenditure</b>	<b>£383m</b>
Employment direct FTEs	4,642
Employment indirect FTEs	1,279
<b>Total Employment FTEs</b>	<b>5,921</b>

2.5 Employment claims for wind energy from computer modelling studies have been largely discredited by economic analysts and actual experience of large windfarms<sup>26</sup>. Employment is predicated on Wales developing a substantial turbine construction programme. Given that the push to import lowest cost components has stifled the UK

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<sup>23</sup> Talbot, M Farm Tourism in Wales Products and markets, resources and capabilities European Countryside 4-2013 · p. 275-294

<sup>24</sup> Welsh Economic Research Unit 2010

<sup>25</sup> STEAM Powys 2012

<sup>26</sup> For example in Mid Wales at Cefn Croes windfarm, a Denbighshire construction firm was used and only 5 permanent jobs resulted for 32 turbines. There are a similar number for the 106 turbine windfarm at Llandinam.

on-shore turbine industry, with some 80% imported, there is no indication there will be any surge in Welsh manufacturing. The collapse of European turbine manufacture has caused serious problems for companies elsewhere, such as Vestas in Denmark and the only Welsh tower manufacturer, Maybey Bridge which closed with the loss of some 180 jobs. A further result of imported technology is that the installation has to be carried out by fully trained technicians brought in for the job. Monitoring of the operational turbines is primarily carried out remotely with 'flying squad' maintenance teams again creating few, if any, local jobs.

2.6 The principal data source cited for Hendy is from BiGGAR<sup>27</sup> and derived from a study of 18 Wind projects from a potential 27 who were approached. As CPRW show in Annex A this analysis cannot be relied on to predict the impact of Hendy windfarm locally or regionally as it is overwhelmingly based on Scottish data where there is an established windfarm construction sector.

2.7 Windfarm employment and investment is heavily front loaded. As CPRW show in Annex A in the analysis of the ES, there is significant revenue for front end professional services but Hendy is not using a single local or Welsh company so no benefit will accrue to the national, regional or local economy.

2.8 CPRW further show that the costs and figures for Hendy are at variance with those given for the consented and constructed Bryn Blaen windfarm raising questions regarding credibility.

2.9 Income will obviously accrue to an individual landowner and is evidently factored in as an element of local benefit. However, socio-economic data and poverty indicators show no evidence of any 'trickle down' effect into local economies in north Powys where there are long established windfarms.

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<sup>27</sup> RUK/DECC Onshore Wind: Direct and Wider Economic Impacts (BiGGAR 2012)



2.10 It is perhaps surprising that Hendy do not refer to the Cardiff University study on the economic impact of windfarms on rural communities specifically in Wales and using data from existing Welsh windfarms. In summary Munday, Bristow and Cowell <sup>28</sup> found that:

- economic development outcomes are '*questionable*'
- there are limited opportunities for genuine local purchasing of goods and services in Local Authority areas surrounding wind energy sites;
- existing foreign expertise and specific skills development mean that it is '*very unlikely to create significant capacity in Wales to produce turbines*'.
- new investment in Strategic Search Areas across the whole of Wales is '*unlikely to create significant additional employment as a result of operations and maintenance activity...*' '*less than 150 direct jobs across the whole of Wales*'.
- Capital cost distribution shows that 64% of capital cost is for turbine manufacture; thus a high proportion of investment goes out of Wales / UK (BWEA figures). Assessment of the impact on employment by the renewables industry clearly demonstrates that on-shore wind only increases local employment opportunities where there is significant component manufacturing and export.
- community benefit schemes are unlikely to be an avenue for significant additional job creation in rural Wales due to the constraints in distribution and application
- overall job losses are likely due to impacts on rural tourism and small businesses.

2.11 There are two holiday park sites in the Hendy vicinity and a number of smaller proximate tourism businesses all in the same postcode area: Graig Fawr (Eco cabins); The Wern (self-catering letting unit); Bettws Cottage (self-catering letting unit); Glanoer (self-catering cottage and Bed and Breakfast), and Bettws Mill (Bed and Breakfast and application pending for Eco cabins). These smaller businesses provide valuable additional income and are particularly likely to be adversely affected should the area

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<sup>28</sup> Munday, Bristow & Cowell Cardiff University ESRC Centre for Business Relationships & School of City and Regional Planning in Journal of Rural Studies (2011): Windfarms in Rural Areas: How far do community benefits from windfarms represent a local development opportunity?

become industrialised with a windfarm. The surprising amount of holiday accommodation in this area is indicative of both tourism demand and potential.

2.12 The adopted UDP for Powys states: *'... development of any kind which would have an unacceptable adverse effect upon the environmental setting of established tourist attractions will be opposed'*<sup>29</sup>. As we have seen the major tourist attraction here is the landscape and the proposed development will have an unacceptable adverse affect. The Draft Deposit Local Development Plan, now at the end of the Examination stage, states in terms the importance of landscape to well being and the economy and is even more strongly worded as regards the avoidance of adverse impacts on landscape and Rights of Way as tourism assets.

2.13 The development at Hendy thus fails to meet the tests of the existing or the emerging Powys Development Plans.

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<sup>29</sup> p.130 Powys UDP

## Annex A Local economic benefit

Country of W.Dev.	No. Turbines	Installed Capacity of W. Dev. (MW)	Average Capacity per W. Dev.
Scotland	9	764.8	85
England	5	143.3	28.6
Ireland	1	15	15
Wales	3	10.1	3.4
<b>UK</b>	<b>18</b>	<b>933.2</b>	<b>51.8</b>

- 1 The projects are divided into capacity categories and the economic benefit findings are then weighted to represent the distribution of UK capacity categories of wind project in operation and in planning in order to give an overview of the percentages of financial benefit to the local area, regional area and UK. It is clear that, for Scotland, England and Ireland, “region” equates with “nation”. This means that the “regional=national” proportion of capital expenditure is likely to be influenced by the large proportion of case-study wind farms in Scotland. If, as is likely, Scottish developments (in whatever size category) bring a greater economic benefit per MW inside Scotland than Welsh ones do per MW inside Wales, the economic benefit figures informing the analysis will be over-optimistic (see, for instance, the example of development costs below).
- 2 Other factors likely to bring the actual figures down are the area demographics, sparse population and high level of home based self-employment.
- 3 Comparison with the Bryn Blaen application that uses lower capital costs.

Njord WF	No. Turbines	Capacity MW	Capital cost £millions	benefit Wales	benefit local	FTE jobs Wales	FTE jobs local
Bryn Blaen	6	15	20	5.81	1.37	4.8	1.6

Hendy	7	14.35- 17.5	19-23.3	8.4	2	5-6	2

- 4 Bryn Blaen (6 turbines) Cost £20M, local benefit £1.37 M Wales benefit £5.81M 2FTE locally 5-6 FTE Wales over 25 years  
Hendy (7 turbines) Cost 19M, Local benefit 2M Wales benefit 8.4M 1.6FTE locally, 4.8 FTE Wales.
- 5 The ES extends the multiplier for including indirect expenditure (on lodging, services etc.) which is applied to National economic benefits, to Local benefits. The ES states this is for want of any alternative, but admits it is a likely overestimate for the local case because revenue is not so likely to be retained locally (P6-12).
- 6 The overestimation is exacerbated by the easy accessibility of the site from England (along the A44) compared with poorer accessibility from the industrial belt in S. Wales. This means a good proportion of labour and services contributing to the multiplier effect (ES p6-12) may come from England.
- 7 In practice, development expenditure has already started to drain any potential local and Welsh benefits since professional development services are all located outside Wales.
- 8 ES Figure 6.4.1 quotes figures from RUK and Energy & Utility Skills (Feb 2011) showing that nearly half (2,900 out of 6,000) of UK jobs in the onshore wind industry are in Planning and Development.
- 9 ES Table 6.3 (second table 6.3!) taken from O’Herlihy & Co Ltd (2006) Windfarm Construction presents results from a study of 3 Scottish wind farms under development, 100% of planning process costs (1. Wind assessment and feasibility and 3.Planning Process) were retained in Scotland.

10 Locations of planning process services are the only firm data we have for Hendy and, by contrast to the O’Herlihy figures, all are outside Wales.

- ES, D&A, LVIA: Cunnane Town Planning, Teddington
- Ecology, Historic Environment & some figures : ADAS, Abingdon & ADAS Wolverhampton
- LVIA & Archaeology photomontage, ZTVs: Viento, Shrewsbury
- Figures: Halcrow, Glasgow
- Transport docs: WYG, Edinburgh& SBA also Edinburgh
- TV: Pager Power Sudbury, Suffolk
- Aaron: Chester
- Njord: London
- Frampton Planning, Banbury, Oxon

11 ES Table 6.3 (the first table 6.3) applies the RUK/DECC findings to Hendy:

*Table 6.3: Shares of benefits of wind energy retained locally, in the region/nation, and the UK.*

Stage	Weighted Spend per MW	Local	Region/ Nation	UK	Local benefits*	Benefits to Wales*
Development	£108,759	8%	41%	98%	£0.12 – 0.15 million	£0.6 – 0.8 million
Construction	£1,182,612	7%	29%	45%	£1.2 – 1.4 million	£4.9 - 6 million
<b>Total capital investment*</b>	<b>£1,291,371</b>	-	-	-	<b>£1.3 – 1.6 million</b>	<b>£5.5 – 6.8 million</b>

*Table 6.4: Economic benefits of operating and maintaining wind farms to the local, regional and UK economy*

Stage	Weighted Spend per MW	Local	Region/ Nation	UK	Local benefits*	Benefits to Wales*
<b>Operation and Maintenance, per annum</b>	<b>£52,659</b>	<b>29%</b>	<b>65%</b>	<b>90%</b>	<b>£0.2 – 0.3 million</b>	<b>£0.5 – 0.6 million</b>

*[Source: DECC and Renewable UK (May 2012). Onshore Wind: Direct & Wider Economic Impacts. \*: Own calculations based on the results from the DECC and Renewable UK study]*

12 We have seen that the expected 41% of Development benefits accruing to the Nation approaches zero. In Table 6.3 : If the turbines are imported to Wales from outside the

UK, and the turbine costs are 65% of the capital costs (as stated in the ES), it is impossible for as much as 45% of construction costs be retained in the UK?

13 Hendy ES 6.7 Summary says *“20-30% of the capital cost could be awarded to suitable local and regional companies. Assuming a total project cost of 19 million this could equate to 2 million for the local economy and £8.4 million for the Wales economy.”*

14 These figures exceed the capital sums in Table 6.3 and even the sum of Development, Construction and Operation & Maintenance over 25 years (Tables 6.3 and 6.4). £8.4 M is **44%**, and not 20-30%, of £19M. The ES mentions “suitable local and regional companies” and does not say that the 1.53 multiplier (which the ES admits is probably too large for indirect local economic impacts) has been applied and therefore the discrepancy with Table 6.3 must be the result of an error or wishful thinking. Turbine costs are at 65% of capital costs (this ball-park is confirmed by other studies, for example, *ClimateX: Life Cycle Costs and Carbon emissions of Onshore Wind Power 2015*). If the turbines are imported to Wales from outside the UK, how could 45% of construction costs possibly be retained in the UK and 29% be retained in Wales?

15 Our conclusion is that the calculations have been based on a study dominated by Scottish data where a greater proportion of economic impact is within the “nation” than is likely in Wales, with its greater dependence on England. The Local impact has not been defined and, in the context of Hendy, the land-rents gained by a handful of local land-owners are likely to be the main truly local component.

## **Appendices – Socio-Economic and Tourism**

### **Supplied in electronic form not printed – relied on in text**

A: Tourism Strategy MWTP (note 2)

B: Walking and Hill Walking report 2011 (note 4)

C: Impact of Wind Farms on Tourism to Wales NFO (note 11)

D: YouGov Renewable UK Cymru Results 130422(1) (note 12)

E: Thornholme Field Judgement (note 16)

F: Inspector Report – 2189697 (note 17)

G: Pentre Tump decision (note 20)

H: Powys Economy February 2014 (note 22)

I: Munday et al Cardiff Uni community benefits and economic development

J: Rural development Sub-Committee Inquiry into Rural Tourism in Wales 2011

K: Tourism Sector (WG 2016)

L: BHS 2012 Survey Results Turbine Experiences

Additional information re local tourism – supplied in paper format and electronic

M: Kington Walks brochures 2016-2018

N: Local Tourism Statements

O: Local Landscapes - photographs