

POWYS LOCAL DEVELOPMENT PLAN Wind and Solar Local Search Areas (LSAs)
LDP Policy RE1 & associated maps (Further Focussed Changes Consultation)

We hope these notes will help you compose your letter of objection to Powys Council's new wind turbine policy

Consultation period: 10th October to 21st November 2016

1. IMPACTS OF THE PROPOSED POLICY – THESE HAVE NOT BEEN TAKEN INTO ACCOUNT

Failure to take account of impacts on local residents

Failure to carry out Strategic Environmental Assessment (see 5 below) means that there has been no assessment of impacts of this policy on local residents. The technologies proposed are known to have serious potential impacts. Impacts on residents may include:

- Loss of loved landscapes
- Water supply contamination
- Noise, audible and low frequency, shadow flicker and amplitude modulation nuisance
- Employment and income loss from tourism enterprises
- Safety issues, including blade and ice throw and risks to horse riders of turbines close to equestrian routes

Quality of life and stunning landscapes have brought many to live in Powys, and persuades others to remain. Rural properties with blighted views and/or noise problems will have the opposite effect. With the mobility of much of the self-employed or home-working population there is a risk of depopulation of rural areas.

Failure to take account of impacts on Landscape

- **LANDMAP** data has not been consulted in identification of Local Search Areas. The REA specifically sets out that to do so is entirely feasible. Why have LANDMAP evaluations not been identified as constraints on identification of LSAs? LANDMAP assessments need to be taken into account in proximate areas as well as within the LSAs because of the high visibility of these industrial structures. There has been no attempt to assess the visibility from outside the LSAs although, given the topography, this will be extensive.
- **Wild land:** See Figures 2.7 'Absence of modern human artefacts' and 3.1 Wild Land map of 'Wildness Study in Wales' (http://www.wildlandresearch.org/media/uploads/Report_WildMappingWales-v.2-Feb-2015.pdf) It will be seen that the identified wind LSAs fall within those areas identified as free of modern human artefacts, and as 'wild land', as does the major part of the proposed solar LSAs. These are among the qualities which lead to High and Outstanding LANDMAP assessments. **In other words, some of our finest landscapes, most valuable to residents and to the tourism industry, have been identified as suitable for intrusive modern infrastructure, thus destroying their most vital qualities.**

- **Historic Landscape and Archaeology:** Powys is a county rich in archaeology, much of it unexplored, and historic sites and buildings. Our uplands are not blanks to be filled in with modern energy generation but rich and diverse historic and cultural landscapes. This quote from the National Trust objection to Further Focussed Change FFC79 says it all: *‘The area of Abergwesyn is a wild and ancient landscape, with far reaching views. People have lived and worked in this upland landscape for over 9000 years, the majority of the area has never been ploughed or disturbed. Abergwesyn Commons has a wealth of remains including 14 bronze age cairns, 95 medieval sites and 459 sites classified as post medieval. It is a place of unspoilt and dramatic landscapes; a combination of wilderness; tranquillity; wildlife and views. A visit to this proposed LSA is truly an escape and forms the rooftop of Wales.’*

Note also that as each MW of solar generation will occupy approximately 6 acres of land (see REA), 308.2MW (Solar component of 600MW target, see Topic Paper) will occupy 1850 acres, with enormous visual and environmental impact, but will produce, taking into account load factor of 9.7% (DECC) a mere 29.9MW.

Failure to take account of impacts on wildlife

Impacts of turbines on wildlife are well documented. Powys is rich in birds and bats. *“The available evidence suggests that wind farms can harm birds in three possible ways – disturbance, habitat loss (both direct and/or indirect) and collision.”* (RSPB) Various researches indicate the bird species most vulnerable to collision are raptors and insect hunters, such as swifts and swallows. Bats are susceptible to fatal lung damage (caused by rapid air pressure changes) in the vicinity of wind turbines, and like insect hunting birds are drawn to turbines by the presence of insects*. Noise and light flicker can also disturb livestock.

* <http://www.batsandwind.org/pdf/baerwald%20et%20al%20current%20biology%202008.pdf>

The areas covered by the LSAs also include upland habitats with their characteristic assemblages of plants including mosses, ferns and flowering plants. These plant communities and the soil beneath them, left undisturbed, sequester carbon as well as buffering water flow through the system.

All of these impacts above will be hugely exacerbated by the failure to take any account of associated grid transmission infrastructure

- In many parts of Powys there is little or no remaining grid capacity. Renewable developments of the scale envisaged in remote, dispersed locations will necessarily require additional large scale transmission infrastructure.
- No account has been taken of the impacts of construction of transmission infrastructure which will further extend the intrusive landscape character and visual impacts of the solar and wind developments.
- The dispersed nature of LSAs will require maximum grid infrastructure for an amount of energy generation which, if the target of 600MW ‘nameplate’ capacity of generation is achieved, is likely to amount, after adjustment for load factor, to no more than 104MW. (Calculated using REA capacity factors for wind and solar of 27% and 9.7% respectively & allocations by technology per Topic Paper Page 24 of 281.2MW wind and 308.2 solar.)

2. DEMOCRATIC DEFICIT – LOCAL PEOPLE DENIED A VOICE IN DECIDING THEIR FUTURE

- Insertion of a major policy change at final iteration of the Draft local Development Plan, after several rounds of public consultation, and when residents will assume that major policy direction is concluded, undermines the democratic process and reduces opportunity for residents to have meaningful impact in their Local Development Plan.
- Large scale wind and solar projects (over 10MW) will be decided by the Welsh Government, thus local residents are effectively denied both the opportunity to properly consult on the concept and location of Local Search Areas and also the opportunity to be heard in the determination of applications for development within these Local Search Areas.

This democratic deficit is in direct conflict with achievement of the Welfare of Future Generations Act National Indicators:

- 23: ‘Percentage who feel able to influence decisions affecting their local area’
- 26: ‘Percentage of people satisfied with local area as a place to live.’

3. WHAT IS A LOCAL DEVELOPMENT PLAN MEANT TO DO?

Planning Policy Wales 8* Para 2.2.1 says **“It is for the local planning authority to determine how its LDP should be tailored to the needs of the area based upon robust evidence.”**

Why this policy does not address local need

The newly introduced renewable electricity target of 600MW (50MW in earlier iterations of the LDP) is not remotely proportionate to any local need. Renewable Energy Assessment (REA) 2016 report, page 36:

“The total electrical energy that is currently being generated across Powys (or will be when all currently consented projects and those under construction are built) from renewable and low carbon energy technologies is circa 810 GWh, which equates to circa 133% of the total electrical consumption across Powys in 2008 and 134% of the total predicted electrical consumption across Powys in 2026.”

The ambition for Powys almost to treble its renewable capacity is not supported by new national policy, and is in conflict with existing national policy TAN8.

LDP Objective 5 (ii) now reads ‘Deliver the county’s contribution to the national targets for renewable energy generation.’ This is an entirely **illegitimate objective** in that there are not any enacted national targets for renewable energy generation, and cannot be any agreement as to any particular county’s contribution to those non-existent targets.

The Council’s ‘evidence’ and problems with it

Assumptions underlying the identification of ‘wind resource’ and ‘solar resource’ are set out on pages 48, 49 and page 52 respectively of the REA and are astonishingly permissive. We set out below major evidential failures but this is not an exhaustive list.

- **Housing constraint & Noise:** Identification of ‘wind resource’ includes the assumption that a 2MW (or larger) turbine can be built 500m from homes without noise (or other) impact. Across Powys there have been many instances of noise nuisance arising from turbines of smaller capacity (50KW) at greater distances from homes, and the hilly nature of the county can exacerbate noise impacts. The Welsh Government Environment and Sustainability Committee was alarmed at the number of noise complaints received from Carmarthenshire residents; unfortunately we have discovered through FOI that Powys do

not systematically collate turbine noise nuisance information. (Further info on turbines and noise <https://www.heatonharris.com/reports-publications>, <http://www.masenv.co.uk/windfarms> & others)

- **Landscape character and visual impact:** It is stated in the REA (page 19) that wind resource, and thus Local Search Areas, have been identified without reference to LANDMAP landscape sensitivity data. It is also stated that refinement using LANDMAP is feasible. This begs the question why such an exercise has not been undertaken and what impact on identified LSAs such an exercise would have made. Solar LSAs do not take account of landscape other than to assume that a 3.5km buffer between installations will entirely remove any cumulative impact (REA Page 30).
- **Cumulative impacts:** These are referred to but insufficiently considered, and must in any case also consider cumulative impacts not only of developments of the same technology, but also of different technologies together, and also of the major grid transmission infrastructure which is a necessary consequence of adoption of proposed policies.
- **Delivery of objectives:** A sound evidence base also requires robust evidence that such a policy would deliver the required objective i.e. CO2 savings. A CO2 audit of emissions savings of both technologies, from first sourcing of raw materials, through to decommissioning and disposal, including, transport, construction, use of concrete, disruption of peat etc. is required to support such a radical proposal with far reaching implications for residents. (See <http://www.turbineaction.co.uk/wind-turbine-issues/no-reduction-in-co2-emissions.html>)

4. PROBLEMS WITH THE LOCAL SEARCH AREAS – EXTENT AND PRESENTATION

- **Priority areas:** The rationale of priority areas should be clearly set out in consultation documents. Note that Priority Areas 5 and 6 assume that a high level of disruption on the National Air Traffic Service is acceptable. (For explanation of ‘priority areas’ see ‘Low Carbon Energy – A Toolkit for Planners’ page 143 <http://gov.wales/topics/planning/policy/guidanceandleaflets/toolkit-for-planners/?lang=en>) Also see the table at end of this document in conjunction with the ‘Wind Map’.
- **Extent of LSAs:** We can’t understand the extension of LSAs for both wind and solar far beyond areas identified as having both wind resource and absence of housing restraint (wind) or identified as appropriate for solar development. This risks presumption of development in wholly unsuitable areas or areas close to housing.

5. FAILURE TO FOLLOW REQUIRED LEGAL PROCEDURE

Legal procedure not followed: Environmental impacts assessment not carried out

A full Strategic Environmental Assessment (SEA) of proposed policy is a legal requirement, and this SEA process is intended to ensure that environmental impacts are acceptable and proportionate to benefits.

- SEA has not been carried out for policy RE1 (renewable energy) – see pages 549 to 560 of the ‘SEA Environmental Report (Including Appendices 1, 2, 4, 5 6A, 6B, 7, 8)’. Assessments are largely blank.
- Where the SEA report is completed the conclusions of acceptability are untenable – as for example that large scale renewable development will be beneficial to local employment (where new jobs are likely to be very limited in number and job losses from tourist enterprises alone, for example, could be substantial), or will have no impact on healthy living or nuisance and risk to human health.

- The SEA must also consider environmental impacts of associated grid infrastructure.
- The absence of a Habitats Regulation Assessment is not satisfactorily justified.

Legal procedure not followed: SEA requirement – consideration of alternative policies

Assessment of alternatives is at the heart of the strategic environmental assessment process. It is intended that within the Environmental reporting ‘...*reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated.*’ (Article 5.1 SEA Directive). Justification of the choice made between these alternatives is also required.

Alternatives policies to achieve CO2 emissions objectives might include:

- Large scale upland restoration to improve carbon sequestration whilst also enhancing the capacity of uplands to hold water and reduce flooding risk, to provide a clean water supply, and enhancing biodiversity and landscape beauty. (All are strategic objectives of this LDP.)
- Focus on efficiencies and reduction of energy use, coupled with deployment of micro renewables to reduce grid demand from individual homes/businesses.

Both would contribute towards achievement of several of the LDP’s objectives.

The location of intermittent energy generation in widely dispersed and remote rural areas is a fundamentally inefficient use of resources, resulting in maximum negative impacts for negligible benefit.

(It is disappointing that the Welsh Government has no strategy to enhance the very considerable carbon sequestration properties of soil through the promotion of soil health and carbon content, despite identifying the increase of carbon content of soils as a desirable outcome in the Welfare of Future Generations Act 2015.)

6. CONFLICT OF PROPOSED POLICY WITH OTHER WELSH LEGISLATION

Conflict of proposed policy with Environment (Wales) Act & Welfare of Future Generations Act

Renewable technologies have known environmental costs as does the construction of grid infrastructure. No Strategic Environmental Assessment has been carried out. Implementation of this policy will conflict with achievement of the Council’s **legal** duties of protection and enhancement of ecosystems, as set out within the Environment Act.

In addition to the National Indicators above, the proposed policy will conflict with National Indicators relating to ecology and the environment.

The Welfare of Future Generations Act imposes a duty of ‘*sustainable development*’ on public bodies. See Natural Resources ‘Introducing Sustainable Management of Natural Resources’ (<https://naturalresources.wales/media/678317/introducing-smnr-booklet-english.pdf>) . Principles of sustainable management of natural resources include ‘public participation’, ‘evidence’, taking account of benefits of natural resources and ecosystems, preventing damage to and promoting resilience of ecosystems. The proposed energy policy for Powys fails to comply with these underlying principles of sustainability.

Conflict of proposed policy with TAN 8, Wales’s existing national wind energy policy

Regardless of the divergence of opinion on the suitability and currency of TAN 8, it remains a WG Guidance note.

- TAN8 established Strategic Search Areas (SSAs) as 'concentration' areas **with the implicit objective of maintaining landscape character outside of SSAs** (i.e. no significant change) and to prevent proliferation. The introduction of large swathes of LSAs dispersed across the county takes a diametrically opposite approach.
- Powys already has more land area within Strategic Search Areas than any other county and should not be expected to contribute unreasonably, to the detriment of landscapes and the economy. It is now time to look at other options including more efficient and sustainable opportunities in building design.

Conflict of proposed policy with Planning Policy Wales 8

From guidance on LDP preparation in Planning Policy Wales 8 (PPW)

(see gov.wales/docs/desh/publications/160104ppw-chapter-2-en.pdf):

- **PPW Paragraph 2.2.1:** ‘It is for the local planning authority to determine how its LDP should be tailored to the needs of the area based upon robust evidence’.
- **PPW paragraph 2.5.10:** ‘Occasionally, if new information such as new national policy, becomes available in the later stages of plan preparation and some limited changes are deemed necessary to make the plan sound then the authority can exceptionally publish, as an addendum to the deposit plan, a schedule of focussed changes.’
- **PPW Section 2.6** sets out the role of the Welsh Government in the plan process. **Paragraph 2.6.4** states that the Welsh Government will generally only use its powers of direction ‘as a last resort when dialogue has failed and where an LDP:
 - raises issues of national importance, or
 - could have wide effects beyond the area of the plan-making authority.’

The proposed Local Search Areas are not a limited or focussed change to the Deposit LDP, are not a response to new national policy and we cannot see how the tests set out in paragraph 2.6.4 have been met

7. OTHER LDP PROBLEMS – INTERNAL CONFLICT, POOR WORDING ETC.

Conflict of proposed policy with Powys LDP Objectives

- Policy RE1 is in conflict with LDP objectives 10, 11, 12 and 13 concerning the safeguarding of assets such as landscape, historic environment, National Trails etc. and takes no account of the far reaching landscape character and visual impacts which will be felt far beyond the boundaries of the Local Search Areas, and which will be exacerbated by the requirement for associated grid transmission infrastructure.
- Policy RE1 is also in conflict with LDP Objective 4 (and also 5 (i)). The construction of access tracks and immense concrete foundations for wind turbines, and imposition of large expanses of solar panels have serious implications for both water quality and the integrity and hydrological function (including water storage) of the uplands.
- Policy RE1 is in conflict with LDP Objectives 6 and 7. The proposed policy will deal a death blow to landscape tourism. Tourism income is one of the two principle sources of income and employment in the

county and it is fully acknowledged in the LDP that landscape is the major driver of the Powys tourism industry and offers the greatest potential for the aim of increased all year round tourism.

- Policy RE1 is in conflict with LDP Objective 16. Enormous community conflict has resulted from renewable energy proposals which generally benefit one person while wreaking damage on others. Community benefit funds do not compensate for the scale of loss borne by some residents.

Lack of appropriate monitoring of impacts of proposed policy

The monitoring report is not fit for purpose and fails to reflect the significant dangers associated with the proposed energy policy. It is in fact highly selective as to those objectives which are to be monitored at all. For example, 'Theme 4 Guardianship of Natural and Built Assets' considers only Objective 12 'Resources', whilst omitting Objective 11 'Natural Heritage' and Objective 13 'Landscape and the Historic Environment'. Does Powys want carte blanche to inflict huge damage on our natural heritage, landscape and historic environment without the mechanisms whereby they can be held accountable?

Unsatisfactory wording of Policy RE1 – fails to provide protections for people, wildlife, landscapes

The wording of this policy gives us cause for concern that protections are inadequate:

- 'Minimal impacts' on visual amenity, biodiversity, and the natural and historic environment may still be wholly unacceptable.
- Is there a commitment to protect species other than European Protected Species (as required by the Environment Act)?
- There is no specific identification of landscape as requiring protection. This is unacceptable to residents, and also in conflict with the achievement of LDP Objective 13 (i): '*Landscape: To protect, preserve and/or enhance the distinctive landscapes of Powys and adjoining areas, including protected landscapes.*'
- Mitigation against landscape and environmental harm of wind turbines and solar arrays is not possible, and the alternative course of that mitigation taking the form of planning conditions requiring funding for 'improvements' elsewhere in the County is totally unacceptable in the context of residents' loss of amenity.
- Table RE1 LDP Para 4.10.6A conflicts with a stated target of 600MW.

This is not an exhaustive list.

* Government guidance on preparation of Local Development Plans: Planning Policy Wales (Ed. 8, Jan 2016)
"This is our land use planning policy for Wales and should be taken into account when preparing development plans." (<http://gov.wales/topics/planning/policy/ppw/?lang=en>)

Resources: There are numerous online resources. Below are just a sample few:

<https://www.heatonharris.com/reports-publications>

<http://www.masenv.co.uk/windfarms>

<http://www.batsandwind.org/pdf/baerwald%20et%20al%20current%20biology%202008.pdf>

<http://www.turbineaction.co.uk/wind-turbine-issues/no-reduction-in-co2-emissions.html>

<http://hearinghealthmatters.org/hearingnewswatch/2016/wind-turbines-noise-and-health/>

<https://windfarmaction.wordpress.com/2013/10/19/dr-rachel-connor-and-the-reality-of-whitelees-wind-farm/>

http://www.iucn-uk-peatlandprogramme.org/sites/www.iucn-uk-peatlandprogramme.org/files/12%20Tracks%20on%20peatland_v2_FINAL.pdf

<https://windfarmaction.wordpress.com/>

<https://www.wind-watch.org/>

<http://www.turbineaction.co.uk/>

<http://www.bbc.co.uk/news/uk-wales-32145512> (Wales Upland Archaeology Initiative)

<http://www.spectator.co.uk/2013/01/wind-farms-vs-wildlife/>

Table 42: Wind resource priority

| Wind Resource Priority | Average Annual Wind Speed | Potential disruption to the National Air Traffic Service |
|-------------------------------|----------------------------------|---|
| Priority 1 | High (>6.5m/s) | Low |
| Priority 2 | Moderate (6.0-6.5m/s) | Low |
| Priority 3 | High | Moderate |
| Priority 4 | Moderate | Moderate |
| Priority 5 | High | High |
| Priority 6 | Moderate | High |

(This information is not given in LDP documents but has been found in

<http://gov.wales/docs/desh/publications/151021renewable-energy-toolkit-en.pdf> Page 143)