



Powys County Council

Local Development Plan - 2011 – 2026

Powys LDP Examination – Council’s Response to Action Points from Hearing Session 15 – Renewable Energy

Action Point	To be completed by	Officer	Agreed
AP1 - PCC to address matters identified in SoCG between PCC, SPEN and WPD (ED078).	12 July 2017	RP	Agreed
<p>Council Action/Proposed Matters Arising Change The Statement of Common Ground (ED078) drawn up between PCC, Scottish Power Energy Networks and Western Power Distribution, details the two proposed Matters Arising Changes that has been agreed by the signatories. These are as follows;</p> <p>Proposed MAC 1;</p> <p>Insertion of word ‘new’ into Objective 9;</p> <p>Theme 3 – Supporting Infrastructure and Services LDP Objective 9 – Infrastructure and Services To support the provision of new infrastructure and services to meet the future needs of Powys’ communities.</p> <p>Proposed MAC 2;</p> <p>Insertion of new text into Policy DM15 paragraph 4.2.55A within <u>Policy DM15 – Design and Resources</u> 4.2.55A Utilities. Utility infrastructure encompasses services such as water supply, sewerage treatment, electricity and gas and heat supplies, and telecommunications. Responsibility for the supply and maintenance of existing services rests with a mix of statutory undertakers and private companies. Where possible, practical and not an undue burden, particularly likely to be the case where there exists little or no infrastructure or spare grid capacity, developments should utilise sustainable, low and zero carbon energy technologies. Where this is not possible, developments should be connected to the existing infrastructure but in locations where there is no spare capacity, future development will be constrained until the capacity is increased or a satisfactory alternative can be found include provision for increasing the existing capacity and developers will need to work closely with utility providers in providing new infrastructure where it is required. The creation of extra capacity will improve the resilience of the local network which will provide</p>			

Action Point	To be completed by	Officer	Agreed
benefits for communities across Powys in line with Paragraph 2.13 of Annex C, of TAN 8.			

AP2 – PCC to issue an erratum to the REA by AECOM, clarifying in liaison with Geoffrey Sinclair (EIS), which grades of agricultural land were included in the assessments. In addition, undertake desktop exercise to indicate implication of changes to evidence on ALC grade land.	12 July 2017	AECOM / AH	Agreed
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Council Action/Proposed Matters Arising Change

The Council's contractor (AECOM) has reviewed the Renewable Energy Assessment (2017) [ED059] in relation to the description of the use of Agricultural Land Classification in preparation of the solar maps. To clarify the position, ALC Grades 3, 4 and 5 were used for solar PV, but only ALC 4 for energy crops. Because the REA recognises the utilisation of only small percentages of the land for each (e.g. only 10% of suitable land for energy crops), the assumption is that there is sufficient area available across the Powys LPA to avoid overlap between energy crops and solar PV farms.

The errata to the relevant sections are included as Appendix 1 and have been discussed with Mr Sinclair.

Discussions have been undertaken with the Department for Environment and Rural Affairs of Welsh Government with regards the draft ALC Map for Wales and the following has been received:

“Following the DCPO letter, dated 13 January 2016, the Department for Environment and Rural Affairs of Welsh Government has produced a Predictive Agricultural Land Classification Map for Wales. The timeline for development and release is as follows:

- *April 2016 – March 2017: Map Development*
- *April 2017 – September 2017: Targeted Survey Validation Programme*
- *October 2017 – November 2017: Map Refinement based on Validation Programme*
- *November 2017 – February 2018: Release of Predictive ALC Map with guidance and withdrawal of Provisional ALC Map.*

Powys is one of the counties where targeted survey validation is being undertaken. Surveys are being conducted near Trefeglwys, Welshpool, Montgomery, Presteigne, Clyro and Hay-on-Wye on both high quality and poor quality agricultural land. This is to assess whether the Draft Predictive ALC Map fairly reflects actual agricultural land quality. Where there are differences these will be explored and the data behind the map refined.”

As the information is still only in draft and there may be changes to grades depending on the findings of the validation programme, the Council do not consider that it would be appropriate to use unpublished data on which potential challenges could still arise.

AP3 - PCC, in discussion with participants at Hearing Session 15, to revise Draft Policy RE1, to include a list of Local Search Area numbers sequentially and amendment to boundaries of LSAs in accordance with ED079 maps.	12 July 2017	PM	Agreed
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Council Action/Proposed Matters Arising Change

Following the hearing session, the Council prepared a revised version of Policy RE1 which was circulated to all participants at the hearing session(s) for comment. The responses that were received have been attached as Appendix 2. Following receipt of these, the Council has considered the suggestions made by participants and recommends the following wording to Policy RE1 and its reasoned justification as a Matters Arising Change:

Policy RE1 – Renewable Energy

Proposals for renewable and low carbon energy development will be permitted subject to the following criteria.

1. Wind energy

- i. Wind energy proposals (greater than 25MW) will only be supported / permitted in appropriate locations within or close to the boundaries of the Strategic Search Areas (SSAs) and where criteria 4-7 below are met.
- ii. Wind energy proposals of less than 25 MW will only be supported / permitted where criteria 3-7 below are met.

2. Solar Energy

- i. Solar PV proposals (5 – 50MW) will be supported / permitted in appropriate locations within the boundaries of Local Search Areas (Solar LSAs) and where the criteria below are met.
- ii. Outside Solar LSAs, solar PV proposals will only be supported / permitted where all the criteria below are met.

3. Other technologies or scales of renewable and low carbon energy proposed in or close to:

- SSAs (i.e. non-wind energy or wind energy less than 25 MW); or
 - Solar LSAs (i.e. non-solar PV energy or solar PV energy less than 5 MW),
- will be required to demonstrate that they would not prejudice the purpose of the Strategic or Local Search Areas to generate energy in accordance with criteria 1 and 2, and shall meet the criteria below.

4. Proposals for all types of renewable and low carbon energy development and associated infrastructure either on their own, cumulatively or in combination with existing, approved or proposed development, shall comply with all other relevant policies in the LDP and shall not have an unacceptable adverse effect on:

- i. The valued characteristics and qualities of the landscape in accordance with Policy DM3 – Landscape.
- ii. The natural environment in accordance with Policy DM2 – The Natural Environment and Strategic Policy SP7 – Safeguarding Strategic Resources and Assets.
- iii. The historic environment in accordance with Policy DM15 – Design and Resources and Strategic Policy SP7 – Safeguarding Strategic Resources and Assets.
- iv. Groundwater quality in accordance with Policy DM2 – The Natural Environment.
- v. Residential amenity and the amenity of the surrounding area, in accordance with Policy DM15 – Design and Resources. All wind energy proposals shall not

cause unacceptable levels of noise and / or shadow flicker. All solar PV proposals shall not cause unacceptable levels of glare or reflection.

- vi. Highway safety, including during construction, in accordance with Policy DM15 – Design and Resources.
- vii. Surface water and land drainage in accordance with Policy DM5 – Flood Prevention Measures and Land Drainage.
- viii. Dark skies in accordance with Policy DM6 – Dark Skies and External Lighting.
- ix. Air quality in accordance with Policy DM15A – Air Quality Management.
- x. Radar, air traffic control systems, telecommunications links, television reception, radio communication and emergency services communications.

5. Satisfactory mitigation shall be in place to reduce the impact of the proposal and its associated infrastructure. Proposals shall make provision for the restoration and after-care of the land for its beneficial re-use.

6. Where any development, or part of a development or infrastructure ceases to operate for a period in excess of 6 months, it shall be removed and the land restored to its former condition. Development for wind energy and solar PV energy will only be permitted for a period of 25 years.

7. Where necessary, additional compensatory benefits will be sought by agreement with applicants in accordance with Policy DM1 – Planning Obligations.

4.10.1 Renewable energy and low carbon energy are defined by Planning Policy Wales (PPW, Paragraph 12.8.7). Renewable energy includes wind, water, solar, geothermal energy and plant material (biomass). Low carbon energy covers technologies that are energy efficient (but does not include nuclear). The Renewables Directive (2009/28/EC) requires 20% of energy consumed in the European Union (EU) to be generated from renewable sources by 2020. This target is pooled across the EU, the UK's legally binding target by 2020 is 15%. In 2012 the UK was generating just 3.94% of its energy from renewable sources, this being equivalent to a seven-fold increase in UK renewable energy consumption from 2008 levels.

4.10.2 To meet the legally binding target, the UK Low Carbon Transition Plan 2009 sets out that by 2020:

- 30% of electricity will be generated by renewables (e.g. wind, solar PV biomass, hydro, wave or tidal power);
- 12% of heat will be derived from renewables (e.g. biomass, biogas, solar, or heat pump);
- 10% of fuel will be derived from renewables (e.g. electrification).

This is implemented through the UK Renewable Energy Strategy 2009 and these targets were reaffirmed in the Energy Act 2013. This strategy explains that climate change, economic opportunities and security of supply are the key drivers for meeting the targets.

4.10.3 Energy Wales: A low carbon transition 2012 seeks to ensure that communities benefit from energy development. Welsh Government is committed to using the planning system to optimise renewable energy and low carbon energy generation. PPW (12.8.9) explains that Local Planning Authorities can make a positive provision by considering the contribution that their area can make towards developing and facilitating renewable and low carbon energy, and enable this contribution to be delivered.

4.10.4 PPW (Figure 12.2) categorises four scales of renewable energy development. Policy RE1 sets out criteria against which all proposals for renewable and low carbon energy

development, across these four scales, will be assessed. This includes those relating to:

- Strategic (>25MW for wind and >50MW for all other technologies)
- Local Authority-wide (5-25MW for wind and up to 5-50MW for all other technologies) and small scale (<5MW) (Sub-Local Authority and Micro) proposals where they are not permitted development (EfW, CHP, Biomass, Hydro-Power and Solar technology).
- Sub-Local Authority (50kW-5MW).
- Micro (Below 50kW).

4.10.5 The County Council is responsible for determining planning applications for energy generating proposals of less than 10MW; Welsh Government for proposals between 10-350MW; and UK Government for larger proposals. Further guidance is set by Planning Policy Wales PPW and Technical Advice Note 8 and National Policy Statements, and Policy RE1 sets out criteria should be read in conjunction with these national documents.

4.10.5a The Mid Wales Conjoined Public Inquiry into five wind farm proposals delivered its conclusion in September 2015, with the Secretary of State refusing all but one of the proposals. The Council's position at this Inquiry was initially to oppose the proposals but this position does not prejudice future applications which will be dealt with on their merits according to the criteria laid out in this policy.

4.10.5b The County Council has not refined Strategic Search Areas in the LDP. Previously work was undertaken to refine the SSAs. Although this was not completed, the evidence prepared for this has been used to inform a large number of applications, including that for the CPI mentioned above. but the Mid Wales Conjoined Public Inquiry has left there is now a large body of evidence in relation to SSAs, and no need to refine the SSA boundaries at this point. Wind energy proposals greater than 25 MW will only be acceptable within or close to the boundaries of SSAs; acceptable sites close to SSAs will be those that provide robust evidence that the land is suitably unconstrained in line with TAN8.

4.10.6 To inform policy development, the Council prepared a renewable energy assessment (REA), updated in 2017, utilising the method set out in Welsh Government's 'Planning for Renewable and Low Carbon Energy – A Toolkit for Planners' (September 2015), in 2011/12. Subsequent to changes being made to UK national and Welsh renewable energy legislation and policy, (particularly in respect of who determines Planning Applications) the REA was updated in 2016 to make sure that Policy RE1 was still appropriate. Due to the presence of the SSAs in the County, Powys is contributing significantly to the UK target for renewable electricity generation. Findings from the assessment show that in Powys in 2008 the total electrical energy generated from renewable and low carbon energy technologies equated to around 86% of the expected consumption for 2020, however the total thermal energy (heat) generated from renewable and low carbon energy technologies was just 1.7% of the expected thermal consumption for 2020. Whilst the REA was not able to spatially identify all of the possible constraints that would act upon any renewable or low carbon proposals, it does identify spatially, at high-level, areas of the County where there is practical viability for wind in SSAs and Local Search Areas (LSA), PV farms (in Solar LSAs) and hydro-electric power (including potential hydro-electric over 10KWe), as well as an Energy Opportunity Plan for the utilisation of renewable heat. These areas will form the basis of a framework to assist developers with site identification and highlight significant opportunities for householders, communities, businesses (through co-location) and the diversification of rural enterprises to benefit from micro and sub-local authority energy schemes. The REA undertook a high-level strategic assessment of the potential for different scales of renewable and low carbon energy generation across the plan area based on a defined set of assumptions for each type of renewable energy resource. At the Local Authority-wide scale of renewable electricity energy generation, the REA concluded that solar PV energy was the only renewable energy resource for which it was possible to identify Local Search Areas (LSAs). The solar LSAs were identified by applying a series of constraints and the resulting areas were further reduced in number by a

Landscape Sensitivity Study. They are shown on the LDP proposals and inset maps, and listed in the table below. By following the Toolkit and applying a series of assumptions, LSAs are considered to be the least constrained areas of the County within which it may be possible for solar PV farms of the Local Authority-wide scale to be accommodated.

4.10.6a In order to determine whether a particular site within an LSA is acceptable for a solar PV farm, further site specific assessments and information will be required at the planning application stage. This reflects the strategic nature of LSAs and recognises that, whilst the LSAs are generally the 'least-constrained' parts of Powys in terms of the assumptions applied, they are not without site specific constraints. Also, it will be necessary for all proposals to comply with other legislation and regulations such as those in respect of common land or the Habitats Directive.

Table RE1 - Local Search Areas (Solar)

LSA Number	LSA Name	LSA Size (sq. km)	Potential Capacity (MW)	Landscape Sensitivity
SA	Bachrydrada	2.3	10	Medium-High
SB	Abertridwr	1.2	10	Medium
SC	Ffridd Llwydiarth	1	10	Medium-Low
SD	Dongay	0.6	25	Medium
SE	Buttington	1.1	10	Medium-Low
SF	Heldre Hill	0.9	25	Low
SG	Staylitle	14.4	25	Medium
SH	Trefen	0.9	25	Medium
SI	Glynhafren	2.3	10	Medium-High
SJ	Bryn Blaen	3.2	10	Medium
SK	Bryn Titli	8.4	25	Medium-Low
SL	Waun Ddubarthog	20.5	50	Low
SM	Drysgol	4.3	25	Low
SN	Bwlch y Sarnau	3.4	10	Medium-Low
SO	Llandegley Rhos	8	10	Medium
SP	Gilwern Hill	4.5	10	Medium
SQ	Nant Fawr	2.3	10	Medium
SR	Llandefalle Hill	4.9	25	Medium-Low
SS	Camlo Hill	9.9	25	Medium-Low

ST	Ddyle	10.9	10	Medium-High
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(Source, Powys REA: Landscape Sensitivity Study for Solar Farm Development, Powys CC, May 2017)

4.10.6A The REA Update (2016) also identified the contribution that the County is potentially able to make towards meeting the national targets mentioned above. This contribution is shown below. Further information on the methodology for calculating these figures can be found within the REA Update 2016.

Table RE1 2- Summary of Renewable Electricity Contribution

Energy Technology	Existing Energy Generated [MWh]	Potential Additional Energy Generated [MWh]	Percentage Delivered by 2026	Total Additional Renewable Energy to be Delivered by 2026 [GWh]
Biomass (CHP)	19,710	362,664	5%	18
Energy from Waste	-	55,188	5%	3
Hydropower	28,523	48,618	30%	14
Landfill Gas	11,038	-	100%	0
Wind Power	739,598	2,658,485	25%	665
Solar PV Farms	-	1,080,984	25%	270
Other	1,971	-	100%	0
BIR	8,848	13,140	25%	3
Total	809,688	4,219,079		973
Projected Electrical Energy Demand in 2026				606
% of Powys Electricity Demand in 2026 potentially met by Renewables in Powys				106%

	Existing Installed Capacity (MW)	Potential Installed Capacity by 2026 (MW)	Potential Change (MW) by 2026
Biomass	2.5	2.5	-
Energy from Waste	-	-	-
Hydropower	8.8	19.1	10.3
Landfill Gas	2.1	2.1	-
Windpower	312.7*	316.7	4
Solar PV Farms	-	45	45
Other (AD, CHP, etc)	0.5	1.7	1.2
BIR	10.1	11.3	1.2
Total	336.7	398.4	61.7

(Source: REA, 2017)

*Includes SSAs

Table RE2-3 - Summary of Renewable Thermal Contribution

Energy Technology	Existing Energy Generated [MWh]	Potential Additional Energy Generated [MWh]	Percent Delivered by 2026	Total Additional Renewable Energy to be Delivered by 2026 [GWh]
Biomass (CHP)	24,966	674,520	5%	34
Energy from Waste	-	48,180	10%	5
BIR	120,538	145,416	25%	36
Total	145,504	868,116		75
Projected Thermal Energy Demand in 2026				1463

~~% of Powys Thermal Demand in 2026 potentially met by Renewables in Powys~~

5%

	Existing Installed Capacity (MW)	Potential Installed Capacity by 2026 (MW)	Potential Change (MW) by 2026
Biomass (CHP)	5.7	5.7	-
Biomass Boilers	-	1.8	1.8
Energy from Waste	-	-	-
AD	-	1.7	1.7
BIR	68.8	73.3	4.5
Total	74.5	82.5	8

(Source: REA, 2017)

4.10.7 ~~The REA combines all of the resources and opportunities together (including SSA's) in order to provide an understanding of the maximum renewable energy potential for the County. The uptake of renewable energy will be monitored to help show how the LDP is assisting to deliver what is considered to be an appropriate~~ **the contribution identified in the REA.** ~~from that maximum potential and, in so doing contributing to the achievement of sustainable development. Realising the contribution from this potential would help to ensure that by the end of the plan period, and at the very least, irrespective of any further developments within the SSA's, Powys will be generating enough renewable electricity in the County to offset all that which the county consumes and more (so will become a net exporter to elsewhere).~~

4.10.8 ~~The situation for generating renewable heat is less encouraging. The REA Update (2016) showed that just 1.7% of the County's expected thermal consumption for 2020 is currently met by renewables. Policy DM15 provides measures aimed at promoting the uptake of renewable heat. The REA recognised that whilst there was some potential, no settlement in Powys reached the heat density threshold necessary to enable the designation of heat demand density areas,~~ **and electricity and therefore plays an important role in delivering this contribution. from the maximum potential identified in the REA. Monitoring of Policy DM15 and RE1 will show how the LDP is contributing to meeting the UK Low Carbon Transition Plan requirement. Whilst the uptake of renewable heating technologies is being encouraged, it is recognised that delivery will ultimately depend on external factors (such as wider national political support), and include many activities (such as household behaviour) that are outside the control or monitoring reach of the planning process.**

4.10.9 Policy RE1 ~~will supports~~ **the** ~~delivery of national policy by encouraging renewable and low and zero carbon energy projects, subject to there being no unacceptable impact on existing landscape character and other material planning considerations. Proposals which are likely to have a significant impact on the landscape and/or visual amenity will be required to undertake a Landscape and Visual Impact Assessment in accordance with Policy DM3. In relation to wind energy, TAN8 states that, "within (and immediately adjacent to) the SSAs, the implicit objective is to accept landscape change i.e. a significant change in landscape character from wind turbine~~

development”, and this will need to be considered when determining applications in SSAs. “Outside the SSAs, the implicit objective is to maintain the landscape character i.e. no significant change in landscape character from wind turbine development.” (TAN8, Annex D, Paragraph 8.4).

4.10.9A It is possible that renewable wind developments could cause a barrier for migratory birds associated with Special Protection Areas, and other European Sites, and Solar developments could result in changes or increases to surface water run-off. Therefore Policy RE1 also recognises the importance of ensuring that renewable energy developments of any kind do not result in significant negative impacts upon European Protected Sites and their associated features.

4.10.9B All renewable energy proposals and associated infrastructure, such as power lines or battery storage facilities, must respect the existence and amenities of neighbouring residential and sensitive properties including approved development. This is particularly the case when it comes to ‘shadow flicker’, reflected light or noise from wind turbines, and ‘glint and glare’ from large-scale solar developments, and odour associated with anaerobic digestion.

4.10.10 Further details will be included within an SPG on Renewable Energy. This will provide further details on the site specific, landscape and cumulative impact assessments that should be undertaken and the information that should be provided by development proposals to enable the determination of planning applications.

<p>AP4 - PCC to submit methodology for developers assessing viability of potential district heating networks.</p>	<p>12 July 2017</p>	<p>RP</p>	<p>Agreed</p>
<p>Council Action/Proposed Matters Arising Change The methodology can be found in Appendix 3 of this document. See also further information contained within the Council’s Hearing Statement for Session 11 (section 3.f.) and Appendix 4 of the Hearing Statement for Session 11</p>			

<p>AP5 - Erratum to address the errors raised in Appendix D of Mrs Watton’s statement.</p>	<p>12 July 2017</p>	<p>AECOM / AH</p>	<p>Agreed</p>
<p>Council Action/Proposed Matters Arising Change The Council’s contractor (AECOM) has reviewed the Renewable Energy Assessment (2017) [ED059] in relation to the section on Building Integrated Renewables, which has been assessed in relation to Mrs Watton’s statement and the errata are included as Appendix 4.</p>			

<p>AP6 - Amend LSA boundaries 15, 18, 21, and 33 in line with ED079.</p>	<p>12 July 2017</p>	<p>AH / CS</p>	<p>Agreed</p>
<p>Council Action/Proposed Matters Arising Change Appendix 5 of this response includes maps showing the revised boundaries to these LSAs.</p>			

The boundaries have been amended as much as is possible without affecting the integrity of each individual LSA to remove SSSIs, SACs and SPAs. This work has been done in consultation with NRW who are satisfied with the approach taken.

General note on Action Points (APs):

These will normally be agreed in principal by the Inspector and the LPA, and any other participant as required, at the end of the relevant hearing session. Where possible the AP will specify an agreed timeframe for completion. If it is not possible to determine the timeframe at the time of discussion, the LPA will liaise with the Inspector over this via the Programme Officer. The Planning Inspector will send the suggested form of wording for the APs to the LPA via the Programme Officer as soon as practicable after the end of a hearing session. Once the LPA is satisfied that the contents are accurate, they will be published to the Examination website as soon as possible in the interests of transparency. The LPA will work on the schedule of Matters Arising Changes (MACs) in parallel with the APs and their AP responses, ensuring that MACs are accurately recorded at the earliest possible stage. The Inspector will confirm when she expects to be sent an up to date MAC Schedule; this will normally be in advance of the final hearing session.

Appendices

1.	Errata clarifying the use of ALC Grades in the REA.
2.	Suggested Changes to Policy RE1 from Participants of Hearing Session 15.
3.	Methodology for AP4.
4	Errata to the Building Integrated Renewables section of the REA.
5	Revised LSA boundaries 15, 18, 21 and 33.