

Powys Local Development Plan

Renewable Energy

Position Statement

May 2017



Executive Summary

Representations received during the Further Focussed Changes public consultation on the Powys Local Development Plan raised concerns regarding the identification of Local Search Areas for local authority-wide onshore wind power and solar PV farm technologies in the Powys Renewable Energy Assessment Update 2016.

In acknowledgement of the numbers of representations received, the Council's cabinet requested that additional work be undertaken to review the Renewable Energy Assessment and undertake further work with regards to consideration of the National Grid and landscape in informing the policies on renewable and low carbon energy in the Powys Local Development Plan.

In accordance with the evidence, solar PV technologies will be the primary strategy for delivering renewable energy generation in the Powys LDP area. The demand for heat in the Powys LDP area is limited and dispersed and therefore does not lend itself to the generation of large quantities of renewable heat.

This Position Statement, working within the framework of National Policy, provides an overview of the new evidence and includes a proposed revised Renewable Energy policy.

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1. Introduction

1.0.1. This Position Statement provides the explanation of the methodology and decisions taken to express spatially the renewable energy policies of the Powys Local Development Plan (LDP) 2011-2026 following a review of the Powys Renewable Energy Assessment (REA) Update 2016 [EB17]

1.0.2. Following the published Welsh Government practice guidance “*Planning for Renewable and Low Carbon Energy – A Toolkit for Planners*”, (hereafter “the Toolkit”) published in September 2015 [WPP50], a defined process has been followed to undertake a high-level, strategic assessment based on a series of assumptions to inform the Plan’s policies and identify a revised renewable energy contribution which Powys could make towards Welsh Government aspirations and UK national targets.

1.0.3 This document complements and links to other published documents within the theme of Renewable Energy as submitted to the Planning Inspectorate for examination:

Document	Ref No	Date
Planning Policy Wales Edition 9	WPP11b	November 2016
Planning for Renewable and Low Carbon Energy – A Toolkit for Planners	WPP50	September 2015
Ministerial Letter – Planning for Renewable and Low Carbon Energy	WPP51	September 2015
Ministerial Letter – Energy Policies in Local Development Plans	WPP51a	December 2015
Powys Renewable Energy Assessment	EB17	2012
Powys Renewable Energy Assessment Update 2016	EB17	August 2016
Renewable & low Carbon Energy Topic Paper	EB36	March 2015
Renewable Energy Topic Paper	EB36	September 2016

2. Purpose of this Position Statement

2.0.1. This Position Statement provides a clearly articulated position with regards to renewable energy technologies within the Powys LDP Area.

2.0.2. In a planning context, it recognises that the Local Planning Authority balances the impact of renewable and low carbon energy proposals against all of the other material planning considerations and policies within the LDP. Additionally this position statement is to:

- Explain how the recommendations of the new assessments will be addressed in the LDP;
- Identifies the changes to the Plan considered necessary to align the additional evidence.

2.0.3. The changes proposed are informed by the published updated evidence base arising from the additional work which accompanies this Position Statement. They have also been subject to informing assessments (HRA, SEA/SA).

2.1. National Policy

2.1.1. Welsh national policy promotes the use of renewable technology at all levels and requires that planning policy at all levels should facilitate delivery of both the ambition set out in *Energy Wales: A Low Carbon Transition* and UK and European targets on renewable energy. Local Planning Authorities should look to “optimise” their contributions. National policy recognises the need to minimize environmental and social impacts but does not specifically exclude important landscapes.

2.1.2. Planning Policy Wales [WPP11b] clearly defines the scales which development plans should plan for in terms of renewable and low carbon energy (Table 1). Paragraph 12.8.15. of PPW states:

The impacts from renewable energy developments and associated infrastructure will vary depending on their type, location and scale. This requires different policy and development management considerations. For planning purposes the following scales are considered:

Table 1: Renewable and low carbon energy scales for planning purposes

Scale of development	Threshold (electricity and heat)
Strategic	Over 25MW for onshore wind and over 50MW for all other technologies
Local Authority-wide	Between 5MW and 25MW for onshore wind and between 5MW and 50MW for all other technologies
Sub Local Authority	Between 50kW and 5MW
Micro	Below 50kW

Source: *Planning Policy Wales*

2.1.3. Since the submission of the Renewable Energy Topic Paper (September 2016) [EB36], Planning Policy Wales Edition 9 has been published (November 2016). No major changes were made to Chapter 12 Infrastructure and Services.

2.1.4. Powys LDP Examination Document [ED020] has clarified that the LDP will not be subject to the requirements of the Well-being of Future Generations (Wales) Act 2015. Therefore, it follows that achieving the well-being goals cannot apply to LDPs submitted for

examination before 1 April 2016 because the goals are intrinsically linked with the carrying out of sustainable development under section 2 of the WFG Act. All other subsections under section 2 of the Planning (Wales) Act 2015 are not applicable either.

2.2. Ministerial Letter, December 2015

2.2.1. Following the publication of the revised Toolkit [WPP50] in September 2015, the Minister responsible for Renewable Energy wrote to LPA's [WPP51a] requesting that they consider the need for local policies (including the expectation for the spatial representations as allocations or local areas of search) in support of local authority scale (between 5MW and 25MW for onshore wind and between 5MW and 50MW for all other technologies) renewable energy applications.

2.3. Powys Approach for the Further Focussed Changes

2.3.1. Following representations received on the consultation on Focussed Changes and the failure to take account of the December 2015 Ministerial Letter [WPP51a], an Update to the Powys REA was prepared [EB17] for the Council by its contractor (AECOM) to inform the spatial representation of renewable energy policies of the Plan. It was identified that two technologies had the potential to achieve the 5MW threshold for individual schemes and that an assessment should be undertaken for onshore wind and solar PV farm technologies.

2.3.2. As no requirement exists to call for candidate sites specifically for renewable and low carbon energy technologies during the Plan making process which could enable site allocations to be identified, the assessment for spatial representation of these technologies was a high level, strategic study to identify local areas of search. These were termed Local Search Areas (LSAs) for wind and solar PV farm technologies for development proposals that would accord with the scale of Local Authority-wide schemes identified in Planning Policy Wales. For smaller schemes, the Plan's policies would be generally supportive.

2.3.2. The LSAs for these technologies were defined by using the steps recorded in the Toolkit [WPP50], which are based on a series of standardised assumptions in terms of technology and buffering of a range of features to identify those areas which would be least constrained for a particular technology.

3. REA Update (2016) Review

3.0.1. Following the Further Focussed Changes consultation during October – November 2016, the Council undertook a review of the REA. The updated Consultation Report [LDP26] in January 2017 identified the need for additional work, particularly as a result of the high level of interest shown on the proposed Local Search Areas (LSAs) for onshore wind and solar PV farm technologies.

3.0.2. The Review resulted in a number of issues being identified. These did not fundamentally alter the principles which have been established by following the Welsh Government's published Toolkit (September 2015) [WPP50] and policy clarification letter (December 2015) [WPP51a], but did potentially impact upon the location and extent of the proposed LSAs, the overall renewable energy contribution currently identified in the REA Update and the Renewable Energy Policy RE1 included in the LDP. The issues identified were:

- Some constraints stated in the REA Update (2016) as being included in the analysis appeared to be absent from the GIS layers;
- Some of the datasets considered did not exclude the area of the Brecon Beacons National Park Authority;
- A GIS error in the designation of wind priority areas and subsequent theoretical build out which informs the wind power contribution;
- Some sections drawing on other elements of the Plan are not in alignment with other components of the Plan's evidence base, in particular the Building Integrated Renewables element.

3.0.3. As well as requiring the contractor to address the errors identified in the REA Update (2016), the Council, having considered the representations arising from the consultation on Further Focussed Changes, agreed to undertake additional work beyond that in the guidance within the Toolkit to ensure alignment with Planning Policy Wales and the December 2015 Ministerial Letter.

4. Additional Work

4.0.1. The additional work undertaken on the REA took account of further identified constraints elicited through the FFC consultation and to ensure that the outcomes of the REA were aligned with national policy (PPW) [WPP11] by considering connectivity to the national grid to inform deliverability and the influence of landscape in determining the contribution any proposed areas of search may make [WPP51].

4.0.2. The workflow was divided into four stages:

1. Alignment of evidence with the Plan area and other components of the Plan;
2. Correct application of identified constraints and inclusion of new constraints arising from FFC consultation to identify amended LSAs;
3. Landscape assessment of the amended LSAs taking account of development type;
4. Calculation of a revised Renewable and Low Carbon Energy contribution which Powys could make during the Plan period.

4.0.3. The Council engaged two contractors to undertake this work. Stages 1, 2 and 4 would be undertaken by AECOM; Stage 3 by Enplan.

4.1. Rationale and Baseline Assumptions

4.1.1. The additional work continued to be underpinned by the assumptions and parameters identified in the Toolkit [WPP50]. This would enable high level strategic planning decisions to be made to identify least constrained areas and inform the revision, if necessary, of both the Local Search Areas for onshore wind and solar PV farm technologies at the Local Authority-wide scale as defined by Planning Policy Wales and of the renewable energy policy in the LDP.

4.1.2. The baseline assumptions used in the additional work remained unchanged from those used in the REA Update (2016). Full details are provided in the Toolkit and the REA (2017) and include:

A) Onshore wind technology assumptions:

- Individual wind turbines are 2MW, 120m to blade tip;
- A minimum of 0.5 sq km is required to achieve 5MW lower threshold for Local Authority-wide schemes;
- A 500m noise buffer around all buildings;
- Buffers of 7km around existing, consented and proposed wind development;
- All statutory environmental designations (SAC, SPA, SSSI);
- All statutory historic designations (SAMs);
- CAA restricted airspace.

B) Solar PV technology assumptions

- Solar PV installations of 0.5MW and greater are viable and occupy 1.2ha;
- A minimum threshold of 0.12 sq km (12ha) is required to achieve the 5MW lower threshold for local-authority wide schemes;
- Solar PV would be limited to Agricultural Land Classification (ALC) Grade 5, as in terms of renewable and low carbon energy resource, ALC Grades 3b and 4 could be used for the growing of biomass to support other technologies;
- A 500m glare buffer around all buildings;
- Buffers of 3.5km around existing, consented and proposed solar PV development;
- All statutory environmental designations (SAC, SPA, SSSI);
- All statutory historic designations (SAMs);
- CAA restricted airspace (glare).

4.2. Additional Constraints

4.2.1. In determining LSAs for onshore wind and solar PV farm technologies, the REA Review and FFC consultation identified the following constraints which required correct application or highlighted additional constraints to those previously included:

4.2.2. For onshore wind technology:

- MoD - RAF Tactical Training Area Low Flying Template;
- “Looking out” buffers of 7km for Protected Landscapes of National Parks and AONBs;
- Correct identification of boundaries of all constructed, consented and proposed wind developments greater than 5MW within the planning system as at 31 March 2017 and application of buffer;
- Species-specific foraging range buffers applied to SPAs (addition);
- Identification of the MoD’s Sennybridge Training Area (SENTA) as it is safeguarded through other Plan policies;
- 10km buffer around the safeguarded SENTA area due to low flying and night-time exercises (addition);
- Inclusion of thick peat polygons (addition).
- National Air Traffic Control Services (NATS) radar data.

The Toolkit [WPP50] applies NATS data as a constraint in “Step 6” of Sheet B, but then uses the same dataset as a prioritisation tool in “Step 7”. The Council considers that this was inconsistent use and “double-counting”, therefore applied the NATS data as a constraint for the onshore wind technology during the additional work.

4.2.3. For solar PV farm technology:

- “Looking out” buffers of 3.5km for Protected Landscapes of National Parks and AONBs;
- Correct identification of boundaries of all constructed, consented and proposed solar farm developments greater than 5MW within the planning system as at 31 March 2017 and application of buffer;
- Identification of Sennybridge Training Area (SENTA) as it is safeguarded through other Plan policies;
- 3.5km Buffer around the safeguarded Sennybridge Training Area (SENTA) for military exercises and operations (addition);
- Inclusion of thick peat polygons (addition).

4.2.4. The identification of amended LSAs arising from the additional work **does not** mean an automatic presumption in favour of any renewable or low carbon energy development. LSAs represent the areas for two particular renewable energy technologies which have been identified as least constrained by utilising the Toolkit and as a consequence, development proposals could come forward outside LSAs if site specific constraints are mitigated.

4.2.5. By identifying LSAs for onshore wind and solar PV farm technologies through a series of standardised assumptions as informed by the Toolkit, the Council recognises that whilst LSA should be the first place to look for Local Authority-wide scale developments, they need not be the only place to look.

4.3. Additional Work Outcomes

4.3.1. Stage 1

4.3.1.1. The REA has been re-assessed by AECOM for all technologies to ensure alignment with the Plan area. Much renewable energy data is published County-wide and thus included that area of the County which is within the Brecon Beacons National Park. The data for

biomass, waste and hydro-power has as a consequence been re-calibrated. The heat opportunity mapping which assessed the settlements of Welshpool, Newtown and Llanidloes has not required amendment.

4.3.1.2. Building Integrated Renewables (BIR) assessments were informed by dwelling numbers arising from an early stage in the Plan preparation process. Whilst the REA (Update) 2016 provided alternative scenarios assuming lower delivery rates, this element has been fully revised to align with the Plan's Dwelling Requirement Figure of 4,500.

4.3.2. Stage 2

4.3.2.1. Work was undertaken on the spatial representation of the Local Search areas for solar PV farm and onshore wind technologies to correct omissions and include the additional identified constraints and this work was undertaken by AECOM. To improve clarity of approach, the maps for onshore wind (W series maps) and solar PV farms (S series maps) were revised as follows:

Map 1 – unconstrained total resource;

Map 2 – identified constraints;

Map 3 – remaining least constrained resource expressed as land parcels above and below the 5MW lower threshold;

Map 4 – remaining resource after consideration of the national grid expressed as land parcels above and below the 5MW lower threshold within 10km of at least a 33kV electricity line.

4.3.2.2. From this additional work, least constrained land parcels could be identified for both solar PV farms and onshore wind technologies which were both above and below the thresholds as described in Section 4.1. above.

Outcomes for Onshore Wind Technology at End of Stage 2 (Map W4)

For onshore wind, based on the assumptions applied in the REA and including the additional constraints, a total of four unconstrained parcels of land were identified at Y Gigyn west of Welshpool and on Aberedw Hill east of Builth Wells. However, no single parcel of land exceeded the threshold of 0.5 sq km and the three parcels of land on Aberedw Hill if combined totalled 0.36 sq km, again below the assumed threshold required to achieve 5MW.

As a consequence, it has not been possible to define Local Search Areas for onshore wind technologies in the range 5-25MW for Local Authority-wide scale developments, although the Council recognise that varying the assumptions could increase or decrease the availability of least constrained land parcels.

Outcomes for Solar PV Farm Technology at End of Stage 2 (Map S4)

For solar PV farms, based on the assumptions applied in the REA, least constrained parcels of land above and below the 0.12 sq km threshold were identified across the County.

From this distribution, the most concentrated least constrained land parcels were grouped into 33 *initial* Local Search Areas that could be identified for solar PV farm installations between 5 – 50MW in installed capacity to take forward for landscape assessment in Stage 3 (Map S5).

As the Toolkit provides no guidance on the defining of LSAs, a set of guidelines was applied to the remaining least constrained solar resource land parcels to enable the initial solar LSAs to be identified, these being:

- An initial LSA must contain at least one red area (as defined by map S4 i.e. >0.12 sq km = 5 MW) and preferably at least one amber area (<5 MW) of potential resource. LSA's cannot be defined by amber areas alone.
- Initial LSA's should have a minimum size of 0.5 sq km).
- An initial LSA should not be intersected by a class 1 or class 2 highway. Minor roads can intersect LSAs.
- An initial LSA should not include a statutory environmental designation (e.g. SPA, SAC, SSSI), although non-statutory designations may be included (such as woodland and buildings). Statutory heritage designations can be included as setting can be considered at site specific development proposal stage.
- LSA's should respect topographic setting e.g. two hilltops separated by a large valley should not be joined together.
- Boundaries have been drawn "tight" to clusters of least constrained land parcels so some "outliers" have been excluded but it may be possible to draw them into refined LSA boundaries provided constraints are not included or the other criteria above broken.
- It may be possible to cluster some of the LSA's together following landscape susceptibility assessment.

4.3.3. Stage 3

4.3.3.1. The Council-appointed contractors (Enplan) undertook a detailed landscape assessment of the amended LSAs. As no LSAs were identified for wind energy, the landscape work focussed solely on the 33 initial solar PV farm LSAs which had been identified.

4.3.3.2. Enplan carried out a detailed landscape analysis which assessed:

- The landscape value derived from the National Resources Wales (NRW) LandMap database, drawing on the "particularly informative" and "Main Drivers" criteria as identified in Guidance Note 1, published by NRW.
- The susceptibility of the landscape to a particularly development type (in this case, solar PV technology).
- The resultant sensitivity of the landscape defined by a matrix assessing landscape value against susceptibility to the development.

4.3.3.3. Resulting from this exercise, 11 of the initial solar PV farm LSAs were identified as being unsuitable in landscape terms and thus were ruled out, and two had very limited potential of less than 5MW due to landscape constraints. Of the remaining 20 initial solar LSAs, it was identified that each had potential for solar PV farm installations varying in installed capacity from 5-50MW, providing for a maximum installed capacity of 385MW (Map S7).

4.3.4. Stage 4

4.3.4.1. The remaining solar PV farm LSAs were subject to a theoretical "build-out" exercise by AECOM to inform likely contributions from this technology. The "build-out" followed a critical pathway to optimise potential whilst acknowledging cumulative impacts, and this exercise will further inform the contribution solar PV farm technology could make across Powys.

4.3.4.2. The results from this analysis have been included with the outcomes from the other renewable and low carbon technologies identified within the REA. The potential installed capacity recognised that this was likely to be the maximum achievable, therefore this was adjusted to take account of the Plan period to inform the policies within the LDP.

5. Recommendations

5.0.1. As a result of the additional work to take account of the issues identified during the Review, Table 2 and Table 3 summarise the realistic renewable and low carbon energy contributions that could be made towards meeting a proportion of the total demand for energy in the Powys LDP area in 2026. For renewable sources of electricity, an additional 61.7MW of installed capacity has been identified as a realistic contribution, the majority met by the equivalent of nine 5MW solar PV farm developments. For renewable sources of heat, an additional 7.0MW of installed capacity has been identified as a realistic contribution, through continuing Building Integrated Renewables (BIR) uptake and continuing installation of biomass boilers.

5.0.2. To be in alignment with Planning Policy Wales, consideration must be given to optimising the potential across all forms of renewable and low carbon energy and any new policy must take into account small schemes for which the Plan would continue to remain generally supportive, as well as local authority wide schemes of the scales identified in Planning Policy Wales.

5.0.3. Although no onshore wind LSAs were identified, it has been recognised that proposals at the local-authority wide scale may still come forward. Technological advances in turbine technology and varying the assumptions from those used in the Toolkit could identify potential sites provided they were in appropriate locations and identified constraints were mitigated at the site-specific level.

5.0.4. Similarly, it may be possible for solar PV farm proposals to come forward outside of solar LSAs for the same reasons as those identified in paragraph 5.0.3. above, and any policy must be able to address this possibility.

Table 2: Resource summary table for renewable electricity in 2026

Energy Technology	Capacity Factor Assumed	Existing Installed Capacity (MW)	Existing Energy Generated (MWh)	Additional Potential Installed Capacity (MW)	Additional Potential Energy Generated (MWh)	Additional Potential Capacity Delivered by 2026 (MW)	Additional Potential Energy Delivered by 2026 (MWh)	Total Installed Capacity in 2026	Total Energy Generated in 2026 (MWh)
Biomass (CHP)	0.90	2.5	19,710	39.8	313,783	-	-	2.5	19,710
Energy from Waste with CHP (includes poultry litter)	0.90	-	-	7.8	61,495	-	-	-	-
Hydropower	0.37	8.8	28,523	10.3	33,384	10.3	33,384	19.1	61,907
Landfill Gas	0.60	2.1	11,038	-	-	-	-	2.1	11,038
Wind Power (existing includes SSAs)	0.27	312.7	739,598	4.0	9,461	4.0	9,461	316.7	749,059
Solar PV Farms	0.10	-	-	220.0	192,720	45.0	39,420	45.0	39,420
Other (fuelled; sewage gas; AD with CHP)	0.42	0.5	1,840	1.6	5,887	1.2	4,415	1.7	6,255
BIR	0.10	10.1	8,848	4.8	4,205	1.2	1,051	11.3	9,899
Total	-	336.7	809,557	288.3	620,935	61.7	87,731	398.4	897,288
Projected electrical energy demand in 2026									497,000
Percentage electricity demand in 2026 potentially met by renewable energy resource									181%

Table 3: Resource summary table for renewable heat in 2026

Energy Technology	Capacity Factor Assumed	Existing Installed Capacity (MW)	Existing Energy Generated (MWh)	Additional Potential Installed Capacity (MW)	Additional Potential Energy Generated (MWh)	Additional Potential Capacity Delivered by 2026 (MW)	Additional Potential Energy Delivered by 2026 (MWh)	Total Installed Capacity in 2026 (MW)	Total Energy Generated in 2026 (MWh)
Biomass (CHP)	0.50	5.7	24,966	79.6	348,648	-	-	5.7	24,966
Biomass Boilers	0.50	-	-	57.6	252,288	1.8	7,884	1.8	7,884
Energy from Waste with CHP – includes poultry litter	0.50	-	-	15.4	67,452	-	-	-	-
AD (with CHP)	0.50	-	-	2.3	10,074	1.7	7,446	1.7	7,446
BIR	0.20	68.8	120,538	14.0	24,528	3.5	6,132	72.3	126,670
Total	-	74.5	145,504	168.9	702,990	7.0	21,462	18.0	166,966
Projected thermal energy demand in 2026 (MWh)									1,221,000
Percentage thermal energy demand in 2026 potentially met by renewable energy resource									14%

6. Proposed Revised Renewable Energy Policy

6.0.1. Arising from the additional work undertaken on the Renewable Energy Assessment, the following revised Policy RE1 is proposed based upon the requirements of national policy and the updated evidence base.

4.10 Sustainable Energy

Policy RE1 – Renewable Energy @ 39.91

Proposals for renewable and low carbon energy development will be permitted subject to the following criteria. Appropriate locations will be defined by demonstrating compliance with Criterion 3.

- 1. Proposals for wind energy development greater than 5 MW:**
 - i. Wind energy proposals (greater than 25MW) will be directed to appropriate locations within the boundaries of the Strategic Search Areas (SSAs).**
 - ii. Wind energy proposals (10 – 25 MW) will only be permitted in appropriate locations and where they are in the national interest for meeting energy contributions.**
 - iii. Wind energy proposals (5 – 10 MW) will only be permitted in appropriate locations.**
- 2. Proposals for Solar PV energy development greater than 5 MW:**
 - i. Solar PV proposals (5 – 50MW) will be directed to appropriate locations within the boundaries of Local Search Areas (Solar LSAs).**
 - ii. Outside Solar LSAs, solar PV proposals will only be permitted for:**
 - a) 10 – 50MW in appropriate locations and where they are in the national interest for meeting energy contributions.**
 - b) 5 – 10 MW in appropriate locations.**
- 3. Proposals for all types of renewable and low carbon energy development and associated infrastructure either on their own, cumulatively or in combination with existing and or approved development, must comply with all other relevant policies in the LDP but in particular shall not have an unacceptable impact on:**
 - i. The landscape including visual amenity in accordance with Policy DM3 – Landscape;**
 - ii. The natural and historic environment in accordance with Policy DM2 – The Natural Environment and Strategic Policy SP7 – Safeguarding Strategic Resources and Assets;**
 - iii. Residential amenity, groundwater quality, and highway safety, including during construction, in accordance with Policy DM15 – Design and Resources; and**
 - iv. Radar, air traffic control systems, telecommunications links, television reception, radio communication and emergency services communications.**
- 4. There are satisfactory proposals in place for site restoration and aftercare.**

It is also recommended that the proposals and inset maps of the LDP are amended as follows:

1. Removal of the LSAs for wind and solar as set out in the composite LDP [LDP42].
2. Identification of LSAs for solar PV farm technologies (REA Map S7).

The reasoned justification to the policy will require amendment and will be prepared as part of the Council's hearing statement (to be submitted 5 June 2017).

The revised Policy RE1 and the amended LSAs (solar) have been informed by statutory assessments (SEA, SA, HRA). The assessments are appended.

7. Summary

7.0.1. For larger scale electricity generation (solar PV farms), new Local Search Areas (LSAs) are identified in addition to the existing Strategic Search Areas (SSAs) that encourage strategic-scale wind development. LSAs are intended to inform developers to better target their detailed site investigations. Solar PV farm LSAs are in essence: ***the first place to look, but not the only place to look.***

7.0.2. As such, it is important to remember that the Renewable Energy Assessment and the identification of Local Search Areas are not:

- A series of planning applications for renewable and low carbon technologies;
- Defining areas which will be given over to renewable and low carbon technologies;
- Industrialising the County.

The Renewable Energy Assessment ***is***:

- A strategic high level document based on a series of assumptions;
- Providing guidance on available opportunities and what the Local Authority *could contribute* towards National Targets across a wide range of renewable and low carbon technologies.

All applications will be considered on their own merits, inside or outside an LSA, in accordance with planning policies and other material considerations.

7.0.3. In accordance with the evidence, solar PV farm technologies will be the primary strategy for delivering renewable energy generation in the Powys LDP area. Renewable heat is, by nature dependent upon a demand for its use. The demand for heat in the Powys LDP area is limited and dispersed and therefore does not lend itself to the generation of large quantities of renewable heat.

7.0.4. Powys does however have considerable potential to produce energy crop and woody biomass which could facilitate neighbouring areas of Wales to generate renewable heat where there is demand.

7.0.5. Powys could gear up for this role by developing its supply chain to deliver biomass generated heat to its building stock wherever appropriate: this could be secured through an invitation by the Council for developers to consider these options as part of the planning process.

Appendices

Appendix 1: Habitat Regulation Assessment Screening of Revised Policy RE1 – Renewable Energy (HRA)

Appendix 2: Strategic Environmental Assessment / Sustainability Appraisal of Policy RE 1 (SEA/SA)

Appendix 1

Powys County Council Local Development Plan 2011 – 2026 Examination

Habitat Regulation Assessment Screening of Revised Policy RE1 – Renewable Energy

Summary Statement

May 2017

Habitats Regulations Assessment Screening of Changes to Policy RE1 – Renewable Energy (May 2017)

Following publication of the *Schedule of Further Focussed Changes – An Addendum to the Powys Local Development Plan, Deposit Draft and Focussed Changes 2011 – 2026* (October 2016) changes have been made to Policy RE1 – Renewable Energy.

As part of the ongoing Habitats Regulations Assessment (HRA) the proposed changes to Policy RE1 – Renewable Energy have been reviewed. This document outlines the findings of the HRA Screening of the revised Policy.

Screening of the changes has been undertaken to consider the nature and significance of the changes and whether the changes proposed would affect or alter the conclusions of the HRA Screening Report (June 2015), the Habitat Regulation Assessment Screening of Focussed Changes (January 2016) and the Habitat Regulation Assessment Screening of Further Focussed Changes (October 2016).

Policy RE1 – Renewable Energy has been revised to remove Local Search Areas (LSAs) for Wind Energy Development, Criterion 1 of the revised Policy sets out a strategic approach to the siting of Wind Energy Development based on the scale of the proposed energy generation.

Criterion 2 of the revised Policy set outs a strategic approach to the siting of Solar Photovoltaic Energy Development based on the scale of the proposed energy generation

The revised Policy identifies that Solar Photovoltaic energy developments between 5-50MW of energy generation will be directed to appropriate locations within the boundaries of Local Search Areas (Solar LSAs). Outside Solar LSAs, solar PV proposals will only be permitted for:

- a) 10 – 50MW in appropriate locations and where they are in the national interest for meeting energy contributions.
- b) 5 – 10 MW in appropriate locations.

The identification of Solar LSAs has been made based on the results and recommendations of the *Powys Renewable Energy Assessment (REA) 2017* (AECOM) and *Landscape Sensitivity Study 2017* (ENPLAN).

The methodology used to identify Local Search Areas (Solar LSAs) has followed the methodology set out in the Welsh Government Planning for Renewable and Low Carbon Energy - A Toolkit for Planners September 2015 which includes specific provisions with regards to incorporating Environmental Constraints including European Designated Sites and their associated features into the assessment process. In addition guidance from Natural Resources Wales (NRW) regarding buffer zones with regards to specific mobile features of European Designated Sites has been incorporated into the assessment process.

The identification of Solar LSAs does not provide any guarantee that applications for schemes will be approved within them, nor do they preclude applications from elsewhere in the county from being considered. In addition Solar LSAs are not safeguarded. As such they represent the optimum areas of the county where it is thought such schemes would be most viable (in terms of the stated environmental constraints and availability of resource, etc.).

Specific provisions have been made within the policy to reinforce the need for proposals to ensure the protection of European Protected sites and their associated features either alone or in combination with other plans or projects, where this cannot be demonstrated the proposal would be considered unacceptable. Criterion 3 identifies that Proposals for all types of renewable and low carbon energy development and associated infrastructure either on their own, cumulatively or in combination with existing and or approved development, must comply with all other relevant policies in the LDP but in particular shall not have an unacceptable impact on:

- ii. The natural and historic environment in accordance with Policy DM2 – The Natural Environment and Strategic Policy SP7 – Safeguarding Strategic Resources and Assets;

In addition Supplementary Planning Guidance (SPG) will be produced to support the Renewable Energy policy.

The revised Policy has been assessed against the criteria identified in Table 5 of the Draft Deposit HRA Screening Report (June 2015), the revised Policy has been found to meet the criteria of Category E2 Lower Tier Assessment i.e. the Policy:

Makes provision for a type of development, generally, (and may indicate a broad scale and / or one or more broad locations e.g. a particular part of the plan area). Some limited uncertainty to the precise nature, scale and type of development. However, any development would be subject to policies contained in the LDP and the Habitats Regulations which will ensure that development does not adversely affect European Designated Sites.

In summary, the screening of the proposed changes to the LDP Policy RE1 – Renewable Energy have been assessed as not resulting in any changes to the findings of the Draft Deposit HRA Screening Report (June 2015), the Habitat Regulation Assessment Screening of Focussed Changes (January 2016) or Habitat Regulation Assessment Screening of Further Focussed Changes (October 2016).

The changes proposed to LDP Policy RE1 are not considered to result in a Likely Significant Effect to any of the European sites (identified in the HRA Screening Report (June 2015)) or their associated features either alone or in combination with other plans or projects when considering the criteria of the Policy itself as well as existing provisions made by the LDP in other policies with regards to the protection of European Designated Sites.

Therefore an Appropriate Assessment is not considered necessary.

Appendix 2

Powys County Council Local Development Plan 2011 – 2026 Examination

Strategic Environmental Assessment and Sustainability Appraisal of Policy RE1: Renewable Energy

Technical Note

May 2017

Section 1 – Introduction

1.1 Background

1.1.1 The Local Development Plan

Powys County Council (the County Council) is currently preparing the Powys Local Development Plan (LDP) which, once adopted, will replace the Powys Unitary Development Plan (UDP) 2001-2016 (adopted March 2010). The LDP will set out, inter-alia, the vision and objectives for the future growth of the County, the overarching spatial strategy, policies for the development and use of land in Powys up to 2026 and site allocations. The LDP applies to all of Powys except land within the Brecon Beacons National Park.

The LDP was submitted to the Planning Inspectorate for Examination in January 2016. Following an Exploratory Meeting held on 10th May 2016, the appointed Planning Inspector wrote to the County Council on 25th May 2016 outlining her decision to suspend the Examination for a period of six months in order to enable the authority to prepare additional evidence. Having undertaken the additional work, the County Council consulted on Further Focussed Changes to the LDP prior to the recommencement of the Examination in March 2017.

1.1.2 Policy RE1 – Renewable Energy Development

Representations received during the Further Focussed Changes public consultation raised concerns regarding the Local Search Areas (LSAs) identified for local authority-wide onshore wind power and solar PV farm technologies in Policy RE1 – Renewable Energy Development. In acknowledgement of the number of representations received, the County Council's Cabinet requested that additional work be undertaken to review the renewable energy assessment that informed the identification of the LSAs to take into account additional constraints including a landscape assessment of the LSAs.

As a result of this work, the County Council has made revisions to Policy RE1 in order to take into account updates to the Powys Renewable Energy Assessment¹ and a Landscape Sensitivity Study². In particular, proposed LSAs for wind energy proposals have been removed whilst LSAs for solar PV have been amended. The revised policy wording is reproduced below.

Policy RE1 – Renewable Energy

Proposals for renewable and low carbon energy development will be permitted subject to the following criteria. Appropriate locations will be defined by demonstrating compliance with Criterion 3.

- 1. Proposals for wind energy development greater than 5 MW:**

¹ AECOM (2017) *Powys Renewable and Low Carbon Energy Assessment*.

² ENPLAN (2017) *Landscape Sensitivity Study*.

- i. Wind energy proposals (greater than 25MW) will be directed to appropriate locations within the boundaries of the Strategic Search Areas (SSAs).**
 - ii. Wind energy proposals (10 – 25 MW) will only be permitted in appropriate locations and where they are in the national interest for meeting energy contributions.**
 - iii. Wind energy proposals (5 – 10 MW) will only be permitted in appropriate locations.**
- 2. Proposals for Solar PV energy development greater than 5 MW:**
 - i. Solar PV proposals (5 – 50MW) will be directed to appropriate locations within the boundaries of Local Search Areas (Solar LSAs).**
 - ii. Outside Solar LSAs, solar PV proposals will only be permitted for:**
 - a) 10 – 50MW in appropriate locations and where they are in the national interest for meeting energy contributions.**
 - b) 5 – 10 MW in appropriate locations.**
- 3. Proposals for all types of renewable and low carbon energy development and associated infrastructure either on their own, cumulatively or in combination with existing and or approved development, must comply with all other relevant policies in the LDP but in particular shall not have an unacceptable impact on:**
 - i. The landscape including visual amenity in accordance with Policy DM3 – Landscape;**
 - ii. The natural and historic environment in accordance with Policy DM2 – The Natural Environment and Strategic Policy SP7 – Safeguarding Strategic Resources and Assets;**
 - iii. Residential amenity, groundwater quality, and highway safety, including during construction, in accordance with Policy DM15 – Design and Resources; and**
 - iv. Radar, air traffic control systems, telecommunications links, television reception, radio communication and emergency services communications.**
- 4. There are satisfactory proposals in place for site restoration and aftercare.**

1.1.3 Strategic Environmental Assessment and Sustainability Appraisal

In developing the LDP, the County Council must incorporate the requirements of European Union Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment, referred to as the Strategic Environmental Assessment (SEA) Directive, implemented through the relevant Welsh regulations. The objective of the SEA Directive and regulations is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes such as LDPs.

Additionally, all LDPs are expected to 'contribute to the achievement of sustainable development' (Section 39 of the Planning & Compulsory Purchase Act 2004) and in this context, the County Council is required to undertake a Sustainability Appraisal (SA) of the LDP as an integral part of the plan making process. The purpose of SA is

to appraise the social, environmental and economic effects of a plan so that decisions on its content are made on an informed basis. The SA considers how implementation of a plan will help to meet sustainable development objectives.

In this context, SEA and SA have been undertaken throughout the development of the LDP in order to integrate environmental and sustainability considerations into the development of the plan. As part of this iterative process, SEA and SA were undertaken of the Deposit Draft LDP (incorporating Focussed Changes and Further Focussed Changes) with the SEA Environmental Report and SA Report published for consultation alongside the Further Focussed Changes. These reports are available via the County Council's website: <http://www.powys.gov.uk/en/planning-building-control/local-development-plan/ldp-examination/core-documents-library-for-ldp-examination/ldp-documents/>.

As part of the ongoing SEA and SA, the proposed revisions to Policy RE1 have now been assessed.

1.2 This Technical Note

This Technical Note presents the SEA and SA of Policy RE1 (as amended). It provides a brief overview of the approaches to the SEA and SA (**Section 2**) before presenting a summary the assessment findings (**Section 3**). Detailed assessments are contained in **Annex A** and **Annex B**.

Section 2 – Assessment Approach

2.1 Strategic Environmental Assessment

Consistent with the approach to the SEA of the Deposit Draft LDP, SEA objectives have been used to support the assessment of Policy RE1. **Table 2.1** lists the SEA objectives used in the assessment.

Table 2.1 SEA Objectives

SEA Topic Area – Biodiversity
<ol style="list-style-type: none"> 1. To protect and enhance all designated sites of nature conservation in the Plan area. 2. To protect and enhance all species and habitats identified in the Powys Local Biodiversity Action Plan or Section 42 List.
SEA Topic Area – Population and Human Health
<ol style="list-style-type: none"> 3. Enhance the provision of housing, employment and community services to meet the needs of the population and in response to demographic changes (e.g. the ageing population and the need to retain the young working age population). 4. Promote improvement in community safety. 5. Promote improvement in human health and opportunities for healthy living. 6. To prevent or minimise exposure to potential sources of nuisance and risk to human health.
SEA Topic Area – Soil
<ol style="list-style-type: none"> 7. To protect soils that are classified as being important for carbon storage and agriculture. 8. To prevent contamination of land and support remediation as part of new development.
SEA Topic Area – Water
<ol style="list-style-type: none"> 9. To maintain and improve water quality and quantity.
SEA Topic Area – Air
<ol style="list-style-type: none"> 10. To protect and improve air quality in Powys and in particular the Newtown Air Quality Management Area.
SEA Topic Area – Climatic Factors
<ol style="list-style-type: none"> 11. To reduce flood risk. 12. To reduce greenhouse gas emissions.
SEA Topic Area – Material Assets
<ol style="list-style-type: none"> 13. To protect mineral resources from development that would preclude extraction. 14. To protect important material assets including strategic, transport and location specific infrastructure from incompatible development.
SEA Topic Area – Cultural Heritage
<ol style="list-style-type: none"> 15. To understand, value, protect and enhance Powys' historic environment including its diversity, local distinctiveness and heritage.

16. To protect and enhance Welsh language and culture.
SEA Topic Area – Landscape
17. To protect and enhance Powys rich natural landscape.
SEA Topic Area – Geodiversity
18. To protect Regionally Important Geo-diversity Sites (RIGS) from incompatible development.

The policy has been assessed against the SEA objectives to consider whether it would have positive or negative environmental effects. **Table 2.2** sets out the scoring system that has been used to assess the policy against the SEA objectives. The findings of the assessment have been recorded in a matrix presented at **Annex A**.

Table 2.2 Qualitative Scoring

Key	Detail	Comment
PP	Major Positive	Policy would have a major positive impact on the environment
P	Positive	Policy would have a positive impact on the environment.
?	Uncertain	Policy's impact on the environment is uncertain.
0	Neutral	Policy would have a neutral impact on the environment
N	Negative	Policy would have a negative impact on the environment
NN	Major Negative	Policy would have a major negative impact on the environment.

2.2 Sustainability Appraisal

The SA has considered Policy RE1's integration with sustainability 'capitals' (natural, social, human, infrastructure and financial) using the County Council's Sustainability Integration Toolkit.

To support the assessment, questions have been derived relating to a range of sustainability topics under each capital, as set out in **Table 2.3**. The questions were taken from the Sustainability Integration Toolkit and are consistent with those used to appraise the Deposit Draft LDP.

Table 2.3 Questions Used in the Assessment of Policy RE1

Question Ref. No.	Sustainability Topic	Prompting Questions
Environmental Capital		
2.	Energy	How can this policy/objective reduce the demand for energy? (<i>For example through measures to use less and innovative solutions in energy supply, demand storage and distribution</i>). How can it encourage energy to be produced from renewable sources?

Question Ref. No.	Sustainability Topic	Prompting Questions
3.	Climate Change	<p>How can it reduce our greenhouse gas emissions in line with global efforts to restrict warming to 2°C?</p> <p>How can it encourage measures to adapt to climate change and/ or contribute to the Council's efforts?</p>
4.	Waste	<p>How can it avoid and minimise the production of waste?</p> <p>How can any waste produced be re-used or recycled?</p> <p>How can waste going to landfill be minimised?</p>
5.	Water	<p>How can it reduce the frequency and severity of flooding?</p> <p>Are developments taking place in areas free from flooding?</p> <p>How can it reduce the amount of surface water and ground water appropriated for human activity?</p> <p>How can it increase water efficiency (e.g. by recycling, treating, reusing)?</p>
6.	Green infrastructure	<p>How can it achieve an increase in biodiversity?</p> <p>How can it improve water, air, river and soil quality?</p> <p>How can it prevent water and air pollution (including toxic substances and chemical pollution that natural systems can't process)?</p> <p>How can it protect and expand green spaces?</p> <p>How can it promote food security and local food production?</p>
7.	Resource use	<p>Does it avoid exploiting natural resources beyond their recovery point?</p> <p>How can it improve the land-use efficiency of human activity?</p> <p>How can it improve the material efficiency of the economy? <i>(For example by developing closed-loop material systems)</i></p> <p>How is it using non-renewable resources more efficiently and using more sustainable alternatives where possible? <i>(For example: aluminium, copper, lead, iron, tin and steel; and materials based on petrochemicals).</i></p>
Infrastructure capital		
9.	Housing	<p>How can it provide or improve access to sufficient, affordable, high quality housing?</p> <p>How can it provide or improve access to housing that's fit for the future? <i>(For example: energy efficient, environmentally sustainable, easy to maintain, resilient to the effects of climate change, takes account of relevant trends)</i></p> <p>How is it using housing improvements to strengthen communities? <i>(For example, by enhancing the availability and access to public spaces)</i></p> <p>How is it using housing improvements to encourage community participation? <i>(For example, by facilitating the renaissance of Powys' town and village centres and improving access to education, leisure, employment areas)</i></p>

Question Ref. No.	Sustainability Topic	Prompting Questions
10.	Access	<p>How can it reduce the need to travel? How can it provide users with a range of low carbon transport options and encourage a shift to using more sustainable forms of travel? How can it make better use of journeys that are essential? How can it improve and harness access to digital connectivity?</p>
11.	Regeneration	<p>Is this the most effective way to deliver services for the community? How is this helping to promote Powys and make it a location of choice (including to contribute to tourism)? How can it improve access from residential areas to key education, leisure and employment areas? How can this project harness Powys' natural assets? How can it support an affordable, open flow of information, and opportunities for sharing knowledge?</p>
Social capital		
13.	Community Support	<p>How can it support people to live in the community for longer? How can it help people to live active, fulfilling lives? How can it encourage early intervention and support for families and young children? How is it helping to strengthen communities by building social networks and other assets?</p>
14.	Governance	<p>Are there appropriate, transparent and accountable governance structures in place? How could the project be developed or delivered more effectively (and cost effectively) with other organisations, including public sector bodies? How is it engaging and involving all those that are affected by the project? Is it encouraging cooperation between, and the engagement of businesses, communities and civil society?</p>
15.	Equality	<p>How can it deliver greater respect for human rights? How can it promote equality? How can it foster and protect trust? How can it promote international efforts to achieve fairness and reduce poverty (e.g. fair trade)?</p>
16	Culture and Sense of Place	<p>How can it help develop and support Welsh culture, values and language? How can it help make people feel positive about the area they live in? How can it reduce crime and levels of anti-social behaviour?</p>
17.	Business	<p>How can it deliver or access maximum support for local business enterprises? How can it encourage the development and use of local supply chains? How can it help foster entrepreneurship and innovation? Can it help to diversify the economy? How can it support the development of social enterprises?</p>
Human Capital		

Question Ref. No.	Sustainability Topic	Prompting Questions
19.	Health	<p>How can it promote healthy living and sustainable behaviours? (<i>For example; physical activity, and active travel, nutrition, self-monitoring of health issues, energy and water saving practices, recycling</i>)</p> <p>How can it improve health outcomes for people in the most deprived areas?</p> <p>How can it help to deliver mental well-being?</p> <p>How can it reduce the number of people out of work due to ill health?</p> <p>Does it seize opportunities to help prevent key, chronic diseases?</p>
20.	Education	<p>How can it improve the early years' experience, particularly for hard to reach groups?</p> <p>How can it improve life chances in the most deprived areas?</p> <p>How can it help deliver or access a range of educational choice for post 16 learners?</p> <p>How does it contribute to universal access to education?</p>
21.	Skills	<p>How can it attract, retain and nurture the best talent?</p> <p>How can it improve the proportion of highly skilled people in the county?</p> <p>How can it lead to a flexible and adaptable workforce?</p> <p>How does it build the wide ranging skills and capacity of individuals to realise their potential?</p>
22.	Employment	<p>How can it provide or facilitate the creation of satisfying, lasting new jobs?</p> <p>How can it help increase overall employment?</p> <p>How can it help provide employment in the most deprived areas?</p> <p>How can it help citizens to determine and shape their own lives?</p>
Financial Capital		
24.	Maximising Financial Effectiveness	<p>Does it provide a financially viable service that meets needs? (<i>For example, schools or health services</i>)</p> <p>How can this enable other departments to deliver their priorities and services?</p> <p>Does it provide and seize opportunities for income generation?</p> <p>How is it investing in actions that will deliver long-term value?</p> <p>How does it value and report the true costs and impacts of the resources used?</p>

The findings of the SA are presented in **Annex B**.

Section 3 - Summary of Assessment Findings

3.1 Strategic Environmental Assessment

Annex A presents the findings of the assessment of Policy RE1 (as amended) against the SEA objectives. Policy RE1 permits proposals for renewable and low carbon energy development, subject to specific criteria. With regard to wind energy proposals, the policy directs development as follows:

- Wind energy proposals greater than 25 MW are directed to appropriate locations in Strategic Search Areas (SSAs) (as identified in Technical Advice Note (TAN) 8).
- Wind energy proposals (10 – 25 MW) will only be permitted in appropriate locations and where they are in the national interest for meeting energy contributions.
- Wind energy proposals (5 – 10 MW) will only be permitted in appropriate locations.

In terms of Solar PV, development proposals between 5 and 50 MW are directed to appropriate locations within the boundaries of LSAs. Outside of LSAs, proposals will only be permitted in appropriate locations.

Given its support to renewable and low carbon energy development, Policy RE1 has been assessed as having a significant positive impact on SEA Objective 12 (reducing greenhouse gas emissions). This policy has also been assessed as having a positive impact on SEA Objective 3 (provision to meet future needs) as it enables the consideration of a range of proposals including community-led projects and district level schemes which can meet the needs of local communities.

There is the potential for renewable energy and low carbon development to have adverse environmental impacts. However, despite the identification of LSAs for Solar PV, the type, scale and exact location of any development that may come forward is unknown and in consequence, uncertain impacts have been identified against the majority of the other SEA objectives including those that relate to biodiversity, soil, water, air, cultural heritage (the historic environment), landscape and geodiversity.

Notwithstanding the above, Policy RE1 sets out that proposals must comply with other relevant LDP policies and that they should not have an unacceptable impact on (inter alia) landscape and visual amenity, the natural environment and historic environment. Taking into account the protections provided by Policy RE1 and other LDP policies including the suite of development management policies, significant negative effects are not anticipated.

Overall, the proposed amendments to Policy RE1 do not materially affect the conclusions of the SEA of the Deposit Draft LDP incorporating Focussed Changes and Further Focussed Changes.

3.2 Sustainability Appraisal

Annex B presents the appraisal of Policy RE1 using the Sustainability Integration Toolkit. This has confirmed that the conclusions of the SA of the Deposit Draft LDP incorporating Focussed Changes and Further Focussed Changes would not be materially affected. In particular, significant positive impacts have been identified in respect of energy, climate change and resource use reflecting the policy's support for renewable and low carbon energy development. No significant negative impacts have been identified.

Annex A – SEA of Policy RE1**Significance Assessment**

Symbol	Description
PP	Policy is likely to have a significant positive effect
P	Policy is likely to have a minor positive effect
?	Policy is likely to have an uncertain effect
0	Policy is likely to have a neutral effect
N	Policy is likely to have a minor negative effect
NN	Policy is likely to have a significant negative effect

Renewable Energy Policy (RE1)			
SEA Objective	Policy	Cumulative effect	Commentary
	RE1		
1. To protect and enhance all designated sites of Nature Conservation in the Plan Area	?	?	<p>Likely significant effects</p> <p>Policy RE1 permits proposals for renewable and low carbon energy development, subject to specific criteria. With regard to wind energy proposals, the policy directs development as follows:</p> <ul style="list-style-type: none"> • Wind energy proposals greater than 25 MW are directed to appropriate locations in Strategic Search Areas (SSAs) (as identified in Technical Advice Note (TAN) 8). • Wind energy proposals (10 – 25 MW) will only be permitted in appropriate locations and where they are in the national interest for meeting energy contributions. • Wind energy proposals (5 – 10 MW) will only be permitted in appropriate locations. <p>It should be noted that for wind energy, the Powys Renewable and Low Carbon Energy Assessment (REA)³ included the constraints criteria to avoid ‘all statutory environmental designations (SAC, SPA, SSSI)’. Further, when considering LSAs for wind, an additional biodiversity constraint was considered, ‘species-specific foraging range buffers applied to SPAs (addition)’. As a consequence, for onshore wind, based on the assumptions applied in the REA and including the additional constraints, it has not been possible to define LSAs for onshore wind technologies in the range 5-25MW for local authority-wide scale developments.</p> <p>In terms of Solar PV, development proposals between 5 and 50 MW are directed to appropriate locations within the boundaries of Local Search Areas (LSAs). Outside of LSAs, proposals will only be permitted in appropriate locations.</p> <p>There is the potential for renewable and low carbon energy development to affect designated nature conservation sites. Adverse effects in this regard may occur in both the short term during construction and in the longer term once development is complete. Effects may be direct (e.g. the loss of habitat due to land take) or indirect (for example, adverse effects on interest features due to emissions to air, disturbance or collision). However, the type, scale and exact location of any development that may come forward is unknown. Notwithstanding this, Policy RE1 does stipulate siting requirements, stating that proposals should not have an unacceptable impact on (inter alia) the natural environment. The policy also sets out that proposals must comply with all other relevant policies in the LDP and in this regard, Strategic Policy SP7 – Safeguarding of Strategic Resources and Assets stipulates that proposals must not have unacceptable adverse impacts on (inter alia) land designated at the international, European and/or national level for environmental protection. Policy DM2 – The Natural Environment also requires that all new developments must not compromise, or unacceptably adversely affect either on their own or in combination with existing or approved development, the natural environment and the integrity or conservation objectives of European designated sites. Further, the proposed LSAs for Solar</p>

³ AECOM (2017) Powys Renewable and Low Carbon Energy Assessment.

Renewable Energy Policy (RE1)			
SEA Objective	Policy	Cumulative effect	Commentary
	RE1		<p>PV have been informed by the REA. Through a staged approach to their identification, statutory designated conservation sites such as European designated sites, Sites of Special Scientific Interest and National Nature Reserves have been excluded from the LSAs. In consequence, significant negative effects on this objective are not anticipated. This conclusion is consistent with the Habitats Regulations Assessment of the LDP.</p> <p>Overall, there is an uncertain impact against this objective.</p> <p><u>Mitigation</u> No further mitigation identified.</p> <p><u>Assumptions</u> None.</p> <p><u>Uncertainties</u> The exact type, scale and location of development which may occur under Policy RE1 is unknown at this stage.</p>
2. To protect and enhance all species and habitats identified in the Powys Local Biodiversity Action Plan or Section 42 List.	?	?	<p><u>Likely significant effects</u> Renewable and low carbon energy development has the potential to result in habitat loss and disturbance of species. Adverse effects in this regard may occur in both the short term during construction and in the longer term once development is complete. Effects may be direct (e.g. the loss of habitat due to land take) or indirect (for example, adverse effects on species due to emissions to air). There may also be opportunities through the development of sites to minimise adverse effects and generate benefits through, for example, biodiversity enhancements. However, the type, scale and exact location of any development that may come forward as a result of the implementation of Policy RE1 is unknown and in consequence, it is not possible to determine whether there would be the potential for adverse effects on biodiversity at this stage.</p> <p>Policy RE1 does stipulate siting requirements including consideration of biodiversity which has the potential to reduce negative impacts on habitats and species identified at the planning application stage. Further, as noted above, Policy DM2 – The Natural Environment requires that all new developments must not compromise, or unacceptably adversely affect either on their own or in combination with existing or approved development, the natural environment, integrity or conservation objectives of European designated sites and a range of reserves and sites important to biodiversity. Policy DM2 also stipulates that proposals for development will be permitted where they 'protect, positively manage and wherever possible enhance biodiversity and geodiversity interests and produce a net gain for the County</p>

Renewable Energy Policy (RE1)			
SEA Objective	Policy	Cumulative effect	Commentary
	RE1		<p>including the enhanced connectivity of habitats'. In consequence, significant negative effects on this objective are not anticipated.</p> <p>Overall, there is an uncertain impact on this objective.</p> <p><u>Mitigation</u> No further mitigation is required.</p> <p><u>Assumptions</u> None.</p> <p><u>Uncertainties</u> The exact type, scale and location of development which may occur under Policy RE1 is unknown at this stage.</p>
3. Enhance the provision of housing, employment and community services to meet the needs of the population and in response to demographic changes.	P	P	<p><u>Likely significant effects</u> Policy RE1 enables the provision of energy from renewable and low carbon sources including community-led projects and district level schemes which can meet the needs of local communities. This policy has also been derived to help meet legally binding targets resulting from climate change, economic opportunities and security of supply, hence meeting identified future needs. Therefore, this policy has been assessed as having a positive impact on this objective.</p> <p>Overall there is a minor positive impact against this objective.</p> <p><u>Mitigation</u> None required.</p> <p><u>Assumptions</u> None.</p> <p><u>Uncertainties</u> The exact type, scale and location of development which may occur under Policy RE1 is unknown at this stage.</p>
4. Promote improvement	0	0	<p><u>Likely significant effects</u> A neutral impact is identified for this objective. Policy RE1 relates to proposals for renewable energy development only and has no direct relationship with community safety. The policy does state, however,</p>

Renewable Energy Policy (RE1)			
SEA Objective	Policy	Cumulative effect	Commentary
	RE1		
in community safety.			<p>that proposals will only be permitted subject to, inter alia, the development not compromising highway safety.</p> <p>Overall, there is a neutral impact against this objective.</p> <p><u>Mitigation</u> None required.</p> <p><u>Assumptions</u> None.</p> <p><u>Uncertainties</u> The exact type, scale and location of development which may occur under Policy RE1 is unknown at this stage.</p>
5. Promote improvement in human health and opportunities for healthy living.	0	0	<p><u>Likely significant effects</u> A neutral impact is identified for this objective. Policy RE1 relates to proposals for renewable energy development only and has no direct relationship with human health and opportunities for healthy living.</p> <p>Overall, there is a neutral impact against this objective.</p> <p><u>Mitigation</u> None required.</p> <p><u>Assumptions</u> None.</p> <p><u>Uncertainties</u> The exact type, scale and location of development which may occur under Policy RE1 is unknown at this stage.</p>
6. To prevent or minimise exposure to potential sources of nuisance and	0	0	<p><u>Likely significant effects</u> Whilst the exact location, type and scale of development that may come forward under this policy is unknown, Policy RE1 sets out that renewable and low carbon energy development will only be permitted subject to, inter alia, there being no unacceptable effects on residential amenity, amongst other conditions. Further, Policy DM15 - Design and Resources (which applies to all development), requires that the amenities enjoyed by occupants or users of nearby properties shall not be unacceptably affected</p>

Renewable Energy Policy (RE1)			
SEA Objective	Policy	Cumulative effect	Commentary
	RE1		
risk to human health.			<p>by levels of noise, dust, air pollution, litter, odour, hours of operation, overlooking or any other planning matter. This policy provision will further mitigate against potential sources of nuisance and risk to human health that could arise for renewable and low carbon energy development. It should also be noted that in identifying LSAs for Solar PV, a 500m buffer from buildings has been applied in recognition of the potential for adverse impacts on amenity associated with the construction of solar schemes.</p> <p>Overall, there is neutral impact against this objective.</p> <p><u>Mitigation</u> None required.</p> <p><u>Assumptions</u> None.</p> <p><u>Uncertainties</u> The exact type, scale and location of development which may occur under Policy RE1 is unknown at this stage.</p>
7. To protect soils that are classified as being important for carbon storage and agriculture.	?	?	<p><u>Likely significant effects</u> Whilst it is recognised that new renewable and low carbon energy developments are likely to take place in the open countryside (many of the LSAs identified for Solar PV are in countryside locations for example) which could affect soils, the scale and exact location of new development is unknown at this stage. However, it is noted that in identifying the LSAs for Solar PV, the County Council has sought to exclude areas of peat land and of grades 1-4 agricultural quality. It is however noted that ALC Grades 3b and 4 could be used for the growing of biomass to support other technologies.</p> <p>Overall, there is an uncertain impact on this objective.</p> <p><u>Mitigation</u> No further mitigation identified.</p> <p><u>Assumptions</u> None.</p> <p><u>Uncertainties</u> The exact type, scale and location of development which may occur under Policy RE1 is unknown at this stage.</p>

Renewable Energy Policy (RE1)			
SEA Objective	Policy	Cumulative effect	Commentary
	RE1		
8. To prevent contamination of land and support remediation as part of new development.	?	?	<p><u>Likely significant effects</u> Contamination of land and support for remediation as part of new development is uncertain because contamination issues and their extent are largely unknown prior to site development. The exact location of new development proposed under Policy RE1 is unknown and therefore an uncertain impact is identified against this objective. However, any contamination issues identified as part of new development supported by Policy RE1 would be mitigated by Policy DM9 – Contaminated and Unstable Land which requires that proposals on contaminated land shall not result in any additional contamination problems and that any new development is assessed to ensure contamination risks are acceptable and addressed.</p> <p>Overall, there is an uncertain impact effect on this objective.</p> <p><u>Mitigation</u> None identified.</p> <p><u>Assumptions</u> None.</p> <p><u>Uncertainties</u> The exact type, scale and location of development which may occur under Policy RE1 is unknown at this stage.</p>
9. To maintain and improve water quality and quantity.	?	?	<p><u>Likely significant effects</u> Renewable and low carbon energy development may result in increased surface water run-off (particularly where development results in the loss of greenfield land) and contamination of water sources (depending on the use, proximity to watercourses and any discharges). The magnitude of effects in this regard will depend on the nature, location and scale of development proposed which is currently unknown. However, Policy RE1 requires that proposals should not have an unacceptable adverse impact on (inter alia) the natural environment and groundwater quality. It also requires that proposals comply with other LDP policies that will help to offset adverse effects in this regard. In this context, Policy DM2 – The Natural Environment, in particular, requires that all new developments must not compromise, or unacceptably adversely affect either on their own or in combination with existing or approved development, the achievement of the Water Framework Directive’s overarching objectives. Further, Policy DM2 requires proposals near a watercourse to be acceptably managed to protect water quality whilst Policy DM5 – Flood Prevention and Land Drainage requires satisfactory provision for land drainage and SuDS. Finally Policy DM15 – Design and Resources requires all development to</p>

Renewable Energy Policy (RE1)			
SEA Objective	Policy	Cumulative effect	Commentary
	RE1		<p>demonstrate sustainable and an efficient use of resources by including measures to achieve water conservation and efficiency which addresses quantity.</p> <p>It is important to note that in identifying the LSAs for Solar PV, the County Council has excluded watercourses including major, secondary and minor rivers, canals and lakes.</p> <p>Overall, there is an uncertain impact against this objective.</p> <p><u>Mitigation</u> No further mitigation required.</p> <p><u>Assumptions</u> None.</p> <p><u>Uncertainties</u> The exact type, scale and location of development which may occur under Policy RE1 is unknown at this stage.</p>
10. To protect and improve air quality in Powys and in particular the Newtown Air Quality Management Area.	?	?	<p><u>Likely significant effects</u> The impact of Policy RE1 is uncertain because the exact location and nature of development proposed is unknown. However, the policy states that proposals will only be permitted subject to, inter alia, that there will be no unacceptable impacts on residential amenity, which could include air quality, and no Solar PV LSAs contain AQMAs. It should also be noted that Policy DM15 – Design and Resources requires that new development should not have a negative impact on amenities including air pollution. Policy DM15A also includes provisions in relation to air quality management.</p> <p>Overall, an uncertain impact is identified for this objective.</p> <p><u>Mitigation</u> No further mitigation required.</p> <p><u>Assumptions</u> None.</p> <p><u>Uncertainties</u> The exact type, scale and location of development which may occur under Policy RE1 is unknown at this stage.</p>

Renewable Energy Policy (RE1)			
SEA Objective	Policy	Cumulative effect	Commentary
	RE1		
11. To reduce flood risk.	?	?	<p>Likely significant effects Policy RE1 has been assessed as having an uncertain effect on flood risk. Whilst it is recognised that any new development may increase surface water run-off and increase the risk of flooding elsewhere, the scale, type and location of future proposals is unknown at this stage.</p> <p>Notwithstanding the above, Policy DM5 – Flood Prevention Measures and Land Drainage seeks to implement and reflect the actions identified in the relevant River Basin Management Plans and Catchment Flood Management Plans together with the recommendations of the LDP’s Strategic Flood Consequences Assessment (Stages 1 and 2). This will help to ensure that any new development does not increase flood risk.</p> <p>Overall, Policy RE1 has been assessed as having an uncertain effect on this objective.</p> <p>Mitigation No further mitigation required.</p> <p>Assumptions None.</p> <p>Uncertainties The exact type, scale and location of development which may occur under Policy RE1 is unknown at this stage.</p>
12. To reduce greenhouse gas emissions.	PP	PP	<p>Likely significant effects Whilst it is recognised that renewable and low carbon energy development will increase greenhouse gas emissions during construction, the effects of Policy RE1 on this objective are positive because the generation of renewable energy should lead to a reduction in greenhouse gas emissions. The intent of the policy is to permit proposals for renewable and low carbon energy development subject to a number of criteria.</p> <p>Overall, Policy RE1 has been assessed as having a major positive effect on this objective.</p> <p>Mitigation No further mitigation identified.</p> <p>Assumptions None.</p>

Renewable Energy Policy (RE1)			
SEA Objective	Policy	Cumulative effect	Commentary
	RE1		
			<p><u>Uncertainties</u> The exact type, scale and location of development which may occur under Policy RE1 is unknown at this stage.</p>
<p>13. To protect Mineral Resources from development that would preclude extraction.</p>	?	?	<p><u>Likely significant effects</u> Policy RE1 is considered to have an uncertain impact on this objective because the type, location and scale of development is unknown. However, development permitted in accordance with Policy RE1 will be required to adhere to Strategic Policy SP7 which stipulates that proposals should not have an unacceptable adverse impact on (inter alia) Mineral Resource Areas. This would mitigate against any negative impacts on mineral resources and their extraction.</p> <p>Overall, an uncertain effect is identified against this objective.</p> <p><u>Mitigation</u> No further mitigation identified.</p> <p><u>Assumptions</u> None.</p> <p><u>Uncertainties</u> The exact type, scale and location of development which may occur under Policy RE1 is unknown at this stage.</p>
<p>14. To protect important material assets including strategic, transport and location specific infrastructure from incompatible development.</p>	0	0	<p><u>Likely significant effects</u> The construction of renewable and low carbon energy schemes associated with the implementation of Policy RE1 could have short term and temporary adverse effects on the highways network depending on the scale and location of development which is currently unknown. However, any proposal would be determined in accordance with those policies of the LDP that seek to manage the transport impacts of development (such as Strategic Policy SP7) and Policy RE1 itself sets out that proposals must not compromise highways safety. Finally, it is important to note that in identifying the LSAs for Solar PV, the County Council has had regard to proximity to transportation infrastructure by excluding (inter alia) land intersected by a class 1 or class 2 highway.</p> <p>Overall, a neutral effect is identified against this objective.</p> <p><u>Mitigation</u></p>

Renewable Energy Policy (RE1)			
SEA Objective	Policy	Cumulative effect	Commentary
	RE1		<p>No further mitigation identified.</p> <p><u>Assumptions</u> None.</p> <p><u>Uncertainties</u> The exact type, scale and location of development which may occur under Policy RE1 is unknown at this stage.</p>
15. To understand, value, protect and enhance Powys historic environment including its diversity, local distinctiveness and heritage.	?	?	<p><u>Likely significant effects</u></p> <p>There is the potential for any new development to adversely affect cultural heritage assets. In terms of renewable energy development, adverse effects may be direct (for example, the loss of or damage to an asset) or indirect (for example, effects on the settings of assets) and may occur in both the short term during construction and in the longer term once development is complete. However, the REA has excluded 'All statutory historic designations' from both wind energy and solar energy and therefore reduced the risks of likely adverse effects occurring.</p> <p>It is not possible to ascertain if Policy RE1 would have effects on Powys' historic environment at this stage as the exact type, scale and location of development proposed is unknown. However, Policy RE1 does stipulate siting requirements, stating that proposals should not have an unacceptable impact on (inter alia) the historic environment. The policy also sets out that proposals must comply with all other relevant policies in the LDP and in this regard, Policy DM15- Design and Resources requires the design, layout, size, scale, mass and materials of any new development to compliment and wherever possible enhance the character of the surrounding area and take into account heritage assets. It is also important to note that the County Council has had regard to proximity to (inter alia) scheduled monuments in identifying the LSAs for Solar PVs.</p> <p>Overall, an uncertain impact has been identified for this objective.</p> <p><u>Mitigation</u> No further mitigation identified</p> <p><u>Assumptions</u> None.</p> <p><u>Uncertainties</u></p>

Renewable Energy Policy (RE1)			
SEA Objective	Policy	Cumulative effect	Commentary
	RE1		
			The exact type, scale and location of development which may occur under Policy RE1 is unknown at this stage.
16. To protect and enhance Welsh language and culture.	0	0	<p><u>Likely significant effects</u> A neutral impact is identified for this objective. Policy RE1 relates to proposals for renewable and low carbon energy development only and has no direct relationship with the protection and enhancement of Welsh language and culture.</p> <p>Overall, there is a neutral impact against this objective.</p> <p><u>Mitigation</u> None required.</p> <p><u>Assumptions</u> None.</p> <p><u>Uncertainties</u> None identified.</p>
17. To protect and enhance Powys rich natural landscape.	?	?	<p><u>Likely significant effects</u> Renewable and low carbon energy development is likely to be proposed in the open countryside which has the potential to have a negative impact on Powys' rich natural landscape. Negative effects on landscape and visual amenity may occur in the short term during construction (for example, due to the presence of machinery and HGV movements) and in the longer term once development is complete (for example, due to the scale of development resulting in impacts on the prevailing landscape character and views).</p> <p>However, it is expected that measures will be implemented to reduce as far as possible adverse landscape effects. In this regard, Policy DM3 – Landscape requires that all new developments must not compromise, or unacceptably adversely affect either on their own or in combination with existing or approved development the characteristics and special qualities of Powys' landscape and adjacent protected landscapes (National Parks and Areas of Outstanding Natural Beauty (AONB) and the visual amenity of those areas. Policy RE1 also states that proposals will be required to demonstrate that measures have been taken to minimise impacts on (inter-alia) the natural environment and landscape and visual amenity.</p>

Renewable Energy Policy (RE1)			
SEA Objective	Policy	Cumulative effect	Commentary
	RE1		<p>For wind energy, the REA methodology included the constraints criteria to avoid “Looking out” buffers of 7km for Protected Landscapes of National Parks and AONBs’. As a consequence, for onshore wind, based on the assumptions applied in the REA and including the additional constraints, it has not been possible to define LSAs for onshore wind technologies in the range 5-25MW for local authority-wide scale developments.</p> <p>In identifying LSAs for Solar PV, the County Council has excluded (inter alia) designated landscapes including National Parks, AONB and Registered Historic Landscapes (with a 3.5km buffer also applied to National Parks and AONBs). Following the application of constraints information, remaining land parcels have also been subject to a detailed landscape assessment in order to exclude potentially unsuitable land. This has assessed:</p> <ul style="list-style-type: none"> • the landscape value derived from the National Resources Wales (NRW) LandMap database, drawing on the “particularly informative” and “Main Drivers” criteria as identified in Guidance Note 1, published by NRW; • the susceptibility of the landscape to a particularly development type (in this case, solar PV technology); and • the resultant sensitivity of the landscape defined by a matrix assessing landscape value against susceptibility to the development. <p>Notwithstanding the mitigating factors above, it is not possible to ascertain if Policy RE1 would have effects on Powys’ rich natural landscape because the exact type, scale and location of new development is unknown.</p> <p>Overall, there is an uncertain impact identified against this objective.</p> <p><u>Mitigation</u> No further mitigation identified.</p> <p><u>Assumptions</u> None identified.</p> <p><u>Uncertainties</u> The exact type, scale and location of development which may occur under Policy RE1 is unknown at this stage.</p>
18. To protect Regionally	?	?	<u>Likely significant effects</u>

Renewable Energy Policy (RE1)			
SEA Objective	Policy	Cumulative effect	Commentary
	RE1		
Important Geodiversity Sites (RIGS) from incompatible development.			<p>It is not possible to ascertain if Policy RE1 would have effects on RIGS because the exact type, scale and location of development is unknown. Notwithstanding this, Policy DM2 – The Natural Environment requires that all new developments must not compromise, or unacceptably adversely affect either on their own or in combination with existing or approved development RIGS and Geological Conservation Review Sites which would mitigate against any identified negative impacts at the planning application stage.</p> <p>Overall, an uncertain impact has been identified against this objective.</p> <p><u>Mitigation</u> No further mitigation required.</p> <p><u>Assumptions</u> None identified.</p> <p><u>Uncertainties</u> The exact type, scale and location of development which may occur under Policy RE1 is unknown at this stage.</p>

Annex B – SA of Policy RE1

		Contribution				
sustainable development aim		Impact: - Very Positive - Positive - Neutral / Unknown - Negative - Very Negative	Magnitude: - High - Moderate - Low	Probability: - High - Medium - Low	Significance Figure (I x M x L)	Significance Symbol
2	energy	Very Positive	Moderate	High	18 Significant	++
3	climate change	Very Positive	Moderate	High	18 Significant	++
4	waste	Neutral / Unknown	Low	Low	-1 Minor	?
5	water	Neutral / Unknown	Low	Low	-1 Minor	?
6	green infrastructure	Neutral / Unknown	Low	Low	-1 Minor	?
7	resource use	Very Positive	Moderate	High	18 Significant	++
9	housing	Neutral / Unknown	Low	Low	-1 Minor	?

10	access	Neutral / Unknown	Low	Low	-1 Minor	?
11	regeneration	Positive	Low	High	6 Minor	+
13	community support	Neutral / Unknown	Low	Low	-1 Minor	?
14	governance	Neutral / Unknown	Low	Low	-1 Minor	?
15	equality	Neutral / Unknown	Low	Low	-1 Minor	?
16	culture and sense of place	Neutral / Unknown	Low	Low	-1 Minor	?
17	business	Neutral / Unknown	Low	Low	-1 Minor	?
19	health	Neutral / Unknown	Low	Low	-1 Minor	?
20	education	Neutral / Unknown	Low	Low	-1 Minor	?

21	skills	Neutral / Unknown	Low	Low	-1 Minor	?
22	employment	Positive	Low	High	6 Minor	+
24	maximising financial effectiveness	Neutral / Unknown	Low	Low	-1 Minor	?