BRIDGEND

REPLACEMENT LOCAL DEVELOPMENT PLAN (2018-2033)

EXAMINATION

SCHEDULE OF MATTERS, ISSUES AND QUESTIONS

Matter 5: Productive and Enterprising Places – Renewable Energy

Issue: Does the Plan provide a framework for the management of renewable energy and low carbon development that is soundly based, justified and consistent with the requirements of national policy?

1. Is the Renewable Energy Assessment robust, based on credible evidence and consistent with the requirements of national planning policy?

Yes, the Council's Renewable Energy Assessment (See SD84) is robust and based on credible evidence, consistent with the requirements of national planning policy.

The Welsh Government's Practice Guidance: Planning for Renewable and Low Carbon Energy – A Toolkit for Planners, September 2015 Toolkit has been used to inform and guide the Council's Renewable Energy Assessment. Where appropriate, the methods have been updated to account for the local and temporal context of Bridgend's Replacement Local Development Plan 2018-2033. This is consistent with the advice contained in Planning Policy Wales paragraph 5.9.9, which acknowledges the "…approach should be adapted to local circumstances to enable renewable energy opportunities to be maximised…". The approach of the assessment is supported by officers within Welsh Government.

Within this assessment, the current and future energy demands of the county borough, and progress in meeting these demands from local low carbon energy generation assets, have been estimated. Against this backdrop, a resource assessment has been undertaken of land within the county borough boundary to identify the potential for renewable and low carbon energy project deployment by 2033. The following technologies were considered:

- Wind energy
- Ground mounted solar PV
- Biomass energy
- Energy from waste
- Hydropower energy
- Building-integrated solar PV

Previous work was undertaken by BCBC under the Smart Systems and Heat programme. This related to the potential for low carbon heating within the county borough and informed the low carbon heating potential and opportunities within the county borough.

The potential resource available has been compared with projected future energy demands. It is considered unlikely that all of the county borough's future energy needs will be able to be generated from renewable and low carbon sources due to the impracticalities of deploying the level of ground mounted solar PV potential identified within the assessment.

Additional energy generated in other parts of the country and offshore will also be relied upon. With this in mind, ambitious renewable energy deployment targets have been set within the Replacement LDP to maximise the use of the local resources available within the county borough. The county borough has high wind resource and solar resource, with much of the county borough designated for priority large-scale wind and solar developments Future Wales: The National Plan 2040.

2. Does the Plan provide an appropriate balance between realising the area's potential for renewable energy production and the protection of the landscape, natural and historic environment of Bridgend?

Yes, the plan provides an appropriate balance between realising the area's potential for renewable energy production and the protection of the landscape, natural and historic environment of Bridgend. The Renewable Energy Assessment (SD84) has identified the contribution that the county borough is potentially able to make towards meeting the national renewable energy targets and identified that wind and solar are the predominant energy resources in meeting those targets. The renewable energy resource targets contained within Table 10 of the Replacement LDP reflect the findings of the Renewable Energy Assessment.

To ensure that the targets set out were realistic and achievable the Renewable Energy Assessment undertook a high-level constraints assessment of the county borough to identify areas (Local Search Areas) that are considered more suitable for the location of wind and solar developments. Section 7 and Appendix 3 of the Renewable Energy Assessment reviewed the less constrained areas for wind and solar identified in Section 4 against a number of constraints (e.g., ALC, historic landscape, archaeologically sensitive areas) to help support a prioritisation of areas to target for development. The locations identified were also overlaid alongside the 15 Landscape Character Areas defined as part of the landscape sensitivity assessment set out in SPG20: Renewables in the Landscape (2016). Whilst this assessment found that all the Council's landscapes are particularly sensitive to large-scale wind and solar developments, it identifies two Landscape Character Areas (1: Llangynwyd Rolling Uplands & Forestry and 8: Ogmore Forest and Surrounding Uplands) as having the least sensitivity to wind turbine

development. For solar PV developments, the entire County Borough is considered to have high sensitivity to solar schemes greater than 15 hectares (~8.5 MW). However, LCA 12: Newton Down Limestone Plateau is considered to be the least sensitive and is identified in SP13 as a suitable location for solar PV developments in the County Borough.

Furthermore, Policy SP13 outlines criteria to assess proposals of a Local Authority-wide scale against. This will ensure that renewable and low carbon energy development proposals do not result in unacceptable impacts upon the landscape, natural and historic environment of Bridgend. This will be enforced by ensuring that renewable energy developments outside of Pre-Assessed Areas satisfy criteria 1a), 1b) and 1c) of Policy SP13 in addition to other relevant policies contained within the plan. This is considered to be in line with Planning Policy Wales (Edition 11) paragraph 5.9.14 of which states "There should be a presumption in favour of development [for renewable and low carbon energy] in identified areas, including an acceptance of landscape change with clear criteria-based policies setting out detailed locational issues to be considered at the planning application stage".

As such the plan provides an appropriate balance between realising the area's potential for renewable energy production whilst ensuring that there is sufficient protection offered to the landscape, natural and historic environment of Bridgend.

3. Does the Policy SP13 provide an appropriate policy framework for realising Bridgend's potential for renewable energy generation?

Yes, SP13 (and supporting development management policies) will assist the County Borough transition to a low carbon, decentralised energy system that works for its individuals, communities and businesses by encouraging renewable and low and zero carbon energy projects.

a) Is the policy consistent with the requirements of national planning policy?

Policy SP13 has been informed by a strong evidence base including the Renewable Energy Assessment, Bridgend Local Energy Strategy, Planning Policy Wales (Edition 11) and Future Wales 2040. Policy SP13 (and supporting development management policies) will assist the County Borough transition to a low carbon, decentralised energy system that works for its individuals, communities and businesses by encouraging renewable and low and zero carbon energy projects. Planning Policy Wales paragraph 5.9.14 states that *"Planning authorities should support and guide renewable and low carbon energy development to ensure their area's potential is maximised. Planning authorities should assess the opportunities for renewable and low carbon energy in the area, and use this evidence to establish spatial policies in their development plan which identify the most appropriate locations for development of energy developments below 10MW. There should be a*

presumption in favour of development in identified areas, including an acceptance of landscape change, with clear criteria-based policies setting out detailed locational issues to be considered at the planning application stage."

As set out by national planning policy, Policy SP13 outlines the criteria against which proposals up to Local Authority-wide scale will be assessed. These areas have been identified and directed to LCA1: Llangynwyd Rolling Uplands & Forestry (Suitable for Wind Energy), LCA8: Ogmore Forest and Surrounding Uplands (Suitable for Wind Energy); and LCA 12: Newton Down Limestone Plateau (Suitable for Solar Energy). Within and outside these areas proposals for wind and solar energy generation will be permitted subject to criteria 1a), 1b) and 1c) and other relevant policies in the plan. Proposals for other development within these areas will only be permitted where they can demonstrate that they would not unacceptably prejudice the renewable energy generation potential of the Local Search Area or the Future Wales' Pre-Assessed Areas for Wind Energy.

As such, Policy SP13 provides a framework that is consistent with the requirements of national planning policy and will allow the Council to meet renewable energy targets whilst ensuring that development is sited in appropriate areas deemed suitable to accommodate such provision.

b) Are the defined local search areas for wind and solar robust? and should they be annotated on the proposals map?

Yes, the defined Local Search Areas for wind and solar development are considered robust. Planning Policy Wales (Edition 11) paragraph 5.9.14 states *"Planning authorities should assess the opportunities for renewable and low carbon energy in the area, and use this evidence to establish spatial policies in their development plan which identify the most appropriate locations for development of energy developments below 10MW".*

The Renewable Energy Assessment undertook a high-level constraints assessment of the County Borough to identify areas that were considered more suitable for the location of wind energy and ground mounted solar PV developments. Section 7 and Appendix 3 of the Renewable Energy Assessment reviewed the less constrained areas for wind and solar identified in Section 4 against a number of constraints (e.g., ALC, historic landscape, archaeologically sensitive areas) to help support a prioritisation of areas to target for development. The locations identified have also been overlaid alongside the 15 Landscape Character Areas defined as part of the landscape sensitivity assessment set out in SPG20: Renewables in the Landscape (2016).

Whilst this assessment finds that all the county borough's landscapes are particularly sensitive to large-scale wind and solar developments, it identifies two Landscape Character Areas (1: Llangynwyd Rolling Uplands & Forestry and 8: Ogmore Forest and Surrounding Uplands) as having the least sensitivity

to wind turbine development. Landscape Character Area 8: Ogmore Forest and Surrounding Uplands is located within Future Wales' Pre-Assessed Areas for Wind Energy, and in accordance with Policy SP13, any proposal in this area will need to ensure that the intention of the Priority Area designation is not compromised.

For solar PV developments, the entire county borough is considered to have high sensitivity to solar schemes greater than 15 hectares (~8.5 MW). However, LCA 12: Newton Down Limestone Plateau is considered to be the least sensitive and is identified in SP13 as a suitable location for solar PV developments in the County Borough. As such, the defined Local Search Areas for wind and solar development is considered robust.

The identified Local Search Areas have not been annotated on the proposals map to maintain clarity and readability. However, the areas can be added to the proposals map if deemed necessary.

c) Should defined local search area for wind be amended to take account of the pre-assessed areas for wind energy contained in Future Wales: The National Development Plan?

The Replacement LDP ensures that any Local Search Area for wind energy that overlaps with a Pre-Assessed Area for wind energy contained in Future Wales must ensure the Pre-Assessed Area is not compromised. The supporting text under Policy SP13 paragraph 5.4.89 states that *"Landscape Character Area 8: Ogmore Forest and Surrounding Uplands is located within Future Wales' Pre-Assessed Areas for Wind Energy, and in accordance with SP13, any proposal in this area will need to ensure that the intention of the Priority Area designation is not compromised."* The supporting text is therefore considered clear and in line with national planning guidance.

d) Are the requirements of Policy SP13(b) and paragraph 5.4.85 appropriate for the consideration of wind energy development of less than 10 MW? and how will the approach work when considered in conjunction with Policies SP17 and DPN4?

The requirements of Policy SP13 1(b) and paragraph 5.4.85 are considered appropriate for the consideration of wind energy development of less than 10MW. Wind energy development of less than 10MW in the first instance will need to comply with Policy SP13(b). If the development has been identified to be located within a Special Landscape Area, the development will also need to satisfy Policy DPN4 of which will take precedence over Policy SP13(b). Policy DNP4 will require such development to undertake a Landscape and Visual Impact Assessment to identify likely significant effects and demonstrate that adequate mitigation has been incorporated into the proposals. Policy SP17 (2) will not be required in the assessment of such development in relation to

landscape matters as Policies SP13 and DNP4 will be considered sufficient in assessing any likely impact, although other criteria contained within Policy SP17 may be considered applicable to the development proposal.

4. **Should the pre-assessed areas for wind energy contained in Future Wales: The National Development Plan be annotated on the proposals map?**

   The Pre-Assessed Areas for wind energy contained in Future Wales have not been annotated on the proposals map to maintain clarity and readability. However, the Pre-Assessed Areas can be added if deemed necessary.

5. **Is the target for energy generation contained in Table 10 – Targets for Area-Based Resource Use appropriate or should it be more ambitious?**

   The targets for energy generation contained in Table 10 – Targets for Area-Based Resource Use are considered appropriate and based upon evidence gathered as part of the Renewable Energy Assessment (SD84). Planning Policy Wales (Edition 11) paragraph 5.92 states *"To assist in the achievement of [national] targets, local authorities must take an active, leadership approach at the local or regional level, by identifying challenging, but achievable targets for renewable energy in development plans."* Furthermore, Planning Policy Wales paragraph 5.9.6 states *"Local authorities should consider the renewable energy resource they have available in their areas when formulating their renewable energy target, informed by an appropriate evidence base, and use the full range of policy options available, including developing policies in their development plans. Targets must not be seen as maximum limits, but rather used as a tool to maximise available resource. Planning applications should be refused on the basis of exceeding a renewable energy target."*

   The evidence base generated within the Renewable Energy Assessment was derived from determining the renewable energy resource potential (See Section 4) and comparison of potential energy generation resource and energy demand (See Section 5). This evidence was then drawn on and considered alongside information relating to local factors and the National Grid ESO Future Energy Scenarios to suggest potential targets that could be adopted – these potential targets were shared with stakeholders during an engagement exercise. The evidence base found that the predominant renewable energy resources within County Borough were wind and solar. Low and high target scenarios for wind and solar were developed (See Page 105 of the Renewable Energy Assessment) and calculated based on:

   - Low target: National Grid ESO projected growth in national onshore wind/solar capacity to 2033 for the Two Degrees scenario (this scenario is based on a centralised energy system that meets the 80% carbon reduction targets).
   - High Target: National Grid ESO project growth in national onshore wind capacity to 2033 for the Community Renewables scenario.

Following a stakeholder engagement workshop (held with a variety of internal BCBC stakeholders and a representative from Natural Resources Wales), a target for each generation technology was agreed based upon a number of factors including landscape constraints. The wind generation target is based upon a combination of the current installed capacity and an estimation of the remaining potential within the Landscape Character Areas identified as having moderate sensitivity to large wind turbine developments of 76-110m tip height (as opposed to high sensitivity). The Ground mounted solar target is based upon transferring the majority of the wind energy generation potential to solar PV, given the existing heavy concentration of wind turbines in the north of the County Borough. The building integrated solar PV target is based on a combination of the current installed capacity and the desire to prioritise the incorporation of the technology into new building proposals.

As such, these targets are considered to be appropriate and ambitious based upon clear robust evidence which will seek to maximise the resources available alongside other land uses and considerations.

6. **Are Policies ENT10 and 11 necessary? and do they provide an appropriate mechanism for securing low carbon heating technologies for new development and energy efficient design?**
   a) **Have the requirements of the policies been superseded by amendments to Part L of the Building Regulations?**

      The Council has an aspiration for all new homes to be net zero carbon in the first instance. The Bridgend Local Area Energy Strategy (SD61) and Renewable Energy Assessment (SD84) identifies those areas considered to be suitable for development for district heat, hybrid and electric-heating solutions in combination with different levels of targeted fabric retrofit. Policy ENT10 outlines a sequential approach that requires new major development to demonstrate sustainable heating and cooling systems have been selected in the first instance, where technically feasible and financially viable. Exploring heat networks directly aligns with Policy 16 of Future Wales. Planning Policy Wales (Edition 11) paragraph 5.9.13 also encourages development plans to support opportunities for local carbon energy generation scheme stating "Planning authorities should use their evidence base to inform policies and proposals for local energy. Development plans should support identified opportunities for heat networks, local renewable and local carbon energy generation schemes, and the co-location of new proposals and land allocations with existing developments, heat suppliers and heat users."

      Following the adoption of the amendments to Part L Building Regulations in November 2022, a review of Policy ENT10 has been undertaken. Whilst it is acknowledged that Section 3 of Approved Document Part L: Volume 1 requires the consideration of high efficiency alternative systems, the building regulations

do not require that high efficiency alternative systems or other low and zero carbon systems are installed. As such, the requirements of Policy ENT10 are still considered to be required in accordance with national planning policy.

ENT11 continues the Council's current approach to seeking more energy efficient and lower carbon housing, and development that is environmentally sustainable in a wider sense in order to achieve the Vision and Objectives for the County Borough and national policy objectives. ENT11 seeks to ensure that the design and standard of any new development is optimised to achieve energy efficiency and zero carbon emissions. Development proposals must demonstrate that sustainable design standards are integral to the proposal through construction and operation, ensuring that they are considered at the beginning of the design process.

However, a review of the criteria contained within Policy ENT11 against the amendments to Building Regulations has also been undertaken:

1) Has now been incorporated into Approved Document 0 – Overheating.
2) Has now been incorporated into Part L Amendments (Improved U-Values).
3) Part L will ensure that energy efficiency measures such as loft/wall insulation are installed.
4) Covers non-residential proposals. Not covered by Part L Building Regulations.
5) It's not currently a requirement to install renewable energy generation technologies but they are often installed to achieve compliance with the energy performance of the building.
6) Part L will ensure energy demand is reduced by maximising energy efficiency in fabric design.
7) Water reuse and recycling is recommended by Part L but not enforced.
8) Part L will require applicants to explore opportunities to integrate energy storage to provide load flexibility.

As highlighted above, the majority of the criteria set out by Policy ENT11 is now covered under the amended Part L Building Regulations. Therefore, Policy ENT11 can be removed if deemed necessary.

b) Should 'Major Development' be defined in the policies reasoned justifications?

Major developments relates to 10 or more dwellings as defined by The Town and Country Planning (Development Management Procedure) (Wales) Order 2012. The definition can be added to the supporting text if deemed necessary.

The requirement for new major development to be accompanied by an Energy Masterplan follows the advice contained within paragraph 5.8.4 of Planning Policy Wales (Edition 11), which states, *"In order to further promote energy*

efficiency and energy conservation, planning authorities should consider including development plan policies requiring applications for major development to be accompanied by an Energy Report. This independent report should include recommendations to the developer relating to energy efficiency and appropriate renewable energy technologies that could be incorporated into the development. A response to that report from the developer should also accompany the application. If planning authorities feel that insufficient consideration has been given to energy issues in project design, they may refuse planning permission".

c) Is the requirement for energy masterplans to be provided by all major development based on robust and credible evidence? and what impact would this threshold have on the viability of new development?

The requirement for new major development to be accompanied by an Energy Masterplan follows the advice contained within paragraph 5.8.4 of Planning Policy Wales (Edition 11), which states, *"In order to further promote energy efficiency and energy conservation, planning authorities should consider including development plan policies requiring applications for major development to be accompanied by an Energy Report. This independent report should include recommendations to the developer relating to energy efficiency and appropriate renewable energy technologies that could be incorporated into the development. A response to that report from the developer should also accompany the application. If planning authorities feel that insufficient consideration has been given to energy issues in project design, they may refuse planning permission"*. As part of their response to the Deposit Consultation, Welsh Government stated the requirements for "Energy Masterplans for major developments and exploring heat networks directly align with Policy 16 (NDF)". Further guidance on implementing the principles and requirements set out in ENT11 will be provided within a future Sustainable Construction and Design SPG.

In terms of viability, it is acknowledged the requirement for an energy masterplan will necessitate a modest capital upfront cost. However, based on indicative conversations, a high-level desktop study would not attract a significant consultancy fee in any case and the site-specific viability appraisals have demonstrated more than significant headroom to absorb such costs without impacting upon scheme viability. It is equally considered that many established developers will have the internal capability to undertake such energy masterplans in-house to inform their respective planning applications. Moreover, requiring new major development to undertake an energy masterplan from the outset will help to inform the most appropriate form of net-zero carbon energy system, which may in turn help to reduce the overall cost of the development in the long-term and provide clarity as to the most appropriate solutions upfront.