



**RTPI
Research**

MAY 2025

REGEN

Spatial Approaches to Local Energy Planning

Case study: Denbighshire

The Royal Town Planning Institute (RTPI)

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This resource is part of the Spatial Approaches to Local Energy Planning (SALEP) suite

This resource is part of the RTPI's SALEP (Spatial Approaches to Local Energy Planning) suite of guidance, analysis and in-depth case studies on integrating energy planning with town planning across the UK. It was produced in collaboration with Regen.

For more information and access to the rest of the suite, please visit the [SALEP webpage](#).

Authors

This document was produced by Regen with input from the RTPI.

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1. Case study summary

- The Welsh Government has commissioned Local Area Energy Plans (LAEP) for all 22 local authorities in Wales including Denbighshire.
- The Denbighshire LAEP was developed with Arup, The Carbon Trust and Afallen, and through engagement with stakeholders since April 2023. It was approved by the local council in October 2024, though as of January 2025 it has not been published.
- Denbighshire is currently producing a replacement Local Development Plan (LDP) and are therefore required to complete a Renewable Energy Assessment (REA) in accordance with Planning Policy Wales.

2. Key insights from this case study

- This case study reveals potential challenges in clarity regarding the scope and purpose of LAEPs in Wales, particularly in relation to REA. It demonstrates the challenges of misalignment between LAEPs and REAs particularly if LAEPs are not considering key town planning data such as local land-use constraints.
- While Planning Policy Wales sets out that REAs “*should be used in conjunction with local and regional energy plans / strategies to seek to deliver on a local authority’s wider energy aspirations*”, in practice this appears challenging.
- The case of Denbighshire reveals governance challenges in terms of coordination and information sharing between LAEP and town planning teams.

3. Context: energy planning in Wales

The Welsh Government has committed to a major programme of LEAP roll-out, commissioning 22 LEAPs so that every local authority within Wales will have a LAEP in place. Once all LAEPs have been completed (the original target was 2024), Energy Systems Catapult will work with the Welsh Government to aggregate all LAEPs to support the creation of a National Energy Plan.

Planning Policy Wales (12) section 5.9 sets out the Welsh Government’s town planning policy on renewable and low carbon energy. This section refers to both LAEPs and REAs. The following policy excerpts are of particular relevance:

- Para 5.9.5: “Using LAEP or other development plan evidence, local authorities should identify challenging, but achievable targets for renewable energy in local/ regional plans and strategies or development plans.”;
- Para 5.9.8: “In order to facilitate local and regional energy planning, local authorities must develop an evidence base (which can include LAEP).”; and
- Para 5.9.9: “Welsh Government Practice Guidance: Planning for Renewable and Low Carbon Energy – A Toolkit for Planners provides guidance on how an evidence base can be developed. It includes guidance on developing a Renewable Energy Assessment, Energy Opportunities Plan and Strategic Sites Assessment, and how this can be translated into planning policies. These assessments should be used in conjunction with local and regional energy plans / strategies to seek to deliver on a local authority’s wider energy aspirations”.

4. Development of the Local Area Energy Plan (LAEP) and Local Development Plan (LDP)

4.1 LAEP

Denbighshire’s LAEP has been developed by Arup, The Carbon Trust and Afallen, and through engagement with stakeholders. In October 2024, the local council approved the plan, though as of January 2025 it has not been published. The council state that the LAEP will help:

- Determine what products, partnerships or services could be offered and delivered in their local area;
- Highlight areas with significant potential to developers;
- Help better prepare organisations for public funding opportunities; and
- Inform regional views and decision-making, to achieve a cost-effective transition or strengthen the case for policy change needed at the UK government level.

The stakeholder engagement process undertaken as part of the LAEP development brought together a wide range of stakeholders including members of the public, registered social landlords, and utility companies. This process aimed to facilitate input from varying levels and sectors into the LAEP.

4.2 LDP

Denbighshire’s current LDP was adopted in June 2013 covering the period from 2006 to 2021. A replacement LDP is currently being developed and is due to be adopted in September 2025. To date, Denbighshire has approved their ‘preferred strategy document’. This document includes clarification of the need to plan for the provision of renewable energy generation, and the LDP objective of protecting, enhancing and sustainably developing green infrastructure and renewable

energy resources.

Along with the development of a replacement LDP, the local town planning team in Denbighshire have been producing a REA for the local area. This has been guided by the planning for renewables and low carbon energy toolkit for planners produced by the Welsh Government. The REA, as advised in the toolkit itself, is undertaken at an early-stage within the development of a new LDP in order to ensure that full consideration of renewable energy sites can be given throughout the LDP development process. Once the LDP is adopted, the REA will have weight in the town planning decision making process.

The result of the REA produced information and data based on energy planning considerations including identifying suitable areas for different renewable energy technologies within the county, which the local planning authority then provided to the LAEP team.

5. Role of local authority planners in preparing the LAEP

During the development of Denbighshire's LAEP, the local planning authority sought to integrate findings from the REA and were keen to feed into the process as much as possible to ensure that the LAEP was able to support and complement town planning efforts. The REA process had generated valuable insights into the suitability of locations for renewable energy projects, considering both opportunities and barriers within the town planning system. This aimed to align energy planning with the strategies and policies of the LDP. However, for planners, the integration process with the LAEP faced significant challenges, primarily due to a perceived lack of clarity regarding the purpose LAEP and ambiguity on how the modelling was being undertaken.

The planning team expected that the LAEP would be a working document intended to be accessible to councillors and the public, thus believing it would benefit directly from town planning considerations and data. However, during the development of the LAEP, the planners got a sense that it was largely focused on supporting Distribution Network Operators (DNOs) in considering grid connections and that this focus did not fully account for local planning policies or town planning considerations.

The town planning team contributed a range of data and findings from the REA into the LAEP development process, including sites with off-grid potential, constraints analyses for protected areas, local land designations and local knowledge on public acceptability, however they felt that these inputs were not fully reflected in the LAEP. The emphasis of the LAEP on grid-connected

sites and its limited consideration of town planning implications highlighted, to planners, a lack of integration of the two approaches and it wasn't apparent to them what assumptions the LAEP modelling system was using. Planners felt that the LAEP lacked clear explanations for the exclusion of certain planning datasets. As one interviewee stated: "There could have been more inputs into the model. That would have given better outputs if they put in more planning inputs."

While the LAEP development involved consultation with a variety of stakeholders, planners felt there was insufficient clarity on how their feedback was incorporated into the final document. This experience underscores the importance of fostering effective cross-authority collaboration, ensuring clarity of purpose, and integrating diverse expertise in multi-disciplinary energy planning processes. Improved communication, clarity on the data that could be used, and a clearer alignment of objectives could have supported this process.

6. Perceived challenges in the disconnect between the LAEP and emerging LDP

Denbighshire faces a significant challenge in aligning the LAEP with the REA and the emerging LDP. While these documents serve distinct purposes—particularly as the LAEP addresses broader issues beyond energy planning, such as retrofitting and electric vehicle charging—there was an expectation from planners that they would complement one another. Planners anticipated that the LAEP would support the REA and feed into the LDP to ensure a cohesive approach to energy and town planning. However, no clear guidance was provided at the outset or during the process on how these documents should interrelate.

The disconnect became evident when the town planning team reviewed the draft LAEP. They perceived the LAEP to be overly focused on grid connections. This technical emphasis raised concerns about public reception, particularly given that members of the public who encounter the LAEP may not understand that it is not an official town planning document. Planners raised concerns that the maps included in the LAEP, such as those identifying areas suitable for renewable energy projects, might be mistaken for formal land-use designations. For example, the draft LAEP initially proposed a site near a historic town as a broad suitable area for wind energy development, based on grid availability. After planners raised concerns about the likely public opposition and the area's unsuitability, this proposal was reconsidered. To further address such concerns, the town planning team requested that the LAEP explicitly state that the plan does not create a "presumption in favour of development" for the projects it identifies.

The differences in language and accessibility between the LAEP and town planning documents like

the LDPs further exacerbate the disconnect. While LDPs and REAs are designed to be comprehensible to councillors and the public, the LAEP is perceived by the town planning team to cater primarily to DNOs. As a result, it contains technical language and complex modelling that planners and the public may find difficult to interpret. This situation highlights the need for better integration and communication between energy and town planning processes.

7. Recommendations from this case study

7.1 Better utilisation of local town planning expertise in the LAEP process

Local planners bring valuable insights into land-use constraints, community preferences, and protected sites, yet this case study demonstrates how there are not always methods in place to ensure that such inputs can be used in LAEP development. To improve outcomes, there could be processes and guidance in place to input such local town planning knowledge into LAEP development processes.

7.2 Sharing technical data and LAEP methodologies with planners

While the LAEP data was shared with the town planning department, planners noted that they did not have access to the key technical reports and methodologies explaining the data. Planners felt that this limited their ability to reconcile the LAEP findings with their renewable energy assessments. Ensuring that planners have access to technical documentation and the opportunity to provide informed feedback would enhance the integration of energy and town planning.

7.3 Clarifying the purpose of LAEPs

There is a need to clearly articulate the purpose of LAEPs, particularly their role in relation to local plans and renewable energy resource assessments. A lack of alignment between these documents creates confusion and reduces their practical utility. In the case of Denbighshire planners raised concerns about potential misunderstandings of the LAEP once it is published, for example if it shows potential for renewable energy generation in areas that are locally valued.



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