

CYNGOR GWYNEDD CABINET



Date of Meeting: 16 September 2025
Cabinet Member: Councillor Craig ab Iago
Relevant Officer: Bethan Richardson, Climate Change Programme Manager
Title of Item: Gwynedd Local Area Energy Plan

Report to a meeting of Cyngor Gwynedd Cabinet

1. Decision Sought

- i. To endorse the Main Report and Technical Report of the Gwynedd Local Area Energy Plan, understanding that the Actions and Recommendations assigned to Cyngor Gwynedd are subject to securing and maintaining the necessary funding.
- ii. A governance and monitoring mechanism for the Actions and Recommendations will need to be developed in conjunction with Ambition North Wales and other north Wales local authorities, and brought back to Cabinet for approval.

The mechanism should lead to:

- Agreeing a governance structure
- Aligning the North Wales Regional Energy Strategy (and action plan) with the Local Area Energy Plan
- Align the Local Area Energy Plan with national energy plans that can be developed by NESO (National Energy System Operator) on behalf of the Welsh Government
- Identifying key performance indicators
- Formation of a Regional Steering Group

2. The reason why the Cabinet needs to make the decision

- i. Cyngor Gwynedd, through our Climate and Nature Emergency Plan has set the ambition that “Cyngor Gwynedd will be net zero carbon and ecologically positive by 2030.”
- ii. In March 2021 the Senedd approved an all-Wales net-zero target for 2050, with interim targets of a reduction in carbon emissions of 63% by 2030 and 89% by 2040. The Welsh Government

commissioned a programme for all Local Authorities in Wales to develop a Local Area Energy Plan (LAEP) to contribute to these national targets.

3. Background

- i. Gwynedd Council's Local Area Energy Plan (LAEP) looks at the most efficient and cost-effective ways of decarbonising a whole energy system for Gwynedd by 2050. The LAEP looks at all aspects of the local energy systems: what the demand for energy is, how it is generated and how it is distributed.
- ii. This LAEP was prepared by Arup, the Carbon Trust and Afallen, on behalf of Cyngor Gwynedd and co-ordinated across the north Wales region by Ambition North Wales. The development of the Local Area Energy Plans across Wales has been funded by the Welsh Government.
- iii. To ensure consistency, each LAEP has been developed following an internationally recognised approach, and was based on modelling, insights from data, and stakeholder plans and ideas, including through workshops. Further information on the stakeholder consultation process in the development of the LAEP can be found on page 37 of the Main Report and in chapter 2 of the Technical Report (p. 23).
- iv. The development of LAEP has resulted in the creation of two documents aimed at two different audiences:

Gwynedd Local Area Energy Plan - Appendix 1.

For the attention of the public, businesses, policy makers etc. This includes an outline of all data and action plans. It's called the 'main report'.

Local Area Energy Plan Technical Report – Appendix 2.

For the attention of Local Authority, technical stakeholders (e.g. distribution network operators, energy managers, planners). This includes graphs, the charts, maps and supporting data for the results published in the LAEP. It also includes more details about the modelling approach and scenario analysis. It's called the 'Technical Report'.

- v. The first step in developing Local Energy Plans was the creation of regional energy plans, and the [North Wales Energy Strategy](#) was published in November 2021. The second stage of the process is that 22 LAEPs are being developed for each county in Wales to reflect the diversity of local needs. Each of the individual plans will in turn feed into the creation of a single National Energy Plan to be developed in the name of the Welsh Government.

vi. Content of the Local Area Energy Plan

- vii. The vision in the Gwynedd Local Area Energy Plan is:
 - ‘Develop a local net zero carbon energy system for Gwynedd that encourages the development of affordable and reliable energy sources for the benefit of our local communities. This will support a transition to a prosperous and resilient economy, whilst protecting and enhancing the natural environment’.
- viii. The geographical boundary for Cyngor Gwynedd was used to determine the boundary for the LAEP. This is not just a plan for Cyngor Gwynedd, it is a plan for the whole of Gwynedd and therefore also needs to be owned and operated by a wide range of stakeholders from all sectors.

- ix. There are limitations on the data that has been collected and the options for the future within the plan. The following are excluded:
- Current and future energy assets likely to be overseen by central government, e.g. offshore wind, grid-scale batteries, SMR hydrogen
 - Non-energy sources of greenhouse gas emissions occurring within Gwynedd (e.g. emissions from industrial processes, agricultural land use and livestock)
 - Energy used for shipping, aviation and rail
 - Large electricity generators connected to the transmission network and/or more than 100 MW are considered national assets and excluded, for example, Dinorwig Power Station.

But projects *of up to* 100MW, such as the Glyn Rhonwy pump storage project have been included in the use modelling process to demonstrate the importance of tidal energy.

- x. The outcome of stakeholder consultation in developing the plan was an agreement that the LAEP would choose to look at the 'Islanded: Community-focussed' scenario when modelling future possibilities. This scenario takes into account an energy system that does not import electricity across the local authority border, but is capable of exporting, seeking to make the most of opportunities for community-owned renewable or low carbon energy, and presenting an ambition to decarbonise the energy system at a faster rate.

4. Implementation and Funding of the Local Area Energy Plan

- i. Information on who is responsible for implementing different actions (or projects), and the timetable, can be found in Section 4 – Actions and Recommendations.
- ii. The Council's role will vary in each action. Some actions call on the Council to act in the delivery of programmes, while other actions involve the Council as a co-ordinator between a number of organisations. But the vast majority of the Actions, 54 out of 75, are responsibilities on organisations separate from the Council, such as Ambition North Wales, Welsh Government, District Network Operators, housing associations, and others.
- iii. The 'Energy Propositions – Plan on page – 2030' on page 17 of the main document outlines the likely costs of running a number of innovative projects. They are likely to fall between £121.56M and £590.70M. Sourcing this income, and spending it, would be a joint responsibility between all partners.
- iv. The details of the investment necessary to realise the actions set out in Section 4 of the LAEP will be subject to further collaborative work with stakeholders. Business cases will need to be developed to gauge how much financial and staffing resources will be needed and where that investment will come from. This is also true for the projects mentioned in 4.iii above.
- v. Cabinet should note that while the LAEP sets out the investment needed to achieve the change needed to decarbonise the energy system in Gwynedd by 2050, it does not commit the Council financially at the current approval stage.

5. Governance and Monitoring

- i. A governance and monitoring mechanism for the Actions and Recommendations will need to be developed in conjunction with Ambition North Wales and other north Wales local authorities and brought back to Cabinet for approval.

The mechanism should lead to:

- Agreeing a governance structure
 - Aligning the North Wales Regional Energy Strategy (and action plan) with the Local Area Energy Plan
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 - Identifying key performance indicators
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- ii. As an interim arrangement, the LAEP is expected to be reviewed in five years' time, as we approach 2030 and the date of the public sector's net zero carbon target.
 - iii. For the purpose of internal monitoring by the Council, it is suggested that a LAEP Panel be established from among officials, who will report to the Climate and Nature Board.
 - iv. The achievement of a net zero energy system in Gwynedd by 2050 will depend heavily on political will at all levels, significant financial support, technical assistance, policy changes, supply chain development, addressing skills gaps, and significant behavioural change and stakeholder engagement.

6. Well-being of Future Generations (Wales) Act 2015

Well-being Goals

i. A Prosperous Wales

By focusing on local energy generation and distribution for the benefit of Gwynedd's communities, the LAEP should lead to new economic opportunities, and strengthening and developing new skills amongst the local workforce.

ii. A Resilient Wales

Decarbonising the local energy system will directly contribute to reducing carbon emissions which in turn will reduce the effects of climate change in the long term. Incorporating changes that are considerate and protect biodiversity will also help adapt to climate change.

iii. A Healthier Wales

Reducing the use of fossil fuels in energy generation will improve air quality which in turn will help protect the health of residents.

iv. A More Equal Wales

One of the goals of the LAEP is to generate affordable energy for local residents, in order to reduce fuel poverty.

v. A Wales of Cohesive Communities

The LAEP seeks to strengthen the network of sustainable private and public transport and to encourage active travel, for the benefit of residents living in rural and urban areas alike.

vi. A Wales of Vibrant Culture and Thriving Welsh Language

The LAEP encourages active modes of travel (e.g. walking, cycling) in order to reduce demand for fossil fuel-using transport.

vii. A Globally Responsible Wales

The decarbonisation of the local energy system will contribute directly to reducing carbon emissions in order to meet Cyngor Gwynedd, Welsh Government, UK Government and international targets (e.g. Paris Agreement).

5 Ways of Working

viii. Long-term

Some of the Actions and Recommendations in the LAEP are programmed to be realised in the short or medium term, but most are actions that will need to be continued to be implemented in the long term. This is in order to meet the Welsh Government's target for Wales to be net zero by 2050.

ix. Prevention

The decarbonisation of the energy system is intended to prevent the effects of climate change from worsening into the future.

x. Integration

The aim and vision of the LAEP is consistent with a large number of local, regional and national policies and strategies as seen in figures 15 and 16 in chapter 2 of the Main Report.

xi. Collaboration

The LAEP was developed in collaboration with 74 individuals from 22 organisations who had knowledge of the field or are affected by the realisation of the scheme.

xii. Involvement

See 'Involvement' above.

7. Next Steps and Timetable

- i. Subject to a Cabinet decision, we will proceed to
- Establish a monitoring and governance regime as described in 5.i
 - To act on the Actions and Recommendations which are the responsibility of Cyngor Gwynedd only, where no additional resources are required
 - Commence discussions with partners in order to realise the Actions that are the responsibility of Cyngor Gwynedd in conjunction with others, and where additional resources are not required
 - To press the Welsh Government and others for additional resources to realise the bulk of the LAEP, and for this work to be done in collaboration with local regional partners
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8. Appendices

Appendix 1 – Gwynedd Local Area Energy Plan

Appendix 2 - Gwynedd Local Area Energy Plan: Technical Report

9. Views of the Statutory Officers

Monitoring Officer:

The report sets out the proposed project and the employment context appropriately.

Chief Finance Officer:

I have no objection to the decision sought to support the main report and technical report of the Gwynedd Local Area Energy Plan, as the decision is conditional on securing and maintaining the necessary funding. The Plan identifies some of the funding sources that may be available in order to develop individual schemes, but there is significant further work to be done before Gwynedd Council is in a position to commit resources to the implementation of the Local Area Energy Plan.

I support the intention to develop a governance and monitoring mechanism for the actions and recommendations.