



CABINET - 21ST MAY 2025

SUBJECT: CAERPHILLY LOCAL AREA ENERGY PLAN

**REPORT BY: EXECUTIVE DIRECTOR FOR CORPORATE AND
REGENERATION**

1. PURPOSE OF REPORT

- 1.1 To present Cabinet with the Local Area Energy Plan (LAEP) developed for Caerphilly County Borough.
- 1.2 To seek Cabinet endorsement of the Caerphilly LAEP.

2. SUMMARY

- 2.1 The LAEP is a partnership document and not a Council document, however it will be an important document for future direction, strategy and potentially funding.
- 2.2 Local Area Energy Planning is a means of enabling local areas to translate Net Zero Carbon targets into actions within the local energy system by using a data driven, evidence-based approach to the whole energy system to set out the change required to transition the local energy system to Net Zero. It results in a costed and spatial plan that identifies the change needed to the energy system and built environment and the near-term actions and projects for prioritising investments and action.
- 2.3 Welsh Government commissioned Local Area Energy Plans (LAEPs) for all Local Authorities in Wales. The Local Authorities were grouped into four regions and there was a procurement process for the delivery of the LAEP Reports for each region. The Cardiff Capital Region bid was secured by ARUP in partnership with Carbon Trust.
- 2.4 Between March 2023 and October 2024, Carbon Trust, ARUP and Afallen developed a Local Area Energy Plan for Caerphilly County Borough. This process included data collection, stakeholder engagement, modelling and developing actions, priorities and priority projects culminating in the production of the LAEP.

- 2.5 The Caerphilly LAEP process produced two reports:
- Main Report (Appendix 1) – A vision for a decarbonised energy system intended for the general public, businesses, policy makers etc; this has been translated into Welsh (Appendix 2).
 - Technical Report (Appendix 3) – Detailed methodology and analysis intended for local authority and technical stakeholders such as distribution network operators (NGED, WWU), energy managers and planners.
- All local reports within the CCR have also been amalgamated to produce a Regional Investment Prospectus (RIP) which outlines a compelling vision for investing in the region and is intended for investors and developers. Due to the status of other LAEPs within CCR, the RIP is currently in draft form.
- 2.6 Within the main LAEP and technical reports, there is extensive analysis of the current energy system and its components including energy generation, domestic & non-domestic building fabric and transport requirements.
- 2.7 Within the Caerphilly LAEP, the council and other stakeholders have reaffirmed commitment to existing actions that are focused on these short-term priorities. However, further work is needed to fully comprehend the wide-ranging complexities of the medium and long-term collaborative actions required to achieve a net zero energy system by 2050.

3. RECOMMENDATIONS

- 3.1 That Cabinet endorses the Caerphilly Local Area Energy Plan developed for the whole of Caerphilly County Borough.

4. REASONS FOR THE RECOMMENDATIONS

- 4.1 To contribute to the Welsh Government's legally binding target for a Net Zero Carbon Wales by 2050.
- 4.2 To contribute to the Council's commitment to become a Net Zero Carbon local authority by 2030 through the decarbonisation of the local energy system.

5. THE REPORT

- 5.1 Energy Systems Catapult (ESC) has developed the concept of Local Area Energy Planning as a means of enabling local areas to translate Net Zero targets into actions within the local energy system. The guidance and methodology created by ESC describes a LAEP as:
- Setting out the change required to transition an area's energy system to net zero in a given timeframe.
 - Using data driven and whole energy system, evidence-based approach that is led by local government developed collaboratively with defined stakeholders.
 - Resulting in a fully costed and spatial plan that identifies the change

needed to the local energy system and built environment, detailing 'what, where and when and by whom'.

- Identifying near-term actions and projects, providing stakeholders with a basis for taking forward activity and prioritising investments and action.

5.2 Welsh Government commissioned LAEPs for all Local Authorities in Wales (except for Pembrokeshire, Conwy, Bridgend and Newport who had already piloted the LAEP process). The Local Authorities were grouped into four regions and there was a procurement process for the delivery of the LAEP Reports for each region. The Cardiff Capital Region bid was secured by ARUP in partnership with Carbon Trust; they were also successful for the North Wales Region.

5.3 Between March 2023 and October 2024, Carbon Trust, ARUP and Afallen developed a Local Area Energy Plan for Caerphilly County Borough. This process included data collection, stakeholder engagement, modelling and developing actions, priorities and priority projects culminating in the production of the LAEP.

5.4 Propositions chosen for the Caerphilly County Borough LAEP were:

- (i) Getting buildings zero carbon ready
- (ii) Making journeys more sustainable
- (iii) Increasing renewable generation
- (iv) Net zero businesses
- (v) Decarbonise energy networks

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- Technical Report (Appendix 3) – Detailed methodology and analysis intended for local authority and technical stakeholders such as distribution network operators (NGED, WWU), energy managers and planners.

All local reports within the CCR have also been amalgamated to produce a Regional Investment Prospectus (RIP) which outlines a compelling vision for investing in the region and is intended for investors and developers. Due to the status of other LAEPs within CCR, the RIP is currently in draft form.

5.6 Within the main LAEP and technical reports, there is extensive analysis of the current energy system and its components including energy generation, domestic & non-domestic building fabric and transport requirements. These elements of the reports are a useful foundational basis for further work for the Decarbonisation Team – both internally considering council owned buildings and land holdings and externally in working with partners in the public and private sectors in identifying opportunities for decarbonisation in support of the 2050 net zero target.

5.7 Data from the LAEP has proven useful in the current development of the Caerphilly 2050 Net Zero Carbon Strategy. Further, relationships built during

the LAEP process have been integral in ensuring primary stakeholder involvement in the drafting and development of that strategy.

- 5.8 The purpose of the LAEP is to provide short-term low regrets actions and interventions for the decarbonisation of the local energy system. Within the Caerphilly LAEP, the council and other stakeholders have reaffirmed commitment to existing actions that are focused on these short-term priorities. However, further work is needed to fully comprehend the wide-ranging complexities of the medium and long-term collaborative actions required to achieve a net zero energy system by 2050.
- 5.9 Veracity of the future system modelling has been challenged through the process. However, the modelling up to 2050 is not intended to be a concrete route map in this initial process but instead serve as a gauge of the enormity and complexity of decarbonising the energy system and the vast investment needed, both capital and revenue from public and private actors, in seeing it come to fruition. LAEPs are intended to be live documents, updated and reviewed at least every 5 years. As this process continues, the data and the modelling should improve and over time build a clearer vision of what is required.
- 5.10 It is clear that the presence of a LAEP will be integral to supporting future funding applications for decarbonisation projects.
- 5.11 CCR have begun developing a governance and performance monitoring framework to aid delivery and performance monitoring of the LAEPs within the region. The LAEP Regional Steering Group (RSG) will continue to co-ordinate delivery and share best practice. CCR are also investigating setting up a CCR delivery unit and themed net zero clusters to support wider delivery. The themed areas will be based around the energy proposition areas in the LAEPs. A strategic business plan will also be developed which will set out options for accessing funding and investment, with possibility of setting up a CCR green energy investment fund for the region.
- 5.12 CCR have stated that the CJC will not be monitoring the delivery of the LAEPs but putting together a consistent approach and supporting LAs in pulling together an annual report each year on progress. The intention is for LAs to use internal scrutiny using a regionally consistent framework. Welsh Government have also stated that there are currently no plans to put in place for national monitoring specifically on the LAEPs as there are already national monitoring metrics such as the number of heat pumps or EV chargers installed.
- 5.13 The LAEP is a partnership document and not a Council document, however it will be an important document for future direction, strategy and potentially

funding. Considering this it is proposed that the LAEP and supporting technical report are endorsed by Cabinet.

6. ASSUMPTIONS

- 6.1 The outputs within the LAEP are based on data collated by the Decarbonisation Team and provided by external stakeholders. This data is a snapshot in time from March 2023.
- 6.2 The LAEP was developed using modelling methodology prescribed by Energy Systems Catapult.
- 6.3 The process was shaped by partners that engaged and fed into the stakeholder workshops.

7. SUMMARY OF INTEGRATED IMPACT ASSESSMENT

- 7.1 The proposal is to endorse the Caerphilly Local Area Energy Plan which has been commissioned by Welsh Government and developed to create a costed and spatial plan to transition to a net zero energy system within the county borough.

There is no direct impact to service delivery from the endorsement of the strategy. Impacts that come about because of implementation of the LAEP will be assessed in due course.

The LAEP is focused on taking action to reduce greenhouse gas emissions from the energy system and in doing so it aims to mitigate the impacts of climate change, improve the resilience of the local energy system, improve the energy efficiency of homes alleviating fuel poverty, support the growth of a green skills economy within the borough and improve air quality by reducing pollution leading to improved health and wellbeing outcomes for residents. It supports taking collaborative action now in Wales to contribute to the global challenge of climate change. Long term modelling provides a sense of the size of the challenge complimented by an understanding of the short-term steps that need to be taken now to enable the transition towards net zero 2050, enabling more cost effective and sustainable action.

[Caerphilly Local Area Energy Plan - IIA - Accessible English Form.docx](#)

8. FINANCIAL IMPLICATIONS

- 8.1 There are no immediate financial implications from the endorsement of the Local Area Energy Plan. There will be significant investment needed in the local energy system and the implementation of the LAEP to achieve Net Zero by 2050.
- 8.2 It is anticipated that the LAEP will be a key document in support of securing

funding for Net Zero projects in future.

9. PERSONNEL IMPLICATIONS

- 9.1 There are no associated personnel implications. The Decarbonisation Team co-ordinated the Council's involvement in the development of the Local Area Energy Plan. There are implications for the implementation of the LAEP in future to achieve Net Zero by 2050.

10. CONSULTATIONS

- 10.1 The views of the listed consultees have been reflected within this report.
- 10.2 The "Caerphilly Local Area Energy Plan" report was considered by the Housing and Environment Scrutiny Committee on Tuesday 29th April 2025.

One Member queried the liaison that had taken place with Community Councils and advised that Gelligaer Community Council had set aside £20,000 to install solar panels on primary schools in its area. The Decarbonisation Manager advised that the study was carried out by consultants and that he would review why Community Councils were not consulted. Members heard how CCBC were now responsible for managing delivery and as such the Community Councils would be part of ongoing consultation. The Member then highlighted the Solar Together scheme, which was not mentioned in the report, and requested more information. The Decarbonisation Manager advised that the scheme was run by a company called iChoosr and was supported by the Council. It was agreed that further information would be circulated to Members and that an update on scheme uptake be included in future reports.

A Member wished to know how the LAEP aligned or differed from other energy and climate policies already adopted by the Council. The Decarbonisation Manager outlined how the Plan would work in partnership with several other schemes and in particular the key strategy to be carbon neutral by 2050. Committee heard how this was a Welsh Government policy for the whole of Wales, and that the Council was aiming to be net zero by 2030.

The Member also asked how the LAEP's recommended short-term actions would be translated into funded deliverable projects. The Decarbonisation Manager highlighted that there was no funding allocated to this programme at the moment. The Plan identified aims which would require Welsh Government and UK Government funding. The initial Council actions would be around engagement and behaviour change.

One Member queried the modelling within the Technical Report. The Decarbonisation Project Officer advised that the modelling was based on substation zones and that energy components were ranked using various weighted considerations.

A Member highlighted the potential high costs involved with the LAEP and suggested that the CCBC commitment to be net zero by 2030 was

unobtainable. It was the Member's view that the Welsh Government target of 2050 should be key aim, but the Member doubted if even that could be reached. The Deputy Leader and Cabinet Member for Prosperity, Regeneration and Climate Change disagreed with this assessment and reminded Members that Council had voted in favour of the Climate Emergency policy in 2019 and that he was not prepared to roll back on this commitment. The Cabinet Member highlighted that the Council was on course to reach the target and outlined how carbon emissions had significantly reduced. The Member questioned if adequate funding was available to reach the 2030 target. The Decarbonisation Project Officer advised that the 2030 target was aligned with a Welsh Government objective for the whole public sector in Wales and was not a unilateral decision made by CCBC alone. The officer also outlined how LAEP methodology aimed to produce a fully costed spatial plan and that it would be refreshed at least every five years. Whilst costs are variable at the moment they would become more focussed as additional data was gathered, directions were decided upon, and as potentially new technologies became part of the plan. One Member enquired about improving public transport and also observed that Electric Vehicle charging points were limited whilst other areas were using Welsh Government funding to improve the situation. The Deputy Leader and Cabinet Member for Prosperity, Regeneration and Climate Change outlined how these issues had been discussed at a recent Regional Transport Authority webinar and that it was also recognised that installing EV charging points on terraced streets would be challenging. The Member highlighted that other Authorities were using WG funding to install gully charging channels on terraced streets and asked if these Councils had been consulted to gather best practice. The Member highlighted that some people in his Ward were now facing fines for trailing a cable across the pavement to charge their Electric Vehicles. The Director of Infrastructure and Waste Services highlighted to Committee that a report detailing the options and liabilities around residential EV charging had been considered by the Scrutiny Committee and that a further report would be prepared following consultation with Newport and Bleanau Gwent Councils on the ongoing trials highlighted by the Member. Members heard how one potential issue could be that residents with EVs might think that they have a designated parking space on terraced streets alongside the charging point.

11. STATUTORY POWER

11.1 Climate Change Act 2008

11.2 Environment (Wales) Act 2016 (Amendment of 2050 Emissions Target) Regulations 2021

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Consultees: Cllr James Pritchard – Deputy Leader and Cabinet Member for Prosperity, Regeneration and Transformation
Cllr A Whitcombe Chair Housing and Environment Scrutiny Committee
Cllr S Williams Vice Chair Housing and Environment Scrutiny Committee
Housing and Environment Scrutiny Committee
Richard Edmunds, Chief Executive
Mark S Williams, Executive Director Corporate and Regeneration
Rob Tranter, Director of Legal, Democratic Services and Monitoring Officer
Stephen Harris, Director of Financial Services and S151 Officer
Ben Winstanley, Director of Assets and Decarbonisation
Allan Dallimore, Regeneration Services Manager
Leadership Team

Appendices:

- Appendix 1 [Caerphilly Local Area Energy Plan \(Eng\)](#)
- Appendix 2 [Caerphilly Local Area Energy Plan \(Cym\)](#)
- Appendix 3 [Caerphilly Local Area Energy Plan Technical Report](#)