

**Environment & Economy Overview & Scrutiny Committee**

<b>Date of Meeting</b>	14th January 2025
<b>Report Subject</b>	Flintshire's Local Area Energy Plan
<b>Cabinet Member</b>	Collective Responsibility
<b>Report Author</b>	Chief Officer (Planning, Environment & Economy)
<b>Type of Report</b>	Operational

**EXECUTIVE SUMMARY**

Local Area Energy Planning (LAEP) is a data driven and whole energy system, evidence-based approach that sets out to identify the most effective route for the local area to contribute towards meeting the national net zero target, as well as meeting its local net zero target.

LAEPs feed into regional energy strategies, which relate to national policies: Future Wales: the national plan 2040, Climate change targets, and National Energy Plan 2024.

A Members' Briefing was held on 16<sup>th</sup> December 2024, and provided an opportunity to increase understanding of and consider the details in the LAEP.

Since the endorsement of the North Wales Energy Strategy and Action Plan and commencement of the Local Area Energy Planning (LAEP) in early 2023, the LAEP for Flintshire has now been finalised.

**RECOMMENDATIONS**

1	Cabinet endorses the attached Flintshire Local Area Energy Plan Main Report and Technical Report (Appendix 1 and 2), understanding that the LAEP actions assigned to Flintshire County Council are subject to securing and maintaining necessary funding.
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2	Cabinet considers the content of The Coal Authority report ‘Flintshire County Council: Mine Water Heat Opportunities’ (Appendix 3) in conjunction with the Local Area Energy Plan.
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## **REPORT DETAILS**

<b>1.00</b>	<b>EXPLAINING THE REPORT</b>
1.01	<p><b>Local Area Energy Planning</b></p> <p>Local Area Energy Planning (LAEP) is a data driven and whole energy system, evidence-based approach that sets out to identify the most effective route for the local area to contribute towards meeting the national net zero target, as well as meeting its local net zero target.</p>
1.02	<p>LAEP aims to: account for local and national conditions to achieve net zero; consider how cooperation with adjacent areas can bring success; and increase local stakeholder awareness to increase consent and facilitate credible commitments to achieve the plan.</p>
1.03	<p>LAEPs feed into regional energy strategies, which relate to national policies: Future Wales: the national plan 2040, Climate change targets, and National Energy Plan 2024.</p>
1.04	<p>The local energy system includes: whole building retrofit, local onshore renewables, decarbonisation of transport, deployment of heat pumps where appropriate, reinforced electricity distribution network, decarbonisation of industry and hydrogen networks.</p>
1.05	<p>On behalf of the Welsh Government, Ambition North Wales are managing a contract with consultants developing the LAEP for Flintshire, and the other north Wales counties. The LAEP was authored by The Carbon Trust and Arup, following an internationally recognised method, and was based on modelling, insights from data, and stakeholder plans and ideas, including through workshops. These workshops were attended by Council officers across portfolios, Members, Town &amp; Community Councils, and external stakeholders. External stakeholders have included large local employers, large local energy providers, large local energy users, Deeside decarbonisation forum, transport providers, Distribution Network Operators, housing providers, and any community groups who are focussing on energy.</p>
1.06	<p>The plans will fall under the ownership of each local authority in Wales. They are aimed at being a guidance tool in how best to work towards a fully decarbonised energy system by 2050. All LAEPs will be aggregated to inform the development of the National Energy Plan by the end of the year. Local authorities are requested to endorse the Local Area Energy Plan through due process. The LAEP will be reviewed by Environment &amp;</p>

	Economy Overview & Scrutiny Committee, Corporate Resources Overview & Scrutiny Committee and Cabinet.
1.07	<p>A Members' Briefing was held on 16<sup>th</sup> December 2024, and provided an opportunity to increase understanding of and consider the details in the LAEP.</p> <p>With Ambition North Wales and other counties in Wales, a delivery/ monitoring mechanism to progress LAEP actions will be developed, including:</p> <ul style="list-style-type: none"> <li>• Agreeing on a governance structure</li> <li>• Aligning north Wales Regional Energy Strategy (+Action Plan) with the LAEPs</li> <li>• Identifying KPI's</li> <li>• Regional Steering Group</li> </ul> <p>The LAEP is provisionally due to be reviewed in five years' time, as we approach 2030 and the public sector net zero carbon target deadline.</p>

<b>2.00</b>	<b>RESOURCE IMPLICATIONS</b>
2.01	The Flintshire LAEP includes high-level indicative costs. Actions identified in the plan are assigned to many organisations in the county and funding for actions is not expected to come only from the Council and the public sector. Where possible, the LAEP actions assigned to the Council align with the Climate Change Strategy and are subject to securing and maintaining necessary funding. Delivering the LAEP actions will be for a wide range of stakeholders and will be subject to sufficient political and financial support.
2.02	There will be the requirement for both capital and revenue resource in order to deliver on the LAEP. Specific projects will require full feasibility assessments and this would require additional staffing resource. Delivery of all projects and actions identified is subject to securing the necessary funding.

<b>3.00</b>	<b>IMPACT ASSESSMENT AND RISK MANAGEMENT</b>
3.01	<p>There is a risk in terms of lack of capacity (people and/or funding) to deliver the actions allocated to the Council as lead. This could result in actions not being delivered, or delayed in delivery, and therefore outcomes in terms of decarbonising and futureproofing the energy system, not being realised. This risk can be mitigated by collaborating across the region to secure funding to support these actions.</p> <p>Ambition North Wales are working to increase resource capacity in order to support Councils with LAEP action delivery. Many of the actions within the LAEP are aligned with the Council's Climate Change Strategy which will assist in likelihood of delivery, and robust, clear and transparent</p>

	messaging must be used to manage expectations in terms of resource availability matching the Council's ability to deliver.	
3.02	<b>Ways of Working (Sustainable Development) Principles Impact</b>	
	Long-term	<p>Positive: Decarbonisation of the Council's activities and services will require long term planning and a long term vision to ensure systems and services are fit for purpose as the climate changes as well as reducing the impact of harmful climate change through mitigation.</p> <p>Decarbonisation activities such as developing renewable energy will have long lasting impacts over tens to hundreds of years. These activities also contribute to the climate change targets set by Welsh Government particularly Wales generating 70% of its electricity demand from renewable energy by 2030 and becoming a net zero carbon nation by 2050.</p>
	Prevention	<p>Positive: In order to avoid the harmful effects of climate change it is necessary for the Council to reduce its carbon emissions and increase the amount of carbon sequestered in its land assets. Carbon emissions caused by human activities are the main cause of climate change.</p> <p>Mitigating climate change will help to reduce impacts such as extreme weather causing flooding / extreme heat, loss of wildlife and habitats, increased pests and diseases, etc.</p> <p>Adapting to the impacts of climate change now will improve sustainability of our communities as the climate changes.</p>
	Integration	<p>Positive: Becoming net zero carbon integrates with the following priorities under the Council Plan; Green Council, Ambitious Council and Supportive Council. It integrates with the public service board objectives in the Environment priority of the Wellbeing Plan as well as the Smart Access to Energy project in the North Wales Growth Deal. It also integrates with the Environment (Wales) Act 2016 and Welsh Government's decarbonisation of the public sector agenda.</p>
	Collaboration	<p>Positive: The climate change programme offers multiple opportunities to work collaboratively both internally and</p>

	externally – and this collaboration will determine the success of the programme. Collaboration with the following groups is needed to ensure decarbonisation is integrated into everything that the Council and the wider region does and plans for: <ul style="list-style-type: none"> <li>- Welsh Government</li> <li>- Other public sector organisations such as local authorities, NRW, health boards, universities.</li> <li>- Private sector</li> <li>- Regional groups such as Ambition North Wales</li> <li>- Local Town and County Councillors</li> <li>- the local communities</li> </ul>
Involvement	Positive: If decarbonisation is to succeed and harmful climate change is to be avoided then everyone at a professional and personal level will need to be involved
<b>Well-being Goals Impact</b>	
Prosperous Wales	Positive: Reducing the Council’s carbon emissions should enable strategic investment in projects and ways of working that could deliver savings or generate new income streams, therefore supporting delivery of local services. It should also facilitate the development of the low carbon economy through infrastructure projects, land management etc which can support local businesses and communities.
Resilient Wales	Positive: Decarbonisation of the local energy system will promote resilience through actions such as: investment in renewable energy infrastructure which helps to reduce reliance on imports from across Europe and the World and the associated price fluctuations.
Healthier Wales	Positive: Decarbonisation of the energy system will provide clean, green energy that is not releasing emissions into the atmosphere via burning of fossil fuels.
More equal Wales	Neutral; No impact identified
Cohesive Wales	Neutral; No impact identified
Vibrant Wales	Neutral; No impact identified
Globally responsible Wales	Positive: Reducing the Council’s carbon emissions to net zero helps to mitigate climate change and therefore contributes to the achievement of Welsh Government,

		UK Government and international climate goals.
3.03	Not anticipated to be any negative anti-poverty, equalities or environmental impacts of the scheme.	
3.04	<p><b>The Council's Well-being Objectives</b></p> <p>Decarbonisation of the Council's activities will support the Green Council objective with a key impact of reducing carbon emissions mitigating climate change, for example, through the development of alternative and renewable energy production, promoting active travel, shifting to electric fleet vehicles, engaging with the supply chain and promoting a low carbon economy through the goods and services purchased.</p> <p>It can also contribute towards the success of other Council Wellbeing objectives such as 'An Ambitious Council' and 'A Caring Council' through providing local job creation and apprenticeships and therefore potentially reducing poverty through maximising residents' income and employability.</p>	

<b>4.00</b>	<b>CONSULTATIONS REQUIRED/CARRIED OUT</b>	
4.01	<p>The LAEP was created with stakeholders operating in Flintshire (geographical area). Identification and engagement of stakeholders eg in workshops, was a key part of the process of creating the LAEP. Details are included in the Technical Report (Appendix 2).</p> <p>Progress reports and draft versions have also been to Climate Change Committee, Environment &amp; Economy Overview &amp; Scrutiny Committee and Cabinet.</p>	

<b>5.00</b>	<b>APPENDICES</b>	
5.01	<ol style="list-style-type: none"> <li>1. LAEP Flintshire Main Report</li> <li>2. LAEP Flintshire Technical Report</li> <li>3. The Coal Authority report 'Flintshire County Council: Mine water heat opportunities'</li> </ol>	

<b>6.00</b>	<b>LIST OF ACCESSIBLE BACKGROUND DOCUMENTS</b>	
6.01	<ol style="list-style-type: none"> <li>1. North Wales Energy Strategy (<a href="https://www.gov.wales/regional-energy-strategy-north-wales">https://www.gov.wales/regional-energy-strategy-north-wales</a>)</li> </ol>	

<b>7.00</b>	<b>CONTACT OFFICER DETAILS</b>	
7.01	<p><b>Contact Officer: Alex Ellis – Programme Manager</b>  <b>Telephone:</b> 01352 703110  <b>E-mail:</b> <a href="mailto:alex.ellis@flintshire.gov.uk">alex.ellis@flintshire.gov.uk</a></p>	

8.00	GLOSSARY OF TERMS
	<p><b>Anaerobic digestion</b> – Processes biomass (plant material) into biogas (methane) that can be used for heating and/or generating electricity.</p> <p><b>ANW</b> – Ambition North Wales (formerly North Wales Economic Ambition Board).</p> <p><b>Biomass boiler</b> – Generates heat by burning wood-based fuel (eg. Logs, chippings) in a boiler.</p> <p><b>Energy Component</b> - This is a technology or component of the energy system – such as onshore wind, solar PV</p> <p><b>Ground PV</b> – Converts solar radiation into electricity using photo-voltaic cells mounted on the ground.</p> <p><b>Heat pump</b> – Uses a heat exchange system to take heat from air/ground and increases the temperature to heat buildings.</p> <p><b>Hydro</b> – Uses water falling between two reservoirs to turn turbines to generate electricity.</p> <p><b>LAEP</b> – Local Area Energy Plan</p> <p><b>Onshore wind</b> – Harnesses wind to turn a turbine to generate electricity on land.</p> <p><b>Pathway</b> - A pathway is how we get from the current energy system, to the most likely net zero end point. The pathway will consider what is needed from across the scenarios, the supply chain, number of installers etc. The propositions will make up the more certain part of the pathway, whereas the longer-term energy components will need further definition in the future.</p> <p><b>Retrofit</b> – Upgrading the performance of an existing building, such as installing more insulation or double glazing.</p> <p><b>Scenario</b> - A scenario is a set of assumptions for a particular end point (usually 2050) which are modelled in our optimisation model. We will model 5 different scenarios to see what is common across the scenarios and therefore “no regrets”, and what changes between the modelled scenarios.</p> <p><b>WG</b> – Welsh Government.</p>

