



## Report of the Cabinet Member for Service Transformation

Cabinet - 16 May 2024

### Swansea's Local Area Energy Plan

<b>Purpose:</b>	To inform Cabinet of the final content of Swansea's Local Area Energy Plan (LAEP).
<b>Policy Framework:</b>	Delivering on Nature Recovery and Climate Change Corporate Wellbeing Objective.
<b>Consultation:</b>	Access to Services, Finance, Legal.
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<b>For Information</b>	

#### 1. Introduction

- 1.1 A Local Area Energy Plan (LAEP) is the strategic plan, within a defined geographic area, for how the energy systems will be decarbonised. It results in a fully costed plan that identifies the change that needs to happen, detailing 'what, where, when and by whom'. The aim is to achieve Net Zero by 2050.
- 1.2 Welsh Government have funded the development of LAEPs for every local authority in Wales. This follows several local authorities being pilot locations, plus Pembrokeshire which produced a LAEP in 2022 as a condition of funding for the Milford Haven: Energy Kingdom project.
- 1.3 These locally developed plans will feed into the regional and national energy strategies.
- 1.4 Welsh Government have split councils into 4 regions, to work together while producing their own plans. Swansea is part of the South West

Wales region, along with Neath Port Talbot, Carmarthenshire and Pembrokeshire.

1.5 Welsh Government have appointed a specialist company to work with each region, and the individual councils, to produce their LAEPs. City Science have been appointed to work with the South West Wales region

1.6 These LAEPs are non-statutory documents, owned by the individual Local Authorities but with the responsibility for delivery shared across a broad range of stakeholders at a local, regional and national level.

## **2 Overview of Swansea's Local Area Energy Plan**

2.1 Swansea's Local Area Energy Plan (LAEP) presents a comprehensive vision for Swansea's future energy system, delineating the essential characteristics it will need to achieve a net zero energy system by 2050.

2.2 It is supplemented by a Technical Annex which provides greater detail regarding how the plan has been developed.

2.3 The objectives of the plan include:

- Promote cost-effective solutions for energy generation, distribution, and consumption whilst reducing carbon emissions.
- Enhance the efficiency, security and resilience of the local energy system via sector-based interventions.
- Enable the planning of energy infrastructure that aligns with the current and future needs of the community.
- Stimulate economic development and job creation through the growth of local clean/green energy industries.
- Address equity and social inclusion in the energy system to maximise well-being and other wider community benefits.

2.4 A comprehensive stakeholder engagement programme was embedded throughout each stage of the LAEP development. Local and regional sessions were held including interviews, technical validation meetings, workshops and focus groups to ensure the final outputs reflect the needs and ambition of local stakeholders.

2.5 The current energy system was analysed across sectors to understand emissions trajectories, key challenges and opportunities and to serve as a benchmark against which progress can be measured. The base year was chosen as 2019, as the latest available data unaffected by COVID-19.

2.6 The potential 2050 energy system was modelled under a variety of technology and policy scenarios to understand the capacities of technologies required to reach net zero.

- 2.7 Two main narratives were tested and compared:
- **Widespread Engagement**, which is based around behaviour change and incorporates a widespread uptake of heat pumps, an increase in public transport and high electric vehicle (EV) adoption across all vehicles.
  - **Widespread Hydrogen**, where change is driven from a top-down, system-wide approach with hydrogen infrastructure as a key driver for heating; hydrogen is the main fuel for industry and a key fuel for heavy vehicles; private transport is electrified and use of public transport increases.
- 2.8 ‘Do Nothing’ scenario was also used as a counterfactual, which assumes that nationally and locally, no further policies or action is taken.
- 2.9 Analysis was carried out across multiple factors to determine a preferred pathway which balances the need to deliver carbon reductions with economic opportunity and improved quality of life for local people.
- 2.10 Overall, **Widespread Engagement** was selected by stakeholders as the preferred scenario. This is due to the cost savings, lower impact on consumer bills and generally lower risk associated with the electrification of heat versus widespread dependency on hydrogen.
- 2.11 Both net zero scenarios, however, offered significant carbon emissions savings compared to the “Do Nothing” scenario.

### **3 The Action Plan**

- 3.1 The Action Plan provides the detail of 15 priority actions to achieve the milestone targets set out in the Net Zero Pathway, and support Swansea’s journey to a net zero energy system.
- 3.2 It acts as a catalyst for future initiatives, with an intention to inform upcoming projects, policies, and strategies.
- 3.3 It provides clear, but intentionally flexible direction, channelling the broader decarbonisation focus into a set of collective actions.
- 3.4 It is important to note that the selection of priority actions does not preclude support for initiatives beyond this list or those featured in other Councils’ plans.
- 3.5 The actions are categorised and outlined below:

#### **CROSSCUTTING ENABLING ACTIONS**

- 1:** Establish a Regional LAEP Steering Group;
- 2:** Support a Long-Term Green Skills Programme;
- 3:** Embed LAEP Learnings into Wider Council Processes &

Communications.

### **BUILDING EFFICIENCY, RETROFIT & HEAT ACTIONS**

- 4:** Retrofit & Heat Bulk Purchasing Scheme for Social Housing;
- 5:** Development of a Retrofit and Low Carbon Heating Local Supply Chain;
- 6:** Develop a Retrofit & Low Carbon Heating One Stop Shop;
- 7:** Support the Re:fit Programme to Decarbonise Public Buildings.

### **TRANSPORT ACTIONS**

- 8:** Enhance Active Travel & Public Transport;
- 9:** Facilitate Low & Zero Carbon Vehicle Public Fleet Uptake;
- 10:** Improve the Accessibility of EV Charging Infrastructure.

### **GENERATION & NETWORKS ACTIONS**

- 11:** Continue Collaboration with Electricity & Gas Network Operators;
- 12:** Address Future Needs of Hydrogen-Fuelled Vehicles;
- 13:** Facilitate Renewable & Low Carbon Energy Schemes.

### **INDUSTRY ACTIONS**

- 14:** Establish an Industry Engagement Forum;
- 15:** Support the Green Industries Investment Zone.

## **4 Next Steps**

4.1 To mobilise the actions, the following key next steps have been identified:

- **Regional Review:** A collaborative and thorough assessment of all four LAEPs in the region, leading to the identification of actions to be collectively advanced through a regional approach.
- **Prioritisation:** Mobilise the establishment of a Regional LAEP Steering Group who will assess and develop a phased delivery plan to optimise impact and foster a holistic approach.
- **Collaboration:** The Regional LAEP Steering Group may take ownership of certain actions, however, not all actions will fall under its purview. Instead, it will delegate ownership to appropriate parties, via engagement with key stakeholders.
- **Funding & Resource:** Once ownership has been identified, the next step is to assess the funding and resource required and develop a plan for each action.

## **5 Implementation**

5.1 As previously stated, many of the actions are dependent on decision making processes outside of our control. It is therefore vital that the governance arrangements for the plan and its actions remain robust.

- 5.2 To facilitate this, the South West region has received Welsh Government funding to employ a Project Manager and two Project Officers to oversee the initial implementation of the individual LAEPs and their integration into the Regional Energy Strategy.
- 5.3 These officers will be employed by Carmarthenshire Council but will work with across the region, until November 2025.
- 5.4 Each action will have its own governance arrangements and the overarching governance arrangements for implementing the LAEP will be outlined within the final plan. Governance will cascade down from the South West Wales CJC.

## **6 Integrated Assessment Implications**

- 6.1 The Council is subject to the Equality Act (Public Sector Equality Duty and the socio-economic duty), the Well-being of Future Generations (Wales) Act 2015 and the Welsh Language (Wales) Measure 2011, and must in the exercise of their functions, have due regard to the need to:
- Eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Acts.
  - Advance equality of opportunity between people who share a protected characteristic and those who do not.
  - Foster good relations between people who share a protected characteristic and those who do not.
  - Deliver better outcomes for those people who experience socio-economic disadvantage
  - Consider opportunities for people to use the Welsh language
  - Treat the Welsh language no less favourably than English.
  - Ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs.
- 6.2 The Well-being of Future Generations (Wales) Act 2015 mandates that public bodies in Wales must carry out sustainable development. Sustainable development means the process of improving the economic, social, environmental and cultural well-being of Wales by taking action, in accordance with the sustainable development principle, aimed at achieving the 'well-being goals'.
- 6.3 Our Integrated Impact Assessment (IIA) process ensures we have paid due regard to the above. It also takes into account other key issues and priorities, such as poverty and social exclusion, community cohesion, carers, the United Nations Convention on the Rights of the Child (UNCRC) and Welsh language.
- 6.4 This report does not require an IIA as it does not make any commitment to specific actions but is for information only.

## **7 Financial Implications**

- 7.1 There are no direct financial implications associated with this report. However, it is clear that to reach both the 2030 and 2050 targets, significant investment is required and any such decisions would be subject to separate cabinet reports at the time fully outlining the financial implications with the council continuing to lobby both Welsh and UK Governments to provide appropriate funding.

## **8 Legal Implications**

- 8.1 There are no legal implications associated with this report.

**Background Papers:** None

### **Appendices:**

Please follow the link [www.swansea.gov.uk/laep](http://www.swansea.gov.uk/laep) to view the following

Appendix A Swansea's Local Area Energy Plan

Appendix B Technical Annex