Cyd-bwyllgor Corfforedig De-Ddwyrain Cymru | South East Wales Corporate Joint Committee

Report for:	NOTING
Contains Confidential or Exempt Information	NO

For Consideration By	South East Wales Corporate Joint Committee
Report Title	Local Area Energy Plan (LAEP) Annual Report (2025-26) for the region
Report of	Colan Mehaffey, Strategic Director of Policy, Impact and Partnerships
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Date to be Considered	12th October 2026
Implementation Date	Immediate
Affected Council Areas	All
Keywords / Index	Local Area Energy Plans; Annual Reports; 2025-26

1. Recommendations

1.1 The Corporate Joint Committee is asked to:

(1) Note the contents of the Annual Report paying particular attention to:

(a) Progress against key milestones.

(b) Progress against regional actions.

2. Background

2.1. In 2022, Welsh Government committed to roll out Local Area Energy Plans in every local authority area in Wales. With Welsh Government funding, the CJC agreed to coordinate that process across the region.

2.2. Successful LAEP pilots had already taken place in Bridgend, Newport, Conwy & Pembrokeshire so the CJC agreed to lead on the roll out of LAEPs to the remaining eight local authorities in the region: Blaenau Gwent, Caerphilly, Cardiff, Merthyr Tydfil, Monmouthshire, Rhondda Cynon Taf, Torfaen, Vale of Glamorgan.

2.3. The CJC collaborated with the eight local authorities, technical partners Arup, Carbon Trust & Afallen and wider stakeholders to develop each LAEP. The development process followed standardised guidance defined by Energy Systems Catapult.

A Local Area Energy Plan:

a. collates evidence and works with stakeholders across a local authority area to identify the most effective route to reach a net zero energy system.
b. looks at the whole energy system across the Domestic, Industrial, Commercial, Agricultural and Public Sector.
c. is a data-driven and whole energy system, evidence-based approach that aims to identify the most effective route for the local area to contribute towards meeting local and national net zero targets.
d. It explores a range of different future local energy scenarios with stakeholders across technologies and infrastructure to achieve deep decarbonisation at least cost, setting out a plan for implementation.

Each LAEP:

a. outlines a compelling vision for what a net-zero carbon energy system could look like in 2050.
b. assesses what is needed, how much is needed and by when it must happen.
c. sets out clear actions for the local authority, utilities, key stakeholders, CCR and the Welsh Government to ensure alignment at both local and regional levels.
d. is accompanied by a Technical Report which contains the graphs, charts, maps and supporting data for the results published in the Local Area Energy Plan. It also provides more detail about the approach to modelling and scenario analysis that we took. These reports are available upon request.

2.4. As mentioned above each LAEP sets out clear actions for the local authority, utilities, key stakeholders, CCR and the Welsh Government to ensure alignment at both local and regional levels.

The regional level actions are led by the CJC and are consistent across the eight LAEPs.

2.5. It is important to note that the LAEPs are wholly Welsh Government funded on an annual basis (up to £200k) and that there is no core funding for either the ongoing management of regional energy planning or projects. In the case that the WG funding is not renewed, activities are at risk.

3. LEAP Annual Reports 2025-2026

3.1 Annual Reports Purpose

An annual progress report has been produced for each local area and at a regional level. The local annual report can be reported through the local political process, and the regional report will be presented to CJC in October 2026. The CJC leads and co-ordinates the development of the local and regional reports with the support of each local authority and wider stakeholders.

The local annual reports include:

a. Reduction in carbon emissions for the local authority area.
b. Progress against key milestones contained in the LAEP. e.g. wind, ground solar, rooftop solar, EV chargers, heat pumps, retrofits etc.
c. Progress and review of all actions, local and regional.

The Regional Annual Report (APPENDIX 1) includes:

a. Reduction in carbon emissions for the region.
b. Progress against key milestones across the region. e.g. wind, ground solar, rooftop solar, EV chargers, heat pumps, retrofits etc.
c. Progress and review of the regional actions.

**Bridgend will not be involved in this process for 2025-2026 due to the Bridgend LAEP being written in a different format. The Bridgend LAEP is currently under review to bring in line with other LAEPs in the region. Once this process is complete Bridgend will be added to the process.*

4. Main Findings

The main points to highlight in the annual report are:

4.1 Green House Gas Emissions

- Total greenhouse gas emissions for the region have decreased by 50% between 2005 and 2024.
- For each sector, however, the rates of reduction varied significantly.
- The largest percentage decrease was for the waste sector, which reduced by 76% between 2005 and 2024.
- The transport sector emissions reduced at a slower rate, reducing by 16% between 2005 and 2024.

4.2 2030 & 2050 Aggregated LAEP Milestones

Solar Generation

- Between 2022 and 2025, the region's total solar generation increased by 157%.
- To meet the aggregated regional LAEP milestones
  - of 2,980 MW by 2030, total solar generation in the region needs to increase by 833% between 2025 and 2030.
  - and 8,802 MW by 2050 will require an increase of 2,655% between 2025 and 2050.

Wind Generation

- Between 2022 and 2025, the region's total wind generation increased by 223%.
- To meet the aggregated regional LAEP milestones:
  - of 212 MW by 2030, total wind generation in the region will need to increase by 56% between 2025 to 2030.
  - and 615 MW by 2050 an increase of 349% between 2025 and 2050 would be required.

EV Charge Points

- Between 2023 and 2025 the region's EV charge points increased by 96%.
- The region has surpassed the aggregated regional LAEP milestone for 2030.
- To meet the aggregated regional LAEP milestone for 2050 a further increase of 350% is required.

Building Retrofit

- We are currently unable to make a direct comparison between the LAEP Milestones and the EPC rating households but will work on this for future reports.
- Of those building that have an energy performance certificate in the region:
  - 44.4% have a rating of A-C (323,877 buildings).
  - 55.6% have a rating of D-G (404,682 buildings).
- The aggregated regional LAEP milestones are:
  - by 2030 for 136,550 homes retrofitted and by 2050, 331,050 homes retrofitted.

Heat Pumps

- We are also unable to make a direct comparison between the LAEP Milestones and heat pump data available currently but will work on this for future reports.
- In 2025, the region had:
  - 26,180 m^2 of non-domestic heated floorspace. This is a 3% increase from 2024.
  - And 3,822 domestic heat pumps installed. This is a 24% increase from 2024
- Aggregated Regional LAEP Milestones:
  - 74,150 buildings with heat pumps installed by 2030 and 463,150 buildings with heat pumps installed by 2050.

4.3 Regional Actions

- 87.2% of regional actions are on track.
- 12.8% are behind schedule but are being progressed or planned to be progressed in the future.

5. **Regional LAEP Project Updates**

5.1. Switch Together

Switch Together is a group purchasing scheme for solar PV, battery storage and EV charger installations. The scheme targets owner-occupier households that are able to invest in low-carbon technologies, using local authority-branded communications and social media campaigns to increase awareness and participation. Its aim is to provide residents with access to reliable, high-quality and more affordable installations. The scheme achieves this through a reverse auction model, whereby installers must meet a range of quality standards in order to participate. These requirements include holding MCS (Microgeneration Certification Scheme) accreditation and maintaining appropriate insurance cover. By creating competition between pre-qualified installers, the scheme helps secure competitive pricing while maintaining quality and consumer protection.

The 2025 Solar Together scheme saw great success with a high level of take-up:

- Total installations across the region:
  - Solar PV – 470
  - Batteries – 438
  - EV Charging Points - 84
- 3 SME's installs
- Scheme delivered £3,927,736 of private resident investment in renewable technology
- Estimated 368,662 kg of annual carbon reduction
- All installers achieved 90% or higher customer satisfaction rate

The second year of the Switch Together scheme is underway and we're currently in the installation phase. We can provide figures on the 2026 scheme once the year is complete. Plans are currently being made to continue the scheme into a third year.

We are also investigating a similar scheme but instead for the installation of heat pumps, this scheme would run separately to the Solar PV scheme and will be dependent on whether we can source funding for the scheme.

5.2 Business Park Decarbonisation

The CJC commissioned Severn Wye Energy Agency to undertake a narrowing down of potential opportunities for pilot sites followed by feasibility studies of smart local energy system (SLES) implementation in business parks across the region. A SLES involves combining different energy assets and retrofit options to help improve energy

efficiency. The local authorities initially highlighted 47 sites and after a desktop feasibility study, this was narrowed down to three sites to take forward to feasibility:

- Castlegate Business Park – Monmouthshire
- Robertstown Industrial Units – Rhondda Cynon Taf
- Lamby Way Workshops – Cardiff

Severn Wye have now created an energy assessment for each site, highlighting the SLES opportunities and potential cost savings of the work. These studies can be used to apply for further funding.

5.3 Mine Water Heat Feasibility

The CJC commissioned the Mining Remediation Authority (MRA) to undertake a mine water heat shortlisting exercise looking at mine water heat opportunities across the region. The study utilised existing mine water heat opportunity maps completed by the MRA and layers from local authority Local Development Plans to highlight any opportunities to include mine water heat in new developments.

The MRA highlighted a large range of sites through the mapping exercise that had 'good' opportunities for mine water heat. This was then narrowed down to ten shortlisted sites across four local authorities:

- Blaenau Gwent
- Caerphilly
- Merthyr Tydfil
- Rhondda Cynon Taf

The CJC is now in conversation with the MRA and local authorities about the potential to take forward shortlisted sites to feasibility.

5.4 Heat Network Feasibility

Within the LAEPs, a large number of opportunities have been identified where heat networks could be utilised. The CJC has recently commissioned AECOM Limited to conduct a shortlisting and feasibility exercise to look at which heat network opportunities are still viable and could be taken forward to further work. AECOM will consider each opportunity before narrowing down to three sites to take forward to high-level feasibility.

This feasibility work will consider the following:

- Waste heat viability as an energy source
- Potential energy demand
- Flexibility of off takers and anchor organisations
- Potential for network route

This work began on the 15th September and is due to be completed in December 2026.

5.5 Renewable Energy Generation Skills and Supply Chain Study

Following on from the success of the Building Retrofit Skills and Supply Chain Study, the CJC are currently looking at how we can take forward the actions from the report. This includes setting up a partnership tasked with overseeing the progress.

The CJC and the Regional Skills Partnership have also commissioned Wavehill to conduct a similar study looking at Renewable Energy Generation. Through a combination of desk-based research, stakeholder consultations and secondary data analysis, the study aims to:

a. examine the current scale of renewable energy generation
b. and the level of activity required to achieve the ambitions outlined in Local Area Energy Plans (LAEPs).

This work is now underway with stakeholder scoping currently being undertaken by Wavehill. The project is due to conclude in January 2026.

5.6 CJC Regional Energy Investment Prospectus

The CJC are in the early stages of developing a Regional Energy Investment Prospectus to showcase investable energy projects across the region. The aim of this prospectus will be to help accelerate and raise the profile of our existing energy project feasibility studies and potential sites to attract investment. We've engaged with our internal investment manager and have also reached out to the local authorities for sites for consideration.

5.7 Warmer Homes, Healthier Communities

We are in the early stages of discussion with Severn Wye, Torfaen CBC and Blaenau Gwent CBC to take forward two projects in a fully funded scheme. The work focuses on energy advice, debt support and retrofit of streets or a village with every house involved brought to an EPC band C or above.

This will link into another element of the work which is being conducted in partnership with Aneurin Bevan University Health Board on the programme 'Warm and Well Gwent'. This is a two-year programme which focuses on children and young people with respiratory conditions and helps provide energy advice and support.

5.8 Nesta Clean Heat Planning Tool

Nesta, are a UK's innovation agency for social good, who test and scale new solutions to society's biggest problems. As an organisation, their goal is to reduce UK household emissions by 30% by 2030 and therefore to support this goal they are in the early stages of piloting a Clean Heat Planning tool. This tool's primary goal is to identify the

most suitable heating technologies for clusters of similar properties, using neighbourhood and property level data. This work is currently being piloted in the Vale of Glamorgan and the CJC are working with Nesta to roll out the work across the region once the outcome of the pilot project has been identified.

5.9 Net Zero Terrace Streets

The CJC are looking at the opportunity to investigate a Net Zero Terrace Streets project in the region. This is a community led initiative to decarbonise entire streets of terraced housing into warm, low carbon and affordable homes while reducing energy bills. The goal of the work is to consider whole-building retrofit and communal heat pump opportunities for terraced streets which aren't designed for individual heat pump opportunities. The CJC are currently investigating funding opportunities to take this work forward.

5.10 Energy Transition Lab

We are working with North Star Transition and the University College London on developing a funding application bid to the Nuffield Foundation Main Grants (Research, Development and Analysis Fund). The study will examine how officers and communities can co-create energy interventions that align with the LAEPs. The project combines an action-research environment with qualitative inquiry to isolate institutional barriers, evaluate community agency, and assess financing mechanisms.

6. Reasons for Report

6.1 To update on the development of the second Local Area Energy Plan (LAEPs) Annual Report for the region for the period of 2024-25.

6.2 To highlight key progress and developments made in local area energy planning and carbon reduction.

6.3 To ensure transparency and consistency of annual reporting for local area energy progress planning at a local and regional level.

7. Comments of the Director of Resources and Section 151 Officer

7.1 It is important to emphasise, as set out in the report, that while funding is received for us to be able to develop this LAEP, there is no funding for ongoing management of regional energy planning or energy related projects.

8. Comments of the Director of Legal & Governance and Monitoring Officer

8.1 This report sets out the work that has been carried out to implement a particular funding stream and is an important assurance mechanism for members.

9. Equality, Diversity and Inclusion

9.1 The Corporate Joint Committee is subject to the Public Sector Equality Duty and the Socio Economic Duty as defined by the Equality Act 2010.

9.2 The Committee must, in the exercise of its functions, have due regard to the need to: (1) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited under the Act; (2) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not; and (3) foster good relations between persons who share a relevant protected characteristic and persons who do not.

9.3 The characteristics protected under the Act are:

- age;
- disability;
- gender reassignment;
- marriage and civil partnership;
- pregnancy and maternity;
- race;
- religion or belief;
- sex; and
- sexual orientation.

9.4 Having due regard to the need to advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to:

(a) remove or minimise disadvantages suffered by persons who share a relevant protected characteristic that are connected to that characteristic;

(b) take steps to meet the needs of persons who share a relevant protected characteristic that are different from the needs of persons who do not share it;

(c) encourage persons who share a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low.

9.5 The socio-economic duty requires public bodies to, when making decisions of a strategic nature about how to exercise its functions, have due regard to the desirability of exercising them in a way that is designed to reduce the inequalities of outcome which result from socio-economic disadvantage.

9.6 There are no specific equalities implications arising from this report.

10. **Well-being of Future Generations**

10.1 The Well-being of Future Generations (Wales) Act 2015 places a duty on public bodies to carry out sustainable development, meaning the process of improving the social, economic, environmental and cultural well-being of Wales by taking action aimed at achieving the well-being goals of:

- A prosperous Wales
- A resilient Wales
- A healthier Wales
- A more equal Wales
- A Wales of cohesive communities
- A Wales of vibrant culture and thriving Welsh language
- A globally responsible Wales

and by acting in a way which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs.

10.2 In order to act in accordance with the sustainable development principle, when exercising its functions, the Committee must take account of the following things:

- the importance of balancing short term needs with the need to safeguard the ability to meet long term needs;
- the need to take an integrated approach to achieving the well-being goals;
- the importance of involving others with an interest in achieving the well-being goals and of ensuring those persons reflect the diversity of the population of the region;
- how acting in collaboration with others could assist to meet the region's well-being objectives;
- how deploying resources to prevent problems occurring or getting worse may contribute to meeting the region's well-being objectives.

10.3 In developing the Recommendations of this report, regard has been had to the well-being duty arising under the Well-Being of Future Generations (Wales) Act 2015 ('the Act').

11. **Welsh Language Implications**

11.1 In accordance with the Welsh Language Standards (No.1) Regulations 2015, consideration has been given to the impact the recommendations made in this report may have on opportunities for people to use and promote the Welsh Language, whether the proposals treat the Welsh Language more or less favourably than the English Language, and opportunities for increasing the positive effects, or decreasing the negative effects, of the proposals on the Welsh Language.

11.2 No negative impacts were identified which would prevent approval being sought to implement the recommendations of this report.

12 **Risk Management**

12.1 There are no operational risks associated with noting the LAEP Annual Report for the region (2025-26). This is an updated position as that was approved by regional cabinet in 2021.

12.2 Any individual energy projects, interventions and studies taken forward due to the LAEPS will be monitored from a risk management perspective.

13 Links to CJC Priorities

13.1 This report relates to the following outcome(s) set out in the CJC's Regional Economic and Industrial Plan for 2023- 2028:

- CONNECTED - Invest in cutting-edge digital and physical infrastructure and grow the green economy through investing in and promoting companies, technologies and community initiatives that are embracing the de-carbonisation agenda.

14 **Staffing/Workforce Implications**

14.1 None

15 **Any Other Implications**

15.1 None

16 **Consultation**

16.1 Consultation with a wide range of stakeholders was undertaken during the LAEP development process.

17 Timetable for Implementation

17.1 N/A

18 Appendices

18.1 Appendix 1: LAEP Regional Annual Report 2025-26

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Date of Meeting: 12 October 2026

Cardiff Capital Region

Local Area Energy Plan (LAEP) Annual Report

Produced by Cardiff Capital Region

August 2026

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Local Area Energy Plan (LAEP) Overview

A Local Area Energy Plan (LAEP) presents a vision and route map for a net zero local energy system in an area by 2050 by detailing the required changes for the transition. The result is an indicative costed spatial plan that identifies what changes are required, where, when and by whom.

LAEPs are data-driven, evidence-based and utilise a range of technologies and scenarios through whole energy system modelling and analysis to identify the most cost-effective pathway to net zero. The process follows standardised guidance defined by Energy Systems Catapult (ESC).

LAEPs aim to identify core areas that require focus over the next 25 years and propose future sector-specific action plans that set out how each part of the area will be designed and built using a whole energy system approach that is led by local government and developed collaboratively with defined stakeholders. Additional detailed design work will be required for identified specific actions, projects and programmes to progress to implementation.

With the success of local area energy planning pilots in Newport and Bridgend, Welsh Government commissioned Arup, Afallan and Carbon Trust, with support from Cardiff Capital Region (CCR), to develop LAEPs for the remaining 8 Local Authority (LA) areas in the region. All ten Local Authority areas in CCR now have completed LAEPs.

The LAEP process develops three documents:

- Local Area Energy Plans contain the overarching plan, focusing on the area-wide local energy plan and actions.
- Technical Reports contain the graphs, charts, maps and supporting data for the results published in the Local Area Energy Plan. It also provides more detail about the approach to modelling and scenario analysis that was undertaken.
- The Renewable Investment Prospectus highlights short-term, regional and local renewable energy opportunities that have the greatest potential for delivery across the CCR. This is developed at a regional level.

Achieving the transformation that is needed for the energy system to reach net zero will require a collaborative approach. CCR and the Local Authorities have taken facilitating roles in developing the LAEP's, but there has also been an input from a range of stakeholders, including the networks National Grid (NG) and Wales and West Utilities (WWU).

A number of local (Local Authority), regional (CCR), network (NG and WWU) and national (Welsh Government) actions have been identified through the action plans produced in the LAEPs. These actions are subject to annual progress reporting and the updates provided on national, regional and local actions will inform an Annual Report for each local area as well as a regional Annual Report for Cardiff Capital Region. Progress updates will be provided by the relevant officers from the Networks,

Local Authorities and CCR, and CCR will collate the progress updates and produce the Annual Reports.

2025-2026 is the second reporting year for the LAEP Actions, and this is the second regional Annual Report produced for Cardiff Capital Region, reporting on the progress of the region towards meeting the regional and network actions set out in the LAEPs.

Profile – Cardiff Capital Region

Geography:

- The South East Wales Corporate Joint Committee (SEWCJC), known as Cardiff Capital Region (CCR), is a regional public body covering the ten Local Authorities of South East Wales.

Population:

- In 2025, the region had an estimated population of approximately 1,564,900, down from 1,570,694 in 2024, a -0.3% change (ONS, 2026).
- The region has a population density of 558.3 residents per km2 (Open Geography Portal, 2025; ONS, 2025).
- The region's population is projected to increase to 1,579,374 by 2047 (StatsWales, 2021). If accurate, this would result in a projected population increase of 0.9% between 2025 and 2047. It is critical to account for this increasing population when assessing future energy supply and demand.

Business:

- In 2025, there were 38,905 enterprises registered in the Cardiff Capital Region
- The largest proportion of enterprises fell into the construction sector, accounting for 6,245 of the registered enterprises
- The smallest sector of registered enterprises in the Cardiff Capital Region was the public administration and defence sector, accounting for only 145 enterprises (ONS 2025)

Housing:

- The 2021 census revealed there were 650,083 households in the region ONS, 2021).
- The number of households in the region are expected to increase to 732,384 by 2043, if accurate this would result in an increase of 12.7% from 2021 to 2043 (StatsWales, 2021). This is critical to account for when assessing future energy supply and demand.

Heating:

According to the 2021 Census:

- 81% of households in the region (529,625) use mains gas only for their central heating, with 8% (53,553) using two or more systems and only a small proportion relying on alternative fuels or renewable energy.
- 0.85% of households (5,503) in the region have no central heating (ONS, 2021).

Travel:

According to the 2021 Census:

- 54% of residents in the region (363,478) drive a car or van to work whilst 28% (185,507) work mainly at or from home. Other modes such as walking, bus, cycling or train each account for only small proportions (ONS, 2021).
- 41.8% of households (272,018) in the region have one car or van, 27.3% (177,380) have two, 9.5% (61,492) have three or more and 21.4% (139,188) own no cars or vans (ONS, 2021).

Data Overview

Greenhouse Gas Emissions:

The Office for National Statistics (ONS) publishes territorial greenhouse gas (GHG) emission estimates by Local Authority geographical area. This is measured in kilotonnes of CO_2 equivalent emissions (kt CO_2e) for total (disaggregated by sector) and per km^2 emissions and in tonnes of CO_2 equivalent emissions (t CO_2e) for per capita emissions. The data can be aggregated for all ten Local Authority areas in CCR to provide regional emission figures.

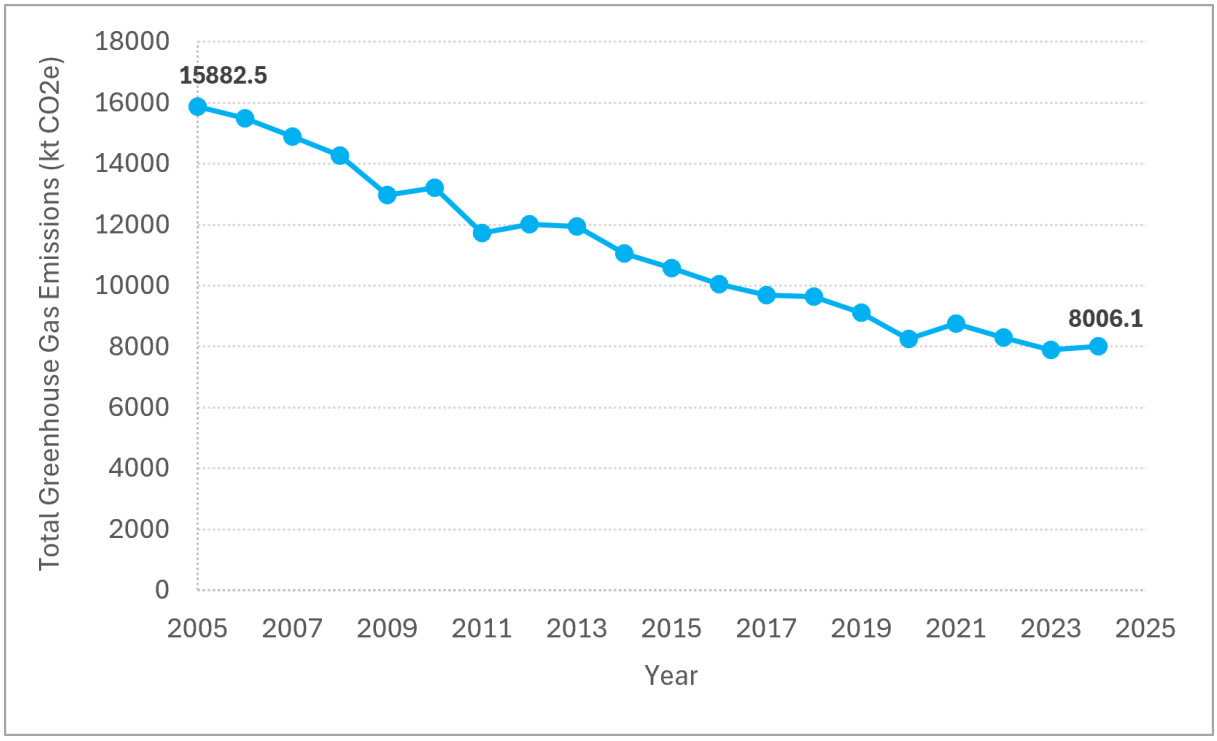

Figure 1. Total Territorial Greenhouse Gas Emissions for the Region (kt CO_2e) 2005-2024.
Source: ONS, 2026.

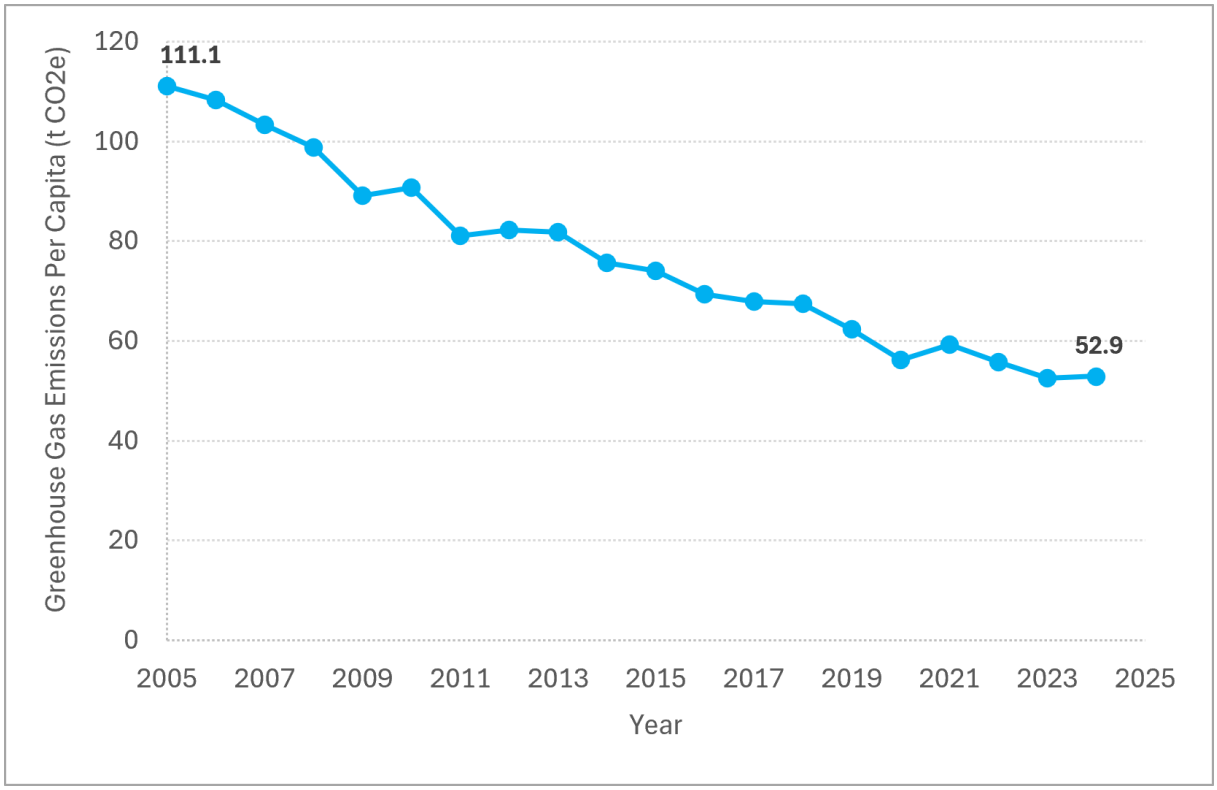

Figure 2. Territorial Greenhouse Gas Emissions Per Capita for the Region (t CO2e) 2005 – 2024.
Source: ONS, 2026.

Note: Calculated by aggregating ONS greenhouse gas emission data for all ten Local Authority areas in the region

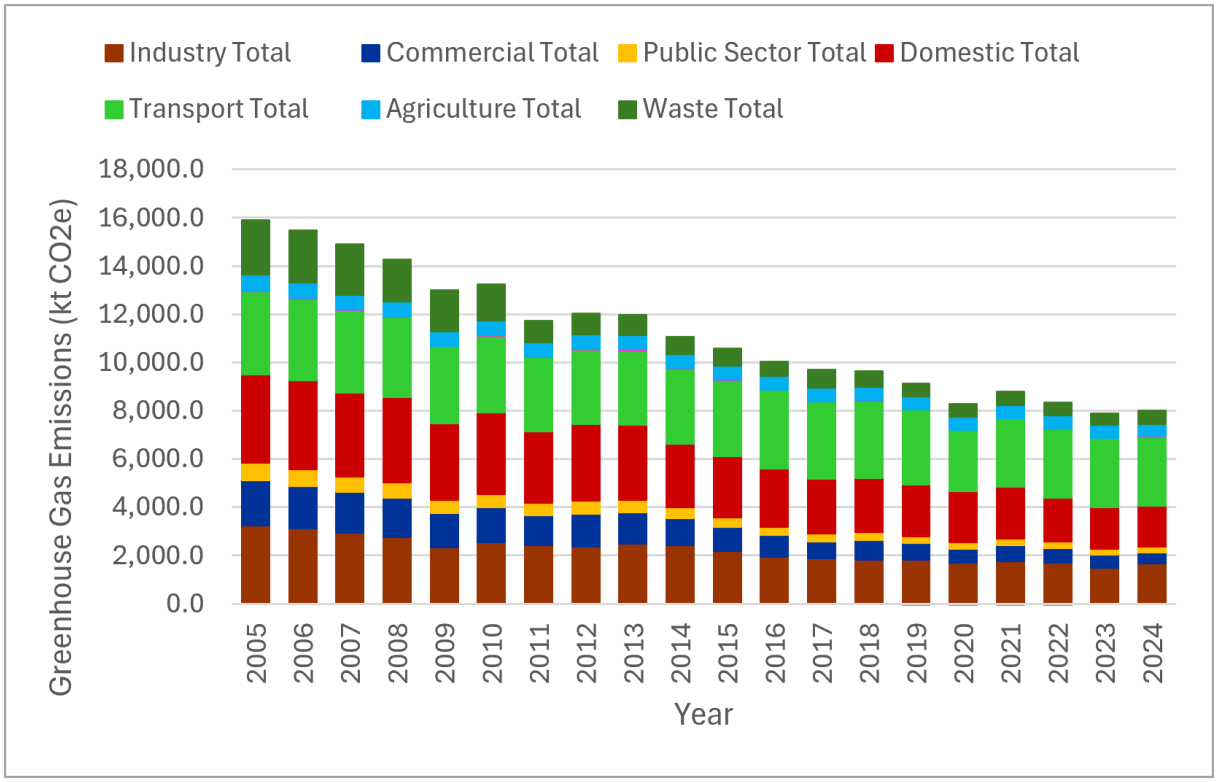

Figure 3. Territorial Greenhouse Gas Emissions by Sector for the Region (kt CO2e) 2005 – 2024.
Source: ONS, 2026.

Note: LULUCF (Land Use, Land Use Change, and Forestry) emissions are excluded from this visual as, for many Local Authority areas, they represent a net removal of emissions in some years and are too small in comparison to the other sectors to be clearly viewable on the chart. In 2024, it contributed 4 kt CO_2e in the region.

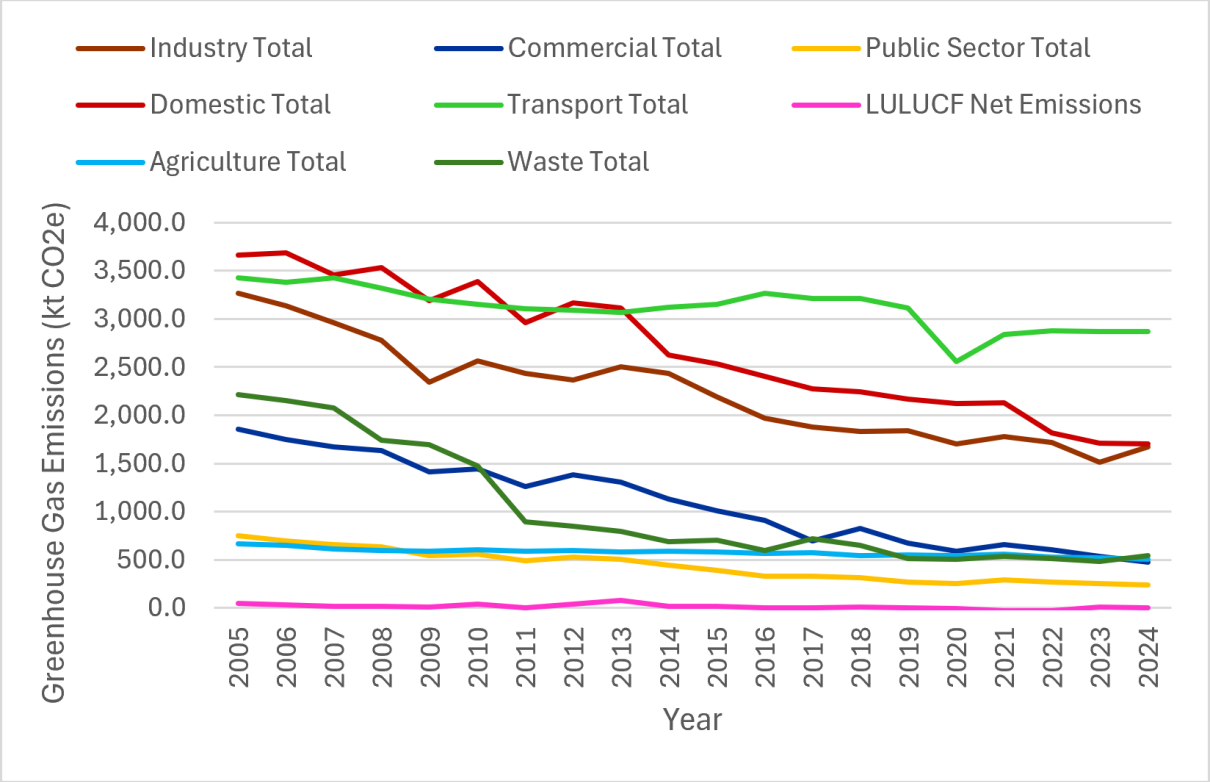

Figure 4. Line Graph of Territorial Greenhouse Gas Emissions by Sector for the Region (kt CO2e) 2005 – 2024.
Source: ONS, 2026.

Greenhouse Gas (GHG) Emission Trends in South East Wales (2005–2024):

Between 2005 and 2024, the region has seen a substantial reduction in greenhouse gas emissions, despite variations in the nature of these reductions for different sectors.

Territorial Emissions Overview:

- Total GHG emissions decreased by 50%, from an estimated 15882.5 kt CO_2e in 2005 to 8006 kt CO_2e in 2024.
- Per capita emissions decreased by 52%, from 11.1 t CO_2e in 2005 to 5.2 t CO_2e in 2024.

Emisisons Trends by Sector:

- GHG emissions reduced for every sector, however, the rates of reduction varied significantly.
- The largest percentage decrease was for the Waste sector, which reduced from 2,213 kt CO_2e in 2005 to 541 kt CO_2e in 2024, an 76% reduction.
- The Commercial sector also experienced a signifcant 75% reduction, from 1,852 kt CO_2e in 2005 to 472 kt CO_2e in 2024.

- Transport sector emissions reduced at a slower rate, reducing from 3430 kt CO_2e in 2005 to 2869 kt CO_2e in 2024, a reduction of 16%.
- The Agriculture sector also experienced a more gradual decline of 24%, reducing from 667 kt CO_2e in 2005 to 507 kt CO_2e in 2024.
- LULUCF emissions changed from 50 kt CO_2e in 2003 to -4.4 in 2024, reflecting how the sector now acts as a net sink, reducing total territorial GHG emissions in the region.

Trends in Proportions of Emissions by Sector:

Note: LULUCF (Land Use, Land Use Change, and Forestry) emissions are excluded from this analysis as, for many Local Authority areas, they represent a net removal of emissions in some years.

- In 2024, the largest contributors to regional GHG emissions were the Transport (36%), Domestic (21%) and Industry (21%) sectors.
- Transport has replaced the Domestic sector as the largest single source of emissions, with the proportion of emisions from the Transport sector rising significantly from 22% in 2005 to 36% in 2024.
- The proportion of emisions coming from Waste decreased significantly from 14% in 2005 to 7% in 2024.

Other proportional changes between 2005 and 2023:

- The Agriculture sector increased from 4% to 6%.
- The Commercial (12% to 6%), Domestic (23% to 21%) and Public (5% to 3%) Sectors all decreased their share of total emissions.
- The Industry sector saw no significant change (remaining at around 21%).

LAEP Milestones:

The LAEPs highlighted a number of technology milestones to head towards by 2030 and 2050. Each LAEP provides a breakdown of the energy components and interventions estimated for achieving a net zero energy system by 2050. These values were derived from an average deployment rate taken across the modelled scenarios. It includes theoretical pathways which have a high degree of uncertainty as there are many variable factors and unknowns. Some of the factors that are not considered in the modelling but still impact deployment are technological advance and innovation, planning, supply chains and how they develop and large-scale activity to decarbonise infrastructure at local, regional and UK level.

This report assesses the regional progress towards the 2030 and 2050 technology milestones set out in each LAEP for the following energy technologies:

- Solar Generation
- Wind Generation
- EV Charge Points
- Retrofit
- Heat Pumps

To conduct a regional analysis and to avoid comparison between Local Authority areas, all of which have differing starting points as well as scales and speeds of projection, all of the figures used in this analysis are an aggregation of data for the ten Local Authority areas in the region. The analysis utilises four main datasets:

- Energy technology data for 2022, 2023 and 2025, sourced from the Distribution Future Energy Scenario (DFES) reports published by the National Grid for each Local Authority area in the region.
- A baseline figure for each energy technology for 2025, sourced from the National Grid Distribution Future Energy Scenarios interactive map.
- Retrofit data on Energy Performance Certificate (EPC) Ratings, sourced from the UK Government Department for Levelling Up, Housing & Communities (DLUHC) which publishes Energy Performance of Buildings Data for England and Wales. The data used in this report utilises the most up to date figures at the time of collection (July, 2026).
- The technology milestones for each Local Authority area, set out in the Local Area Energy Plan (LAEP). These were aggregated to provide the ‘aggregated regional LAEP milestone’ for each technology that is referenced throughout the below analysis.

2025	2030 Milestones	2050 Milestones
401 MW of total solar PV installed capacity	2,980 MW of total solar PV installed capacity	8,802 MW of total solar PV installed capacity
137 MW onshore wind installed capacity	212 MW onshore wind installed capacity	615 MW onshore wind installed capacity
122 MW of EV charge points	87 MW of EV charge points	551 MW of EV charge points
322,877 buildings in the region with an EPC Rating of C and above and 404,682 buildings in the region with an EPC Rating of D and below	136,550 homes retrofitted	331,050 homes retrofitted
26,180 m^2 of non-domestic heated floorspace (heated I&C buildings) and 3,822 domestic heat pumps installed	74,150 buildings with heat pumps installed	463,150 buildings with heat pumps installed

Figure 5. Table of the aggregated regional 2025 figures and LAEP milestones estimated for achieving a net zero energy system for the region by 2030 and 2050 for each energy technology.
Source: The Local Area Energy Plans from across the region, National Grid, 2026 and DLUHC, 2025.

Note: The Local Authority area of Bridgend's LAEP was refreshed in 2021 and is currently under review to bring in line with the other LAEPs in the region. Bridgend could therefore not be included in the aggregated analysis of the region.

Note: The Local Authority area of Newport's LAEP has targets and milestones that do not align with those used for other Local Authority areas in the region. Newport could therefore not be included in the aggregated analysis of the region.

Note: The Caerphilly, Vale of Glamorgan and Blaenau Gwent LAEPs include ranges rather than specific figures for some technology milestones. The midpoints of these ranges were used to aggregate a regional total for each technology milestone.

Solar Generation:

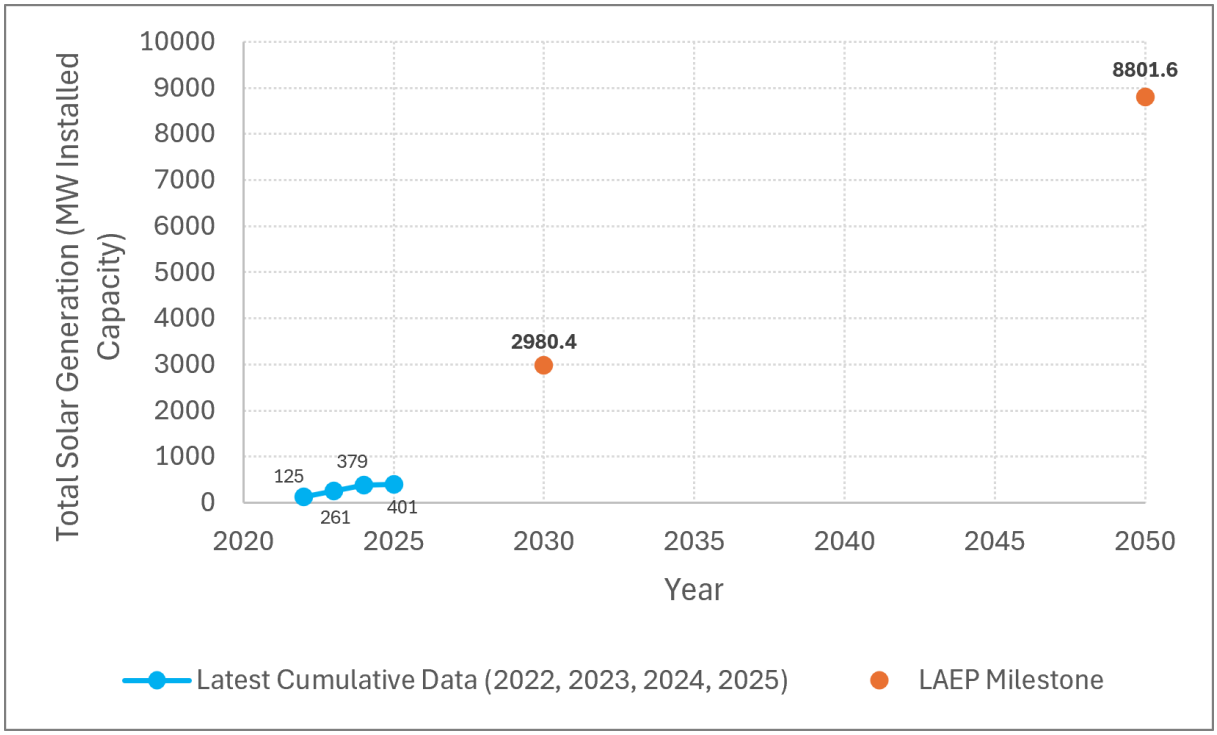

Figure 6. Regional Progress Toward Aggregated Regional LAEP Milestone for Solar PV (MW Installed Capacity).
This chart shows the region's solar generation capacity for 2022-2025, alongside the aggregated regional LAEP milestone for 2030 and 2050 for solar PV (an aggregation of rooftop solar PV and ground solar PV). The chart illustrates the scale of transformation required to meet energy ambitions.
Sources: National Grid, 2022; National Grid, 2023; National Grid, 2025; National Grid 2026; Local Area Energy Plans across the region.

To Note:

- This includes approximately:
  - 25,875 domestic rooftops
  - 12,150 commercial rooftops

<u>South East Wales Solar Generation Progress:</u>

- Between 2022 (125 MW) and 2025 (379 MW), the region's total solar generation increased by 157%.
- Between 2024 (379 MW) and 2025 (319.5 MW), the decrease was 16%.
- To meet the aggregated regional LAEP milestone of 2,980 MW by 2030, total solar generation in the region needs to increase by 833% between 2025 to 2030.
- Achieving the aggregated regional LAEP milestone for 2050 (8,802 MW) would require an increase of 2,655% between 2025 and 2050.

Note: The visualisation of this data is intended to demonstrate regional progress towards the LAEP milestones for Solar Generation whilst avoiding comparisons between Local Authority areas. Projection lines were not included due to the differing scales and speeds of projections for each Local Authority area, comparing the latest data to the LAEP milestones was therefore the most effective way to visualise progress.

Note: For some Local Authority areas, LAEP milestones for rooftop solar PV are in number of buildings with rooftop solar PV rather than megawatts (MW). This report used the assumption of kilowatt peak (kWp) per rooftop provided within the LAEP or LAEP Technical Report of each Local Authority area to convert the 2030 and 2050 milestones to megawatts. This analysis aggregated these rooftop solar PV (MW) milestones with the ground-mounted solar PV (MW) milestones to provide a Total Solar Generation milestone (MW) for 2030 and 2050. This allowed for a comparison of the milestones with the latest National Grid data on solar generation (which is reported as a total solar generation figure in megawatts), allowing an analysis and visualisation of progress towards the milestones.

Wind:

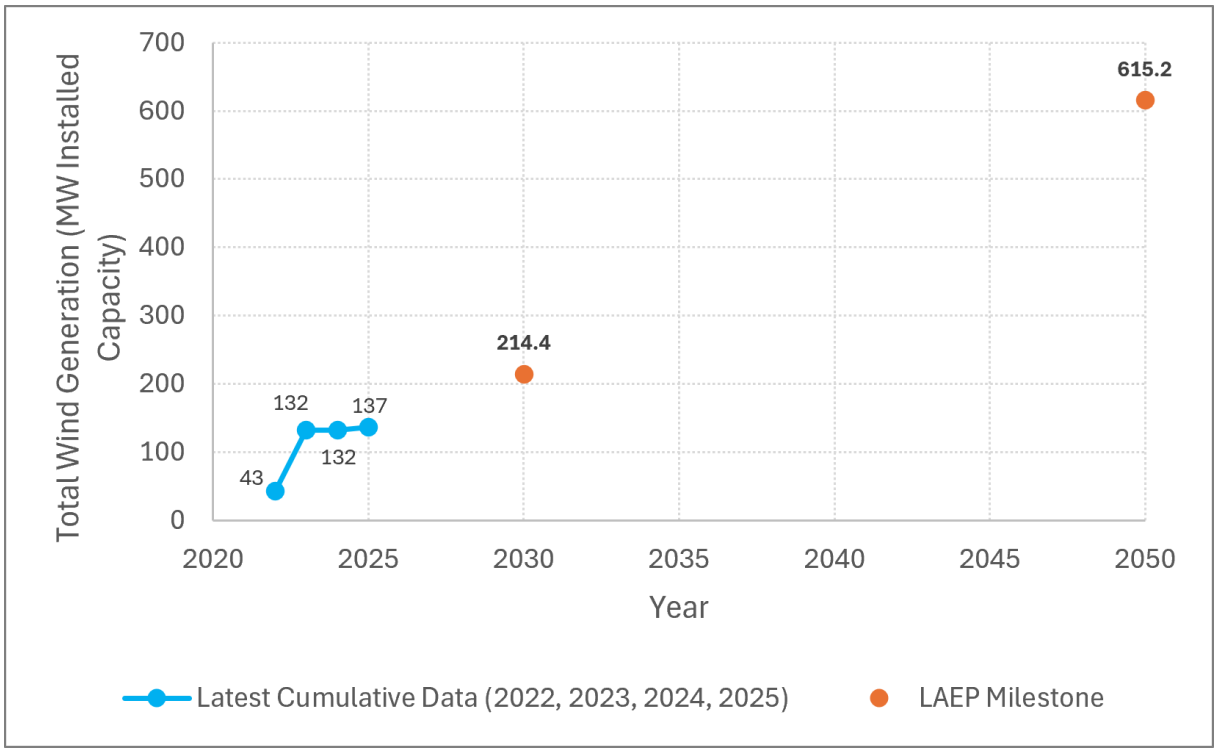

Figure 7. Regional Progress Toward Aggregated Regional LAEP Milestone for Wind Generation (MW Installed Capacity).

This chart shows the region's wind generation capacity for 2022-2025, alongside the aggregated regional LAEP milestone for 2030 and 2050 for wind generation. The chart illustrates the scale of transformation required to meet energy ambitions. *Sources: National Grid, 2022; National Grid, 2023; National Grid, 2025; National Grid, 2026; Local Area Energy Plan*

s across the region.

South East Wales Wind Generation Progress:

- Between 2022 (43 MW) and 2025 (137.1 MW), the region's total wind generation increased by 223%.
- Between 2024 (132.4 MW) and 2025 (137.1 MW), the increase was 4%.
- To meet the aggregated regional LAEP milestone of 212 MW by 2030, total wind generation in the region will need to increase by 56% between 2025 to 2030.
- Achieving the aggregated regional LAEP milestone for 2050 (615 MW) would require an increase of 349% between 2025 and 2050.

Note: The visualisation of this data is intended to demonstrate regional progress towards the LAEP milestones for Wind Generation whilst avoiding comparisons between Local Authority areas. Projection lines were not included due to the differing scales and speeds of projections for each Local Authority area, comparing the latest data to the LAEP milestones was therefore the most effective way to visualise progress.

Note: The Milestone for Blaenau Gwent's LAEP refers to 'Other renewable capacity' rather than 'wind' but has been included in this regional analysis.

Electric Vehicles:

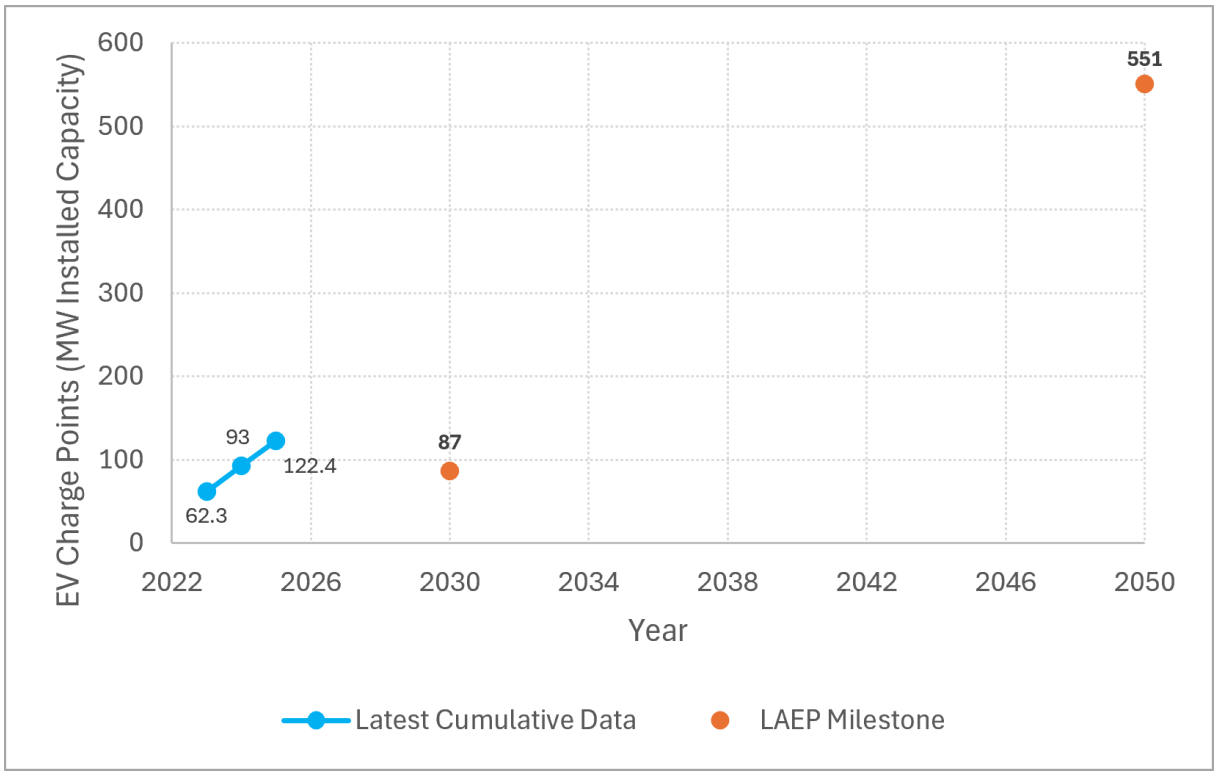

Figure 8. Regional Progress Toward Aggregated Regional LAEP Milestone for EV Charge Points (MW Installed Capacity).
This chart shows the region's EV charge points (MW) for 2023-2025, alongside the aggregated regional LAEP milestone for 2030 and 2050 for EV charge points. The chart illustrates the scale of transformation required to meet energy ambitions.
Sources: National Grid, 2025; National Grid, 2026; Local Area Energy Plans across the region.

<u>South East Wales EV Charge Point Progress:</u>

- Between 2023 (62 MW) and 2025 (122 MW), the region's EV charge points increased by 96%.
- In the Cardiff Capital Region, EV charge points have increased by 32% between 2024 (93 MW) and 2025 (122 MW)
- The region surpassed the aggregated regional LAEP milestone for 2030 of 87 MW in 2024 (93 MW), indicating that deployment is ahead of schedule.
- To meet the aggregated regional LAEP milestone for 2050 of 551 MW, a further increase of 350% is required between 2025 and 2050.

Note: The visualisation of this data is intended to demonstrate regional progress towards the LAEP milestones for EV charge points whilst avoiding comparisons between Local Authority areas. Projection lines were not included due to the differing scales and speeds of projections for each Local Authority area, comparing the latest

data to the LAEP milestones was therefore the most effective way to visualise progress.

Note: As LAEP milestone figures for EV charge points are in numbers rather than megawatts (MW), this report used the specified assumption of kilowatt peak (kWp) per charge point within the LAEP or LAEP Technical Report of each Local Authority area to convert each milestone to megawatts. This was aggregated to provide a regional figure for the LAEP 2030 and 2050 Milestones in megawatts to compare it with the latest National Grid data on EV changepoints (reported in megawatts), allowing for a visualisation and analysis of progress towards the milestones.

Retrofit:

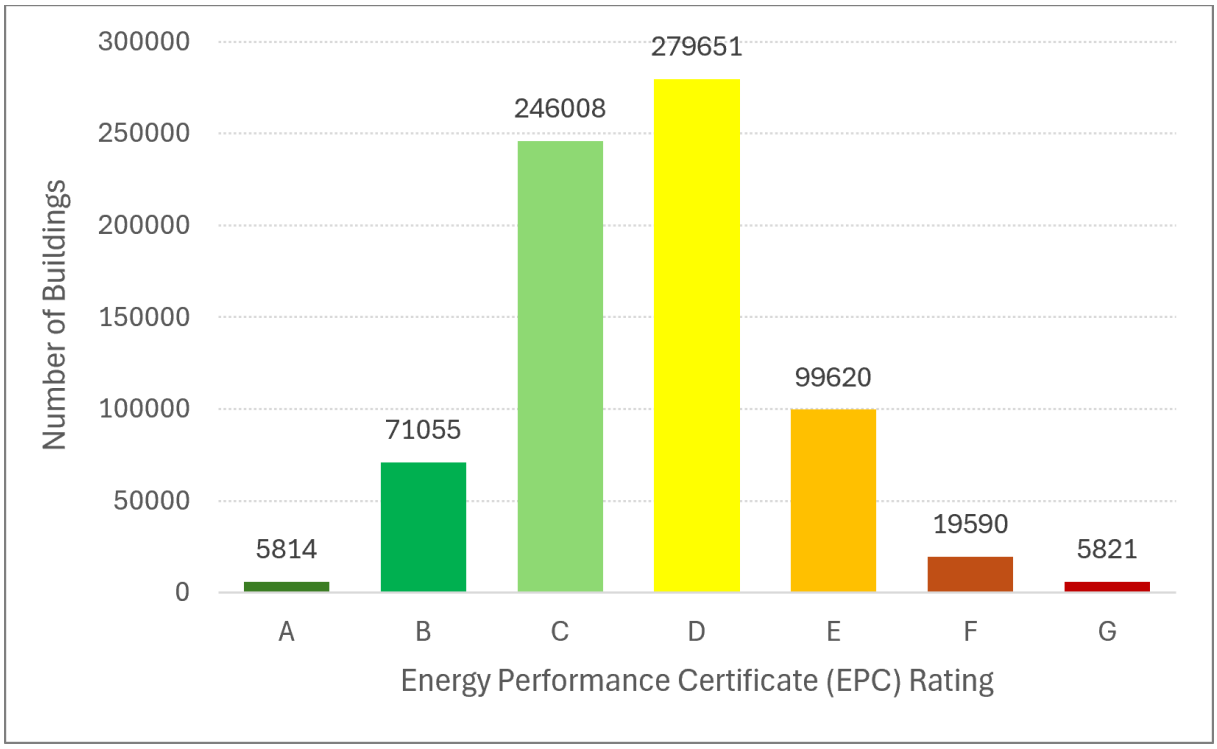

Figure 9. Number of Rated Buildings by Energy Performance Certificate (EPC) Rating in the Region.
Source: DLUHC, 2026.

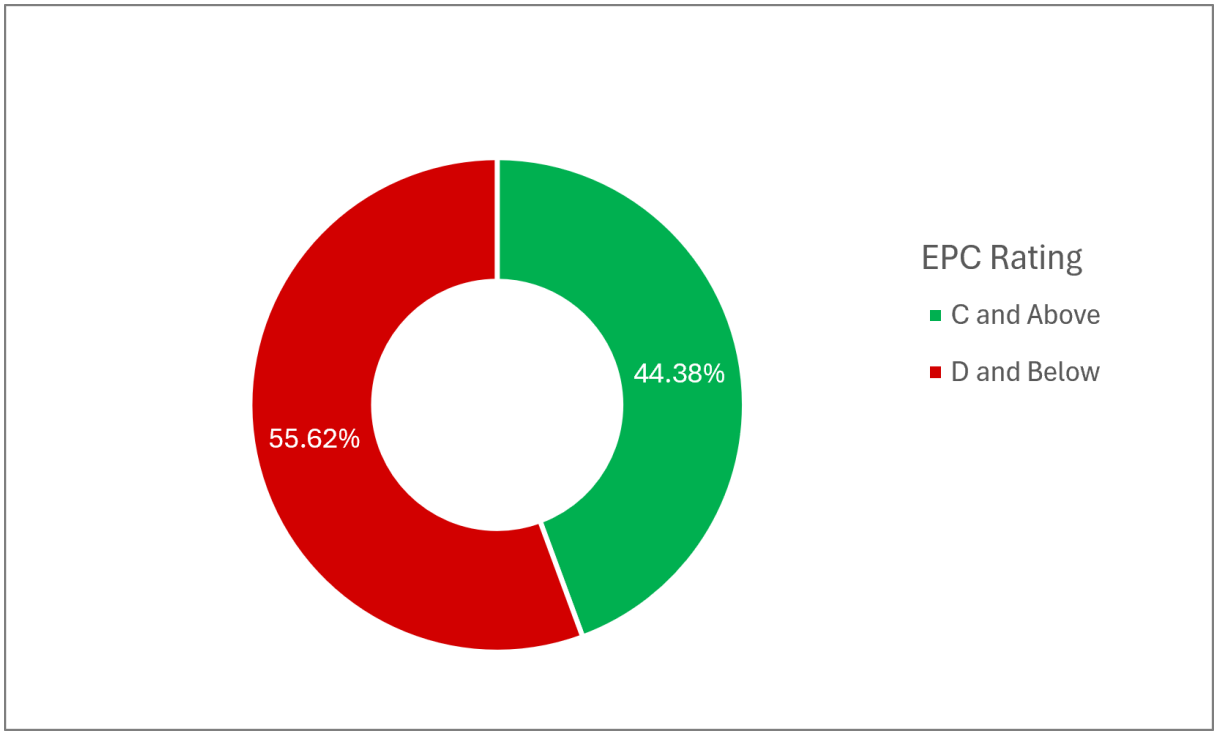

Figure 10. The Region's Energy Efficiency Performance: Percentage of Rated Buildings with EPC Ratings of C and above vs D and below.
Source: DLUHC, 2026.

Energy Efficiency Performance of Buildings in South East Wales

The Ministry of Housing, Communities and Local Government (July 2026) showed:

- The most common EPC rating for buildings in the region is EPC D with 279,651 buildings, 38.4% the total rated buildings.
- The second most common EPC rating for buildings in the region is EPC C with 246,008 buildings, 33.8% the total rated buildings.
- The least common EPC rating for buildings in the region is EPC A with 5,814 buildings, around 0.8% of the total rated buildings.
- 0.8% of the total rated buildings were rated as EPC G, with 5,821 buildings.

EPC Ratings Split:

- There were 323,877 buildings in the region with an EPC Rating of C and above, accounting for 44.4% of all rated buildings in the region.
- In 2026 there were 404,682 buildings in the region with an EPC Rating of D and below, accounting for 55.6% of all rated buildings in the region.

LAEP Milestones:

- The aggregated regional LAEP milestone for 2030 is to have 136,550 homes retrofitted.

- The aggregated regional LAEP milestone for 2050 is to have 331,050 homes retrofitted.

Note: A direct analysis of the progress toward the aggregated regional LAEP retrofit milestones has not been provided. This is because the LAEP milestones outline total numbers of domestic retrofits (homes) to be delivered by 2030 and 2050, whereas the available Department for Levelling Up, Housing & Communities (DLUHC, July 2026) data presents the current distribution of buildings by Energy Performance Certificate (EPC) rating. These two datasets are not directly comparable, as EPC ratings describe the energy efficiency performance of buildings rather than confirmed retrofit completions. However, EPC Rating data does provide valuable context for understanding current baseline energy performance of the region's building stock and will be crucial for informing future progress reporting.

Note: The figures used in the Energy Performance analysis refer to buildings with an Energy Performance Certificate (EPC) rating.

Note: The LAEP Milestones, aggregated for the purpose of this regional report, are worded with slight differences. For example, 'homes retrofitted', 'domestic retrofits (homes), 'homes with domestic retrofit' and 'additional homes with insulation measures' are used to describe milestones on retrofit. For the purpose of providing regional figures, these have been aggregated to provide an overall figure for 'homes retrofitted'.

Heat Pumps:

In 2024, the region had:

- 25,308 m^2 of non-domestic heated floorspace (heated I&C buildings).
- In 2024, the region had 3,083 domestic heat pumps installed.

In 2025, the region had:

- 26,180 m^2 of non-domestic heated floorspace (heated I&C buildings).
- In 2025, the region had 3,822 domestic heat pumps installed

Source: National Grid, 2025.

Aggregated Regional LAEP Milestones:

- 74,150 buildings with heat pumps installed by 2030.
- 463,150 buildings with heat pumps installed by 2050.

Source: The Local Area Energy Plans from across the region.

South East Wales Heat Pump Progress:

- Between 2024 and 2025, there has been a 3% increase in non-domestic heated floorspace (heated I&C buildings)
- Between 2024 and 2025, the number of domestic heat pumps in South East Wales has increased by 24%

The analysis of the progress towards the aggregated regional LAEP heat pump milestones is limited due the inability to accurately make comparisons between 2022-23 data and the latest data for 2024 and 2025, as well as the inability to make direct comparisons between the latest data for 2025 and the LAEP milestones. The reasons for this are set out below:

Note: Data from the National Grid Distribution Future Energy Scenario (DFES) reports for 2022 and 2023 has been excluded and this analysis refers only to 2024 and 2025 National Grid data on heat pumps. This is due to the National Grid's updated 2024 model which only measures heated parts of buildings rather than the entire building floorspace. Updated data from 2024 and 2025 is therefore significantly lower than the data reported in 2022 and 2023 but also significantly more accurate, rendering a comparison between the data from 2022 and 2023 to 2024 of no use.

Note: A direct comparison between the LAEP milestones and the data for 2025 has not been provided due to discrepancies in reporting. The LAEP milestones provide figures for total (domestic and non-domestic) heat pumps installed for 2030 and 2050, whereas the available data from the National Grid reports non domestic heat pump figures as total heated floorspace m^2. No convertible assumptions are provided in the LAEPs making the visualisation of progress unfeasible.

Progress Report

Progress Monitoring Overview

The RAG Status criteria is as follows:

- Green: On track
- Amber: Behind schedule
- Red: Experiencing significant issues

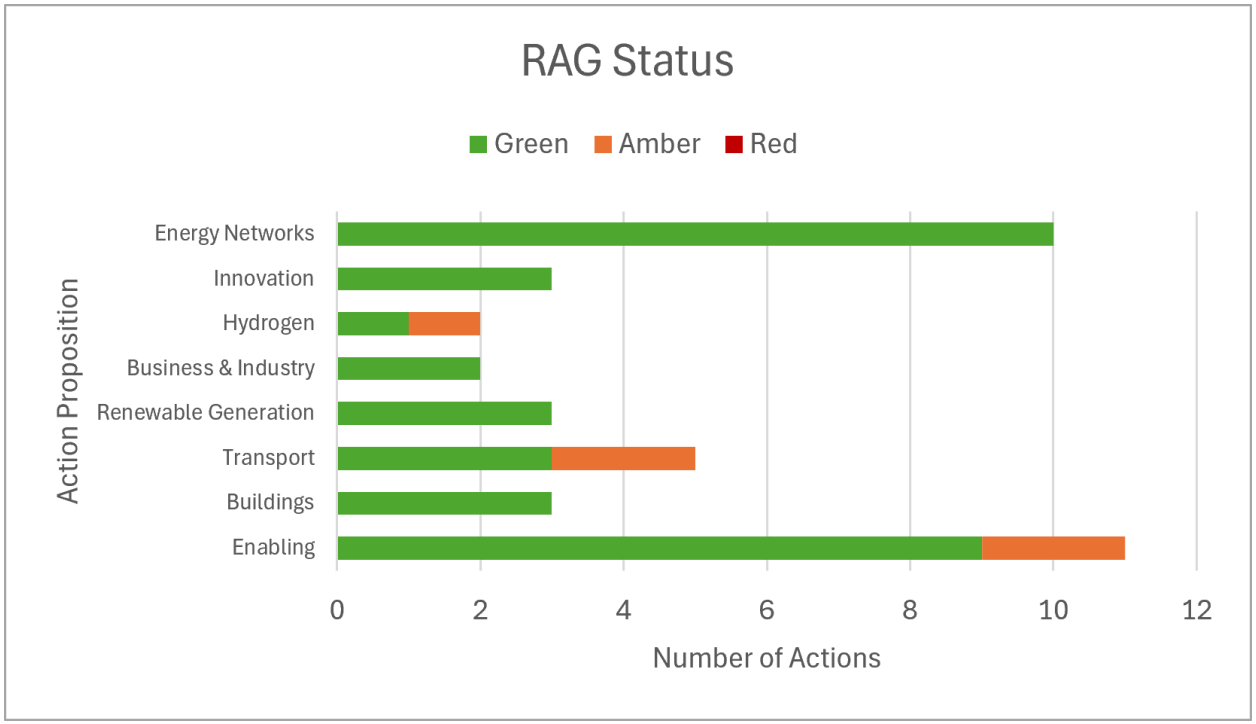

Figure 11. Regional and Network LAEP Actions by RAG Status and Action Proposition.
Source: Progress updates provided by relevant officers.

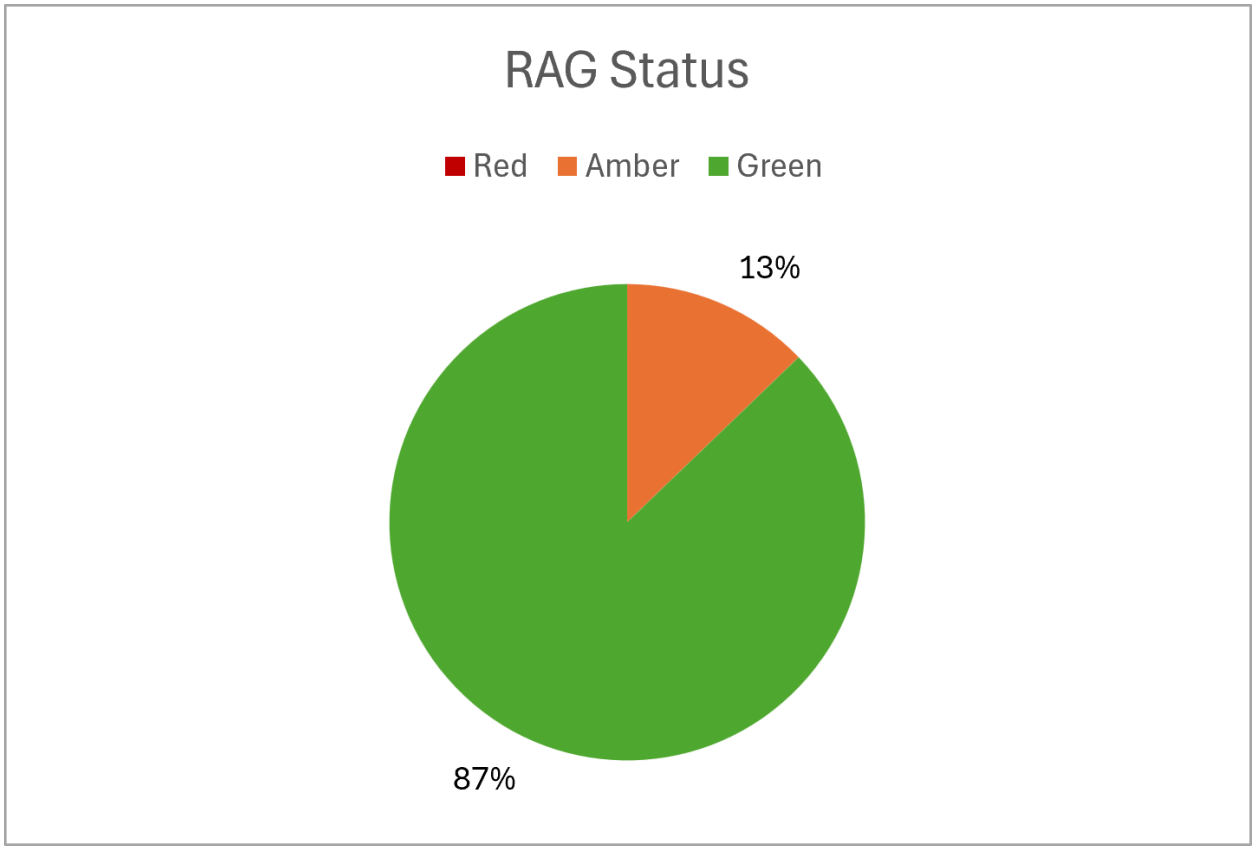

Figure 12. Regional and Network LAEP Actions RAG Status Snapshot.
Source: Progress updates provided by relevant officers.

Progress Overview:

- Out of the 39 regional and network LAEP actions, 87.2% (34) are on track (Green) and 12.8% (5) are behind schedule (Amber).
- All actions under the *Enabling, Innovation, Buildings, Renewable Generation* and *Business & Industry* Propositions are progressing well.
- The majority of actions under *Enabling and Transport* proposition are progressing well whilst some are behind schedule.

Progress Over Time:

- There has been a 21.4% increase in actions that are on track (Green) in the Cardiff Capital Region between 2024 (28) to 2025 (34)
- In Cardiff Capital Region, the number of actions that are behind schedule (Amber) has fallen by 58.3% from 2024 (12) to 2025 (5)

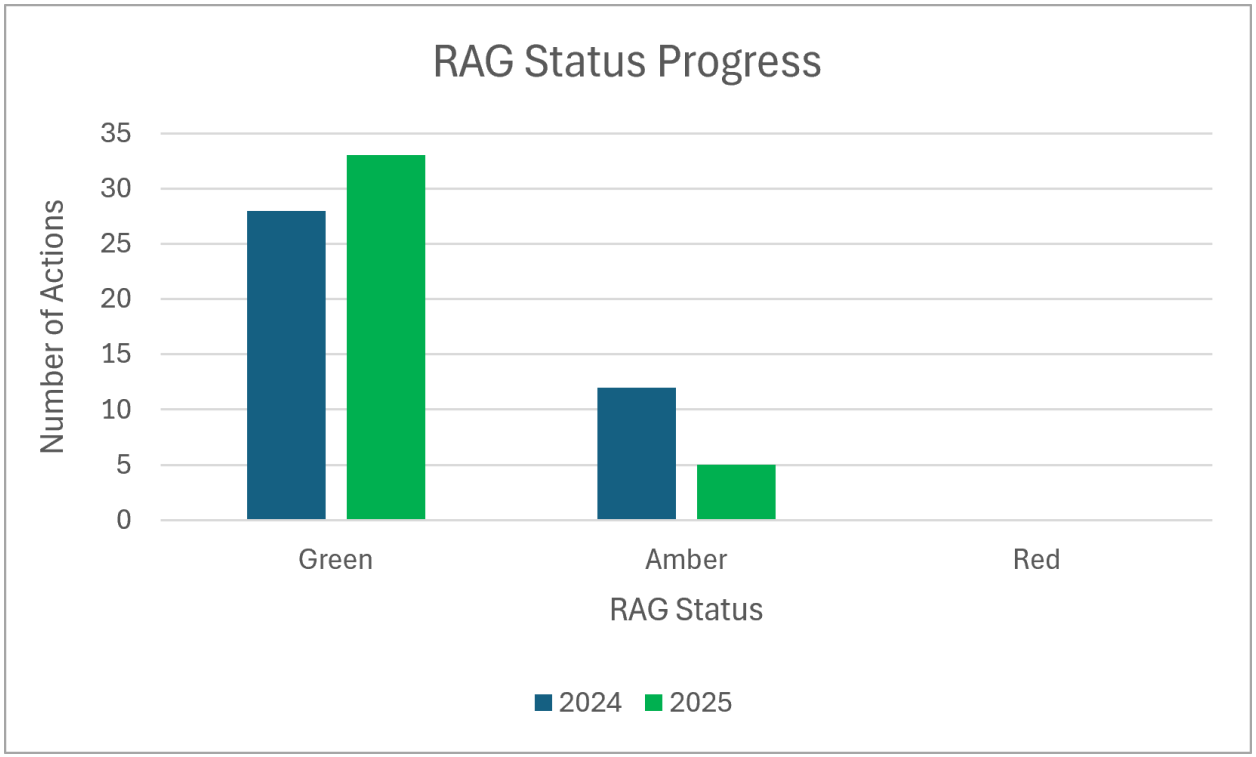

Figure 13: Cardiff Capital Region's Progress Towards LAEP Actions

Full Action Plan Progress Overview

PROPOSITION	ACTION	LEAD	TIMESCALES	2024-25 Progress & Next Steps	2024-25 RAG Status
Enabling	E1.1 Develop a governance structure and performance monitoring framework for the LEAPs	CCR	Jul-24	This action is completed. A governance structure and performance monitoring framework has been developed. The performance monitoring framework includes a LAEP annual report process for the region which has been agreed by CJC in July 2025.	Green
Enabling	E1.2 Facilitate monitoring progress of the LEAPs across the region	CCR	Ongoing, annually	The 2nd set of annual reports will be completed August 2026. (except for Bridgend which LAEP is currently under review)	Green
Enabling	E1.3 Investigate the feasibility and development of a clean energy fund which includes community led funding	CCR	Apr-27	No progress made to date but within timescales.	Green
Enabling	E2.1 Develop the regional Strategic Development Plan (SDP)	CCR	Mar-29	The SDP is in the early stages of development. Engagement is underway with the SDP team to ensure low carbon building practices, low carbon new builds, renewable energy generation and business and industry decarbonisation is considered in the approach.	Green
Enabling	E3.1 Map and identify skills and labour needs	CCR, Regional Skills	April 2024 – March 2025,	This action is behind schedule but underway. Working in partnership with the Regional Skills Partnership a building retrofit skills and supply chain study has been	Amber

PROPOSITION	ACTION	LEAD	TIMESCALES	2024-25 Progress & Next Steps	2024-25 RAG Status
		Partnership (RSP), Welsh Government (WG)	review every 5 years	completed. Again working with the Regional Skills Partnership, we are now progressing a renewable energy generation skills and supply chain study which should be complete by the end of 2026.	
Enabling	E3.2 Review findings and implement recommendations from skills and labour studies	CCR, RSP, WG	Mar-27	A partnership is currently being set up to take forward recommendations from the building retrofit skills and supply chain study.	Green
Enabling	E3.3 Identify supply chain needs	CCR, RSP, WG	April 2024 – March 2025, review every 5 years	This action is behind schedule but underway. Working in partnership with the Regional Skills Partnership a building retrofit skills and supply chain study has been completed. Again working with the Regional Skills Partnership, we are now progressing a renewable energy generation skills and supply chain study which should be complete by the end of 2026.	Amber
Enabling	E3.4 Review findings and implement recommendations from supply chain studies	CCR, RSP, WG	Mar-27	A partnership is currently being set up to take forward recommendations from the building retrofit skills and supply chain study.	Green
Enabling	E4.1 Investigate possible procurement and investment frameworks that could be considered for larger projects of scale	CCR. WG	Mar-26	We are now in the second year of Switch Together. A group purchasing scheme offering Solar PV, batteries and EV chargers to domestic householders at on average 20% cheaper due to group purchasing. Seven LAs have signed up to the scheme in the first 2 years. A third year of the scheme is currently being planned for with hope that all 10 LAs areas will take part. A pilot heat pump project is being investigated as well.	Green

PROPOSITION	ACTION	LEAD	TIMESCALES	2024-25 Progress & Next Steps	2024-25 RAG Status
Enabling	E4.2 Share best practice for energy decarbonisation	CCR	Ongoing	A monthly regional LEAP Steering Group is in place to share best practice across the region.	Green
Enabling	E4.3 Access funding for energy decarbonisation	CCR	Ongoing	In the last year funding for the following has been realised. £222k of Welsh Government funding to fund the LAEP team. £323k of WSRID (Whole System Research, Innovation & Decarbonisation) Phase 2 demonstration funding. Further funding opportunities are also being investigated.	Green
Buildings	B1.1 Develop a plan for domestic retrofit for the region	CCR	Mar-27	No progress made to date but within timescales.	Green
Buildings	B1.2 Engage with any new national programmes developed to support domestic retrofit (in light of ECOflex ending March 2026)	CCR	Ongoing	Awaiting Warm Homes fund decision from Welsh Government.	Green
Buildings	B2.1 Signpost to or develop a retrofit and energy efficiency information hub for consumers	CCR, Nest		No progress to date. Currently no resources in place to enable this work but within timescales.	Green
Transport	T1.1 Produce a Regional Transport Plan (RTP)	CCR	Jun-25	RTP is in its first year of delivery through its RTDP programme. RTDP commenced in 26/27 with a RTF and Burns year 1 budget of £48.5m and match funding of £13m. Schemes include delivery of active travel, road resilience, interchange and bus priority across the	Green

PROPOSITION	ACTION	LEAD	TIMESCALES	2024-25 Progress & Next Steps	2024-25 RAG Status
				region, with 4 main schemes being developed for delivery over the Plan period, as well as many other development schemes under the various modes for future years delivery.	
Transport	T2.1 Develop a plan to fund and roll out EV Chargers	CCR	Ongoing	Current schemes are in the later stages of delivery and should fully conclude by Sept 26. Funding has been provided by WG to undertake a review of the current EV programmes to monitor and evaluate their usage, undertake a lessons learnt exercise, and consider what's next, including a review of policy and delivery for Members to consider.	Green
Transport	T2.2 Explore commercial model for investment into EV Charging	CCR	2025	The review identified above will include all delivery models, including commercial and contractual.	Amber
Transport	T2.3 Explore models and approach for ULEV car sharing schemes (Car Clubs)	CCR	2025	This has not been prioritised for year 1 of the RTP, but has been identified within the RTP to be revisited and reconsidered during the 5-year Plan period.	Amber
Transport	T3.1 Investigate potential of hydrogen vehicle fleet vehicles including refuelling options	CCR Challenge	May-26	In 2024/25 a WSRID (Whole System Research, Innovation & Decarbonisation) Phase 1 feasibility project investigated hydrogen fleet vehicles and refuelling in 3 local authorities (Caerphilly, Monmouthshire & RCT). In 2025/26 a Phase 2 demonstration project comparing hydrogen and electric refuse vehicles in 2 local authorities (Caerphilly & RCT).	Green

PROPOSITION	ACTION	LEAD	TIMESCALES	2024-25 Progress & Next Steps	2024-25 RAG Status
Renewable Generation	R1.1 Identify and showcase energy investment opportunities across the region (including community energy)	CCR	March 2027 then updated annually	Initial work is underway to develop a energy investment prospectus that will showcase energy investment opportunities in the region. This is on target to be completed within timescales.	Green
Renewable Generation	R1.2 Develop a community engagement programme to involve local communities in energy transition	CCR, WG	Mar-27	No progress to date but still within timescales	Green
Renewable Generation	R2.1 Develop and deliver on a masterplan for renewables on the Aberthaw site	CCR Energy	Mar-29	Masterplan Strategic Brief produced by ARUP was finalised in March 2026. Next stage Masterplan development has been put out to market in first quarter of '26/27 financial year. Next stage development of feasibility of an Aberthaw tidal lagoon has been undertaken by CCR (with support of CCR Energy). The Masterplan Strategic brief has considered the National Grid substation relocation and RWE Option Land area location. Energy vectors and users will evolve in future energy Masterplans as the site demolition, remediation and development progresses and the energy transformation is taking shape.	Green
Business & Industry	C1.1 Co-ordinate a network to support businesses to decarbonise.	CCR, South East Wales Business Climate	May-25	The mapping exercise was completed in Sept 2025. Following the results from the exercise, the SEWBCC Steering Group has been refreshed and focus of the group now focussed on supporting those businesses that need most support SMEs.	Green

PROPOSITION	ACTION	LEAD	TIMESCALES	2024-25 Progress & Next Steps	2024-25 RAG Status
		Coalition (SEWBCC)		There is a plan in place to have a series of small, sector focussed business support events and increased engagement on the SEWBCC website and LinkedIn page. SEWBCC website has been updated to include more free resources. Membership is now at 90 businesses.	
Business & Industry	C1.2 Develop an industrial engagement programme to decarbonise industry	NZIW, CCR	Mar-28	The mapping exercise was completed in Sept 2025 and identified the businesses that need most support were SMEs and so the SEWBCC is to focus on those. The SEWBCC and CCR are working closely with NZIW to decarbonise larger businesses/industry in the region including the Investment Zone. The SEWBCC is planning a series of business support events with specific events for: hospitality, infrastructure, creative sector, sports, and construction.	Green
Hydrogen	H1.1 Develop plans for a green hydrogen production facility	CCR	Underway	Hygen have purchased the Hybont project from Marubeni as of December 2025 and CCR are now engaging them to progress the project.	Green
Hydrogen	H1.2 Develop a trade association and develop a regional market for hydrogen	CCR	Ongoing	Hydrogen has been mentioned in the initial Aberthaw Masterplan as being suitable to be playing a role in the site's longer-term future. However, hydrogen's role as an energy vector e.g. as part of production of Sustainable Aviation Fuel will evolve further down the line once green energy sources for production of Hydrogen have been explored and implemented in 5-10 years' time.	Amber

PROPOSITION	ACTION	LEAD	TIMESCALES	2024-25 Progress & Next Steps	2024-25 RAG Status
Innovation	I1.1 Develop plans for viable and alternative energy technologies	CCR	2024/25 and ongoing	Innovation in sustainable energy and circular economy is a key cornerstone of CCR Energy's vision. At Aberthaw bids for feasibility studies are being developed for (i) demonstrators (in biochar and tidal range turbine technologies for examples), (ii) testing facilities (for tidal range technologies and sustainable earth and space innovation) and (iii) University R&D collaborations (in tidal range technologies and sustainable PFA uses). Demonstrators could come to site within 3-6 months' time with full scale modular production possible once planning for the entire site has been approved with outline planning application due for submission in the middle of 2027. Also, CCR Energy are looking for an investor for Long Duration Energy Storage scheme to be built as a FOIK at the Aberthaw site with a capacity of 250MW. This is a scalable technology.	Green
Innovation	I1.2 Investigate opportunities for mine water and heat networks across the region	CCR	Mar-27	A mapping exercise is underway across the coalfield in the region to look at mine water heat opportunities. Once the mapping is complete 3 of the most viable sites will be taken forward for full feasibility study. A shortlisting exercise is also underway to review the heat networks that were identified in the LAEPs. We are also trialling the NESTA heat mapping tool and looking at how we can take forward a "Net Zero Terraced Streets" project forward in the region.	Green
Innovation	I1.2 Creation of Net Zero Clusters (Partnerships) across the region in	CCR	2024/25	Development of innovation clusters around the PFA innovation and green energy technologies is underway at CCR Energy's Aberthaw site with regular meetings between the Academic, public and private sectors and	Green

PROPOSITION	ACTION	LEAD	TIMESCALES	2024-25 Progress & Next Steps	2024-25 RAG Status
	key net zero themes as identified in the LAEPs.			regular funding applications for R&D projects being submitted and consortia being formed. Innovation will keep playing a key role at Aberthaw forming a key pillar of the company's vision.	
Energy Networks	N1.1 Provide data for forecasting to NGED & WWU	CCR	Annually	Data and information provided to NESO for the tRESP process.	Green
Energy Networks	N1.3 Consolidate project pipelines across electricity & gas networks	NESO	Ongoing	As part of developing the Regional Energy Strategic Plan (RESP) for Wales, NESO will maintain an In-Development Register. This register will bring together information on early-stage projects that may help identify potential future energy system needs and opportunities across Wales. Further information on the purpose, scope and use of the In-Development Register will be set out in the RESP Methodology, which is scheduled for publication in Summer 2026.	Green
Energy Networks	N2.1 Inform local authorities about our available data resources	National Grid	Ongoing	This action point a key part of our team's role	Green
Energy Networks	N2.3 Include new projects from the LAEP in strategic planning process	National Grid	Ongoing	This action point is a key part of our team's role	Green
Energy Networks	N3.1 Highlight gas infrastructure opportunities	WWU	Ongoing	Still on track - As we have now entered our new price control period (GD3) we have a new set of strategic aims to guide us on projects over the next 5 years. The relevant projects can be showcased back to wider CCR team and partners via monthly sessions where relevant.	Green

PROPOSITION	ACTION	LEAD	TIMESCALES	2024-25 Progress & Next Steps	2024-25 RAG Status
Energy Networks	N3.2 Include new projects from the LAEP in strategic planning process	WWU	2024-2027	Still on track - Timescales likely need moving out to 2031 in line with our current price control period.	Green
Energy Networks	N3.5 Make the network hydrogen ready	WWU	Ongoing	Repex programme still on target - biggest challenge to this action will be government decision on Hydrogen for domestic heat. Although will unlikely affect industrial clusters.	Green
Energy Networks	N4.3 Pilot projects for hydrogen, biomethane, flexibility & storage	WWU	Ongoing	Ambition to get more demonstrator projects off the ground. Cartrefi Hydrogen House has been extended for another year (September 2027). Working with Caerphilly Council housing stock to trial hybrid heating systems and continuing projects to explore developments in transport technology	Green
Energy Networks	N4.5 Investigate alternate fuels to support transport demand	WWU	Ongoing	New projects kicking off to explore this in more detail - Main focus on HGV fleet but will likely cover smaller commercial vehicles too (e.g. 3.5t vans)	Green

Figure 14. Full Action Plan: Regional and Network LAEP Actions.

References:

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