



Decarbonisation Strategy (2023 - 2025)

Executive Summary

RHONDDA CYNON TAF COUNTY BOROUGH COUNCIL
March 2023

Version 01

Mae'r ddogfen yma ar gael yn y Gymraeg / This document is available in Welsh.



Rhondda Cynon Taf
Hinsawdd Ystyriol
Think Climate
Rhondda Cynon Taf





The Carbon Trust's mission is to accelerate
the move to a decarbonised future.

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Foreword



Climate change is recognized as the biggest threat facing our planet. In April 2019, the Welsh Government declared a Climate Emergency, drawing attention to the magnitude of the present threat to our climate and establishing that substantially reducing our carbon emissions is now a priority for our nation.

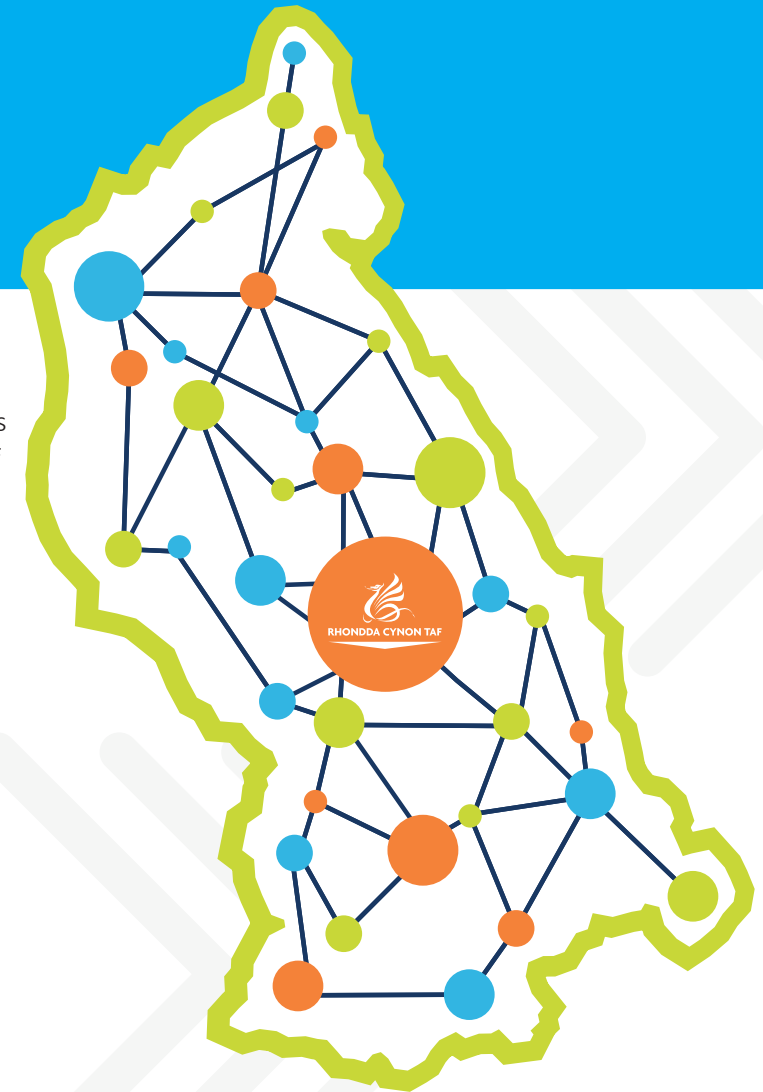
In June 2022, Rhondda Cynon Taf Council adopted our **Climate Change Strategy - 'Think Climate Rhondda Cynon Taf (2022-2025)'**, with the goal of becoming a carbon neutral organisation by 2030. This Decarbonisation Strategy and associated Action Plan outlines how we will work to meet that target and contribute to the global effort to address the climate emergency. Our ambitious target contributes towards the Welsh Government's ambition for the Welsh public sector to be collectively net zero by 2030.

This document sets out a timetable for action with short, medium and long-term measures to reduce the Council's carbon emissions and those of the wider community. The Strategy and Action Plan cover five key areas for focus, including carbon emissions from Transport, Buildings, Supply Chain, Renewables & Land Use. Whilst there is a clear goal of reducing carbon emissions, the Council will also continue to increase renewable energy generation opportunities and seek to increase the carbon sequestration potential of our land holdings.

Over previous years, the Council has been working to understand and increase its decarbonisation potential and has made substantial progress in reducing emissions across our day-to-day operations and with the implementation of renewable energy generation projects. The Council has also taken steps to better mitigate and adapt to the impacts of climate change in multiple ways, including carbon sequestration and building resilience to the impacts of extreme weather.

The Council recognises that the scale of the challenge to decarbonise should not be underestimated. Despite the carbon reductions already achieved and the projects already planned, the Council accepts that more needs to be done to reach our targets. Working collaboratively, we are confident that we can act at a scale needed to further reduce our carbon emissions, increase our carbon sequestration potential, and embed decarbonisation in all strategic decisions and operational activities.

This strategy is a call to action. The Council will require the full support and engagement from staff across all Service Areas to ensure we deliver on our actions and meet our Carbon Neutral target by 2030.



1 Ambition



Rhondda Cynon Taf County Borough Council (RCTCBC) is committed to meeting our carbon reduction target to become a Carbon Neutral Council by 2030 and to contribute to the Welsh Government's ambition for a Net Zero public sector. Further clarification relating to carbon neutral, and net zero definitions are detailed in section 4 Pathway Scenarios.

By working across the Council's internal operations, staff in all departments can play their part in reducing emissions both in their work and by supporting carbon reduction initiatives. Emissions from the supply chain will be tackled by continuing the ongoing engagement with suppliers and working in partnership to calculate the carbon impact of goods and services provided to the Council.

The Council has a large portfolio of land assets in its ownership and has developed plans to increase the amount of carbon dioxide this land sequesters. By improving the quality of peatland and quantity of woodland, and increasing the amount of renewable energy generated on this land through large scale wind and solar farms, the Council aims to balance its residual emissions.

The scale of the challenge to becoming a Carbon Neutral Council and contributing to the Welsh Government's ambition of a Net Zero public section by 2030 should not be underestimated, and even with the carbon reductions the Council has already achieved and projects we plan to implement in the next decade, more still needs to be done to reach the target. The Council plans to reduce emissions through energy efficiency measures, switching to low carbon transport and heating, and increasing the amount of energy generated and carbon sequestered on its land. The Action Plan within this Strategy states clear actions for the next few years and the longer-term ambitions which give direction for the longer term. The Action Plan will be used as a live document which will be updated regularly, and the scale of action increased with each review.



2 Carbon Footprint




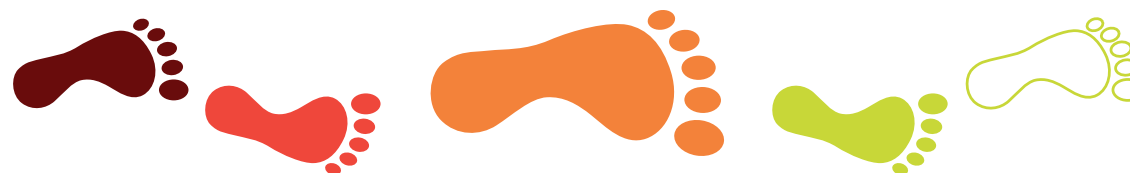
The Council's carbon footprint as reported in the Welsh Public Sector Net Zero Reporting (Net Zero Reporting) has been used within this Strategy. The Carbon Trust has revised the baseline year emission figure to be a more accurate comparison of future reporting years by including categories such as 'commuting' which were excluded from the baseline reporting year. Emissions for the baseline year of 2019/20 were **125,702 tCO₂e**.

The Welsh Public Sector Net Zero Reporting approach has evolved in recent years, with the scope increased to include additional categories such as homeworking and staff commuting. It is expected that the guidance will continue to change in future years as the reporting mechanism becomes more established and more accurate.

As stated above, an updated baseline figure for the baseline year of 2019/20 has been used within this strategy which includes additional reporting categories such as commuting to enable a better comparison to future reporting submissions.

Over the three years since the baseline, emissions of the Council have dropped, with a significant dip in 2020/21 due to the Covid-19 pandemic. In particular, 2020/21 saw reduced commuting and business travel, and reduced carbon intensity of purchased goods & services (e.g. less construction procured goods). Emissions for 2021/22 were reported as 120,907 tCO₂e*, with renewable energy use equivalent to 7,439 tCO₂e.

RCTCBC 2019/20 Carbon Footprint Baseline		
	Operational emissions	Supply chain emissions
	34,528 tCO ₂ e	91,174 tCO ₂ e



*RCTCBC were notified in September 2023 of a formatting error in the FY 2021/22 Welsh Public Sector Net Zero Reporting spreadsheet which impacts on carbon emissions associated with 'Municipal Waste'. The revised emissions for 2021/22 were recorded as 118,974 tCO₂e. The value 120,907 tCO₂e has used within this strategy.

3 Headline Aims



There are 46 initiatives within the Action Plan; to summarise these, the following headline aims up to 2030 have been drawn out.

OPERATIONAL 	Buildings	<ul style="list-style-type: none"> • Improve energy efficiency of all buildings • Maximise renewable energy generation and low carbon heating across the estate
	Transport	<ul style="list-style-type: none"> • Increase the number of electric vehicles in the Council fleet • Ensure that over half of all journeys are taken by public transport, bike or walking, or by electric vehicles
SUPPLY CHAIN 	Goods & Services	<ul style="list-style-type: none"> • Improve carbon accounting for all purchased goods, services and construction • Only procure supplies and services from businesses that are striving to reduce their carbon emissions and, in doing so, actively support low carbon and local suppliers as part of our wider transition to net zero
	Capital Assets	<ul style="list-style-type: none"> • Work with key suppliers to evaluate and reduce emissions from building and infrastructure projects
LAND USE & RENEWABLES 	Sequestration	<ul style="list-style-type: none"> • Assess the condition of peatlands across the county and rewet where required to improve quality of land • Encourage natural regeneration and increase afforestation of woodland and hedgerows
	Renewables	<ul style="list-style-type: none"> • Increase renewable energy generated from Council land and buildings from the 2021/22 baseline (2MW) to 20MW by 2025

The full Action Plan shows details about the individual actions, and includes target delivery dates, the roles responsible for delivery and carbon impact, and it further explains the governance structure for decarbonisation with the Council.

The emissions pathways set the expected operational, supply chain and avoided emissions as follows. Where there is an emissions pathway 'range' – the higher scale of delivery / intervention has been used. For both 2025 and 2030, the expected pathway is above the net zero target line.

RCTCBC emission pathway	2025	2030
Operational emissions	26,354 tCO ₂ e	11,949 tCO ₂ e
Supply chain emissions	52,808 tCO ₂ e	39,759 tCO ₂ e
Total GHG removals and avoided emissions	-1,644 tCO ₂ e	-5,220 tCO ₂ e

4 Pathway Scenarios



RCTCBC are committed to becoming carbon neutral by 2030. However, net zero is considered the more ambitious target and is the one set by Welsh Government for the public sector. The technical definition of net zero is still emerging, however, Welsh Government has utilised the Science Based Target initiative (SBTi) definition within their Net Zero Strategic Plan.

The main difference between net zero and carbon neutral, based on common definitions as set out below, is the approach to residual emissions and offsetting.



Carbon neutral covers Scope 1 and 2 (operational emissions) and is covered by the PAS2060 standard. There is no requirement for a defined reduction target, with neutrality achieved by offsetting greenhouse gas emissions.



Net zero, as defined by the Science Based Targets initiative (SBTi), covers Scopes 1, 2 and 3 and demands emissions reductions in line with limiting global heating to 1.5°C. Furthermore, 90% of the baseline footprint must be reduced with only 10% of the baseline footprint being removed through GHG removals.

The GHG protocol is a widely used and accepted methodology for greenhouse gas (GHG) emissions accounting. The GHG Protocol categorises emissions into three scopes as detailed above. Scope 1, 2 and 3 definitions are defined below:

Scope 1	Direct emissions of an organisation, including combustion of fuels and fugitive emissions
Scope 2	Indirect emissions of an organisation, including purchased electricity and heat
Scope 3	Other indirect emissions associated with an organisation, including the supply chain, transport and distribution, business travel and commuting, use of products, waste, investments and other leased assets or franchises.

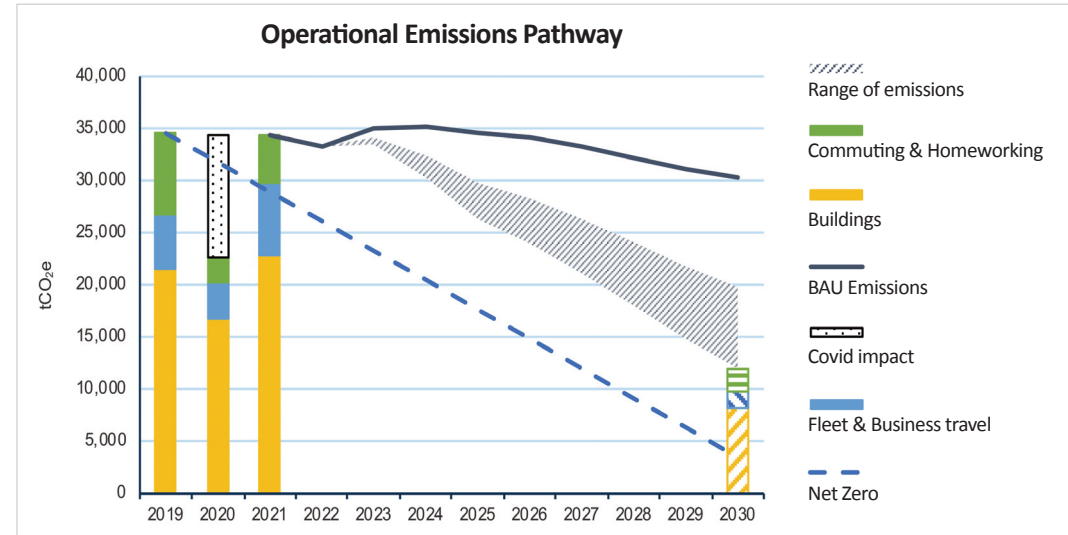


4. Pathway Scenarios (continued)



Due to Welsh Government’s ambitious target of achieving a Net Zero public sector by 2030. A range of pathways have been modelled from the baseline 2019/20 carbon footprint; these consider the future expected carbon intensity of the electricity grid. Trajectories to 2030 have been developed for Business As Usual, and an expected pathway range (high/low intervention scenarios) is based on the initiatives within the Action Plan. Using the Science Based Target initiative (SBTi), a net zero target is shown as a 90% reduction on the revised 2019/20 baseline.

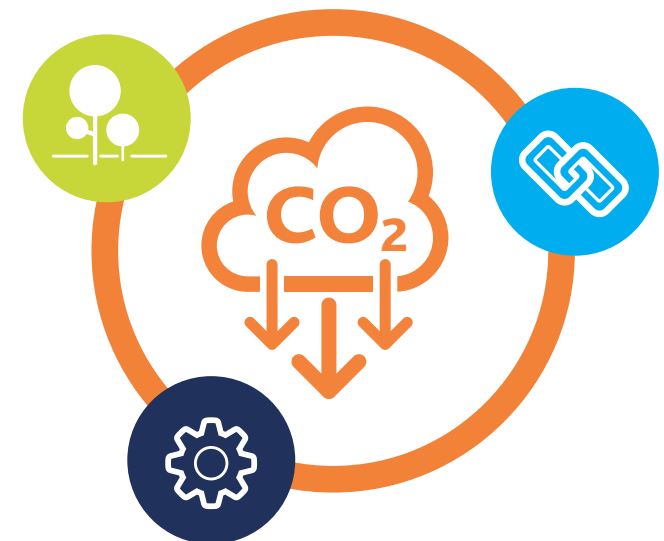
As can be seen in the operational emissions pathway, even after the delivery of planned actions and the grid decarbonisation have been accounted for, there is still a gap to target to achieve net zero emissions in 2030.



2030 Emissions

In 2030:

- The operational emission pathway estimates 11,949 tCO₂e residual emissions – **this does not meet the 90% mitigation target of 3,453 tCO₂e**; this demonstrated the challenge to meet net zero and the need to do more to bridge the gap
- The supply chain will be engaged and able to accurately report on their emissions contributions – this will allow the supply chain emissions pathway and target to be updated
- Renewable energy generation capacity is targeted to be over 20MW



To better understand the Council's emissions pathway, the carbon footprint has been separated into **Operational emissions, Supply chain impacts, and Land Use & Renewables contributions.**

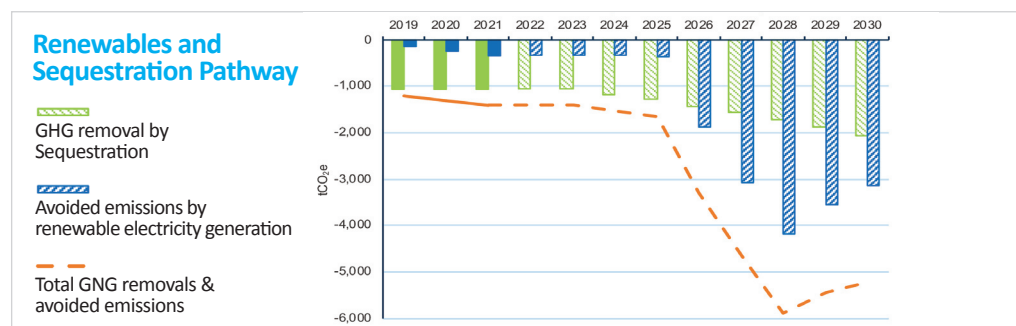
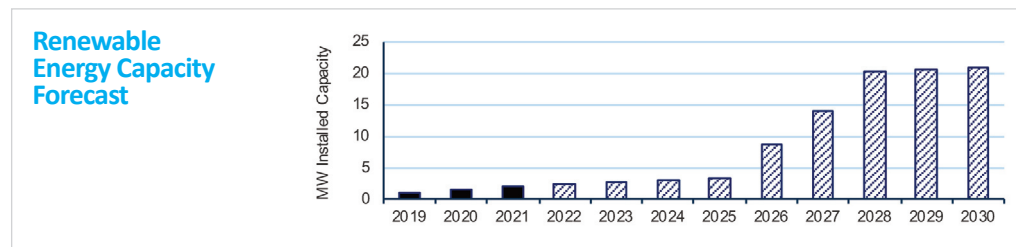
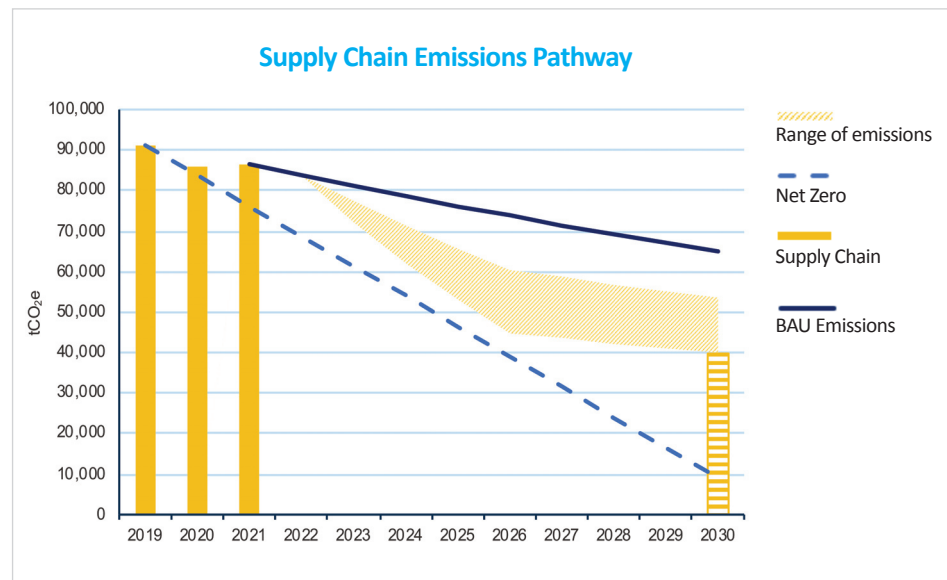
Operational emissions

Operations emissions are attributed to heat and electricity use in buildings and streetlighting, fuel use from owned fleet and business travel, and commuting and homeworking apportioned emissions. These are all Scope 1 & 2 emissions, with selected Scope 3 emissions where there is operational control (e.g. business travel, upstream energy).

Supply Chain

Supply chain emissions are indirect Scope 3 emissions associated with purchasing goods, services and capital assets.

The supply chain emissions pathway is highly estimated, with the baseline footprint data calculated from procurement spend data rather than supplier specific emissions. The approach, footprint, and pathway will evolve in the coming years as data improves – this is expected to include a baseline adjustment and re-targeting for 2030.



Land Use & Renewables

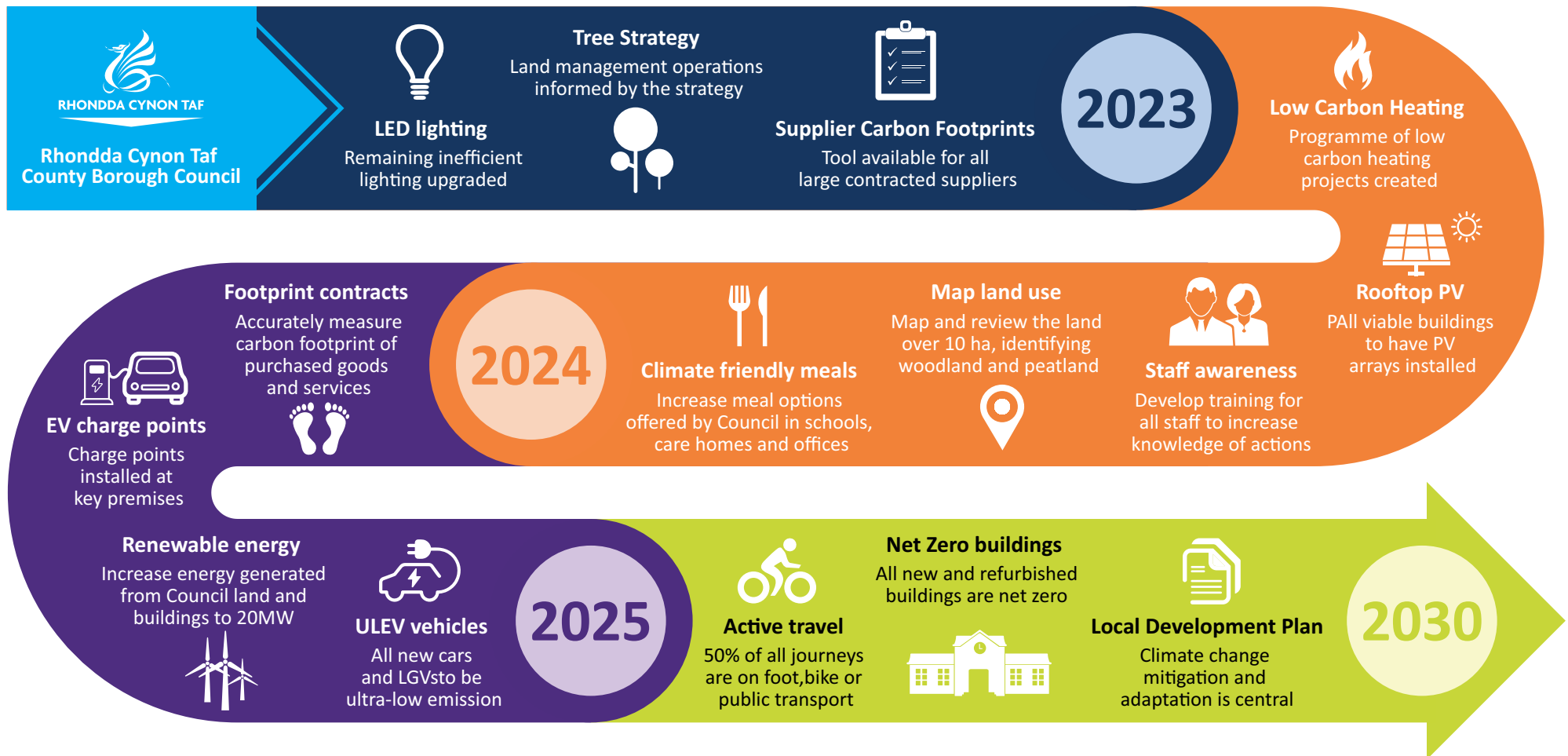
Through dual reporting, the Council's wider efforts for decarbonisation can be reported alongside the carbon footprint. This includes active GHG removals from sequestration (e.g. peatland restoration), and grid-connected renewable power generation schemes.

5 Route Map Timeline



A visual timeline of action is shown by the route map below, with an interim date of the end of 2025 set to align with the next Welsh carbon budget. By 2030, RCTCBC are committed to becoming carbon neutral Local Authority and will aim to contribute towards the SBTi's definition of net zero for their operational emissions.

This Strategy will undergo a review process in 2025 to re-assess the Action Plan progress and the pathway. This review will enable consideration to be given to the technological advancements which will assist decarbonisation progress, and reduce any reliance on offsetting to achieve net zero.





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