

# CLIMATE ACTION SIR GAR – Addressing the Climate Change & Nature Emergencies:

A mid programme assessment of our route to  
becoming a Net Zero Local Authority by 2030.



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## FOREWORD

It is a great honour to be the Cabinet Member for Climate Change, Decarbonisation and Sustainability, and to be tasked with ensuring a sustainable future.

In the face of increasing evidence and dire warnings from scientists around the world, it is becoming increasingly clear that humanity is standing on the brink of a defining moment in its history. We are in the 11th hour of the climate and nature crisis, where the actions we take - or fail to take - will decide the fate of our planet and future generations.

In 2019, Cyngor Sir Gar was one of the first local Authority's in Wales to declare a climate emergency and commit to becoming a Net Zero County Council by 2030 and in 2022, we declared a nature emergency.

We are set with a challenge to rewrite the story of our nation. Together, we must all start making bolder decisions and commit to playing our part as individuals, organisations and communities in addressing these emergencies even with the huge financial and societal pressures we face.

To turn the page on a past that was extractive and exploitative, and to imagine a new chapter, will require us to work differently and to step into a radical new space where we work together across organisations and communities; moving away from doing less bad in better ways and discover the boundaries of what is possible to safeguard our future.

Cymru has incredible potential to drive forward the transition to low carbon living. We have plenty of wind, waves and sun - but we must not allow this wealth to be misused again, with the profits flowing out of Cymru and our communities being left behind. The infrastructure must be fit for the future, sensitive to our landscapes, and shaped by the people who live closest to them. Furthermore, nature recovery must be at the heart of our plans. That means setting clear and ambitious targets and looking at how we use and manage our land.

While we plan for a better future, we must face the current reality. The climate crisis is no longer a distant threat - it is on our doorstep. We will experience more flooding, more dry periods and more stress on food production and health. We must adapt and we must build resilience into every decision — in housing, in infrastructure, and in the way we support our communities. We must build not only for today, but for what is to come.

BUT what a time to be leaders. Let's be in the generation that chose not to make the same old mistakes - but chose to create a new story for Carmarthenshire, based on fairness, resilience and hope.

It worries me that future generations will ask – when you knew so much, why did you choose to do so little? That's why here in Sir Gar we are doing as much as we can.

Imagine the potential if we unite, each with a unique role, moving forward together towards the same common goal.



Cllr. Aled Vaughan Owen

**Cabinet Member for Climate Change, Decarbonisation and Sustainability**

# 1. INTRODUCTION

Carmarthenshire County Council acknowledges the importance of addressing environmental challenges and declared a Climate Emergency in 2019, followed by a Nature Emergency in 2022.

This document outlines our progress on the actions set out in our Net Zero Carbon Plan (Route to Becoming a Net Zero Carbon Local Authority by 2030) and the actions we are taking to address the Nature emergency through our Environment Act Forward Plan. We believe that, while we will continue to meet the separate National reporting requirements, these issues should be considered together, as they are closely interconnected and as such are both captured in the review. The Council introduced its Net Zero Plan in 2019 which detailed its ambition to become a Net Zero Local Authority by 2030 centred on four key areas. The calendar year of 2024 represents the midpoint in that programme of activities warranting a more in-depth examination of the Council's achievement, which is set out in this report.

Whilst the methodology behind our plan consciously adopted a pragmatic approach, focused on operational issues within our control, our commitment to achieving our Net Zero target and promoting decarbonisation more generally is undiminished. We have reflected on the good progress that has been made and, on the need to lead by example, by reframing our approach to capture the wider activity the council is taking to mitigate and adapt to the challenges we face.

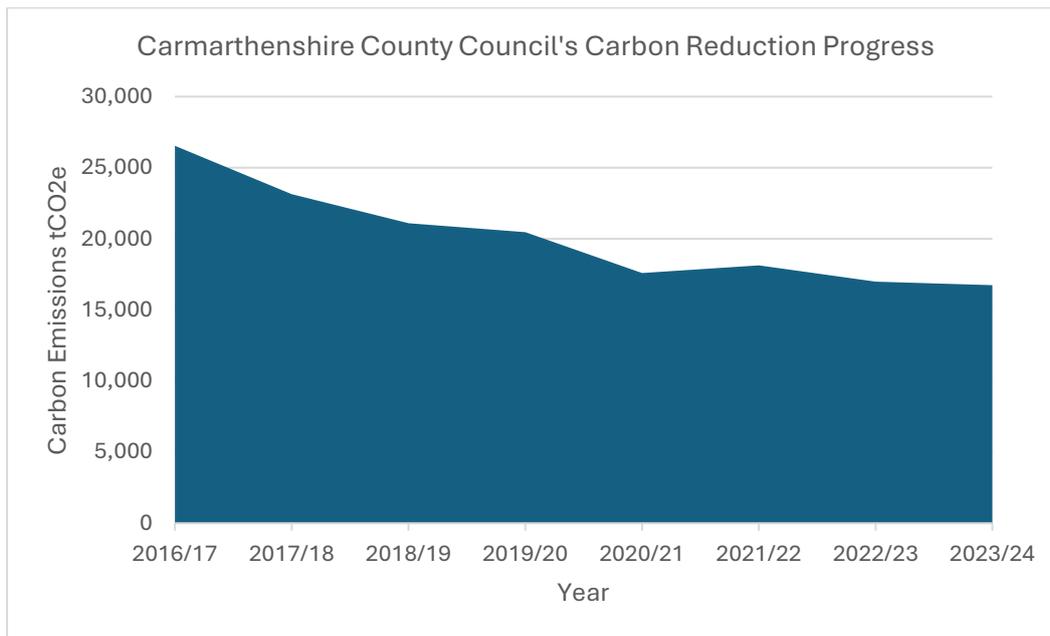
This progress report therefore offers a more in-depth examination of that work that isn't captured within our original net zero plan reporting targets. At this halfway point we are widening our focus and supplementing our Net Zero Plan with a 'People and Cultural Change Plan', Trajectory modelling and reporting on our Environment Act forward plan. We will adopt this new approach for successive years.

This indicates how we work as **One Council** and amplifies the message that a collaborative approach is required to address the challenging impacts of the climate and nature emergency: citizens, communities, businesses and Government, working together. Our response to the health emergency of the COVID-19 pandemic proves that we are extremely capable in overcoming any challenge if we all work together.

The Welsh Government published their first Public Sector Net Zero Reporting Guide in 2021, a year after the Council's plan was published, therefore, resulting in the authority taking a different approach to our reporting methodology. We feel our pragmatic approach is more robust as we have included operational measures that are within our control. Furthermore, the Welsh Government methodology is ever changing with new, often assumption-based measures being added.

## 1.1. SUMMARY OF PROGRESS AGAINST OUR NET ZERO PLAN

Since 2019/20 the authority has been reporting on the four key areas set out in our Net Zero Plan; Non-domestic buildings; Street lighting; Fleet Milage; and Business Mileage. Our baseline year for carbon reporting is 2016/17 and the below table shows the progress we have made since then. As you can see, the graph illustrates a strong performance, having reduced our emissions from 26,542 tCO<sub>2</sub>e to 16,756 tCO<sub>2</sub>e, equating in a 37% reduction compared to our 2016-17 baseline year. Although not directly comparable, this mirrors Wales's emission reduction of 37% since their baseline year; 1990. Our success has largely been achieved through energy efficiency measures being implemented across our estate.



Building upon our Net Zero Plan, the new joined-up approach will help embed decarbonisation, climate adaptation, nature preservation and enhancement. It will also demonstrate that we have progressed from a focus on basic measures, such as recycling and turning off lights, and have moved towards tackling more challenging and embedded carbon intensive infrastructure issues, such as, our heating systems, that are essential to our operation. However, it is still vital that we continue to do the basics as it helps to achieve our goals. The wider approach aims to capture most of the works being done within this agenda across the authority, however, due to the sheer magnitude of what is being done it is unable to capture everything.

It should be noted that our performance data quoted in this document uses UK emission conversion factors issued by the Department for Energy Security and Net Zero. These emission factors are subject to change as energy becomes cleaner, primarily electricity with more renewable energy being included in the energy mix. However, these factors can also increase as data becomes more accurate. Therefore, each year our data is based on the conversion factors for that year. The conversion factors used for the 2023/24 reporting year can be found here: [Greenhouse gas reporting: conversion factors 2024 - GOV.UK](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/115422/gg-reporting-conversion-factors-2024.pdf).

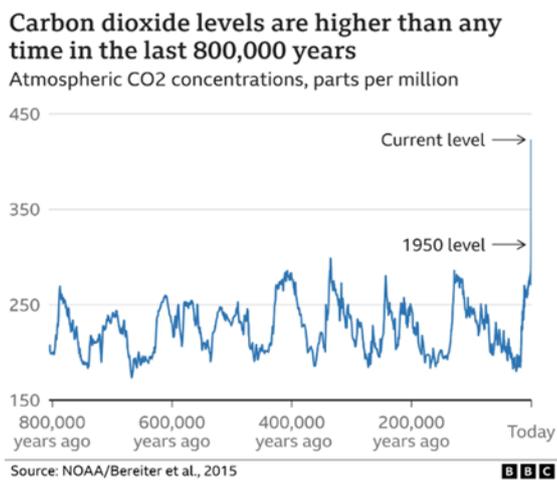
## 2. BACKGROUND

### 2.1. CLIMATE CHANGE

#### 2.1.1. Global

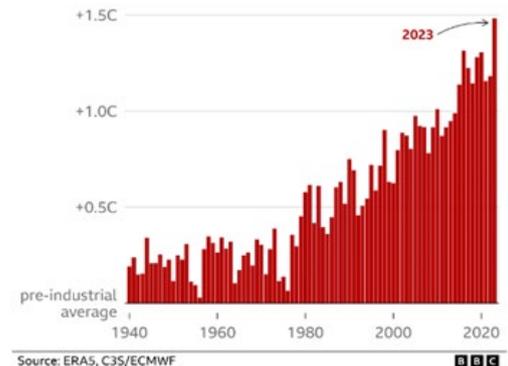
Climate change is the long-term shift in the Earth's average temperature and weather conditions (BBC News, 2024). The Earth is heated by the greenhouse gas effect, which is a natural process and without it, humans wouldn't be able to survive on the planet. Greenhouse gases - consisting of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), sulphur hexafluoride (SF<sub>6</sub>) and nitrogen trifluoride (NF<sub>3</sub>), are present in the Earth's atmosphere and trap heat from the sun. Climate change does occur naturally, with evidence of rise and falls in global temperature occurring throughout the Earth's lifetime for example, the ice ages.

However, natural causes cannot explain the particularly rapid warming seen in the last century, according to the United Nation's climate body, the Intergovernmental Panel on Climate



Change (IPCC). This enhanced climate change has been caused by human activity, the IPCC says, mainly from the widespread use of fossil fuels such as, coal, oil and gas, in homes, factories and transport. Since the start of the Industrial Revolution, when humans started burning large amounts of fossil fuels, the amount of CO<sub>2</sub> in the atmosphere has risen by about 50%. This has caused, the average global temperature to be around 1.2°C warmer than during the late 19<sup>th</sup> Century. This heightened global warming is a major issue because of the effects its having and will have on the planet.

**Hottest year on record**  
Global average temperature by year, compared with pre-industrial average (1850-1900)



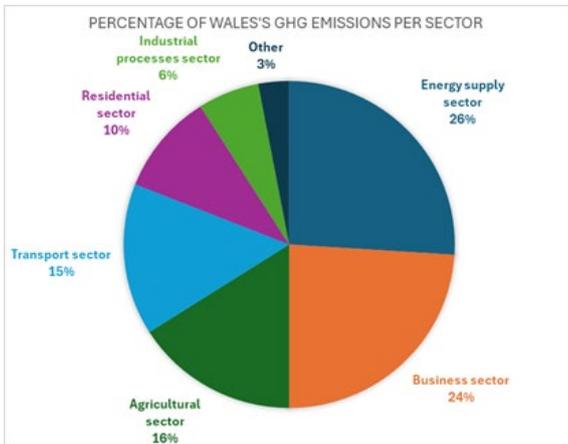
To tackle and reduce the impact of climate change *The Paris Agreement*, a legally binding international treaty, was brought into force on 4<sup>th</sup> November 2016. It was adopted by 196 parties at the UN Climate Change Conference ('COP21') in Paris on 12<sup>th</sup> December 2015. The Paris Agreement is a landmark in the multilateral climate change process because, for the first time, a binding agreement brings nations together to combat climate change and adapt to its effects. It was agreed in the treaty that global warming should be limited to 1.5°C above pre-industrial levels to prevent catastrophic climatic events as the more average temperatures increase, the worse the impacts of climate change become.

However, it has been confirmed that global warming exceeded 1.5°C across the 12-month period between February 2023 and January 2024, with 2023 being declared the warmest year on record. This temperature increase was largely driven by human activity.

At the heart of the Paris Agreement are national pledges to contribute to global mitigation and adaptation goals. The Paris Agreement sets out a mechanism under which each country

produces a nationally determined contribution (NDC), which must be submitted at a maximum of five-year intervals.

### 2.1.2. National: Wales



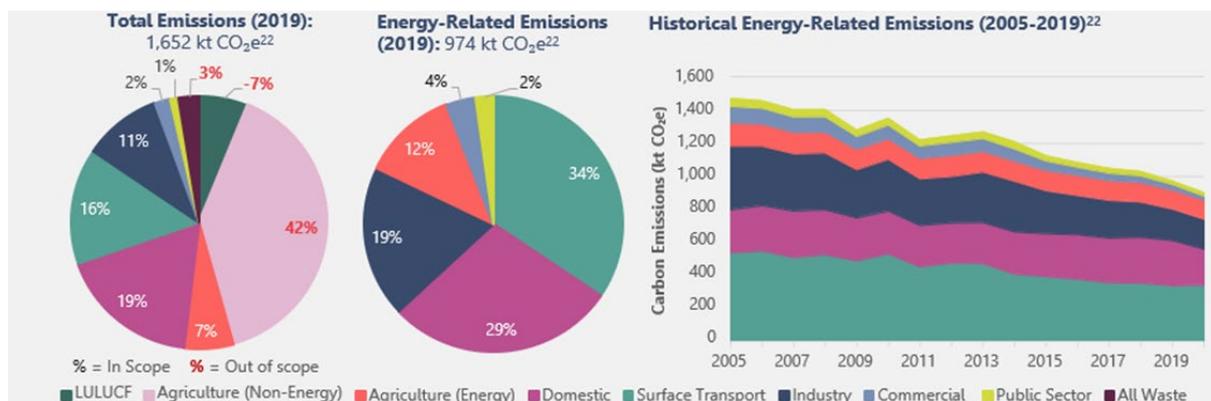
Wales has successfully reduced the amount of greenhouse gas emissions it emits by 37% since 1990 (base year). However, in 2022 Wales emitted 37.7 million tCO<sub>2</sub>e (Climate Change Committee, 2025). The largest source of emissions is the energy supply sector as it produces 26% of Wales’s greenhouse gas emissions. The business sector is the second largest emitter, accounting for 24% of Wales’s emissions. This is largely due to the use of fossil fuels in industrial production, primarily in steel and iron. Other sectors that are high emitters are, the agricultural sector (16%), the transport sector (15%), the residential sector (10%) and industrial processes sector (6%). All other

sectors contribute less than 5%. It must be noted that this only considers Wales’s territorial emissions and does not include emissions that are created outside of Wales for the country’s benefit e.g. imported goods and services (Taylor, 2023).

### 2.1.3. Local: Carmarthenshire

UK local authority and regional greenhouse gas emissions national statistics are produced annually by the Department for Business, Energy & Industrial Strategy. The following quotes 2019 emissions data for Carmarthenshire as this was the last year the available data was unaffected by COVID-19; Carmarthenshire’s largest source of total emissions in 2019 was from Agriculture at 49%. Emissions from energy-related agriculture (from buildings and machinery) accounted for 7%, with the more significant non-energy agricultural emissions (from livestock, land use and soils) at 42%. The highest energy-related emissions were produced by the domestic sector at 19%. Carmarthenshire’s industrial and commercial sectors when combined contribute to 13% of total emissions. 7% of annual emissions are offset through Land Use, Land Use Change and Forestry (LULUCF).

Carmarthenshire’s greenhouse gas emissions have reduced by 38% during 2005 - 2019 largely due to the decarbonisation of the national electricity grid.

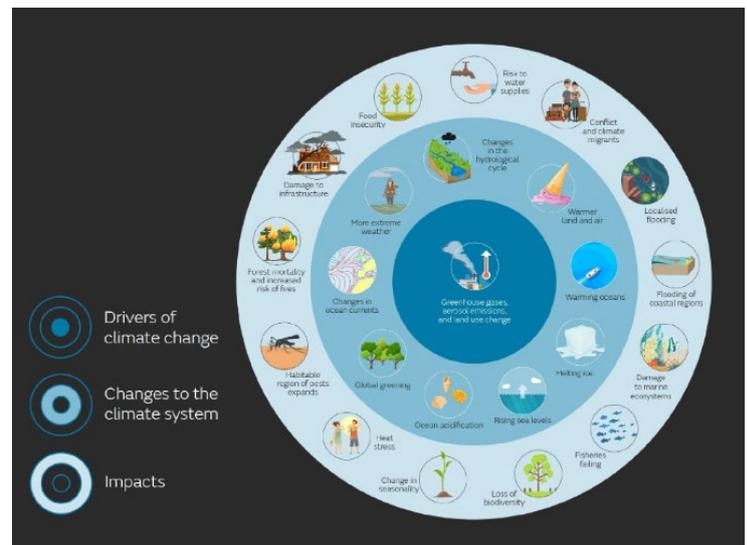


## 2.2. IMPACTS OF CLIMATE CHANGE

Our climate system is finely balanced, and small changes can have significant consequences. Climate change is affecting the Earth's fundamental natural processes as human activity is causing global temperatures to rapidly increase, and the built and natural environments are struggling to adapt to these conditions quickly enough.

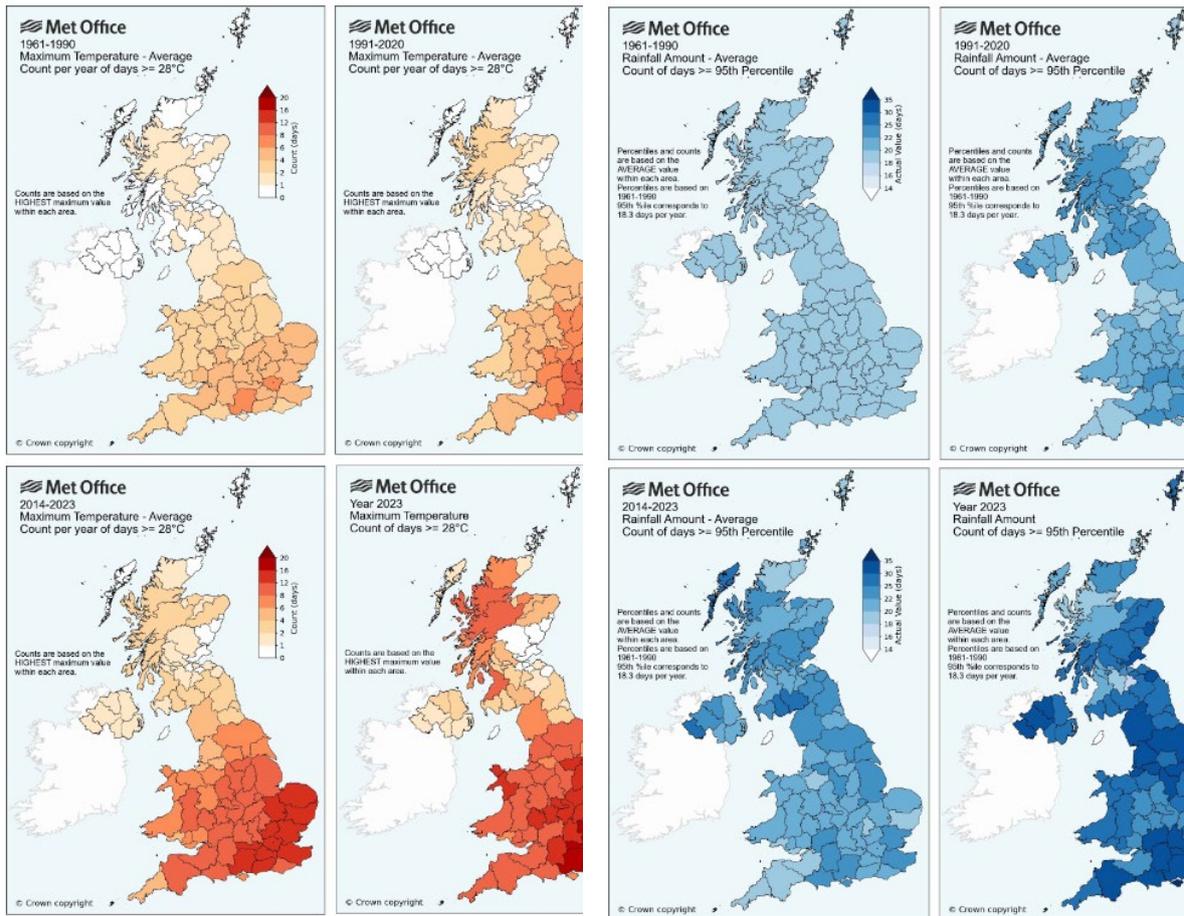
Some of the impacts from these changes to our climate system include:

- Risk to water supplies
- Localised flooding
- Flooding of coastal regions
- Damage to marine ecosystems
- Loss of biodiversity
- Fisheries failing
- Change in seasonality
- Heat stress
- Habitable region of pests and viruses expands
- Forest mortality and increased risk of fires
- Damage to infrastructure
- Food insecurity
- Conflict and climate migrants (Met Office, 2024).



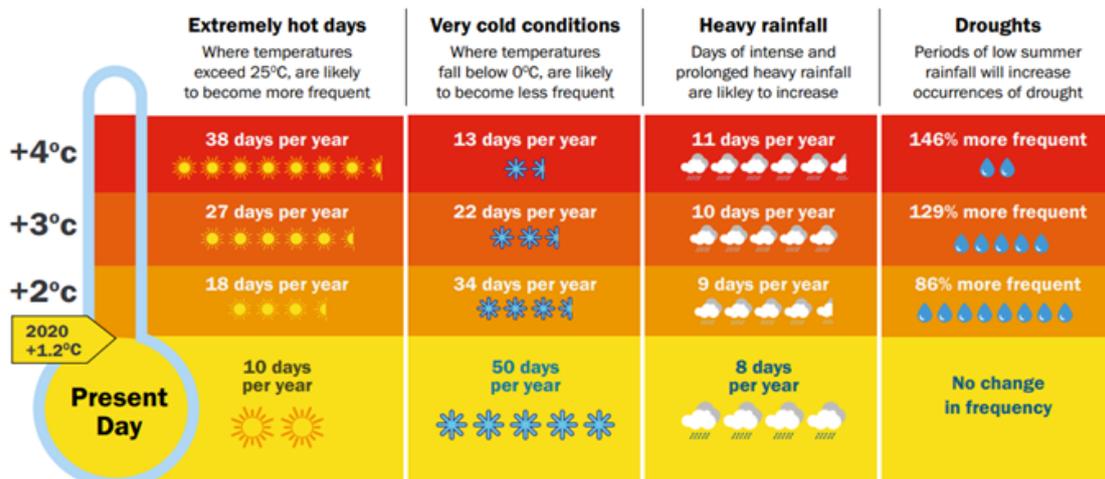
### 2.2.1. National: UK

Climate change is causing a dramatic increase in the frequency of temperature extremes and the number of temperature records that the UK experiences. This means the UK is seeing more frequent periods of hot weather, bringing challenges for infrastructure and health and wellbeing. The observations also suggest an increase in rainfall extremes (Kendon, *et al*, 2023) with the UK rainfall being 11% more than average in 2023. The cause for greater rainfall is due to a warmer atmosphere having a greater capacity to hold moisture (Met Office, 2024). These changes in weather patterns will have devastating effects on our food production and health as extreme heat can cause great stress to our bodies, potentially leading to heart stroke, exhaustion and in severe cases, death. It was estimated by the UK Health Security Agency that during the summer of 2022, extreme temperatures caused almost 3,000 additional deaths in England and Wales. Additionally, warmer weather is opening the door to the UK to viruses that haven't been able to survive here in the past. A prime example is that the West Nile Virus has been found in mosquitos in the UK for the first time in May 2025. This virus that is normally found in parts of Africa, South America and mainland Europe can be harmful to humans and animals (Santos & Roxby, 2025).



Source: [Temperature extremes and records most affected by UK's changing climate - Met Office \(July 2024\)](#)

### Global warming and future high-impact weather in the UK



Source: [Climate Adaptation Strategy for Wales](#)

### 2.2.2. Wales

Similarly, Wales has also seen an increase in average temperatures with 2023 being a consecutive warmest year on record (Madge, 2021). Temperature rises will continue with it estimated to increase by 3.9 °C by the 2080s (Netherwood, 2021). Wales is also seeing a rise in rainfall and since 1961 it has increased by more than 10% (Madge, 2021). It is predicted that winter rainfall will further increase by 25% by 2050, whereas summer rainfall could decrease by up to 26% by the 2080s. These changes in weather patterns will have devastating affects on Welsh livelihoods with it being estimated that 245,000 Welsh properties are at risk of flooding (Senedd Research, 2023). This has meant that the Welsh government has had to invest more than £38 million this year alone (2024-25), into flood risk management (James, 2024). The natural environment will also be severely affected due to the change in habitat suitability and breeding patterns, causing a loss of 25% of species currently found in Wales according to the Climate Change Risk Assessment (CCRA). The CCRA also highlights livestock productivity will reduce by 10-15% due to heat stress and changes in pasture growth patterns. The shift in weather patterns will also change crop suitability in different areas. Therefore, climate change is putting more stress on an already volatile industry that is at the heart of Wales.

**Properties at high risk of flooding in Wales**  
Tidal and river flooding, by local authority

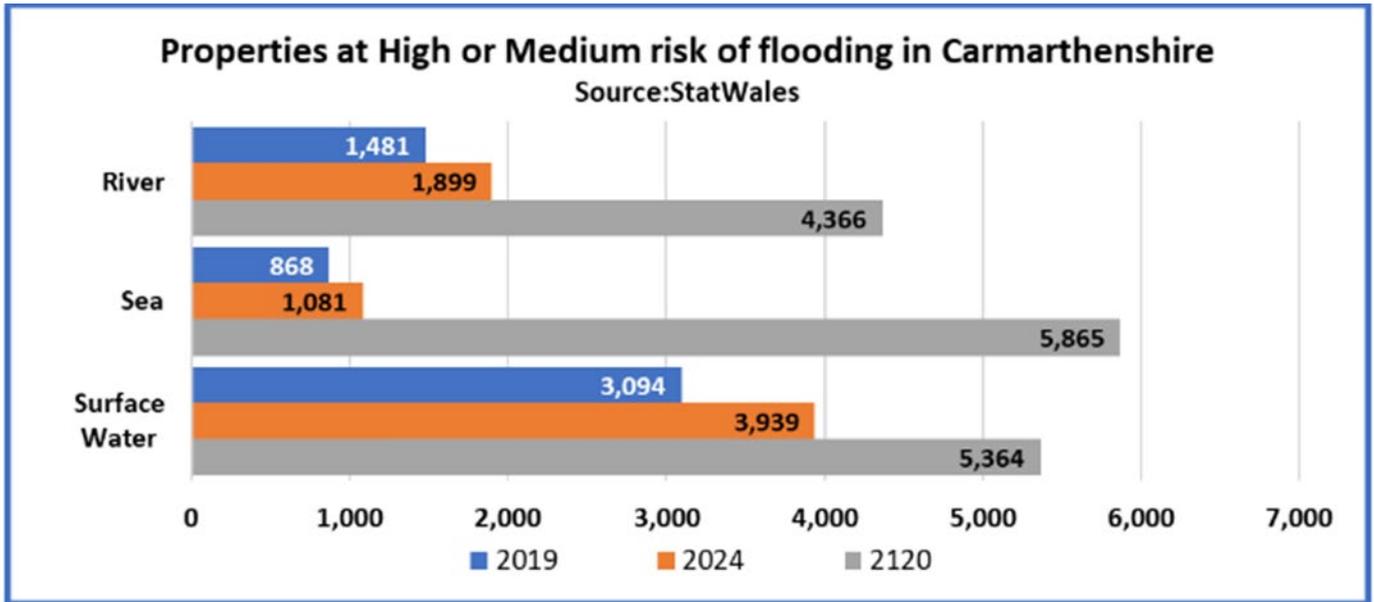


Source: Flood Risk Assessment Wales/Natural Resources Wales, September 2021



### 2.2.3. Local: Carmarthenshire

Carmarthenshire is feeling much of the same pressures from climate change as the rest of Wales. We have felt the impacts of increased rainfall, with more frequent storms. One very rememberable storm was Storm Callum in 2018, which was the biggest flood event recorded since 1987 for both the rivers Towy and Teifi and affected hundreds of businesses and homes across the county, especially in areas like Carmarthen, Newcastle Emlyn, and Llandeilo. This was a vivid reminder that the county is not immune to the effects of climate change and the number of those who will be affected are on the rise. According to StatsWales in 2024 just under 7,000 properties in Carmarthenshire are at risk of flooding, this has increased by 21% since 2019. They have predicted that the number of properties at risk by 2120 will increase to 15,595 (a further 56%).



On the other hand, Carmarthenshire will also feel the pressure of drier and warmer summers, which can have impacts on our health. Based on UK figures it is estimated that in 2023 approximately 2,000 deaths in Wales were heat related (UK Health Security Agency, 2025). Furthermore, these warmer seasons may increase the risks from parasites and pests, that have not historically been endemic to the region but will be able to survive in new areas where the change in climate is able to support their existence.

The climate based changes will also have a devastating affect on the agricultural sector. Not only will climate change have a negative affect on food production, but it will also have a negative impact on Carmarthenshire’s economy, given agriculture is one of the largest sectors in the county and employs 7.5% of the workforce. However, it must be noted that although agriculture is one of the biggest emitters in the County it also has the greatest potential to help mitigate and adapt to climate change. Another sector that is likely to feel huge pressure from the change in weather patterns is tourism. With seasonal unpredictability it may lead to the reduction in visitors to Carmarthenshire. Therefore, there is potential for this to have a devastating affect on Carmarthenshire’s economy as the sector generated over £683million in 2023 and employed over 6,000 people (Carmarthenshire County Council, 2024).

Not only is climate change heavily impacting the social and economic factors of the county, but it is also having a catastrophic effect on the natural environment. Due to climate change, habitat destruction, pollution, overexploitation of resources and invasive species, we are faced with a nature emergency. There is an alarming decline in wildlife populations, as well as the destruction of vital habitats like woodlands and wetlands, and the weakening of ecosystems that sustain life on Earth, with scientists stating we are heading towards a mass extinction event. Our Natural environment is also subject to disease, viruses and parasites that haven’t been found in the UK before due to the change in climate. One recent example is the decline in Blackbirds in the UK. This is due to the bird being infected by the Usutu virus which originated in South Africa (Horton, 2024). The nature emergency is putting even greater pressure on agriculture and human well-being as healthy ecosystems provide essential services like clean air, water, food, and climate regulation. Hence, addressing both climate change and the nature emergency requires urgent action and should be done in conjunction with each other, to secure a liveable planet for all species.

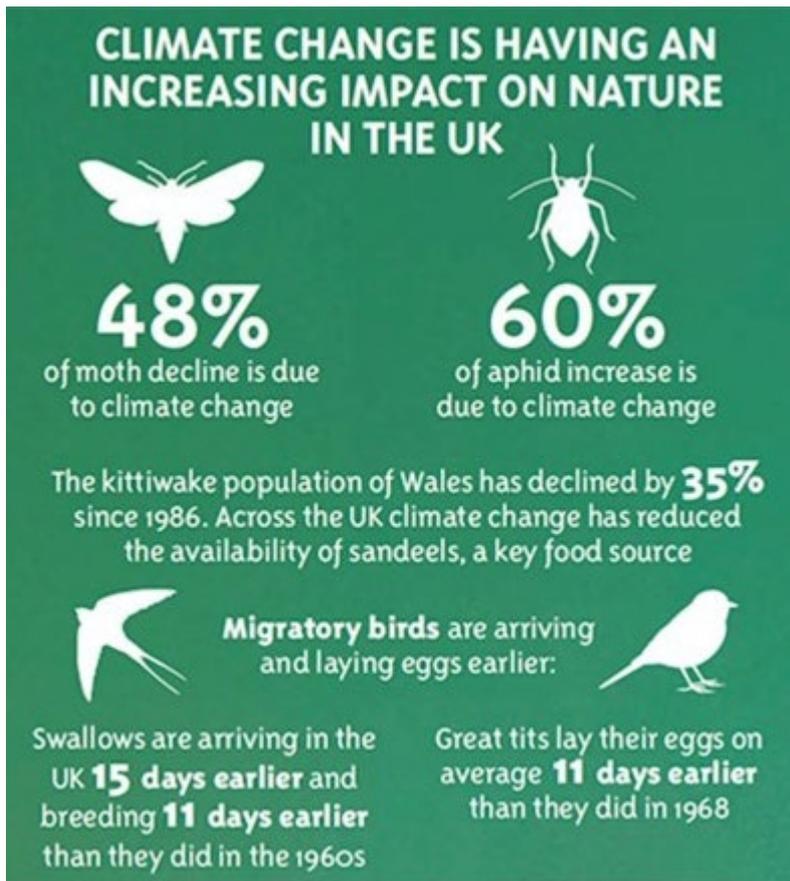


Image source: State of Nature Report - [State-of-Nature-2019-UK-27-](#)

As shown by the infographic, there is a significant increase in the aphid population, which is having a devastating affect on the natural environment. Aphids suck sap from plants which causes significant damage and they also transmit plant viruses and attract other pests like ants. This is increasing the vulnerability of our agricultural production.

Despite technological advancements human life is deeply dependent on healthy and vibrant ecosystems – in short, our lives are dependent on solving the nature emergency. Healthy ecosystems provide essential services that sustain our existence. Nature supplies clean air, fresh water, food, and medicines, while regulating the climate and supporting agriculture through

pollination and nutrient cycling. With agriculture being such a big part of Carmarthenshire’s economy and culture, it is vital to protect the county’s natural environment. Additionally, Woodlands, oceans, and wetlands act as natural buffers against extreme weather and help absorb carbon emissions. Nature also supports mental well-being and our cultural lives, as humans have a biophilic connection and plants have a calming effect on the brain, nurturing positivity, a greater sense of well-being and relaxation. It’s also been proven that plants can increase productivity by 15% (McHugh, 2024.). Without thriving ecosystems, the resources and balance that humanity relies on would collapse, threatening health, livelihoods, and survival, including the survival of ourselves, our children, and grandchildren.

### 3. POLICY AMBTIONS

This chapter will explore the policies that are in place to help overcome the cliamte and nature emergencies.

#### 4.1. WALES

Wales is unique in that it has *The Well-being of Future Generations Act*. The act has 7 well-being goals, which aim to improve the social, economic, environmental and cultural well-being of Wales. The act legally binds public bodies to ensure all development will positively affect our future generations, in which decarbonisation plays a vital role in. The *Environment (Wales) Act 2016* under section 6 states that local authorities have a duty to ensure that consideration for biodiversity is embedded in all business and project development processes through actions that actively pursue opportunities to enhance and maintain the natural environment and promote ecosystem resilience. Following the legal frameworks of both Acts, the Welsh Government developed their climate change strategy and set the legally binding target of being a Net Zero nation by 2050. This is largely set out in *Prosperity for All: A Low Carbon Wales* (2019) - Wales’s first statutory Low Carbon Delivery Plan, and *The Net Zero Wales Carbon Budget 2 (2021)* – Wales’s second carbon reduction plan, which can be found here: [Net Zero Wales Carbon Budget 2 \(2021 to 2025\) | GOV.WALES](#). You can find all of the Welsh Government’s policies that relate to the Environment and Climate Change here: [Environment and climate change | Topic | GOV.WALES](#)



Image source: [The Well-being of Future Generations | GOV.WALES](#)

*(2019)* - Wales’s first statutory Low Carbon Delivery Plan, and *The Net Zero Wales Carbon Budget 2 (2021)* – Wales’s second carbon reduction plan, which can be found here: [Net Zero Wales Carbon Budget 2 \(2021 to 2025\) | GOV.WALES](#). You can find all of the Welsh Government’s policies that relate to the Environment and Climate Change here: [Environment and climate change | Topic | GOV.WALES](#)

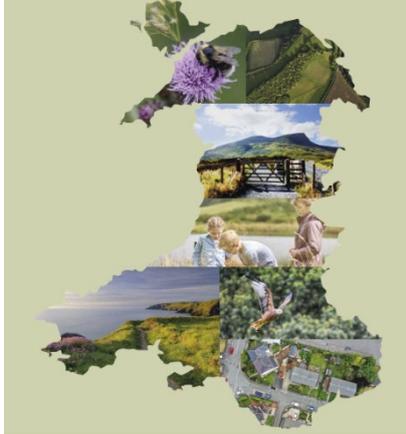
##### 4.1.1. Climate Adaptation Strategy for Wales 2024

The *Climate Adaptation Strategy for Wales 2024* outlines a comprehensive approach to addressing climate change impacts. It emphasises the importance of building resilient communities, protecting ecosystems, and safeguarding the economy. The strategy includes key objectives, such as enhancing flood defences, which can be achieved through built and natural infrastructure; improving early warning systems, to warn of severe weather events, allowing communities to prepare and respond effectively, with a prime example being the warning we received on our mobile phones regarding storm Darragh; and promoting sustainable land use that enhances biodiversity, reduces soil erosion, and increases carbon sequestration.

The full report can be found here: [Climate Adaptation Strategy for Wales 2024 | GOV.WALES](#)

#### 4.1.2. **Natural Resources Policy & Nature Recovery Action Plan**

The *Natural Resources Policy* (NRP) was produced as part of the *Environment (Wales) Act 2016* and sets out how the Welsh Government will use national policies to manage our natural resources (land, sea and air). The policy sets out three national priorities for managing natural resources:



- Delivering nature-based solutions.
- Increasing renewable energy and resource efficiency.
- Taking a place-based approach.

The NRP can be found here: [Natural resources policy | GOV.WALES](https://gov.wales/natural-resources-policy)

The national *Nature Recovery Action Plan* (NRAP) outlines the strategic framework for biodiversity conservation in Wales and aims to reverse biodiversity decline by addressing key objectives, which include safeguarding species and habitats of principal importance, improving their management, and increasing the resilience of the natural environment by

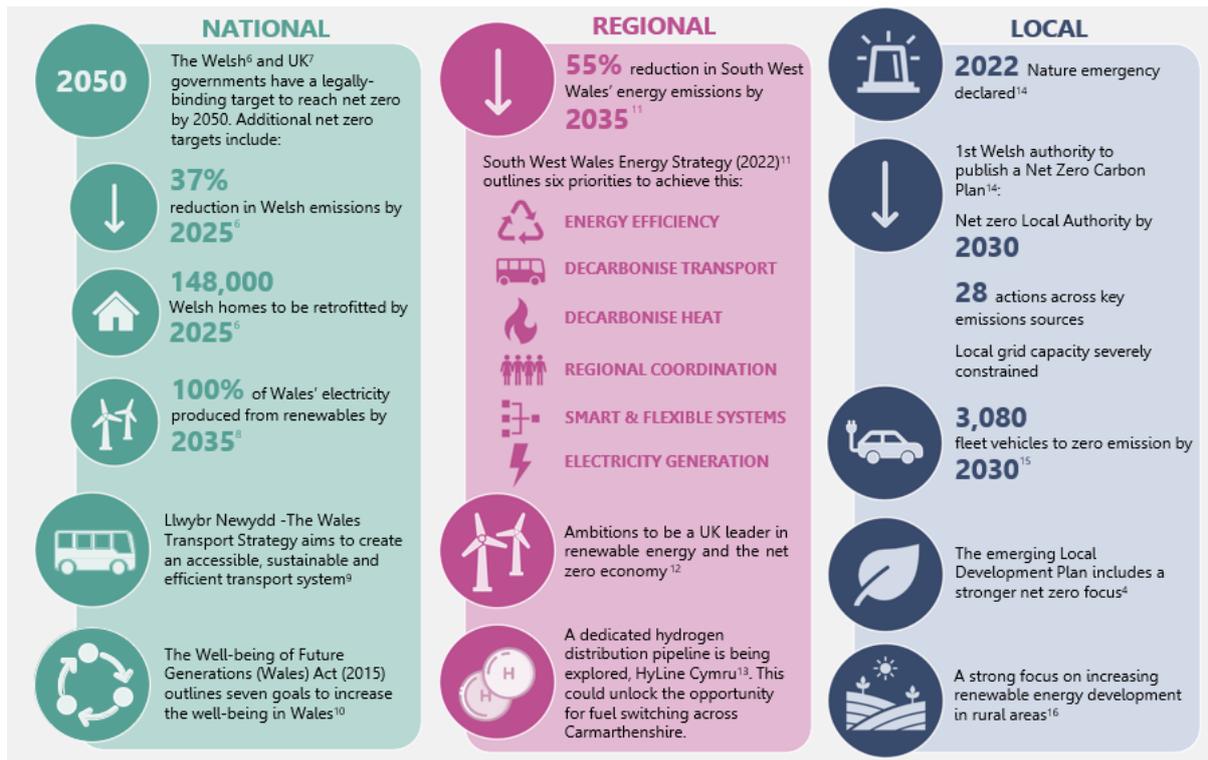
restoring degraded habitats. The plan also focuses on tackling key pressures such as pollution, invasive species, and unsustainable land and marine practices.

The NRAP can be found here: [Nature recovery action plan | GOV.WALES](https://gov.wales/nature-recovery-action-plan)

## 4.2. **SOUTHWEST WALES REGION**

### 4.2.1. **Southwest Wales Energy Strategy 2022**

In 2022, the *Southwest Wales Energy Strategy* was published, and it indicates how the region aims to achieve Net Zero status by 2050, with a 55% reduction in energy system emissions by 2035.



You can find out more here: [South West Wales Energy Strategy](#)

#### 4.2.2. Swansea Bay City Deal

The *Swansea Bay City Deal* is an £1.3 billion investment across the Southwest Wales region, putting the area at the forefront of energy and smart manufacturing innovation and driving it towards a low carbon economy. The City Deal will:

- Create at least 5,000 jobs within the renewables and energy sector.
- Provide approximately 6,000 skills and talent opportunities for the energy and decarbonisation sectors.
- Build a regional centre of excellence within the renewable energy sector.
- Grow two supply chains in the installation, manufacturing and operations of blue and green infrastructure through the Homes as Power Stations Project and Pembroke Dock Marine project.

The Homes as Power Stations Project will reduce the reliance on fossil fuels within households, with the ambition to fit 10,300 homes within the region with renewable technologies, saving 10,417 kWh of energy with a predicted 19,000+ tCO<sub>2</sub>e reduction per year.

#### 4.3. CARMARTHENSHIRE

The dedication of Carmarthenshire County Council to enhance and protect the natural environment as well as mitigate and adapt to climate change is evident through the policies and plans it has in place.

#### **4.3.1. The Carmarthenshire We Want: Carmarthenshire Public Service Board Well-Being Plan 2023-28**

The plan sets out how the board will work collaboratively to improve the social, economic, environmental and cultural well-being of the county over the five year period. This is based on detailed evidence and data derived from the Well-being Assessment as well as engagement with local communities and stakeholders.

#### **4.3.2. Carmarthenshire Cabinet's Vision Statement 2022-2027**

The nature and climate emergencies hold a significant role in the Cabinet vision statement recognising the powerful interrelationship between climate change, the loss of biodiversity and human wellbeing. The vision sets out how the Cabinet plan to help tackle the nature and climate emergencies and includes measures to increase biodiversity on all council owned land, increase renewable energy technology on council owned buildings and houses, improvements to public transport and reviewing the fleet strategy to ensure that the most suitable low emission vehicles are used.

#### **4.3.3. Carmarthenshire County Council's Corporate Strategy 2022-2027**

The climate and nature emergencies are embedded in Carmarthenshire County Council's strategic approach. *Well-being Objective 3: Enabling our communities and environment to be healthy, safe and prosperous*, holds two thematic priorities that are directly linked to the climate and nature emergencies. *Decarbonisation and Nature Emergency* stresses the importance of the natural environment as a core component of sustainable development and commits the authority to working towards being Net Zero by 2030 and addressing the issues that are driving the decline in biodiversity and aiding nature recovery.

#### **4.3.4. Carmarthenshire County Council's Route to Becoming a Net Zero Carbon Local Authority by 2030 (2020).**

After declaring a Climate Emergency in 2019, Carmarthenshire County Council was the first local authority in Wales to publish a Net Zero Carbon Plan in 2020. The plan sets out the authority's methodology behind its carbon reporting and how it plans to reach its targets in four key areas; Non-domestic buildings; Street lighting; Fleet Mileage; and Business Mileage.

#### **4.3.5. Carmarthenshire's Local Area Energy Plan (2024)**

At the County level, the Local Area Energy Plan (LAEP) sets out the actions required to 'rapidly transform' and decarbonise the energy system and infrastructure network and informs the development of the Welsh Government's *National Energy Plan*. It contains 13 priority actions that act as a catalyst for future initiatives, with an intention to inform upcoming projects, policies and strategies to help us achieve Net Zero by 2050.

You can find out more here: [Carmarthenshire Local Area Energy Plan 2024](#)

#### **4.3.6. Carmarthenshire County Council's Forward Plan for Environment (Wales) Act 2016**

The plan outlines a comprehensive strategy to enhance biodiversity and environmental sustainability in the county, aligning with the goals of the Well-Being of Future Generations Act, and focusing on sustainable practices, collaboration, and integrated approaches to environmental management. The plan is reviewed and adapted every three years to ensure it remains dynamic and responsive to new challenges and opportunities.

#### **4.3.7. Nature in Carmarthenshire: Our Approach for Local Action 2020-2030**

Carmarthenshire Nature Partnership have developed a nature recovery plan, which outlines a strategy to protect and enhance biodiversity in the region. It highlights local natural assets, such as woodlands, rivers, and coastal habitats, while addressing biodiversity loss through collaborative efforts. The plan emphasises ecological resilience, habitat connectivity, and public involvement. It aligns with the Wales Nature Recovery Action Plan and aims to inspire widespread participation in safeguarding the environment. The plan also outlines factors contributing to the loss of biodiversity, including climate change, modern agricultural practices, development, pollution and invasive non-native species.

#### **4.3.8. Carmarthenshire County Council's Strategy for Grassland Management for Pollinators on the CCC Estate 2024**

Publicly owned amenity grasslands hold substantial potential for being reservoirs of wildflower rich habitat that can contribute to reconnecting and restoring grassland biodiversity. The strategy seeks to address the loss of grassland habitats by adopting new grassland management techniques where feasible across the county. The strategy promotes the most beneficial method of cutting in each area to support biodiversity, resilience of the local environment, help reduce our carbon footprint, the risks of flooding and support our well-being and place-making agenda by improving green infrastructure for the public.

#### **4.3.9. Carmarthenshire County Council's Green and Blue Infrastructure Strategy 2024**

The Green and Blue Infrastructure (GBI) Strategy focuses on creating attractive, distinctive environments that promote community well-being through improved access to nature, while enhancing biodiversity and strengthening climate resilience. Supported by a practical toolkit to empower communities in developing their own GBI assets, the strategy also includes a detailed action plan outlining the local authority's commitment to promoting multifunctional spaces and achieving a shared vision.

#### **4.3.10. Carmarthenshire County Council's Tree and Woodland Strategy 2024-2029**

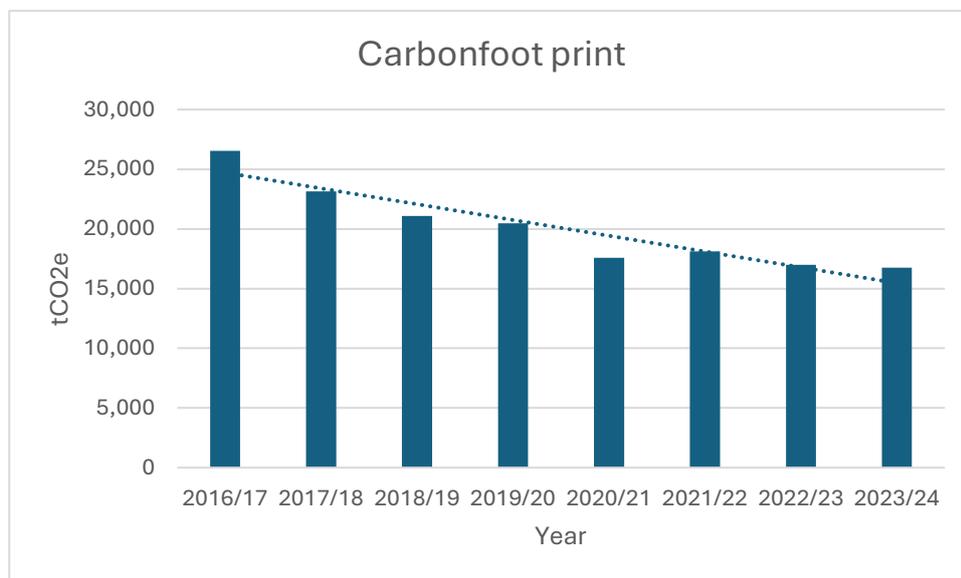
It is vital that we protect and enhance Council owned trees and woodlands as they hold a multitude of benefits. They provide habitats for wildlife and contribute to ecological connectivity and ecosystem resilience; they sequester carbon which helps mitigate against climate change and improves air quality and soundscapes; reduce flooding through increasing absorption and infiltration of surface water; intercept nutrient run-off; and provide a cooling effect for built up areas and shade for livestock. Trees also have a positive impact on mental and physical health and increase work performance, and they can have a positive economic effect by making properties and towns more attractive. The strategy sets an ambitious target to plant 9.5ha of new woodland on our estate each year for the next 25 years, thus increasing our woodland cover from 12% to 17%.

#### **4.3.11. Carmarthenshire County Council's Nutrient Management Strategy 2024**

The Nutrient Management Strategy aims to address nutrient pollution in Carmarthenshire's protected rivers, particularly focusing on phosphate levels in riverine Special Areas of Conservation (SAC). The strategy emphasises a holistic, integrated approach to tackle the impacts that nutrient pollution has on the environment, communities and the economy.

## 5. WHERE ARE WE NOW?

As previously mentioned, we have successfully reduced our carbon emissions by 37% since our baseline year of 2016/17. The progress we have made is illustrated by the graph and table below.



	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2016/17 VS 2023/24	
									Progress	% Change
<b>Consumption (kWh)</b>	72,527,266	68,564,902	69,059,743	70,332,391	63,684,340	67,694,145	63,869,172	61,420,560	<b>11,106,706</b>	<b>-15%</b>
<b>Mileage (Miles)</b>	9,313,790	9,069,875	8,829,043	9,126,181	6,679,056	6,773,772	7,272,186	8,420,699	<b>893,091</b>	<b>-10%</b>
<b>Carbon Emissions (tCO2e)</b>	26,542	23,143	21,087	20,477	17,590	18,124	16,984	16,756	<b>9,786</b>	<b>-37%</b>

### 5.1. ONE COUNCIL

This progress has been facilitated by the extensive delivery of projects across the authority. This chapter explores some of those projects as it is impossible to include all of them due to the sheer volume. Although the positive outcomes of the projects may not always be represented in our emission figures, they do emphasise how we are taking a holistic approach towards fighting climate change and enhancing and protecting our natural environment across the authority to ensure Carmarthenshire has a sustainable future.

### 5.1.1. Chief Executive Department

The department is at the heart of our employee wellbeing and development and is home to legal services, corporate policy, marketing and media, democratic services and civil registration. The department has helped the authority transition into an agile and hybrid way of working, which has had a positive impact on our emissions. The department also ensures staff have access to learning to further develop their knowledge and skills around the nature and climate emergencies and how to tackle them.

A prime example of how the department is working towards a sustainable future is the Bremenda Isaf project, where the Corporate Policy and Partnerships team are promoting sustainable food production. This Shared Prosperity Funded project is growing and processing food on a Council owned farm in Llanarthne – Bremenda Isaf, for schools, care homes and local cafés. Not only is this increasing local employment, but it is also



reducing carbon emissions through reduced food miles, as well as mitigating against the effects agriculture has on the natural environment by using regenerative farming practices. Carmarthenshire County Council is also a member of

the local food partnership – *Bwyd Sir Gâr Food*. The partnership aims to develop a thriving, resilient, sustainable, and inclusive local food system. Furthermore, the team strives to build on Carmarthenshire’s status as a sustainable food place and in collaboration with other partners, will develop a community food strategy to encourage the production and supply of locally sourced food in Wales. Additionally, the team will ensure that the Council fully engages with the Carmarthenshire Public Services Board programme to develop opportunities for public sector procurement of locally produced and supplied food, to further reduce food miles, as well as support local food producers to establish, develop, and grow their businesses.

### 5.1.2. Communities Department

This department is at the heart of Carmarthenshire’s community delivering services that keep our population safe, healthy and thriving. The department have undergone training in sustainability through Coleg Sir Gar’s Green Skills Academy and have replaced condiment sachets with bottled dispensers in all leisure catering facilities. This has prevented approximately 38,000 sauce sachets entering the waste system.

The housing team is apart of this department and through their roof and rendering project they are helping our Council owned homes to decarbonise by installing rooftop solar PV, with approximately 300 homes already having had the technology installed. Additionally, they are installing hybrid heating systems that incorporate air source heat pumps with approximately 100 homes already having them fitted. Furthermore, work is being done to improve the energy efficiency of our housing stock and ensure all our homes hold a minimum of band C energy performance rating (EPC).

The Leisure Team are excelling in driving the sustainability agenda forward and are extremely active in implementing sustainability principles. The team holds the ambition to reduce the energy consumption across the *Actif* facilities by 50%. Although the team have always been very active within this space, efforts have really ramped up since the introduction of the *Leisure Green Champions* in 2023. The Champions are volunteers throughout the different leisure teams and meet monthly to discuss projects and share good practice. Their aim is to encourage all staff to work and think sustainably so it becomes second nature. They have also written the *Sustainability Plan for Leisure Services (July 2024)* which sets out how the Leisure service is going to mitigate climate change and increase biodiversity. They regularly circulate feedback forms to staff to encourage them to make a *green pledge* and to submit their ideas on how to save energy and reduce carbon emissions. Furthermore, they have encouraged carbon reduction and circular economy principles to be included within procurement evaluation criteria's, which have recently been used in the procurement exercises for vending machines within leisure facilities and the new crazy golf facility at Y Caban in Pendine. They included specifications, such as, local suppliers, the use of recycled materials, the reduction of single-use plastic, and equipment that can be recycled.



**Llanelli Library living wall**

Additionally, a Living Wall has been installed on Llanelli Library's façade which has numerous benefits. It has increased the biodiversity and improved the air quality of the town. It also sequesters 23.56kg of carbon annually, which is the equivalent to 6 medium sized trees, whilst also boosting people's well-being. The living wall also compliments our

Green and Blue Infrastructure Strategy and promotes climate adaptation.

Furthermore, Carmarthen Leisure Centre's application for the Welsh Government's Low Carbon Heat Grant has recently been successful and will facilitate the replacement of the gas boilers with Air Source Heat Pumps (ASHP), thus removing the fossil fuel heating at this site.

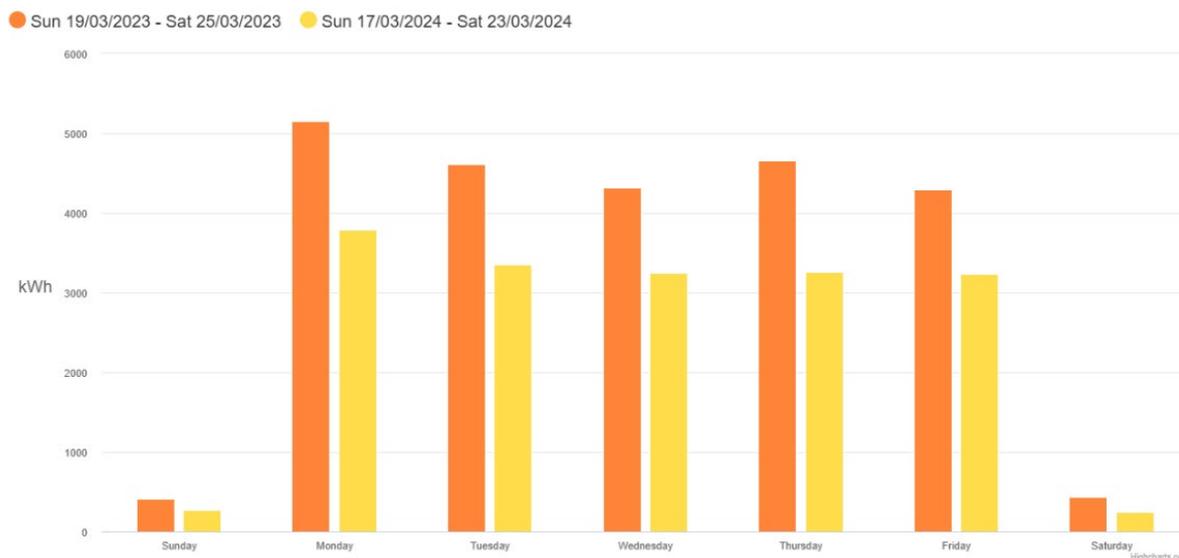
### **5.1.3. Education, Children and Family Services Department**

This department's core principle is to ensure every child is valued and valued equally. The division is dedicated to guaranteeing that children and young people are effectively supported to access their education and other required services. Members of the department have had training in the principles of Circular Economy, including some teachers. Additionally, work to make our schools more energy efficient has and will be facilitated by the Re:Fit Cymru framework. Energy conservation is also being promoted in schools through the 'Energy Sparks' programme. The charity provides a unique school-specific energy management tool and education programme. The tool analyses the school's electricity and gas consumption and provides easy to implement energy savings measures. It also engages children through educational activities that look at the energy consumption of the school. Currently, there are 18 schools that are using the programme. Ysgol Coedcae has been using Energy Sparks since 2022 and have successfully reduced their gas consumption by 25%. This was largely achieved by adjusting their heating controls and reducing the heating period, especially over the weekends. The table below shows a comparison of the same week in consecutive years, when the outdoor temperature was similar, indicating the impact that these small changes have

made on their gas consumption. Not only has this had a positive impact on the school’s carbon emissions but it would have also saved them approximately £2,000 that week alone.

#### Your school's daily gas use for two recent weeks

A comparison of your school's gas use across two recent weeks.



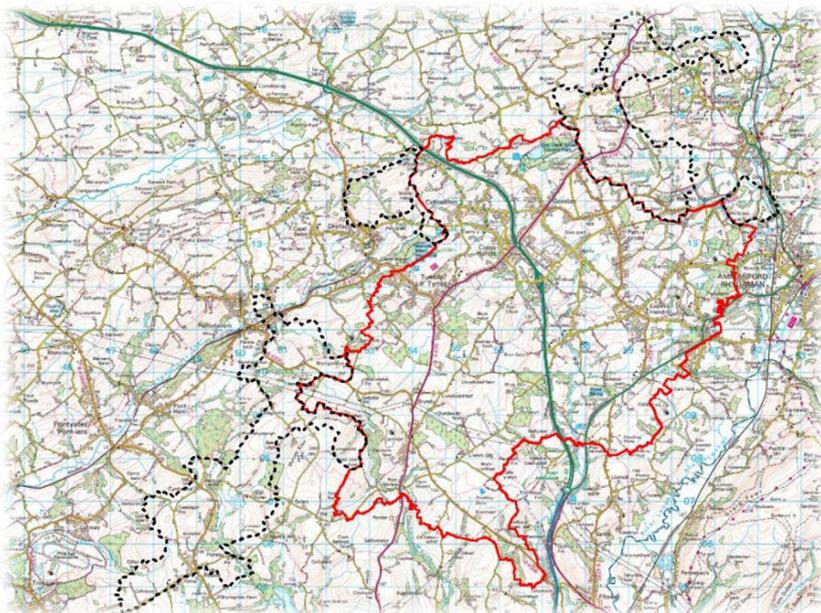
Furthermore, The Climate Action Group has been set up to empower young people across the county to become drivers of transformational change through climate action and sustainable practices by involving them in local governance. The group is made up of elected members of pupils from schools throughout Carmarthenshire, and one method they have used to promote change was a written manifesto with eight climate and nature-based objectives, which they have requested the council to sign and pledge their commitment to climate action. This is integral to ensure young people’s voices are heard in decision-making processes related to climate action. The group meets quarterly to discuss climate change issues, implement recommendations from the manifesto, and to connect with local authorities, organisations and businesses.

Biodiversity enhancement is also being implemented within the County’s schools. Pollinator friendly spaces are being developed in school grounds, and grassland management is being reviewed with the Rural Conservation Team with the development of grassland management action plans. The School Improvement Team is also providing teacher training events and supporting resources for biodiversity conservation. Grant funding had been provided to develop community gardens in Ysgol Bro Banw, Ysgol Bro Myrddin and Ysgol Penrhos. Additionally, Ysgol Penrhos has also been involved in the *Pharmabees Programme*, where a pollinator friendly highway is being developed by Bouygues, led by Cardiff University, to link the school with the Pentre Arwel Site. Bee hives have also been installed at the school and staff members have been trained in beekeeping. Therefore, this not only promotes biodiversity, but also sustainable practices.

#### 5.1.4. Place Infrastructure and Economic Development Department

The Place, Infrastructure and Economic Development department is at the center of the authority's decarbonisation and nature enhancement journey. It prides itself in delivering decarbonisation, adaptation, waste management and biodiversity conservation and enhancement projects.

Development planning plays a vital role in ensuring the sustainable future of Carmarthenshire and planning policy is being driven by Carmarthenshire's Revised Local Development Plan 2018–2033 (rLDP). The plan supports sustainable development by promoting carbon reduction and renewable energy, enhancing biodiversity with green and blue infrastructure, and fostering sustainable communities through placemaking and improved public and active transport. It emphasises protecting the environment, ensuring developments are adaptable to climate change, and creating attractive, inclusive spaces.



The map shows the Caeau Mynydd Mawr Project area (red line) and proposed new area (black dotted line), which will come in with the new LDP later this year.

The ground-breaking Caeau Mynydd Mawr project, which began in 2013, was developed to offset the impacts of development in the Cross Hands area on the European protected Marsh Fritillary Butterfly. Funded by contributions from developers, the project facilitates the delivery of Carmarthenshire County Council's Local Development Plan by allowing development to proceed unhindered, whilst securing sufficient habitat to support the butterfly. The project works with local landowners, graziers and contractors to appropriately manage the habitat which supports this rare

butterfly. The project currently manages approximately 82 hectares of land and has been a huge success, as the Marsh Fritillary Butterfly continues to thrive.

Sustainability has been at the heart of the Pentre Awel development and contractors, Bouygues, have been awarded the Environmental, Social and Governance (ESG) award from Constructing Excellence in Wales. From the start of the project Bouygues has had clear carbon guidelines and have worked closely with clients, supply chain partners, and employees to reduce their impact on the environment as well as enabling the local community to thrive. During the first phase of the development Bouygues saved 450 tCO<sub>2</sub>e from being emitted by reducing over 90% of direct emissions from fuels on the site, largely achieved using sustainably certified hydrotreated vegetable oil (HVO), and 10% reduction in waste production, and energy and water consumption. Solar power was used for the sites CCTV cameras and the site offices and cabins. Recycled and green materials were also used as part of the construction.

Carmarthenshire County Council has partnered with Nappicycle to deliver an innovative project that tackles two major challenges- diverting waste from landfill and sustainable road maintenance. The pilot project on the B4336 at Pontweli used approximately 80,000 nappies, which were collected by the Council, recycled into fibrous pellets at Nappicycle’s facility in Capel Hendre and then incorporated into the Stone Mastic Asphalt (SMA) surfacing material at the GH Harries plant in Ludchurch, Pembrokeshire. This SMA was then used for road surface improvements. This project is a perfect exemplar of a local circular economy in action as well as more sustainable waste and highway management. Using local contractors has also had a greater impact on reducing our carbon footprint by reducing miles travelled, whilst simultaneously having other benefits like boosting the local economy.

As previously highlighted, Carmarthenshire is going to experience more extreme flooding due to climate change, therefore, flood defence plays a vital role within climate adaptation for the county. As Lead Local Flood Authority for Carmarthenshire we undertake a wide range of flood alleviation schemes around the County, as part of our Capital Works Programme. These are targeted to manage flood risk, reduce numbers of properties that flood, and maintain our flood defence assets. Schemes range from small culvert and outfall improvement works, to more complex Natural Flood Management (NFM) projects, as well as schemes to provide Property Flood Resilience (PFR) to individual properties.

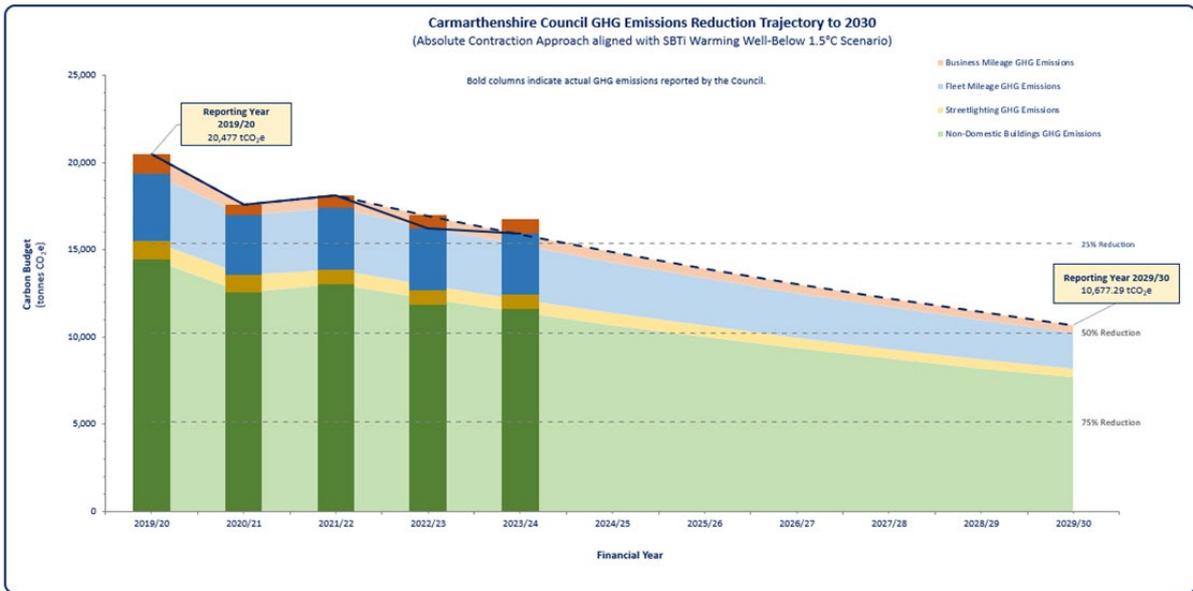
## 6. WHERE DO WE WANT TO BE?

### 6.1. DECARBONISATION TRAJECTORIES

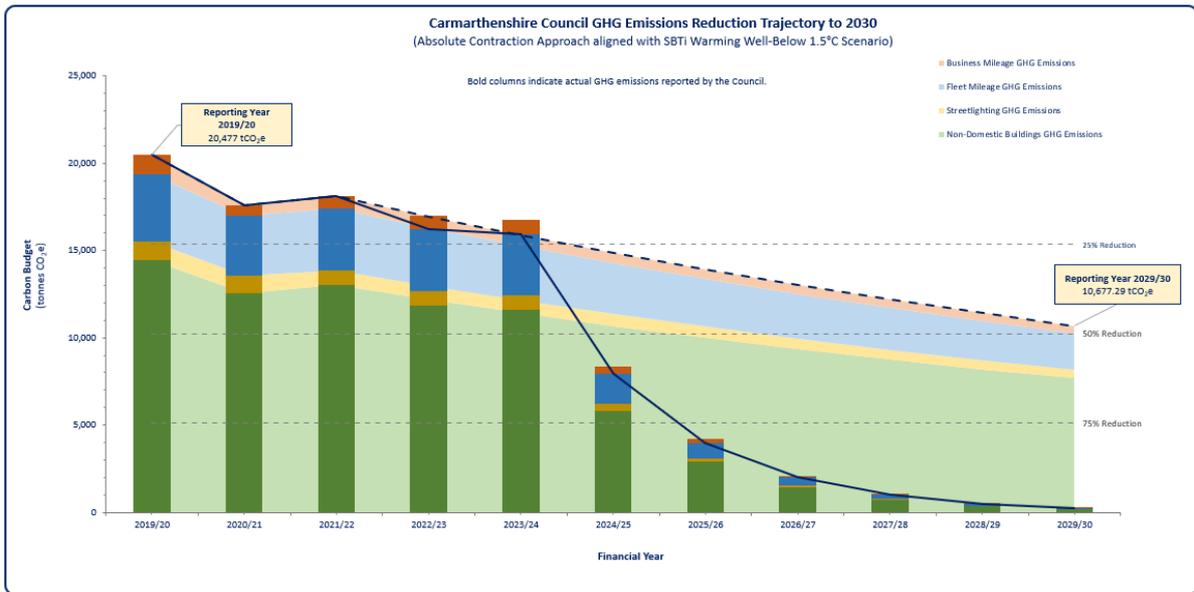
We have recently commissioned the development of a Carbon Trajectory Tool from GEP Environmental. The tool utilises the Science Based Targets initiative (SBTi) and our reporting data to provide a visual representation of our journey to Net Zero. Without a national available tool provided by Welsh Government and being one of the first local authorities to develop such a tool, we offered it out to others to utilise as it holds a multitude of benefits. This promotes collaboration and a joined-up approach with neighbouring authorities. We have utilised the tool to discover the rate of annual emission reduction we require to achieve our Net Zero target.

#### 6.1.1. Low Level Decarbonisation Trajectory

As previously mentioned, we have successfully reduced our carbon emissions by 37% since 2016/17. However, with only 5 years remaining until 2030 our efforts need to be amplified. If we continue to reduce our emissions at our current rate we will reach approximately 50% reduction. This is illustrated in the graph below. Therefore, this would require a great deal of offsetting for us to be able to achieve Net Zero status.



### 6.1.2. High Level Decarbonisation Trajectory

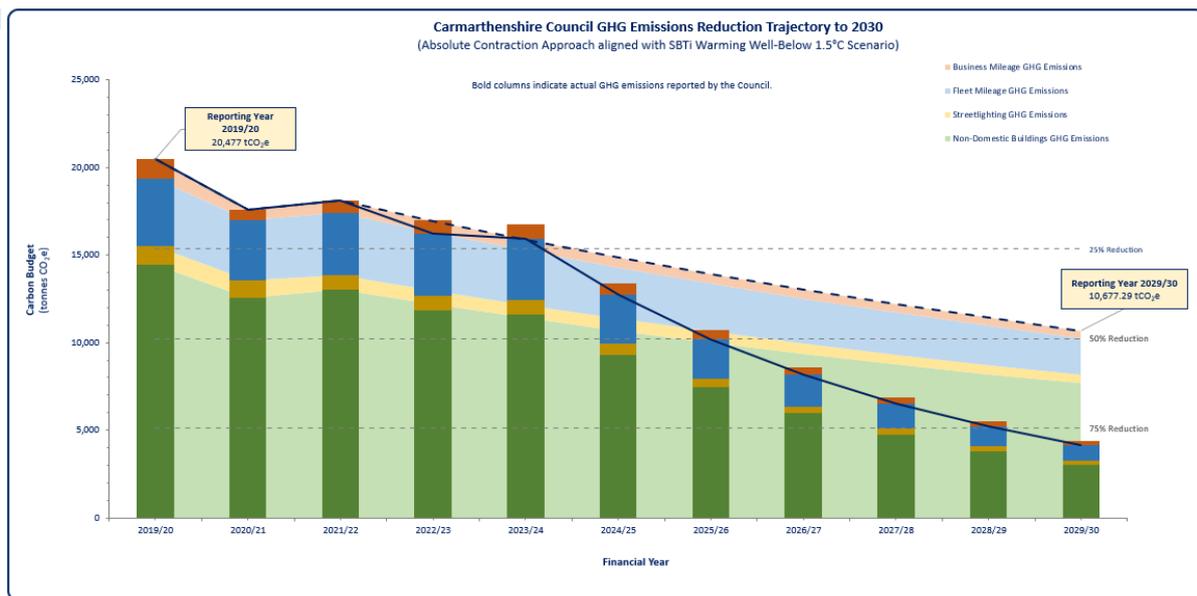


As shown by the above graph, by reducing our carbon emissions by 50% annually going forward, we will see an overall reduction of 99% from our baseline year.

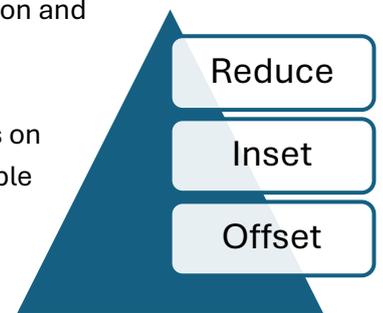
### 6.1.3. Medium Level Decarbonisation Trajectory

As we hold the ambition to firstly reduce our emissions to at least 80%, with the residual being offset, we require at least an annual 20% reduction in our carbon footprint. By following this trajectory, we will achieve more than a 50% reduction by 2026/27 and more than a 75%

reduction in 2030, which is portrayed in the graph below.



This is the trajectory we are working towards as it is the most pragmatic option and the most proportionate in sense of costing and deliverability. The hierarchy within our Net Zero methodology is to reduce our emissions as much as possible, with 80% being the minimum target. It is impossible to eradicate all emissions and we believe having a target of a maximum of 20% residual emissions puts us in the best place possible to achieve Net Zero. Therefore, the second step within our hierarchy means these residual emissions will firstly be counterbalanced through insetting. This will see the investment in renewable energy generation and tree planting across our estate, which is already being widely introduced throughout the authority, with the introduction of works like the Tree and Woodland Strategy. Offsetting sits at the bottom of our hierarchy as it relies on the purchasing of carbon credits and will only be considered if it is impossible to achieve Net Zero through insetting alone. This is because we want to invest in our own county first.



The next chapter will explore how we are going to achieve this.

## 7. HOW ARE WE GOING TO GET THERE?

As showcased at the start of the report Carmarthenshire County Council and Wales have an array of policies and strategies in place to facilitate the journey to Net Zero and to preserve and enhance the natural environment. Furthermore, this is not a challenge we are facing alone; Work is being done across all sectors in Wales and Carmarthenshire to achieve the Welsh Governments targets and we have formed successful collaborations to enhance this work.

## 7.1. COLLABORATIVE WORKING: HOW ARE WE ORGANISAED TO TACKLE THE CHALLENGE

Partnerships and collaboration are paramount to the fight against climate change and efforts to improve the state of nature because it is important to bring together diverse expertise, resources and perspectives to enable a more effective, innovative and comprehensive solution that we are unable to achieve alone.

The climate change and nature emergencies are embedded in Carmarthenshire County Council's corporate strategy and within our decision-making process. The Cross-Party Climate Change and Nature Emergency Advisory Panel gather work stream information and responses to legislative requirements and reports them back to cabinet and full council to help with decision making processes. Additionally, decisions go through a scrutiny committee to assess that all decisions are robust. The authority is also equipped with internal cross departmental officer groups to enable holistic thinking and approaches towards these agendas.

In 2021 four *Corporate Joint Committees (CJC)* were formed across Wales to support greater collaboration between local authorities. The Southwest Wales CJC is made up of representation from the region's four local authorities, the Bannau Brycheiniog National Park Authority and the Pembrokeshire Coast National Park Authority. The focus of the committee is to improve regional planning, co-ordination and delivery of transport, land-use planning, economic development and energy. The CJs hold a regional focus and have the ability to fund projects.

A Local Government *Climate Strategy Panel (CSP)* organised by the *Welsh Local Government Association (WLGA)* has been set up to help support, lead and give strategic overview to decarbonisation work in local government and is made up of Chief Executives from local authroties and other public bodies. By involving chief executives, it ensures that local government voices are heard within Welsh policy through the panel's work with the Welsh Government in developing Wales's next Low Carbon Delivery Plan. Task and finish groups, headed by local authority Chief Executive's, feed into the CSP, enhancing local authority involvement in national policy making as well as facilitating collaborative working.

In addition, the authority is a member of the *Association for Public Service Excellence (APSE)* including APSE Energy. This is a bespoke collaboration of over 100 UK local authorities who are working towards the municipalisation of energy. ASPE Energy was established to support local authorities to make the most of their assets and to progress in the energy and climate agenda, through providing a knowledge sharing platform and extensive resources to help reach our own and national emissions targets.

We also work closely with other local authorities and organisations within our region. We have an excellent relationship with the other three local authorities in Southwest Wales and often work collaboratively when implementing strategies and projects. A prime example is the Regional Energy Strategy and the LAEP work mentioned previously. The regional work is headed by the *Energy Core Group*, which reports to the CJC. Furthermore, the *Swansea Bay City Deal* further promotes this regional working as it's led by the regions four local authorities in conjunction with the local health boards, universities, businesses and private sector.

Additionally, public bodies are also brought together through the Public Service Board, which were established under The *Well-being of Future Generations (Wales) Act 2015*. The board brings together a collection of public bodies to collectively improve the social, economic, environmental and cultural well-being of the county and Carmarthenshire County Council is a statutory member.

Furthermore, we are proud members of the Carmarthenshire Nature Partnership which is made up of a variety of organisations including, government and non-government wildlife bodies, wildlife charities and voluntary groups, that are all working together to enhance and conserve Carmarthenshire's biodiversity.

To achieve the phosphate targets set by Natural Resource Wales a *Nutrient Management Board* (NMB), which we sit on, has been established for the River Tywi. We are also apart of many groups to manage the nutrient levels of the county, for example, the *Technical Advisory Group: Agricultural Working Group*. The aim of this group is to reduce nutrient flux from agricultural practices and rural land use to protect riverine SAC catchments.

Moreover, as previously mentioned the Leisure department is proud to have a team of *Green Champions*. This is a group of individuals who are passionate about climate action and sustainability and have volunteered to be pioneers within the workplace.

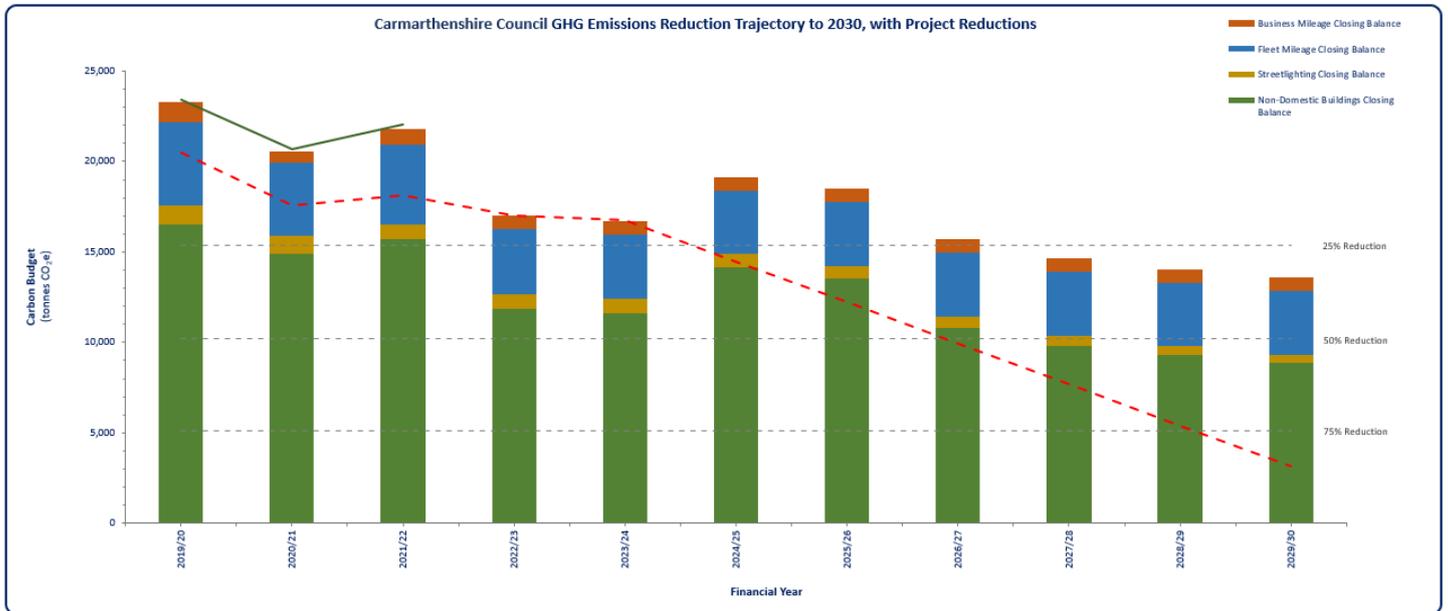
## **7.2. PROGRESS AGAINST ACTIONS**

We have been making good progress against the 16 actions set out in our Net Zero Carbon plan, with 10 of them having been completed and closed. A full list and detail of progress on these actions can be found in appendix 1. However, the authority is far more active in this field than the actions portray due to the ongoing development of the Net Zero plan, which has facilitated the inclusion of decarbonisation and the nature emergency as one of the thematic priorities within the authority's well-being objectives. Moreover, work towards mitigating the climate and nature emergency and incorporating climate adaptation is being taken beyond the Net Zero Plan through the implementation of actions by our Performance Indicator Management System (PIMS). Progress against these actions are monitored and scrutinised quarterly and they also inform the corporate business plan, which is monitored annually. With the evolving nature of the plan, we will continue to track progress against the remaining 6 Net Zero Carbon actions, but new interventions and initiatives will be monitored through the PIMS process. All PIMS actions listed within this report have been taken from the Carmarthenshire County Council's 25-26 business delivery plan, therefore, all actions hold the target date of 31<sup>st</sup> March 2026 for completion.

## **7.3. DECARBONISATION SCENARIOS**

Utilising the carbon trajectory tool we have predicted the impact that different projects will have on our decarbonisation pathway. This provides us the opportunity to develop a visual representation of the impact that each project will have. Therefore, the carbon trajectory tool is highly beneficial within the decision making process. The tool also helps us discover where more work and investment is needed.

### 7.3.1. Pipeline Projects Scenario



Illustrated by the graph above is our decarbonisation trajectory based on projects we currently have in the pipeline. It must be noted that these may produce greater or less savings as they are currently predictions. The savings have also only been inserted for the year of installation for the creation of the graph, however, savings will be made annually by the projects. Although these projects will have a positive impact on our emissions, it signifies that we require far greater investment into decarbonisation projects to achieve our ambition.

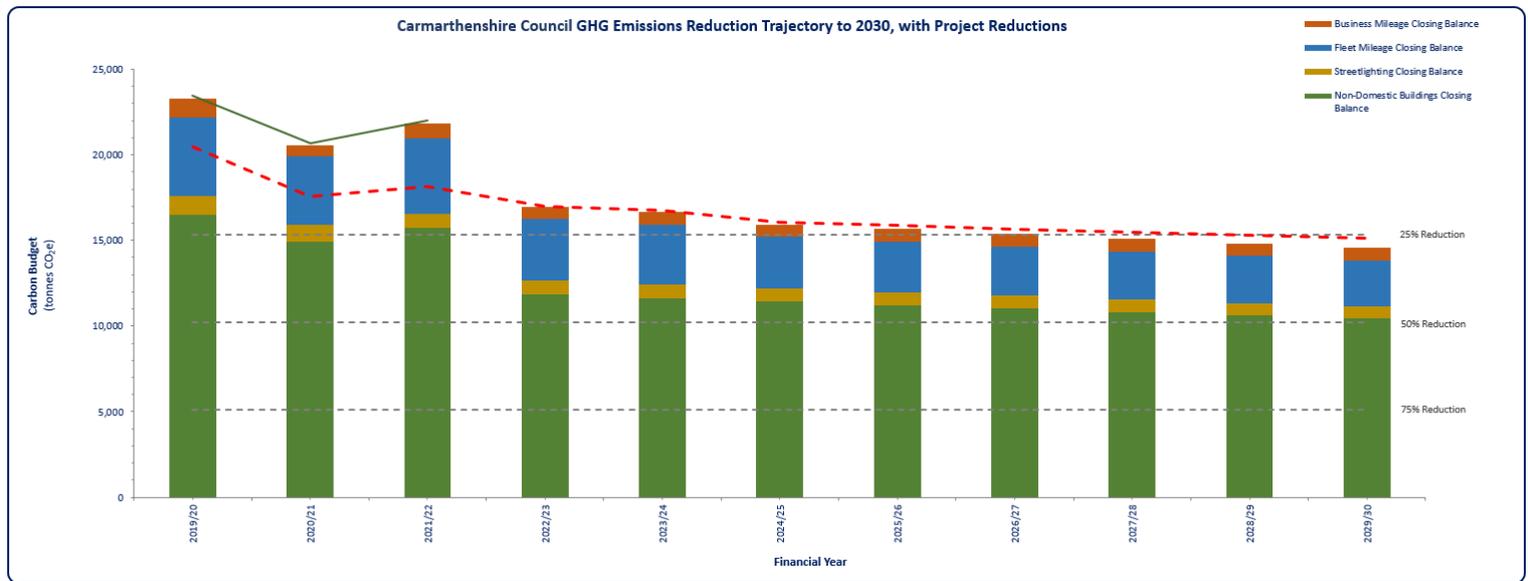
### 7.3.2. Building Disposal Decarbonisation Scenario

Our building portfolio is always subject to change due to the disposal, purchasing and construction of buildings, and plays a considerable role in our carbon footprint. As captured by our reporting (see appendix 1), non-domestic buildings equate for the majority of our emissions. Building disposal has a positive impact on our carbon emissions, and with this in mind, we have considered the future impact this will have. The following scenario, depicted in the graph below, is based on the high-level building disposal that is being considered by 2030. It must be noted that this is merely an exercise and is not definitive. This trajectory is based on our current non-domestic buildings portfolio and 11 buildings that are being considered for disposal.

This trajectory also presumes that we maintain our current reduction rate and assumes that all the buildings will be sold in 2027/28. As you can see from the graph below, by disposing of only 11 buildings it has a considerable positive impact on our emissions. Based on the buildings energy usage in 23/24 it would save 1,621,020.25 kWh and 332.1 tCO<sub>2</sub>e.

This also emphasises the need to consider the environmental impact as well as the biodiversity potential of the buildings grounds when acquiring new buildings into

our estate. This is essential if we want to achieve our ambitions. A prime example of how selling a building can have a huge impact on our carbon emissions is the removal of Parc Dewi Sant



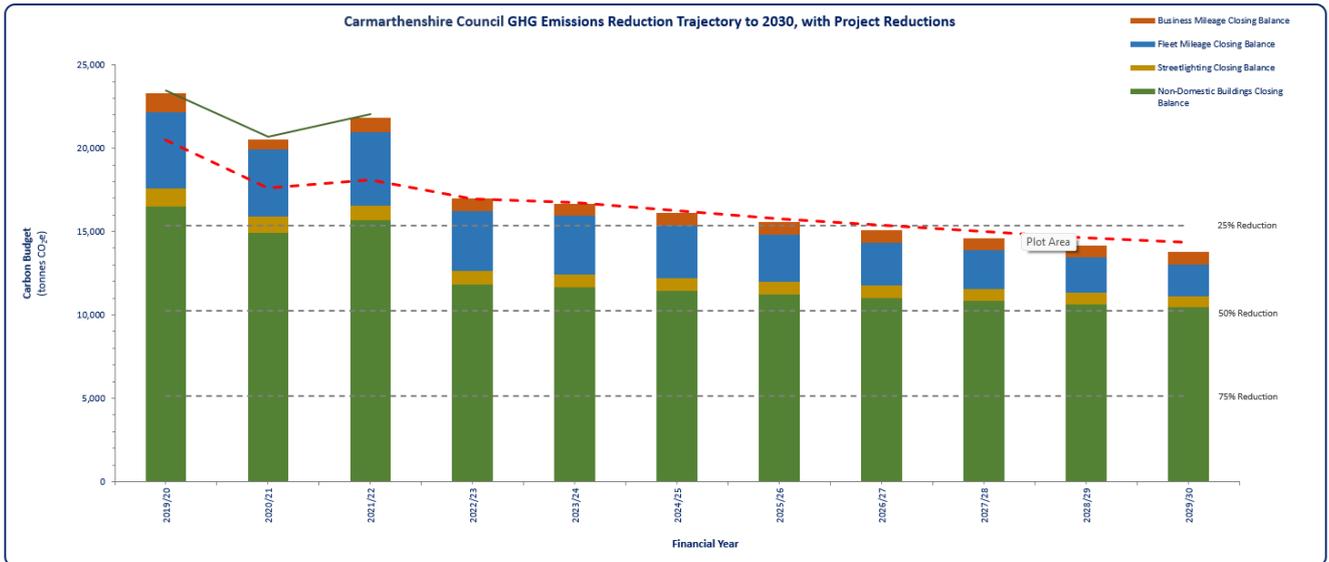
from our estate. Based on 2023/24 energy consumption, the selling of the site will reduce our non-domestic building emissions by 23%.

By law all public buildings that have a total useful floor area of over 250m<sup>2</sup> must acquire and display a Display Energy Certificate (DEC). A DEC shows the energy performance rating of a building based on actual energy consumption across a 12-month period. The operational rating is a numerical indicator of the annual CO<sub>2</sub> emissions from the building and this rating is shown on a scale from A to G, with A being the lowest CO<sub>2</sub> emissions and G being the highest. The DEC rating is a useful indicator that should be considered in the decision-making process of disposing and acquiring buildings.

### 7.3.3. Fleet Decarbonisation Scenario

Of the four key areas we report on, our fleet is our second highest emitter, therefore, making this a priority area. We have considered what position we will be in by 2030 if we were to convert 10% of our fleet to electric vehicles (EVs) every year. By using electric vehicles instead of internal combustion engines (petrol and diesel) it eliminates all emissions when that vehicle is being driven. However, as there are emissions related to the production of the electricity used power the cars there are still emissions associated with these cars, but they are far less. Based on 23/24 emission patterns and if we were to do nothing else to decarbonise apart from converting 10% of our fleet to EVs each year, it would mean that by 2030 we will be emitting 13,025.83 tCO<sub>2</sub>e; this is a 22% reduction from our 23/24 total. This is shown in the graph below. The decarbonisation of our fleet is vital to reach our Net Zero Target, but it needs to be done in conjunction with other decarbonisation projects across the whole authority.

As illustrated by these scenarios, an holistic approach is crucial to achieving our ambition .



## 7.4. CLIMATE CHANGE AND NATURE EMERGENCY PEOPLE AND CULTURAL CHANGE PLAN

To achieve the ambitious goals the Council has set for mitigating and adapting to climate change, as well as preserving and enhancing the natural environment, requires support and dedication from everyone. Therefore, a people and cultural change plan is a vital tool for engaging others by transmitting information about the climate change and nature emergency. It also ensures our messages are structured, clear, consistent and aligned with our organisational aspirations. The plan is a critical component for achieving our goals, building relationships and maintaining a positive and credible presence in our community. The importance of the plan is magnified by the urgency of the matter as action is required now, by everyone, as it effects all aspects of our lives. It was also highlighted in the latest public survey that only 19% of respondents agreed that the climate emergency is being addressed locally and 37% disagreed that their local environment is pleasant and well looked after. This, more than anything, shows that greater collaboration is needed across our communities.

The plan can be found in appendix 3.

## 7.5. THE COST TO DECARBONISE

A huge amount of investment in energy efficiency measures and low emissions technologies is required to reach an 80% reduction in our carbon emissions. Once we have reached our emissions target, further investment may be required for insetting and offsetting activities to ensure we reach Net Zero status. Appendix 2 contains a table that predicts how much this is going to cost.

However, it must be noted that this is merely an estimate and is dependent on a lot of different considerations. It also doesn't necessarily mean that it will require additional funds,

as large portions of the sum will be from redirected money from fossil fuel technology. For example, when a fossil fuel powered boiler needs replacing it will not be replaced like-for-like, but with a low emissions equivalent, like an air source heat pump. We aim to deliver decarbonisation projects collaboratively in conjunction with other interested parties. For example, we work very closely with our neighbouring authorities, and we look to deliver projects jointly and through regional forums, such as the Swansea Bay City Deal, which are already delivering projects across the region. This will help alleviate the cost of decarbonisation. We are extremely committed to our Net Zero ambition but our deliverability is highly dependent on funding from third parties such as the Welsh Government which we are actively seeking and utilising.

## 7. CONCLUSION

In conclusion, at this midway point of our Net Zero Carbon plan we can be proud that we have reduced our carbon emissions by 37% since our baseline year, mirroring the success of the nation. As an authority we have ensured that we have effective strategies and plans in place, that align with the Welsh Government's targets and ambitions to make Carmarthenshire and the Council more sustainable and nature rich. This not only improves the well-being of the current population, but future generations too. We are also proud of the collaborations we have made with neighbouring local authorities and local stakeholders to further drive the work we are doing and ensuring this is a reality. We have set out in this report examples of how across the Council we are working towards our targets and we have reviewed, through our trajectory work, the pathway we need to take to become a Net Zero Local Authority by 2030. To achieve our ambition, we recognise that more investment and interventions are needed and we must remember that the cost of doing nothing will far exceed the cost to decarbonise through the impact climate change and nature depletion will have on our county.

Although we are making good progress and working our hardest to achieve our ambition and goals, we are faced with a multitude of constraints. It is common knowledge that the authority's budget is being tightened each year due to government cuts, therefore we are often reliant on grant funding to complete projects. As you can imagine each grant is highly competitive with the whole of the public sector facing austerity. For renewable energy projects the state of the National Grid holds the biggest constraint. Unfortunately, the National Grid requires a substantial upgrade to accommodate the input and distribution of new renewable energy assets. When installing a new system in areas where the National Grid has no capacity there is an option to pay for its upgrade, however, these costs are often extremely high. Conversely, as previously mentioned, if we do not execute a high level of investment into decarbonisation and nature preservation the cost of doing nothing is going to be far greater to our communities. Cultural behaviours and a lack of understanding around climate change and the nature emergency also hinder our progress. However, this report along with the Climate Change and Nature Emergency People and Cultural Change Plan endeavour to change this. The age of the buildings within our estate also poses a major challenge. This is because older buildings tend to be more energy inefficient as they weren't built with energy conservation in mind. Our oldest buildings date back to the 1800s and we predict that a large

proportion of our buildings are currently wasting energy. Older buildings are also usually home to older systems that work inefficiently and would need complete removal and replacing. Furthermore, there are restrictions on how you can alter listed buildings. Therefore, any energy efficiency or energy generation projects we do must incorporate measures that are sympathetic to a buildings character and designation. It is also vital that we ensure the protection of natural environments within our work efforts. However, we will endeavour to achieve our ambition, and collectively, **as one council**, we can overcome any barriers and achieve anything.

# APPENDIX 1

## CARBON FOOTPRINT

The table below goes into detail on our recorded emissions for the areas within our Net Zero Carbon plan.

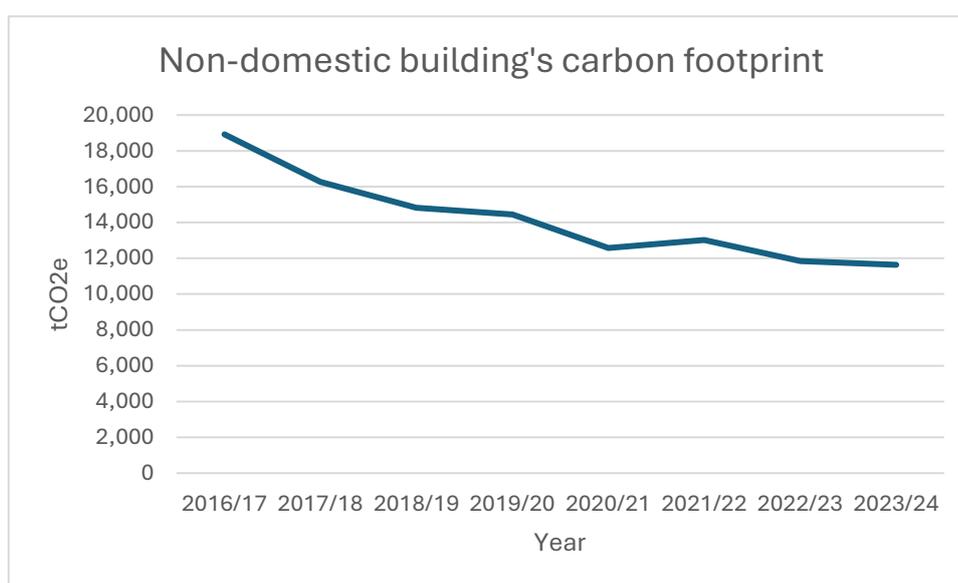
	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	% Change since baseline
<b>Non-Domestic Buildings</b>									
Consumption (kWh)	66,808,735	63,690,923	64,857,362	66,407,242	59,808,497	64,095,021	60,274,987	57,837,072	-13%
Carbon Emissions (tCO2e)	18,923	16,258	14,822	14,443	12,581	13,026	11,846	11,649	-38%
<b>Street Lighting</b>									
Consumption (kWh)	5,718,531	4,873,979	4,202,381	3,925,149	3,875,843	3,599,124	3,594,185	3,521,319	-38%
Carbon Emissions (tCO2e)	2,569	1,874	1,291	1,088	981	832	809	792	-69%
<b>Fleet Mileage</b>									
Mileage (Miles)	5,127,150	5,121,289	4,982,428	5,154,668	4,427,070	4,262,681	4,496,754	5,466,196	7%
Diesel Used (litres)	1,416,276			1,419,336	1,267,437	1,320,551	1,327,545	1,313,071	-7%
Electricity (kWh)	N/A	62,169	N/A						
Carbon Emissions (tCO2e)	3,790	3,852	3,856	3,814	3,407	3,573	3,584	3,507	-7%
<b>Business Mileage</b>									
Mileage (Miles)	4,186,640	3,948,586	3,846,615	3,971,513	2,251,986	2,511,091	2,775,432	2,954,503	-29%
Carbon Emissions (tCO2e)	1,260	1,159	1,118	1,132	621	693	745	808	-36%
<b>TOTAL</b>									
Consumption (kWh)	72,527,266	68,564,902	69,059,743	70,332,391	63,684,340	67,694,145	63,869,172	61,420,560	-15%
Mileage (miles)	9,313,790	9,069,875	8,829,043	9,126,181	6,679,056	6,773,772	7,272,186	8,420,699	-10%
Carbon Footprint (tCO2e)	26,542	23,143	21,087	20,477	17,590	18,124	16,984	16,756	-37%

\*Note: Our performance data quoted in this document uses UK emission conversion factors issued by the Department for Energy Security and Net Zero. These emission factors are subject to change as fuel becomes cleaner, primarily electricity with more renewable energy being included in the energy mix. However, these factors can also increase as data becomes more accurate. Therefore, each year our data is based on the conversion factors for that year. The conversion factors used for the 2023/24 reporting year can be found here: [Greenhouse gas reporting: conversion factors 2024 - GOV.UK](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/114122/greenhouse_gas_reporting_conversion_factors_2024.pdf).

As mentioned in the report we have successfully reduced our carbon emissions by 37% since our baseline year. Having made progress in reducing emissions across the board, the greatest reductions have come from our street lighting emissions.

### **Carbon Footprint: Non-domestic Buildings**

Since our baseline year we have successfully reduced our non-domestic building's emissions by 38% as show in the graph below. This has largely been due to the energy efficiency measures that have been implemented across our estate. However, it must be noted that this is also the result of the grid electricity becoming cleaner through the increase of renewable energy in the electricity mix. It should also be noted that this is the first year that we have removed the electricity used to power our electric vehicles from our building consumptiona and reported on it separetly.



Non-domestic buildings									2022/23 Vs 2023/24	
	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	Progress	% Change
Consumption (kWh)	66,808,235	63,690,923	64,857,362	66,407,242	59,808,497	64,095,021	60,274,987	57,837,072	-2,437,915	-4%
Carbon Emissions (tCO2e)	18,923	16,258	14,822	14,443	12,581	13,026	11,846	11,649	-197	-2%

As part of our Carbonfoot print analysis we monitor the energy consumption of our non-domestic buildings and have identified our top 10 consumers, which are set out in the table below. This allows us to not only identify the extent of the challenge we are facing but also idicates where our focs should lie. A good example of how we are focusing our work on these high consumers is Carmarthen Leisure Centre and as you can see, it ranks second. Energy effeincy measures and solar panels were installed at the site under Re:Fit phase 1 but more work was rewquired to help decarbonise the centre. This led to our recent application for round three of the Welsh Government Low Carbon Heat Grant in which we have been successful to receive financial support to install air source heat pumps. This project will completely erdicate the fossil fuel heating system that currently exists at the site, thus helping it becoming more sustainable. All the sites on the list are being put forward for energy efficiency works under Re:Fit phase 2.

Rank	Site Name	Construction Year	23/24 kWh	23/24 tCO <sub>2</sub> e	DEC Rating
1	Amman Valley School & Leisure Centre	1929 - 2014	3,944,348.72	747.23	71 C (average)
2	Carmarthen Leisure Centre	1982 - 2010	2,937,451.42	553.67	54 C
3	Llanelli Leisure Centre	1963 & 1994	2,234,595.02	426.78	74 C
4	Q E High School	2008	1,885,321.40	370.32	73 C
5	Llys-y-Bryn Care Home & Day Centre	1987 & 2006	1,540,844.19	291.29	91 D
6	Ysgol Maes y Gwendraeth	1926 - 2016	1,539,643.46	305.71	109 E (average)
7	Ysgol Bro Dinefwr	2016	1,309,458.31	257.27	73 C
8	Ysgol Gyfun Dyffryn Taf	1980 - 2005	1,092,640.00	214.42	55 C (average)
9	Ysgol Gyfun y Strade	1937 - 2013	996,654.21	194.67	65 C
10	Parc Myrddin	Approx. 1930	900,491.75	173.31	84 (average)

### **Progress against actions**

<b>NZC-01</b>		
Action	Lead Officer	Timescale
<b>Deliver Re:Fit Cymru (Energy Efficiency) Phase 1 project to achieve energy/carbon savings</b>	Head of Property	<b>Complete</b>
Progress		
Phase 1 of the Re:Fit Cymru project was completed in 2021 and saw the implementation of energy efficiency measures across 30 of the Council's buildings and has resulted in the following savings: <ul style="list-style-type: none"> <li>- 71,874,488 kWh</li> <li>- 2,2929.68 tCO<sub>2</sub>e</li> <li>- £1,379,053</li> </ul>		

<b>NZC-02</b>		
Action	Lead Officer	Timescale
<b>Develop further phases of Re:Fit Cymru (Energy Efficiency) project, or similar, to achieve accelerated energy/carbon savings</b>	Climate Change & Energy Transformation Manager	<b>Ongoing</b>
Progress		
We are currently working with Ameresco, our Re:Fit Cymru service provider, to scope phase 2 of the project. We are aiming for this phase to be more ambitious than the original phase and will be including a larger number of sites in its delivery. Phase 2 has been delayed due to other decarbonisation projects being completed by Ameresco on our behalf. In 2022 Energy efficiency measures including, double glazing, cavity wall insulation and roof improvements were installed at Carmarthen Learning Centre to improve the heat retention of the building. An air source heat pump was also installed which replaced the fossil fuel heating system at the centre with the additional electricity required to power the pump being offset by complementary solar PV that was also installed. LED lighting was also fitted to help reduce the energy usage of the site. This has resulted in the building saving 12.3 tCO <sub>2</sub> e from being emitted annually and between 2023-24 71,379 kWh of energy was avoided from being used. In 2023 we were awarded the Low Carbon Heat Grant (LHG) from Welsh Government, which facilitated Ameresco to install air source heat pumps at 6 of our primary schools, which has eradicated their fossil fuel		

heating systems. Solar PV was also installed at 5 of the sites to mitigate against the additional electricity required to run the pumps. Unfortunately, the installation of the PV at one of the sites has been delayed due to the roof structure. Ameresco have also assisted us in our successful bid for round 3 of the LCH.

<b>NZC-03</b>		
Action	Lead Officer	Timescale
<b>Incorporate 'Passivhaus' standard, where appropriate, in new building construction projects</b>	Property Design Manager	Complete
Progress		
<p>Property Design has continued to implement the Passivhaus Standard across design proposals for new build primary schools. These include Ysgol Gorclas, Ysgol Penbre and Ysgol Y Castell, all successfully completed with the last 24 months. However, with the implementation of Welsh Government cost standards for match funded schools across Wales there is an increasing need to economise building designs and space standards. Therefore, it is likely that the Authority will meet Net Zero Carbon design targets through the implementation of fabric first methodologies for buildings rather than rigorously adopting formal Passivhaus Standard accreditation.</p> <p>Similar methodologies are being utilised in projects outside of the Education sector, namely in major social housing schemes and physical regeneration projects across Carmarthenshire, with investment in fabric design, incorporation of high levels of thermal insulation, exceptional airtightness, and mechanical heat recovery systems aiding building sustainability and performance. This extends to the encouragement of responsible material selection with reference to achieving embodied carbon targets set out by Welsh Government.</p>		
<b>NZC-04</b>		
Action	Lead Officer	Timescale
<b>Continually review and amend design specifications and briefs to reflect new technologies and energy efficient equipment</b>	Property Design Manager	Complete
Progress		
<p>We continue to review, economise, and optimise our approaches to new technologies and energy efficient equipment. This applies to the supporting of the fabric first methodology to building structure. Firstly, by reducing energy demand and then creating a positive offset against the production of new energy on site through the incorporation of solar generating systems, as an example.</p>		
<b>NZC-05</b>		
Action	Lead Officer	Timescale
<b>Extend 'smart' and sub-metering technology to ensure accurate and timely capture of energy consumption data</b>	Corporate Energy Officer	Ongoing
Progress		
<p>100% of the gas meters and 90% of our electricity meters have been updated to AMR. Upon completion of the electricity meter programme we will be conducting upgrades on our water supplies as only 1% of water meters are currently smart.</p>		

<b>NZC-06</b>		
Action	Lead Officer	Timescale
<b>Develop appropriate carbon reduction target for the Council's non-domestic buildings as part of annual review of action plan</b>	Climate change & energy transformation manager	Complete
Progress		

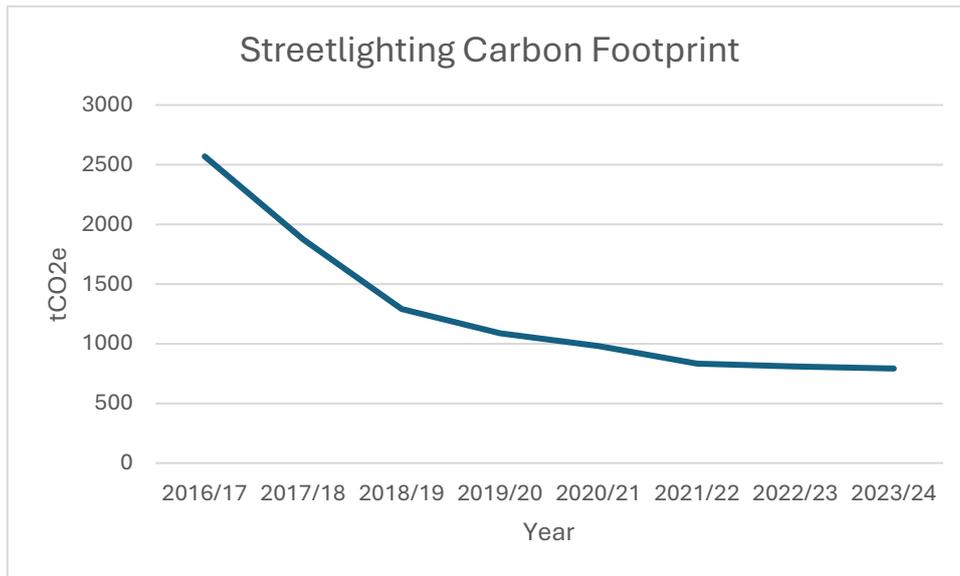
To achieve our Net Zero goal by 2030 our emissions need to be reduced by 20% annually.

### Additional PIMS actions

	Develop a strategy to achieve Net Zero Carbon for in building-use as part of Property Design specifications
17673	Delivery of our energy efficiency / renewable energy 'retro-fit' programme across our estate

### Carbon Footprint: Streetlighting

We have converted approximately 90% of our streetlights to low energy light-emitting diode (LED) lighting, with the remainder being converted at the end of their life. This has resulted in a 69% reduction in carbon emitted and a 38% reduction in electricity used since our baseline year, which is shown in the graph below.



	Streetlighting								2022/23 VS 2023/24	
	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	Progress	% Change
Consumption (kWh)	5,718,531	4,873,979	4,202,381	3,925,149	3,875,843	3,599,124	3,594,185	3,521,319	-72,866	-2%
Carbon Emissions (tCO2e)	2,569	1,874	1,291	1,088	981	832	809	792	-17	-2%

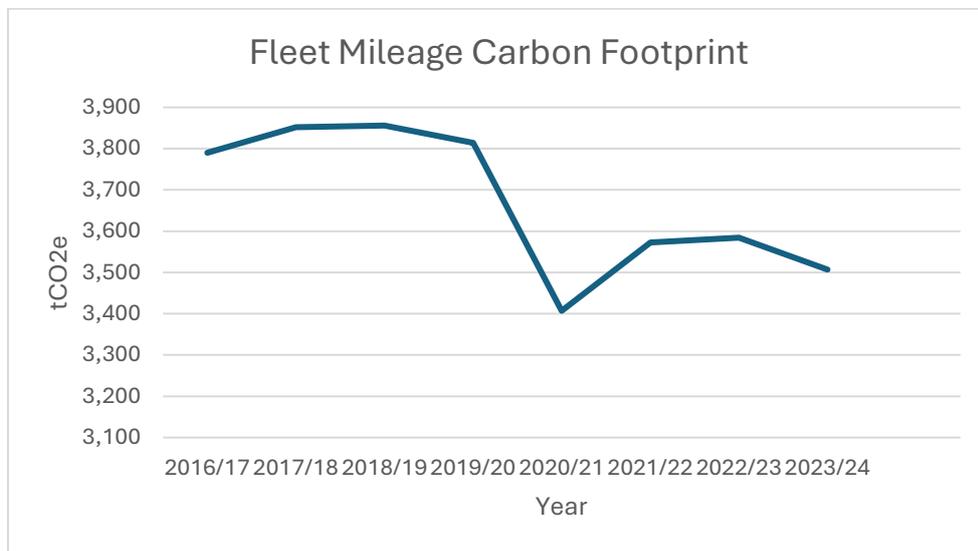
### Progress against Actions

Nzc-07		
Action	Lead Officer	Timescale
Develop appropriate carbon reduction target for the Council's streetlighting as part of annual review of action plan	Public Lighting Engineer	Complete
Progress		

Currently ~90% of our streetlights have been converted to LED with the remainder scheduled to be changed at the current bulbs end of life. For further carbon reductions the possibility of using alternative streetlight technology, e.g. solar powered, needs to be explored as well as lighting hours. A target of 10% reduction in carbon emissions needs to be achieved by 2030.

### Carbon Footprint: Fleet Mileage

Since our baseline year we have successfully reduced our Fleet Mileage carbon emissions by 7%. However, we have seen a drastic increase of 22% in the miles travelled compared to 2022/23 as services provided increase and life reverts to pre-covid. Nevertheless, we have seen a 2% decrease in our Fleet Mileage carbon emissions due to the introduction of more electric vehicles within our fleet. This shows the positive impact that electric vehicles can have on our emissions especially if we are unable to reduce the miles that our fleet travels due to the services we are required to deliver.



Fleet Mileage									2022/23 VS 2023/24	
	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	Progress	% Change
Mileage (Miles)	5,127,150	5,121,289	5,293,249	5,154,668	4,427,070	4,262,681	4,496,754	5,466,196	969,442	22%
Carbon Emissions (tCO2e)	3,790	3,852	3,856	3,814	3,407	3,573	3,584	3,507	-77	-2%

### Progress against actions

NZC-08		
Action	Lead Officer	Timescale
Review the most appropriate fuel powered vehicles for each of the Council's services.	Fleet Manager	Ongoing
Progress		
Currently EVs make up 8.6% of the authority's fleet. However, the Climate Change and Nature Emergency Cross Party Advisory Panel (CCNEAP) has commenced a deep dive into the authority's transport sector, developing a transition plan to convert to a low emissions fleet. The recommendations will be presented to Cabinet during the summer of 2025.		
NZC-09		
Action	Lead Officer	Timescale

<b>Develop an appropriate carbon reduction target for the Council's fleet mileage as part of annual review of the action plan</b>	Fleet Manager	Complete
Progress		
We aim to transition 10% of our fleet to Electric vehicles annually.		

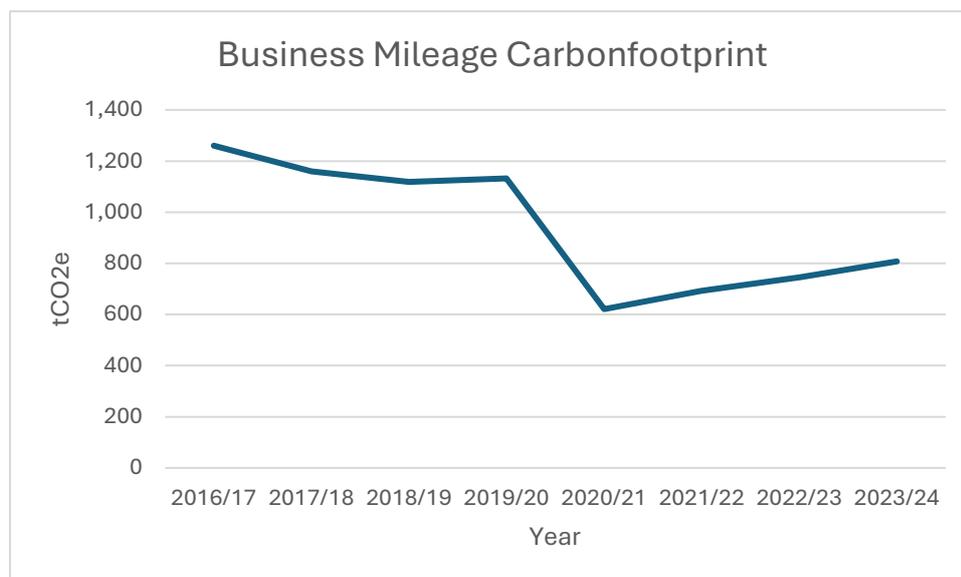
### **Additional PIMS actions**

17484	Develop and implement a new Fleet Strategy [including Electric Vehicle Transition Plan]
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### **Carbon footprint: Business Mileage**

The carbon emissions derived from our Business Mileage have successfully reduced by 36% since our baseline year. This has largely been the result of the introduction of hybrid working allowing more meetings and events to take place virtually. Although there has been an overall decrease, we have unfortunately seen an 8% increase in emissions when comparing to our 2022/23 data. This can be explained by that although hybrid working has become mainstream, there has been a gradual rise in the number of in person meetings and events in recent years as we moved away from a covid world.

This however has highlighted the need for more work to be done in this area to reduce our carbon emissions.



Business Mileage									2022/23 VS 2023/24	
	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	Progress	% Change
Mileage (Miles)	4,186,640	3,948,586	3,846,615	3,971,513	2,251,986	2,511,091	2,775,432	2,954,503	179,071	6%
Carbon Emissions (tCO2e)	1,260	1,159	1,118	1,132	621	693	745	808	63	8%

### **Progress against Actions**

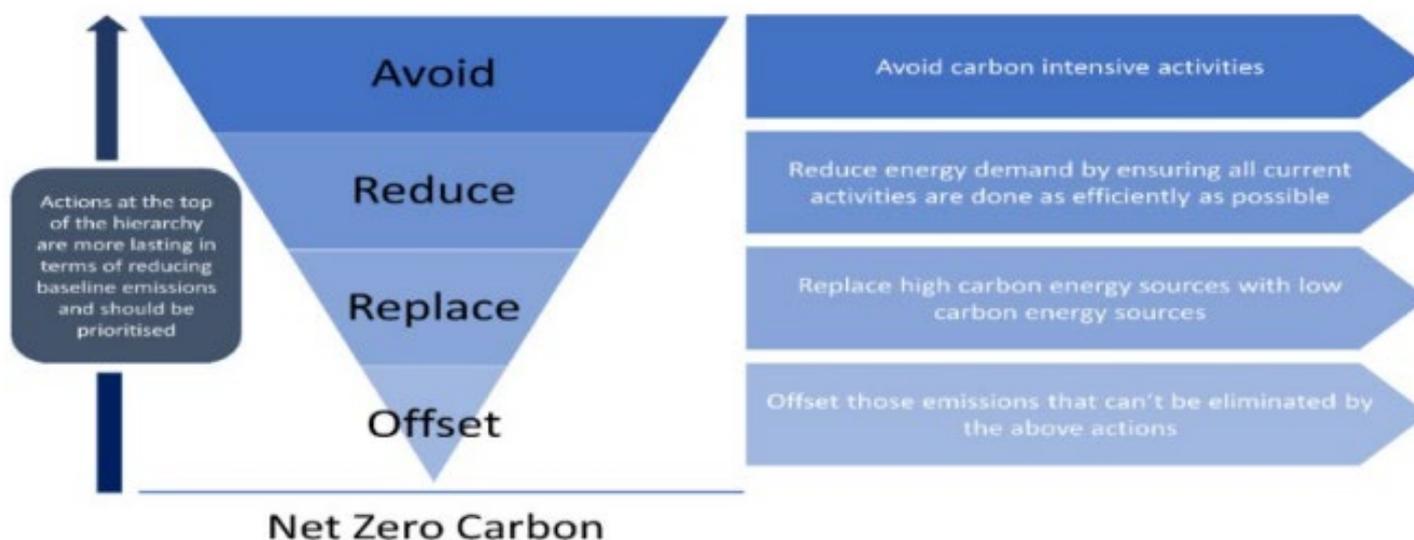
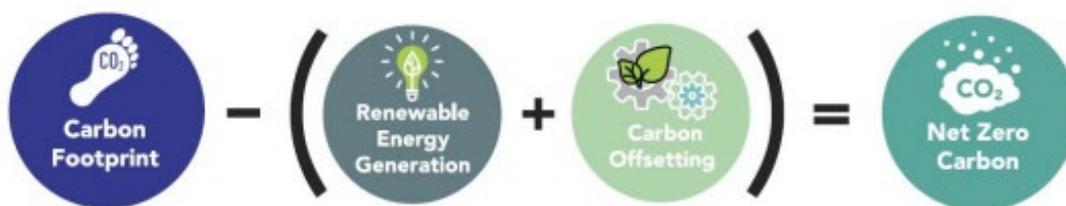
<b>NZC-10</b>		
Action	Lead Officer	Timescale

<b>Undertake a review of the Council's pool cars to identify opportunities for carbon reduction.</b>	Head of Transportation & Highways	Complete
Progress		
<p>Corporately available pool cars are a mixture of hybrids and fully electric vehicles, where previously there was a reliance on internal combustion engine vehicles. Worked has also been done to increase the usage of these vehicles which helps promote sustainable staff travel.</p> <p>To align with the corporate approach and the commitment to reduce carbon emissions, a TEEP form has been developed. Once implemented this will require clear justification for why a non-electric vehicle replacement should be considered.</p>		
<b>NZC-11</b>		
Action	Lead Officer	Timescale
<b>Finalise electric vehicle strategy for the County.</b>	Transport Strategy & Infrastructure Manager	Ongoing
Progress		
The <a href="#">Electric Vehicle Charing Infrastructure Strategy</a> was published in 2022 and a second version is currently being drafted.		
<b>NZC-12</b>		
Action	Lead Officer	Timescale
<b>Develop appropriate carbon reduction target for the Council's business mileage as part of annual review of action plan</b>	Head of Transportation & Highways	Complete
Progress		
We have set a target of an annual 10% reduction in the Council's business mileage. Through our people and cultural change plan we will promote the use of electric pool cars, the use of public transport and active travel to reduce the Council's business mileage.		

### Additional PIMS actions

17457	Develop facilities within Carmarthenshire County Council offices to support Active Travel for visitors, members, and officers. Looking at bike racks, changing rooms, shower facilities etc. <b>[Vision 65]</b>
17458	Deliver the cycle and pedestrian path from Carmarthen to Llandeilo which will be a huge boost to local towns and villages, and tourism throughout the county. <b>[Vision 66]</b>
17469	Continue to bid for finances via Welsh Government to enable further roll out of public access charging points across the county in accordance with our Electric Vehicle Infrastructure strategy; focus on the strategic highway network; look at locations across urban and rural areas, including the first super-charging hub in Cross Hands. <b>[Vision 55]</b>
17483	That the Council works with partners to consider further investment in the electric charging points network across the County with a focus on development of the infrastructure as part of the 10 Rural Towns initiative. <b>MFR 29</b>
17525	Utilise funding to implement the Active Travel Masterplans for our principal towns. We will monitor their effectiveness through quantitative (counts) and qualitative (Surveys) analysis to Improve Active Travel routes for communities
17526	Number of Traffic Free KM in Carmarthenshire (walking, wheeling and cycling infrastructure) [baseline]
17527	Number of users of the Cycle Bike Hire in each location
17529	Number of School Travel Planning Kits/Sustrans Active Travel School Plans Issued to encourage active travel to school
17532	Identify additional potential funding to educate primary aged pupils on feeling safer in the communities walking and cycling.

## Renewable Energy Generation and Carbon Insetting & Offsetting



The Council's approach to Net Zero is to focus on significantly reducing our carbon footprint but recognises that it is impossible to completely eradicate all our emissions. This situation is acknowledged by the 'Net' in the Net Zero Carbon equation, meaning our residual carbon footprint must be offset by the generation of renewable energy and carbon sequestration e.g. tree planting. However, we continue to pursue the carbon mitigation hierarchy approach as we do not consider offsetting as a 'get out clause' for reducing our carbon footprint.

We have continued to install solar PV systems on our non-domestic buildings, including schools, and currently have a total installed capacity of around 1.8 MWp. Our ambition is to generate all our own electricity through renewable sources, but this is a long-term goal which is faced with many constraints. The main constraints being the financial ability and the capacity of the national grid. When installing roof top solar PV we also must consider the structural soundness of the roof, and we unfortunately have a lot of old buildings within our estate. We also do not own a lot of land that could be used for ground mounted PV or wind turbines. The below table illustrates the electricity generated by our solar PV installations.

Solar PV	2019/20	2020/21	2021/22	2022/23	2023/24
Electricity Generation (kWh)	997,480	1,059,364	1,106,902	1,317,121	1,082,623

\*Due to faulty meters our solar PV electricity generation is based on applying an average of 736 kWp/kWh generation across the board. This figure has been calculated using 15 sites that have fully operational meters.

<b>NZC-13</b>		
Action	Lead Officer	Timescale
<b>Work with the Welsh Government Energy Service (WGES) to explore and deliver opportunities for large scale renewables.</b>	Climate change & energy transformation manager	Ongoing
Progress		
The WGES produced a Land Asset Review looking at the potential of ground mounted PV and wind turbines on our bare land holdings. They identified priority sites that offer the greatest potential. We are hoping to implement some of their considerations through phase 2 of Re:Fit. The WGES is also helping to develop the implementation of a solar canopy project within Carmarthen town centre which is currently at feasibility stage. The WGES is an extremely valued asset and we will continue to work with them to explore large scale renewables projects.		
<b>NZC-14</b>		
Action	Lead Officer	Timescale
<b>Work with the National Procurement Service (NPS) to support greater procurement of energy from locally generated renewable energy projects.</b>	Climate change & energy transformation manager	Complete
Progress		
100% of the electricity we procure using the Crown Commercial Service Framework Agreement is matched to power that has been generated by renewable energy sources within Wales, and we hold the Renewable Energy Guarantees of Origin (REGO) certificates to verify this. Whilst this does not equate to 100% clean energy at the point of use, it does signify the Authority's commitment to renewables by aiding the stimulation of an increase in renewable generating assets within Wales.		
<b>NZC-15</b>		
Action	Lead Officer	Timescale
<b>Explore the feasibility of tree-planting and other such measures, on Council controlled land to contribute towards carbon offsetting.</b>	Strategic Asset Manager	Ongoing
Progress		
The Woodland and Tree Strategy has been written and in line with the Welsh Government target the strategy sets out that the Council holds the target to plant 9.5ha of new woodland on our estate annually for the next 25 years, thus increasing our woodland cover from 12% to 17%. The Woodland Carbon Code calculator predicts that planting 9.5ha of broadleaf would result in 21.19 tCO <sub>2</sub> e would be sequestered.		
<b>NZC-16</b>		
Action	Lead Officer	Timescale
<b>Develop appropriate target for renewable energy generation as part of annual review of action plan.</b>	Strategic Asset Manager	Complete
Progress		
The Council's long-term goal is to generate 100% of its electricity from renewable energy sources. To achieve this, we will continuously monitor the National Grid's capacity for new generation and our assets for the potential to install renewable energy systems. We will also utilise any funding opportunities that arise. We will ensure that all phases of the Re:Fit project will include renewable energy generation.		

### **Additional PIMS actions**

	Identify additional sites for renewable energy generation potential
	Explore the potential to use town centre locations to generate renewable energy
16277	Increase renewable energy on council owned land and work with partners to support renewable energy schemes across the county. <b>[Vision 60] [MFR 48]</b>

16278	Work with Welsh Government to ensure electricity infrastructure is in place to allow us to develop ambitious renewable energy projects to reach net zero. <b>[Vision 67]</b>
16542	Delivery of actions as set out in Tree and Woodland Strategy
16282	Working with CCC's Strategic Land-use review group, identify and progress the planting of woodland on suitable sites, demonstrating the principles of responsible afforestation, and in consultation with local communities. Identify three further areas of woodland to be planted. Subject to grant aid being available. <b>[Vision 63]</b>

### **Additional Actions Supporting the Strategic Direction**

As previously mentioned, we have a whole host of additional PIMS measures that fall outside our Net Zero Carbon Plan but are helping the Council and the County to decarbonise and enhance our natural environment. They also indicate how we are investing in carbon insetting as well. These measures are monitored quarterly and are scrutinised. They also represent how the Net Zero plan is ever evolving with new initiatives and transformations being developed and being incorporated into the PIMS monitoring system. All PIMS actions listed within this report have been taken from the Carmarthenshire County Council's 25-26 business delivery plan, therefore, all actions hold the target date of 31<sup>st</sup> March 2026 for completion. A list of the additional actions can be found below.

PIMS Ref	Description
16297	Utilise a phased approach for the implementation of a new kerbside waste collection system in 2025, that is compliant with Welsh Governments' Blueprint collection methodology. Changes to recycling, food, glass and residual collection services from 2025 [CV 48]
16537	Working with partners to develop a flagship circular economy / renewable energy site for Carmarthenshire
16538	Deliver the Carmarthenshire Local Area Energy Plan
16539	To undertake and support the work of the Nutrient Management Boards for the Tywi, Teifi and Cleddau in addressing the issues of phosphates in Rivers
16540	To contribute to achieving minimum nutrient neutrality in response to phosphate and nutrient pollution issues in protected waters
16543	To evidence delivery of the Council's S.6 Biodiversity Duty to maintain and enhance biodiversity and promote ecosystem resilience.
16563	Develop a wider circular economy strategy to enable communities to proactively implement sustainable projects through existing community networks and for the authority to facilitate further infrastructure development to support circular economy aspirations.
<b>new</b>	To support the service in the creation and delivery of a climate change and nature emergency communications plan. (CV47)
	Develop a cost-effective plan to ensure all Council Homes are energy efficient and achieve a minimum EPC Band C as quickly as possible
	Maximise the take up of the eco flex scheme within private sector housing.
	Using the 'Sport Zero Champions' training and model, raise awareness within the sport sector about the importance of sustainability, encouraging organisations, athletes and fans to adopt more environmentally friendly practices and promote social responsibility within the sector.
	Work with Dyfed Pension Fund to continue the journey on reducing its carbon intensity and encourage Dyfed Pension Fund to work and learn from other pension funds with a view to further disinvestment in fossil fuels and non-ethical investments. (CVS57).
	We will embed Net Zero Carbon into our procurement activity
17794	Work collaboratively to ensure all new education projects, plans & policies relating land managed by Ed. demonstrate best practice in delivering, net benefit for biodiversity, nature recovery & Green & Blue Infrastructure.
17793	Work in schools to educate learners about food production and how to cook healthy meals using local produce. (CV82)
17795	On land managed by Education and CCC schools, identify opportunities to enhance biodiversity e.g., managing some areas of amenity grassland for pollinators, and areas suitable for tree planting, consistent with CCC's Tree and Woodland Strategy
17027	Targets to reduce consumption based on Display Energy Certificates baseline data and future rationalisation proposals

16780	Delivery and monitoring of new Environment Act Forward Plan Jan 23 – Dec 25
16798	Roll out operational service standards handbook for the operational staff within Waste Services
	Meet the council's commitment to carbon emission reduction by 2030, compared to 2016 baseline
	Monitor and Implement the Nutrient Management Plans for the Afon Tywi, Teifi and Cleddau
16898	Deliver the recommendations of the fly tipping task and finish group [Vision 62]
17445	Deliver the Climate Change & Nature Emergency Strategy
17482	Implement Service Level Agreements to include Land Management to reflect Bio Diversity Suitability for Land Use Biodiversity Cuts in accordance with Grassland Management Policy
17492	Review and research carbon impacts of highway preventative maintenance versus reactive maintenance [whole life impact]
17494	Review management and the capacity for Community Resilience in relation to the risk of adverse weather effects to include Highways Response to Flooding linked to Flood Coastal Erosion Risk Management Strategy.
17495	Co-ordinate a review of the Sandbags Policy and community engagement events in relation to adverse weather events
17498	That the Council works with local communities to address fly tipping and waste management issues in rural areas and monitors the impact of recently introduced changes at the Council's recycling centres and landfill sites in terms of levels of fly tipping in rural areas. <b>MFR 52</b>
17499	Develop a communication plan for Local Environmental Quality
17500	Engage with fast food hot spots areas to develop specific localised action plan to reduce vehicle dropped litter
17501	Deliver CCTV action plan to support environmental enforcement activities
17503	Co-ordinate 25 Pride in Your Patch litter pick events
17504	Empower residents to take responsibility for their local environment by maintaining 20 volunteer groups per annum.
17505	Implement 6 ward/area-based action plans based on evidence of specific waste related problems.
17506	Identify funding to deliver a resource for education, reuse and repair
17507	Continue to develop the ETO Project through wider community engagement with existing projects to work in partnership and collaboration in the Ten Town locations.
17509	Deliver a community programme of recycling participation surveys to 5% of households
17510	Deliver 25 community engagement activities with residents, staff and community stakeholders.
17512	Co-ordinate 8 staff drop-in sessions on Waste Strategy to include the Education Enforcement process and current waste collection strategy requirements

16280	Continue and accelerate the aim of being a Net Zero Carbon Local Authority by 2030 and set up a cross-party working group to move the Net Zero Carbon and Nature Emergency agenda forward. [Vision 47]
16281	In recognition of the Nature Emergency declared by CCC and WG; we will change our management practices to increase biodiversity of all council-owned land, and recognise the strong interrelationship between climate change, loss of biodiversity, and human wellbeing. Promote the use of CCC land for supporting nature recovery. [Vision 56]
17516	Undertake assessment and rationalisation of all communal collection points in preparation for roll out
17518	Develop and deliver strategic action plan for 'Bulky Waste' service
17519	Implement the purchase strategy for leased waste collection fleet
17521	Develop an educational programme schedule for community and school engagement to raise awareness of repair, reuse and recycling initiatives
17530	Deliver 40 school visits to the ETO centre at Nantycaws
17531	Develop and deliver an education programme for our primary aged pupils on; Environmental Enforcement and Local Environment Quality
17645	Deliver an annual drainage investigation programme—works will be delivered that focuses on surveys & repairs underground drainage assets. Communities of highest flood risk-surveys undertaken for functionality of drainage, also our knowledge & understanding of the drainage is robust. Maintenance & repairs actioned post surveys on a risk-based basis
17653	To lobby Welsh Government to fund and support direct action in Carmarthenshire working with local organisations to address the water pollution issues currently faced. <b>MFR 50</b>
17657	To assist and to guide developer led mitigation towards nutrient neutrality including working in partnership with the Nutrient Management Boards to implement strategic response to facilitating development.
17672	Facilitate opportunities for Phosphate and Nutrient mitigation on council owned land
	Produce a feasibility Study for the implementation of an integrated surface water removal scheme including design for two Car Parks in Llandovery and Newcastle Emlyn as part of the Resilient Rivers Grant Award
	Develop and adopt community focused Place Plan guidance to support community interaction and ownership of policy and decision making
17534	Identify replacement programme (subject to funding) for replacement of underground cabling
17536	Deliver fleet compliance review action plan to deliver safe, compliant and efficient fleet operations, processes and workshops.
17537	Develop and implement fleet renewal policy
	Prepare, adopt and implement the Green and Blue Infrastructure Strategy for Carmarthenshire, including a developer and community toolkit.

	To prepare and adopt the Allotment and Community Growing Strategy as part of the Greening Carmarthenshire project
	Prepare Placemaking Guidance to support the implementation of high-quality design across our communities
	To lobby Welsh Government to re-consider the introduction of the proposed Nitrate Vulnerable Zones regulations (aimed at improving water quality by restricting the period available for spreading slurry) and focus direct intervention on repeat offenders of slurry mismanagement rather than impose sanctions on all farmers. <b>MFR 51</b>
	We will deliver large value cyclical improvement programmes across our existing housing stock to improve thermal performance and increase existing EPC levels. End of year target.
	We will deliver a series of standalone major projects in line with the HRA investment programme.
	We will in accordance with the EPC legislation acquire certifications for all dwellings.
16491	Strategic Land Use Group – complete high-level review of CCC land holdings
	Expand the remit of the Strategic Land Use Group to incorporate the gathering of information on brown field sites for regeneration across the county, which will be used to inform the public on suitable sites for regeneration and their respective barriers to development
15674	Prepare and adopt Revised Local Development Plan in accordance with the Delivery Agreement.
16541	Monitor and report on the delivery of the Grassland Management for Pollinators on the CCC Estate 2023-28 Pollinator Action Plan.
17448	Implement the Flood Risk Management Plan - 2
16851	Deliver a minimum of two projects to upgrade and or renew CCC owned Flood and Coastal Erosion Risk Management assets (subject to funding) from the Welsh Government Flood and Coastal Erosion Risk Management Small Scale Capital Scheme Grant
16852	Deliver 100% of the actions from the annual reservoir inspections within the allocated bespoke time frames.
17449	Lead the delivery of the Shoreline Management Plan and submit annual review to Corporate Management Team, Swansea and Carmarthen Bay Coastal Engineering Group and Welsh Government.
17479	To implement the current adopted Local Development Plan and monitor its success or otherwise against its identified delivery measures ensuring policies, procedures and practices are being adhered to.
17665	Deliver the Flood Defence and Coastal Protection capital works programme
	Identify and implement opportunities for the Local Places for Nature (LPfN) Management Plan to deliver 2 schemes which align with the Tree and Woodland Strategy, and the Green and Blue Infrastructure Strategy and placemaking objectives
	Identify and implement opportunities to align the Tree and Woodland Strategy (TWS) with limiting the effects of flooding through native tree planting initiatives, aiming to deliver 2 schemes
	Identify and implement opportunities to align Tree and Woodland Strategy with nutrient mitigation

	Implement year-2 of a bi-annual Flood and Coastal Erosion Risk Management (FCERM) asset inspection and maintenance programme
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## APPENDIX 2

### THE COST TO DECARBONISE

Without a national model in place the following methodology was developed in conjunction with Swansea Council to predict the cost of becoming a Net Zero local authority. It is important to note that the figures are based on assumptions and estimates, therefore, these figures are not definitive.

Moreover, the investment in decarbonisation will not be borne by the council alone. A significant proportion of the cost will need to come from third parties including central government through grant funding and direct investments in cleaner technologies. Monies will also be redirected from purchasing fossil fuel powered technology.

The council is actively seeking funding from a variety of sources, using invest to save mechanisms and delivering decarbonisation projects collaboratively in conjunction with other interested parties.

	Current tCO <sub>2</sub> e	Investment	Balance of tCO <sub>2</sub> e	Cost
<b>Buildings &amp; Energy</b>	11,649	Energy efficiency measures. Renewable energy generation systems. Heat networks.	3,000	£73m+
<b>Street Lighting</b>	792	CCC managed streetlighting has virtually all been converted to LED with the very few remaining scheduled for LED at 'end of life'. Consequently, there's very little more we can do (other than switch off for longer) until new technology is available. Direct tCO <sub>2</sub> e reductions have been significant over recent years but are now plateauing – but will continue to decrease in line with the decarbonisation of the electricity grid.	600	£1m
<b>Fleet</b>	3,507	113 HGVs x price differential of £200k each = +£23m Welfare buses (25), Minibuses (32), LGVs (313), Cars (87) Vehicles coming around again for renewable before 2030 @ +£15m	0	£56m
<b>Grey Fleet</b>	808	Travel claims	0	£3m
<b>Total</b>	16,756		3,600	£133m+
<b>Land Use</b>	-699			
<b>Insetting</b>	-1027	Report undertaken by City Science. To inset our predicted residual emissions, we will need: -5.5MW solar = £2.5 million - Tree planting = £130,000 upfront cost	-1027	£2.6m +
<b>Offsetting</b>	-2598	Purchased verified offsets = £59,000 annual fee	-2598	£59,000
<b>Total</b>	12,432			£135.6m+

This methodology has been offered to the WLGA and the Welsh Government to help other local authorities and develop a national model. The Welsh Government have announced that a national model is due to be released in 2025. Once we have received this we will assess and will look to incorporate it as part of the development of our Net Zero Carbon Plan.

## APPENDIX 3

### **CLIMATE CHANGE AND NATURE EMERGENCY PEOPLE AND CULTURAL CHANGE PLAN**

Carmarthenshire County Council is committed to reducing the impacts of climate change and the enhancement and preservation of the natural environment. The authority has set ambitious goals which can only be achieved with the support and dedication from everyone. Therefore, a people and cultural change plan is a vital tool for engaging others by transmitting information about the climate change and nature emergencies. It also ensures our messages are structured, clear, consistent and aligned with our organisational aspirations. Therefore, the plan is a critical component for achieving our goals, building relationships and maintaining a positive and credible presence in our community. The importance of the plan is magnified by the urgency of the matter as action is required now, by everyone, as it effects all aspects of our lives. It was also highlighted in the latest public survey that only 19% of respondents agreed that the climate emergency is being addressed locally and 37% disagreed that their local environment is pleasant and well looked after. This, more than anything, shows that greater engagement with the public is needed not only to improve their understanding but also our own.

#### **Objectives and Delivery**

The plan has been developed based on the Well-being of Future Generations Act's sustainability principle and the five ways of working; collaboration, integration, involvement, long-term and prevention.

The objectives of the plan are as followed:

- Convey how Carmarthenshire County Council is transitioning to Net Zero and protecting and enhancing biodiversity through effective communications, initially focusing on three main groups within our community – Schools, Council Tenants and Council Staff. This will enable greater collaboration between the authority and the public.
- Encourage effective behavioural change by building knowledge through training and education that will inspire action.
- Build a collective understanding of new policies and strategies that align to this agenda to help educate people on what is being done in this space both locally and nationally.

- Celebrate the work that has been done and demonstrate the effective outcomes to encourage positive mentalities and integration in and around this workstream.
- Encourage involvement from all Carmarthenshire County Council departments, stakeholders and the public, especially the three focus groups.

The plan will follow the Welsh Government's 5 E's Green Choices Framework in its delivery:

**Exemplify:** We will lead by example and ensure that the message we convey regarding our work inspires others to act and adopt green behaviours.

**Enable:** we will educate to increase knowledge and provide support where possible to enable other departments, stakeholders and the public to make green choices.

**Evaluate:** we will communicate the impact of our actions and demonstrate their outcomes, to encourage integration and collaboration, reinforcing the message that collaboratively we can make a difference.

**Engage:** where possible we will involve others in our work and our delivery.

**Encourage:** throughout our communications we will encourage people to make sustainable choices and to influence the people around them to make similar choices.

### **Target Audience**

The target audience for our communications is the whole of the local authority, Councillors, stakeholders, community groups, schools and the public. However, to gain initial momentum we will be prioritising our focusing locally on three groups – Schools, Council Tenants and Council Staff while working with the Welsh Government communications teams to provide focus to wider public messaging. We believe that by initially focusing on these groups gives a good perspective of Carmarthenshire residents as they represent a variety of demographics. These groups have also been chosen as we feel that an enormous amount of work is already being done in these areas but not necessarily communicated effectively. Furthermore, we believe these groups have the potential to facilitate a snowball effect of knowledge which will aid the cultural change that is needed. Although we are starting with these groups are the focus of the the plan is not exclusive to them and will engage with the general public.

### **Key Messages**

The vital message we will convey throughout our communications is that we are unable to tackle climate change and the nature emergency on our own. Collaboration and a holistic attitude are vital to this agenda. We want to encourage a joined-up

approach by communicating key strategies and policies that are coming into force and how people can engage and adopt them. We will also be celebrating the successes of projects and key work that is being done throughout the local authority. Key national days will also be corresponded along with any events we are holding. Our communication will align with those from Climate Action Wales to further promote the joined-up approach. Through our messaging we also want to ensure that our focus groups know how they can, and are, making a difference; we want them to feel empowered and enthused, which in turn will encourage more action.

### **Channels and Platforms**

We will use a variety of different channels to ensure that our communications reach as many people as possible. We will share information on what the local authority is doing and national days that people can get involved in through the Staff Newsletter, the Council website, the Intranet and social media, which will be facilitated by the Marketing and Media team.

We will also host a Climate and Nature Forum. This will give us the opportunity to deliver presentations to local stakeholders, community groups and the public on the work we are doing. We will also deliver round table discussions to allow people to engage with key officers and provide their ideas and feedback. This will also give us the opportunity to discuss how we can work collaboratively to achieve our targets. Furthermore, this approach will also be taken for our three focus groups – Schools, Council tenants and Council staff. This will provide an excellent opportunity to meet and get to know the groups and provide us with an insight into their current knowledge and understanding. It will also provide us with valuable time to effectively communicate what we as an authority are doing as well as providing an opportunity for them to give feedback and assess how we can improve and work together. This will help promote positive relationships and a stronger bond between the council and local communities.

The ThinQi platform will also be used to encourage staff members to further their knowledge on our approach to Net Zero, and similarly on biodiversity and our Environmental Act duty through e-learning modules.

### **Activities**

#### **1) Focus Group Workshops**

Meet each focus group (Schools, Council Tenant and Council staff) and deliver a round table style discussion with the key topics of discussion being:

- Their current level of understanding on climate change and the nature emergency.

This will enable us to put together some bespoke learning material on these topics to help strengthen their knowledge. This will ensure that they know exactly why we need to change our behaviours and attitudes.

- What we as a local authority are doing to help tackle climate change and the nature emergencies with a focus on their areas.

This will help them to understand that we are being proactive in this space and how the projects we are implementing will affect them. For example, we can inform the Council tenants who have had renewable energy systems installed on their home exactly how it works and how it will benefit them. By drawing attention to the benefits of what we are doing, and how they will positively affect the groups, will help promote a better attitude and engagement with the projects we implement.

- Share ideas and best practices.

By bringing together a group of peers it will enable best practice and ideas to be shared. For example, by bringing together all headteachers into one space to discuss what they are already doing will encourage others to get involved. It is also essential that we allow time for the groups to share the ideas that they have, and where possible and suitable, we will help facilitate these ideas into fabrication.

## 2) **Local Area Energy Plan (LAEP) Launch**

To encourage the embedment of the LAEP we can deliver workshops that present the outcome of the LAEP and its actions to; Members; Directors and Managers; and Stakeholders. It is essential that we effectively communicate within the workshops that the LAEP is everyone's responsibility and that we should all be working towards achieving the actions. We can facilitate discussions on how the actions can be achieved. It is predicted that the workshops will be 2hours long and can be delivered either face-to-face or via Teams; using Teams may mean more people are able to join. A lunchtime learning session will be delivered, where all staff members of the council are invited to attend. This will be an effective way to ensure everyone knows what the LAEP is and that we should be working towards its actions. An extensive communication campaign to promote the learning session and of the LAEP itself will be essential to ensure everyone is aware of the plan. A communication campaign across the corporate website and social media will be utilised to inform the public of the plan. Further public engagement can be achieved through the climate change and nature emergency forum (below).

### 3) Carmarthenshire County Council climate change and nature emergency forum

The aim of the forum is to showcase the work that Carmarthenshire County Council are doing towards tackling climate change and overcoming the nature emergency. Ideally this would be a face-to-face day event that invites stakeholders, community groups and the public to listen to presentations on various council led workstreams. It would also be beneficial to have round table discussions on how these actions can also be delivered in the county by explaining what support we can provide. These round table discussions can also be a great opportunity to hear what is being done across the county, outside of the council, and provide an opportunity for the public to give feedback. The forum would depict and encourage a joined-up approach and reassure that this is a high priority agenda for the authority.

Suggested presentation topics:

- Carmarthenshire County Council's Net Zero Plan & the work we are doing to decarbonise
- Local Area Energy Plan
- Environmental Act duties
- Tree and Woodland Strategy
- Local Places for Nature work
- Pollinator work
- Green and Blue Infrastructure strategy
- The work schools are doing
- Nutrient Management
- EV Infrastructure Strategy

#### **Review**

It is essential that we dedicate time to reflect on our communication activities to evaluate what has been effective. This will enable us to understand where we can make improvements and continue to be engaging within our delivery.

## APPENDIX 4



# Carmarthenshire County Council Environment (Wales) Act 2016 Review 2023–2025 December 2025

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## Cabinet Member for Climate Change, Decarbonisation and Sustainability - Foreword

Carmarthenshire County Council and other local authorities in Wales play a crucial role in addressing the nature emergency. As important stakeholders of our respective communities and environments, we are well-positioned to understand and respond to the unique ecological challenges faced at a local level. Through strategic planning, resource allocation, and policy implementation, Carmarthenshire County Council can actively protect and enhance the natural habitats and biodiversity within our jurisdictions. By collaborating with partners, including community groups, conservation organisations, third sector, public sector and businesses, can foster partnerships that promote sustainable land management, habitat restoration, and wildlife conservation. Additionally, local authorities can engage in public awareness campaigns, educating and empowering residents to contribute to nature conservation efforts. This proactive involvement is vital in safeguarding the natural heritage of Wales, ensuring a healthy and resilient environment for present and future generations.

Sign Off



Cabinet Member for Climate Change, Decarbonisation and Sustainability

## Director's Foreword

The Biodiversity and Resilience of Ecosystems set out in the Environment (Wales) Act 2016 provides a clear direction for the protection of biodiversity and sustainable ecosystems. This is welcomed. The Council's first Transformation Strategy 2022 – 2027 confirms its declaration of a Nature Emergency in 2022 and supports the delivery of the Authority's response to the climate and

nature emergencies. We understand the links between the Nature and the Climate Change Emergencies, and we understand how in promoting ecosystem resilience we will be contributing to climate adaptation. The introduction by WG of the Environment (Principles, Governance and Biodiversity Targets) (Wales) Bill in 2025 with a framework for environmental governance and a target setting framework, which includes requirements to evaluate, monitor and report on progress. The work the Council undertakes in consideration of the Environment (Wales) Act 2016 duty will help the authority be prepared for the implementation of this legislation. The Council recognises the need to prioritise and resource actions that will maintain and enhance the varied, and in some cases unique, ecosystems within Carmarthenshire, and actions that will result in nature recovery. I consider that this review of the Council's Jan 2023– Dec 2025 Forward Plan demonstrates how we are working collaboratively to embed biodiversity and ecosystem resilience into our decision-making processes, our plans and policies and our day- to-day working practices. Over the next 3 years we will continue to develop this approach and monitor our progress.

Sign  
Off

*A. Williams*

Director, Place and Infrastructure

## 1. Executive Summary

This review has been published to comply with the Authority's legal obligation under the Environment (Wales) Act 2016. Under S6 of this Act all public bodies 'must seek to maintain and enhance biodiversity in the proper exercise of their functions and in doing so promote the resilience of ecosystems'. This is referred to as the S6 Biodiversity and Resilience of Ecosystems Duty.

In order to evidence delivery of this duty, under the Environment Act, it is a statutory duty that all public bodies in Wales must prepare and published a plan on how they intended to comply with the Biodiversity and Resilience of Ecosystems Duty. The legislation requires this to be carried out every 3 years, and to review the plan and publish that review on the Council's web site. Carmarthenshire County Council published its first Environment Act Forward Plan in 2017, and this is the review of our third plan 2023-25.

Carmarthenshire's approach to developing and delivering its Forward Plan has been to engage officers across service areas to consider working practices, plans and projects and identify/highlight requirements for action under this duty that would sit alongside the delivery

of their other obligations and objectives. This approach can sometimes need changes to what in some cases are long-established working practices. This can take time to bed in and become routine. While some service areas find this a relatively easy change to make, others find this much harder and require regular support in making these changes. Changes may be smooth or sometimes incomplete or piecemeal but with continue support it is hoped that they will become embedded. It is part of the complexity of the range of functions and legislative responsibilities we have

The agreed 43 Forward Plan actions (we had 29 in our first Forward Plan), as set out below in Table 1, are monitored via CCC's Performance Improvement Monitoring System (PIMS) and reported on by the responsible officer every six months or annually. That report is then signed off by the relevant Head of Service. The Head of Place and Sustainability and the Biodiversity Officer are responsible for monitoring the delivery of the plan and engaging all appropriate CCC officers in this process. The delivery of actions can require regular liaison between these officers and those responsible for each individual action. While this is time consuming it is essential if working practices are to change.

## 2. Environment (Wales) Act 2016

The Environment (Wales) Act became law on 21st March 2016. It puts in place legislation to enable Wales' resources to be managed in a more proactive, sustainable and joined up manner and to establish the legislative framework necessary to tackle climate change. The Act supports the Welsh Government's wider remit under the Well-being of Future Generations (Wales) Act 2015. (WFG Act, see below), so that Wales benefits from a prosperous economy, a healthy and resilient environment and vibrant, cohesive communities.

### The Biodiversity and Resilience of Ecosystems Duty

Section 6 of the Environment (Wales) Act requires that all public authorities ‘must seek to maintain and enhance biodiversity in the exercise of functions in relation to Wales, and in so doing promote the resilience of ecosystems, so far as consistent with the proper exercise of those functions.

The intention of the legislation is to ensure that in carrying out their functions, public authorities will:

- Place biodiversity as a natural and integral part of policy and decision making within public bodies, embedding it in its plans, policies and projects and day-to-day activities.
- Address biodiversity decline, through positive actions that will result in maintenance or enhancement of our biodiversity.
- Develop ecosystem resilience through maintaining and enhancing biodiversity.

### What is a resilient ecosystem?

A resilient ecosystem is one that is healthy and functions in a way that is able to address pressures and demands placed on it and is able to deliver benefits over the long term to meet current social, economic and environmental needs. Our ecosystems provide us with a wide range of services and benefits. We need to take all of these into account when we make decisions about how we use them, so that they provide multiple benefits for the long term. This includes taking into account their intrinsic value.

## 3. Carmarthenshire’s Natural Resources

In reporting on its Environment Act Forward Plan Carmarthenshire County Council understands the importance of the natural environment. Biodiversity and resilient ecosystems provide us with many of the things that sustain our lives, through a number of important services:

- **Provisioning** – providing food (wheat, fish, etc.), fuel (timber, coal), fresh water, medicine, textiles.
- **Regulating** – disposing of pollutants, controlling floods, absorbing carbon dioxide (greenhouse gases), stopping erosion.
- **Cultural** – beautiful landscapes, a sense of place, recreation and tourism, inspiration and investigation, from schoolchildren to scientists.

- **Supporting** – maintaining soils and plant growth.

A healthy natural environment supports our society and enables our economy to flourish. Our natural resources and ecosystems can help to reduce flooding, supply clean water, improve air quality and supply materials for construction. They also provide a home for a variety of wildlife and give us landscapes we farm and value in Carmarthenshire, improving our well-being and quality of life, and they are the natural resource on which our growing tourism and recreation industry is based.

However it is well established that the natural environment is under increasing pressure from a variety of causes. A poorly managed natural environment increases the long-term risks to our well-being and diminishes the value of our natural resources – our natural support system. Hence the rationale in developing our Environment Act Forward Plan of reviewing our working practices, plan and policies to ensure that they minimise any negative impact on the natural environment and actively seek to maintain and enhance biodiversity and promote ecosystem resilience.

### 3.1 How our natural resources support the seven well-being goals (from NRW’s [State of Natural Resources Report](#))

<i><b>A prosperous Wales</b></i>	Natural resources provide opportunities for employment and economic activity. Wildlife and outdoor activity tourism to Wales provides c.206, 000 jobs and is estimated to be worth £6.2 billion. In 2013, over 3.5 million visitors to our coastline brought £602 million to the economy, with growth predicted at 10%. Wales’ three National Parks attract 12 million visitors every year who spend £1 billion on goods and services.
<i><b>A resilient Wales</b></i>	Biodiversity, mountains, moorlands and heaths, semi-natural grasslands, woodlands, urban greenspaces, rivers, streams, lakes and wetlands, coastline, and marine ecosystems all contribute to supporting Wales’ ability to adapt to climate change.
<i><b>A healthier Wales</b></i>	Natural resources make a significant contribution to the physical health and mental well-being of people in Wales. Trees help to absorb pollutants and improve air quality, which if poor can impact on people’s health. Access to nature and greenspace has positive impacts on physical and mental health.
<i><b>A more equal Wales</b></i>	Equal access to ecosystems providing cultural services contribute to equality in Wales. We will work towards proving equal access for everyone to well-being benefits provided by natural ecosystems.

<b><i>A Wales of cohesive communities</i></b>	Involving communities in the management of their local parks and woodlands has been shown to improve community cohesion and reduce anti-social behaviour. We have begun to work with Town and Community Councils regarding local parks
<b><i>A Wales of vibrant culture and thriving Welsh Language</i></b>	Landscapes have played a significant role in the development of distinct cultural practices, such as local building techniques relying on local materials, along with locally specific art and literature.
<b><i>A globally responsible Wales</i></b>	The environment supplies all our material resources, but we must ensure that we use only our fair share.

### 3.2 Nature Recovery Action Plan

The Welsh Government launched its own [Nature Recovery Action Plan](#) (NRAP), which sets out its commitment to biodiversity in Wales,

The NRAP objectives are:

- 1 Engage and support participation and understanding to embed biodiversity throughout decision making at all levels.
- 2 Safeguard species and habitats of principal importance and improve their management
- 3 Increase the resilience of our natural environment by restoring degraded habitats and habitat creation
- 4 Tackle key pressures on species and habitats
- 5 Improve our evidence, understanding and monitoring
- 6 Put in place a framework of governance and support for delivery

In Carmarthenshire the Nature Partnership produced a [Local Nature Recovery Plan](#) in 2020 based on the objectives of the national plan and a [State of Nature](#) report produced in 2024.

## 4. Strategic context

### 4.1 Council Plans and Policies that link to Environment Act (Wales) 2016

- Carmarthenshire County Council Corporate Strategy 22-27 [Well-being Objectives](#): Objective 3 - Enabling our communities and environment to be healthy, safe, and prosperous (Prosperous Communities) and the thematic priority: Decarbonisation & Nature

Emergency (including ‘addressing the issues that are driving a decline in our biodiversity and support nature recovery’). It would also contribute to the Public Service Board’s Well-being Plan for Carmarthenshire.

- [Carmarthenshire County Council Cabinet Vision Statement 2022–27](#), which outlines the starting point of the Council’s ambitions over these 5 years. This includes a vision to: *Increase the biodiversity of all council-owned land, and recognise the strong interrelationship between climate change, the loss of biodiversity and human wellbeing. Consider the use of CCC land for creating havens of wildflowers and pollinators, including roadsides and verges. We cannot solve the threats of human induced climate change and loss of biodiversity in isolation. We either solve both or we solve neither.*
- The declaration by the Welsh Government and CCC of both a **Climate and Nature Emergency**, and the role our habitats in mitigating climate change and delivering opportunities for Nature Recovery.
- It will contribute to the [Council’s Transformation Strategy 2022-27](#) and be a mechanism to implement a programme to deliver the transition to Net Zero by 2030

## 5. Forward Plan – actions delivered

### 5.1 How the action plan was developed and reported on

#### Identifying divisional actions

This third Forward has been developed by and for the council, building on the previous plans, learning from that experience, and discussing with Heads of Service and colleagues within a range of divisions. Actions identified were then approved by the relevant Head of Service and teams. It was stressed that these actions must come from the teams rather than being imposed on them – this is considered essential for the embedding of new working practices.

Each agreed action was then added to the Council’s Performance Management Improvement System (PIMS) and with the intention that they be integrated with Divisional Business Plans as considered appropriate. Using the PIMS these actions are reported on 6 monthly in June and December each year, with the update report being signed off by the relevant Head of Service. The January PIMS reporting round on these Environment Act PIMS actions forms the basis of the annual report to the Council’s Environment and Public Protection Scrutiny Committee in early July each year. The action plan is a dynamic document. Actions are reviewed and revised as necessary with the officers responsible for them. New actions can be added as discussion take place with other relevant divisions within the Council.

The June 2025 reporting round for the Council’s Environment Act PIMS actions has been used in the final compilation of this report.

It is considered that the approach to delivering the Council’s Environment Act Forward plan demonstrates the following ways of working as referred to in the WFG Act:

Looking at the <b>long term</b> so that we do not compromise the ability of future generations to meet their own needs	We have been reviewing the Council’s services and working practices – our core work, and the changes we make to these practices will deliver long term benefits
Understanding the root causes of the issues to <b>prevent</b> them reoccurring	We have developed our Environment Act actions with the delivery teams responsible, ensuring that the actions identified can be integrated into working practices, and with other policies and plans
Taking an <b>integrated</b> approach so that we look at all well-being goals and objectives of other services and partners	We have demonstrated a collaborative approach by working together with those responsible for making changes in working practices
<b>Collaboration</b> - working with others in a collaborative way to find shared sustainable solutions	

## 5.2 TABLE 1 Carmarthenshire County Council’s Environment Act Forward Plan Actions developed and reported on:

### NRAP Objectives

- Objective 1: Engage and support participation and understanding **to embed biodiversity throughout decision making at all levels**
- Objective 2: **Safeguard species and habitats** of principal importance and improve their management
- Objective 3: **Increase the resilience of our natural environment** by restoring degraded habitats and habitat creation
- Objective 4: **Tackle key pressures** on species and habitats
- Objective 5: Improve our **evidence, understanding and monitoring**
- Objective 6: Put in place a framework of **governance and support** for delivery.

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25																
<b>NATURAL ENVIRONMENT AND SUSTAINABILITY DIVISION</b>																			
18034	Progress adoption and delivery of CCC's Tree and Woodland Strategy. Report on total number of actions progressed each 6 months. Individual actions are reported on in PIMS as part of the monitoring of the Tree and Woodland strategy.	1, 6	<p>The <a href="#">Tree and Woodland Strategy</a> was adopted by Cabinet in December 2024.</p> <p>This strategy sets out how and why CCC will manage the trees and woodlands, for which it is responsible. It also sets out how and why CCC will ensure it plants more trees and more woodland in appropriate places, for the right reasons. In delivering the strategy contains CCC will play its part in mitigating both the Nature and the Climate Change Emergencies which it and Welsh Government have declared. Successful delivery of the proposed strategy will also deliver the numerous other benefits which trees and woodlands provide.</p> <p>In the FP period the following has been planted:</p> <table border="1" data-bbox="869 874 1912 1216"> <thead> <tr> <th></th> <th>Ha</th> <th># trees</th> <th></th> </tr> </thead> <tbody> <tr> <td>2022/23</td> <td>5.4</td> <td>8680</td> <td>Woodland creation on a variety of Council owned sites throughout the county</td> </tr> <tr> <td>2023/24</td> <td>0.69</td> <td>1100</td> <td>Woodland creation on a variety of Council owned sites throughout the county</td> </tr> <tr> <td>2024/25</td> <td>10.89</td> <td>12200</td> <td>Woodland creation on a variety of Council owned sites throughout the county</td> </tr> </tbody> </table>		Ha	# trees		2022/23	5.4	8680	Woodland creation on a variety of Council owned sites throughout the county	2023/24	0.69	1100	Woodland creation on a variety of Council owned sites throughout the county	2024/25	10.89	12200	Woodland creation on a variety of Council owned sites throughout the county
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2024/25	10.89	12200	Woodland creation on a variety of Council owned sites throughout the county																
18035	As partner in the Carmarthenshire Nature Partnership publish summary of Carmarthenshire's	1,5	<ul style="list-style-type: none"> <li>The summary of the Carmarthenshire State of Nature Report, prepared by the Carmarthenshire Nature Partnership is now on the <a href="https://www.carmarthenshire.gov.wales/home/council-services/planning/biodiversity/the-state-of-nature-in-Carmarthenshire/">biodiversity pages</a> of the CCC website: <a href="https://www.carmarthenshire.gov.wales/home/council-services/planning/biodiversity/the-state-of-nature-in-Carmarthenshire/">https://www.carmarthenshire.gov.wales/home/council-services/planning/biodiversity/the-state-of-nature-in-Carmarthenshire/</a></li> </ul>																

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
	State of Nature Report on CCC web site.		<ul style="list-style-type: none"> <li>• The full document can be found on the CNP partner website of the <a href="#">West Wales Biodiversity Information Centre</a></li> <li>• It is based on data/knowledge from a range of sources/expertise and provides an overview of the main headlines and recommendations for our <a href="#">priority habitats and species found in Carmarthenshire</a> and the threats they face.</li> </ul>
18036	Report on actions delivered by CCC, and in partnership with others which will deliver nature recovery and evidence CCC's response to the Nature Emergency	1,6	This is the report on the CCC Env Act Forward Plan 2023-2025 and will be submitted Welsh Government by the end of 2025/early 2026. The next plan: CCC Env Act FP 2026-28 will be produced in 2025 for adoption by CCC.
18037	Progress adoption and report on delivery of CCC's Strategy for Grassland Management for Pollinators	1, 5, 6	<p>CCC's <a href="#">Strategy for Grassland Management for Pollinators</a> 2024-29 was presented to and supported by both Pre Cabinet and Cabinet in 2024. It has also been supported by the Shadow Cabinet. Therefore the adoption of the plan is complete.</p> <p>CCC's WG Local Places for Nature grant has funded purchase of additional machinery required to deliver the management required. In total Grounds now have three ride on Grillo cut and collect machines, two trailers, a Weidemann cut and collect to put behind a tractor and electric push mowers to increase the versatility in the way they can work over the council estate.</p> <p>Service Level Agreements now include the 'biodiversity' options as described in the Grassland Management Strategy and Grounds will be able to create detailed grassland management plans for sites, enabling comparisons between different management techniques be compared when a new mapping system Alloy is in place.</p> <p><a href="#">FAQs</a> have been prepared and are on the <a href="#">Pollinators page</a> of the CCC website</p>

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
			A simple monitoring scheme has been devised for use by officers/public/community by the Biodiversity Officer at One Voice Wales and was trialled in 2025.
18038	Continue to progress delivery of CCC's Caeau Mynydd Mawr Marsh fritillary project (CMM) in the Cross Hands area	1,2,3, 6	<p>The <a href="#">Caeau Mynydd Mawr Marsh Fritillary Project</a> continues to deliver biodiversity enhancements which support the Marsh Fritillary butterfly population in the project area, working in partnership with others – inc. NRW, Wildlife Trust of South and West Wales, Butterfly Conservation and private landowners and graziers.</p> <p>The project area will be increased under the new Local Development Plan (2018-2033), to enable development to continue to proceed in the Cross Hands growth area. Through the planning system there will be continued consideration of the impact of development proposals for on the Marsh Fritillary feature of the Caeau Mynydd Mawr Special Area of Conservation (SAC), and the need to establish a management strategy to ameliorate for any impacts on this and secure the ongoing and future management of habitat used by the Caeau Mynydd Mawr SAC marsh fritillary butterfly metapopulation.</p> <p>This will ensure we are compliant with the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.</p> <p>Currently, there are 23 sites with 44 Ha of habitat in suitable condition for the butterfly.</p>
18039	When opportunities arise secure S106 contributions from developers to deliver off site net benefit for biodiversity on land in the management control of CCC	1,3	<p>We continue to secure S106 contributions for all chargeable developments within the Caeau Mynydd Mawr Project area (see action 18038) and look for other opportunities to deliver S106s in relation to other planning applications where there are suitable opportunities.</p> <p>As of the end of 2025 there are five S106 signed which aim to deliver off site net benefit for biodiversity on land in the management control of CCC (see case study accompanying this report). Action plans are written to progress agreements with developers.</p>

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
			Benefits delivered: maintenance and enhancement of grassland, woodland and brownfield habitats and riparian zones.
18040	Seek funding and continue to deliver the Carmarthenshire Bogs Project	2	<p>The focus here is on project sites [areas of 'S45' common land (with no known owner)] that are areas of lowland raised bog (identified by NRW). For S45 commons the Commons Act 2006 confers powers on a local authority to protect land registered as common land and where action can be directed with most benefit achieved for the site and to work in partnership with others.</p> <p>External funding I has been required to carry out required management interventions and WG funding (Enabling Natural Resources and Well-being and Local Places for Nature) has been used to cut firebreaks and undertake contour bunding to keep water in the in the bog and reduce the fire risk.</p> <p>In 2025, CCC officers have met a NRW officer from the Wales Peatland Action Project on site at Figyn common to assess restoration work carried out and discuss future action. Based on the awaited guidance from NRW, funding will be sought to undertake further action.</p> <p>Illegal burns are still a problem on one site.</p>
18041	Llanelli Water Vole project: Commission a water vole survey to inform future management of water vole in the project area and progress costed recommendations	2,3	<p>CCC own sites in Llanelli that have populations of the endangered Welsh Priority and protected Water Vole. The main threats to this species are loss of suitable habitat (including through housing and infrastructure development).</p> <p>Survey commissioned and completed in June 2024 on keys sites in Llanelli. Based on these funding will be sought to undertake the recommendation action (including improving access for</p>

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
			<p>continued survey/management on one currently inaccessible site north of WWT) so costed plans can be produced.</p> <p>CCC uses S106 funding to manage ditches at a site at Machynys where a Persimmon Housing development impacted on Water Vole habitat and officers have met with and advised Machynys Golf Course on management of the ditches on the course for Water Vole.</p> <p>A continued partnership approach is recommended to look at Water Vole habitat management in the wider area – with WTSWW, WWT, NRW, Machynys Golf Course.</p>
18042	Provide training for Elected Members and officers in Biodiversity Enhancement, Ash Dieback, the Nature Emergency etc.	1	<p>Training has become an important part of the embedding the S6 Environment Act duty and ecological legal requirements across council functions. It will continue to be developed as a priority action of the 26-28 Forward Plan.</p> <p>Various training sessions (formal and informal) have taken place in the plan period:</p> <p><b>April 2023</b> a mix of 53 officers, agents and developers attended a Nature based SUDs training session run by Robert Bray Associates funded by CCC’s WG ENRAW grant.</p> <p>May <b>2023</b> EPP Scrutiny attended an information session on the then draft CCC Strategic Plan for managing our Grassland for Pollinators</p> <p><b>April 2023</b> Planning Committee completed training in delivering net benefit for biodiversity.</p> <p><b>Jan and March 24</b> Further training for Housing Maintenance staff on Protected Species delivered.</p> <p><b>March 2025:</b> A further four training sessions for officers have been organised and been delivered. Further training for elected members has also been delivered.</p>

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
18043	Continue to provide secretariat and facilitate three meetings each year for the Carmarthenshire Nature Partnership (CNP)	1, 6	<p>Part of CCC’s biodiversity officer’s role is to facilitate and support the <a href="#">Carmarthenshire Nature Partnership</a> (CNP). The Partnership is now over 25 organizations, who carry out conservation work (wholly or as part of their functions) in the county.</p> <p>The partnership meets three times a year, either in person or on an annual site visit. The usual format of the meetings is presentations/discussion/partner updates/site visit. They are the only way organisations working on the ground in Carmarthenshire can meet and share knowledge and experience.</p> <p>The meetings are highly valued by the Partnership</p> <p>The Biodiversity officer send out weekly Item of Interest emails, and produced 3-monthly <a href="#">Nature Notes</a> and an <a href="#">annual report</a> to highlight some of the work the Partners undertake.</p> <p>The biodiversity officer and Local Places for Nature officer attend biweekly all-Wales Local Nature Partnership meeting and share relevant and useful information with partners and internally within the Council.</p>
18044	Deliver Welsh Government’s Local Places for Nature grant in Carmarthenshire in 2024/25	2,3,4,5	<p>The Local Places for Nature project has completed all of its allocated projects for 2024-25 and now has in place a Local Places for Nature Officer Matthew Collinson who will be in place until at least the end March 2027.</p> <p>LPfN capital funding has focused on green infrastructure, as well as the promotion of a mutualistic relationship with the natural environment – particularly within an urban context. A sense of place, functionality and provenance has also been an important feature of each site where a project has taken place.</p> <p>This round of Local Places for Nature ends on the 31st of March 2025; however, it is confirmed that new funding is secure for 2025- 2027.</p>

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
			<p><b>Project spend 24/25:</b>  <b>Capital:</b> project spend £496,719.95  <b>Revenue:</b> LPfN officer employment and community grant funding £72,000  <b>Biodiversity revenue:</b> £47,696.80 – grant fund for CNP partners</p> <p>Over 50 projects at all scales have been delivered – summary report available.</p>
	<b>STRATEGIC POLICY and PLACEMAKING</b>		
18045	Publish updated Supplementary Planning Guidance on Biodiversity and Nature Recovery	1-6	<p>As part of the preparation of the Revised Local Development Plan (LDP) and to support the implementation and interpretation of its policies, a series of Supplementary Planning Guidance (SPG) are subject to ongoing preparation. These will include thematic SPG as well as those to support site delivery such as masterplans and development briefs.</p> <p>Any SPG can only be adopted once the Revised LDP is in place. Leading up to the adoption of the Revised LDP work has commenced on a series of SPG for adoption concurrent with the Plan or shortly following its adoption - this includes a SPG on Biodiversity and Nature which is currently being finalised ahead of reporting for approval to consult. A date for reporting is has not yet be confirmed.</p> <p>It should be noted that there is a current extant SPG on Nature and Biodiversity in place to support the implementation of the current adopted LDP which will be subject to public consultation ahead of its formal adoption.</p>
18046	Publish updated Supplementary Planning Guidance and secure	1, 3	A Project officer (Greening Carmarthenshire: Project Coordinator) was appointed in Nov/ Dec 2023, funded by Shared Prosperity Grant (SPF).

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
	delivery of Green and Blue Infrastructure (GBI)		<p>The preparation of the SPG is linked to strategic guidance and delivery of Green and Blue Infrastructure under the Greening Carmarthenshire Project.</p> <p>Opportunities to bring the SPG forward to support/frame current policies and proposals will be explored through the above project.</p> <p>As part of the preparation of the Revised Local Development Plan (LDP) and to support the implementation and interpretation of its policies a series of Supplementary Planning Guidance (SPG) are subject to ongoing preparation. These include thematic SPG as well as those to support site delivery such as masterplans and development briefs. Appendix 3 of the Revised LDP includes a list of SPG that will be prepared, including that relating to Green and Blue Infrastructure. However, it should be noted that this is not exhaustive. Any SPG can only be adopted once the Revised LDP is in place.</p> <p>The preparation of SPG will remain ongoing and its delivery is linked directly to the adoption of the Revised LDP.</p>
18047	Publish master plans for allocated sites in the new Local Development Plan setting out the type and location of the where GBI that must be provided by developers.	1, 3	<p>Monitor implementation in line with the trajectory for site delivery post LDP adoption.</p> <p>The Council is a signatory to the Wales Placemaking Charter with placemaking forming an important component of national planning policy which has then been reflected in the Revised LDP. Considerations in relation to Placemaking focuses on considering the future development of distinctive and vibrant places – this includes promoting high-quality design and includes integrating design solutions incorporating buildings, transport, public spaces Green and Blue Infrastructure which includes landscaping, SUDS and nature as part of the development or regeneration proposals.</p> <p>As part of the preparation of the Revised Local Development Plan (LDP) and to support the implementation and interpretation of its policies including those in relation to Placemaking a</p>

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
			<p>series of Supplementary Planning Guidance (SPG) are subject to ongoing preparation. These will include thematic SPG as well as those to support site delivery such as masterplans and development briefs.</p> <p>Any SPG can only be adopted once the Revised Local Development Plan (LDP) is in place. Leading up to the adoption of the Revised LDP work has commenced on a series of SPG for adoption concurrent with the Plan.</p> <p>The Revised LDP makes specific provision through Policy PSD2: Master planning Principles – Creating Sustainable Neighbourhoods. This policy requires proposals where the development is for 50 homes or more, to submit a comprehensive and integrated ‘masterplan’ for the entire site demonstrating a coherent and coordinated approach to creating neighbourhoods in accordance with placemaking and good design principles including Green and Blue Infrastructure.</p> <p>The requirements for the masterplans will be supported through the content of the forthcoming Supplementary Planning Guidance on Placemaking, Green and Blue Infrastructure, Open Space etc. Where appropriate the Council will also produce masterplans or development briefs to support the delivery of sites allocated within Plan – these specific sites will be identified as the Revised LDP is implemented.</p> <p>The action is directly linked to the adoption and implementation of the Revised LDP. In this respect the Plan is currently in the examination phase and consequently no such masterplans have been produced.</p>
18048	Develop and promote the use of S106 to provide for provision and maintenance of GBI. Review opportunities for S106 agreements	1, 3, 4	<p>The implementation of this action is monitored in line with the trajectory for site delivery post LDP adoption.</p> <p>In accordance with regulations, consideration of provision can be made for the use of planning obligations (S106) to provide for provision and maintenance of Green and Blue Infrastructure</p>

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
	to fund the future management of LNRs		<p>particularly where it may provide a net benefit for biodiversity. Such contributions have been sought and secured, and current policy and regulations makes adequate provision for the use of S106 where they mitigate an impact arising from a development, including contributing to Local Nature Reserves (LNR) management/enhancement/creation.</p> <p>In addition and as part of the preparation of the Revised Local Development Plan (LDP) a new Supplementary Planning Guidance in relation to Planning Obligations has been prepared and will be adopted concurrent with the Revised LDP.</p> <p>A further complimentary Supplementary Planning Guidance in relation to Biodiversity is currently under preparation ahead of reporting for approval to consult on its content.</p>
18049	Progress strategic guidance and delivery of Green and Blue Infrastructure	1, 3	<p>A Project officer (Greening Carmarthenshire: Project Coordinator) was appointed Nov/ Dec 23, funded by Shared Prosperity Grant (SPG).</p> <p>The Green and Blue Infrastructure Strategy and Allotments and Community Growing Strategy was reported to Cabinet on the 16th December 2024 and has subsequently been subject to public consultation. The strategy sets a forward-thinking approach for the role of Green and Blue Infrastructure in the Councils future Plans and how they may be considered, incorporated in adherence to our statutory duty but also how others including communities can contribute to the use of Green and Blue Infrastructure in creating better places.</p> <p>The production of a developers and community green and blue infrastructure toolkits have been prepared and form part of the Green and Blue Infrastructure Supplementary Planning Guidance (SPG) to support the implementation of the Revised Local Development Plan.</p> <p><a href="#">Draft Green and Blue Infrastructure Strategy Public Consultation - Carmarthenshire County Council</a></p>

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
	<b>DEVELOPMENT MANAGEMENT AND MINERALS</b>		
18050	Ensure all approved development plans deliver biodiversity enhancement consistent with policy and legislation	1, 6	All Officers are aware of the need to secure biodiversity enhancement in relation to development proposals. Development Management will continue to develop knowledge and skills to ensure this is implemented as required by the legislation.
18051	Secure the resources required and develop a system to monitor compliance with biodiversity, landscape, and Green and Blue Infrastructure requirements of approved developments	1, 5	<p>Work is underway to produce standard planning conditions to ensure consistency of approach.</p> <p>The development of supplementary guidance on net benefit for biodiversity (NBB) to support the LDP will set out the requirements of developers to report on aspects of the development at key stages in the process. The guidance will consider options to fund work for larger schemes through planning obligations.</p> <p><a href="#">Net Benefit for Biodiversity - Carmarthenshire County Council</a></p>
18052	<b>Minerals Section:</b> identify minerals restoration projects across the 11 local authorities for which a minerals planning service is provided, and report on how these projects are delivering net benefit for biodiversity, and how this being monitored and reported	1, 2,3,5	<p>Examples of action include:</p> <p><b>Torcoed Quarry, Carmarthenshire:</b> early 2023 - 445 mixed native trees and shrubs planted.</p> <p>July 2023 Full ecological survey inc. dormouse, bats and other protected species.</p> <p>October 2023, 1000, dormouse tubes set up to monitor activity.</p> <p><b>March 2025 - Selar Opencast</b> (aftercare year 4) aftercare report for has now been completed, measures for the next year of aftercare have been reported on and sent to the landowner, implementation of these measures will be monitored over the remaining aftercare period (along</p>

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
			with the NPT ecologist) - there are 2 years of aftercare remaining in tree planting areas, 1 year in other areas
18053	Progress CCC's adoption of the peat protocol developed by CCC Minerals Section for manging peat on mineral and development sites and raise awareness of this.	1, 3, 6	The peat protocol has been distributed amongst the Minerals and Waste Planning officer society group - but has yet to be adopted by CCC. It needs to be discussed with internal biodiversity teams with a view to getting it adopted as guidance .  Proposed guidance will be updated to reflect the new PPW.
	<b>GROUNDS MAINTENANCE AND CLEANSING</b>		
18054	Review SLAs with Grounds Maintenance clients and deliver pollinator friendly grass cutting regimes across CCC estate	1, 3, 5, 6	CCC's WG Local Places for Nature grant has funded purchase of additional machinery which allows the delivery of a range of management requirements agreed under Service Level Agreements. In total Grounds now have three ride on Grillo cut and collect machines, two trailers, a Weidemann cut and collect to pull behind a tractor and electric push mowers. These all increase the versatility in the way in which Grounds can delivery positive management for biodiversity across the council estate.  Grounds are in process of reviewing SLAs with clients , including Housing, their largest Clients and reviewing composting arrangements.  The revised Landscape Management Tender now include 'biodiversity' options under a new schedule of rates.  Details of the revised SLAs will be integrated on to departmental software systems to allow this methodology of costing to be utilised on all SLAs.

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
			<p>Upon completion of the Housing Service Level Agreement, it is proposed to roll out the revised grassland management principles to inform Schools Service Level Agreements as a second phase with the proposed completion of all Service Level Agreements to include Biodiversity by April 2026.</p> <p>The review of the SLA with Housing has run hand in hand with the implementation of the Digital Transformation software to be utilised by Grounds, which allows all the management types to be shown and costed on the system.</p> <p>Total area (ha) of CCC land managed with either nectar or meadow cuts: approx.. 70 sites/ approx.. 9Ha</p>
18055	<p>Work with Grounds Maintenance clients e.g. Housing, Education, Property to identify and propose areas suitable for tree planting consistent with CCC’s Tree and Woodland Strategy. Work with Natural Environment and Sustainability division to progress tree planting and agree standard maintenance requirements.</p>	1, 2,	<p>Natural Environment and Sustainability division have had to lead on this action, working internally with other CCC Divisions.</p> <p>WG Local Places for Nature funding has allowed tree/orchard planting projects to be undertaken and delivered:</p> <ul style="list-style-type: none"> <li>• in winter 22/23 tree planting on CCC Housing land in Pencader, on Education land at the former Neuadd y Gwendraeth school and at Adult Day Care Centres in Carmarthen, Ammanford and Llanelli.</li> <li>• in winter 23/24 tree planting took place on CCC land in Johnstown, Clos St Paul/Anne Street, Tyisha, Bro Myrddin, Carmarthen</li> </ul> <p>In addition the Tree Safety officer also seeks to ensure all trees removed for safety reasons are replaced.</p>

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
	<b>PROPERTY</b>		
18056	Work collaboratively to ensure that from concept stage all new CCC projects will deliver net benefit for biodiversity and Green and Blue Infrastructure. Reflect in briefs for consultants and contractors. Ensure these requirements are delivered, that long-term maintenance requirements have been addressed and funding solutions agreed	1, 2, 3	Work continues to ensure that all design briefs and specifications undertaken by Property Design reflect the requirements for Green and Blue Infrastructure whilst better understanding the impact on scheme costs.
18057	As part of CCC's asset disposal programme, prior to proposing sites for sale, consult Natural Environment and Sustainability division as to opportunities for biodiversity	1	The Capital Receipt Programme is circulated to Conservation and considered as part of Land Use Group for alternative use options.
18058	With Natural Environment and Sustainability division Section review the tenancy agreements on CCC farms, as appropriate, to promote nature friendly farming	1, 2	Work is progressing at Bremenda Uchaf, Llanarthne to investigate and introduce more sustainable farming practices on this CCC-owned farm.

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
	(NFF) opportunities and techniques, and enhancement of biodiversity on CCC farms.		<p>Working in partnership with West Wales Rivers Trust, in 2023/24 Farmyard Infrastructure reports were completed for four farms in Llanarthne. These reports will advise how water management of the farmyard will be improved.</p> <p>The CCC's Woodland officer has reviewed tree planting opportunities on a number of CCC tenanted farms and tree planting has taken place on a small number:</p> <ul style="list-style-type: none"> <li>• Two Laugharne holdings are progressing tree planting projects with CCC Woodland Officer on two CCC holdings</li> <li>• Tenanted land near Llandoverly</li> <li>• Bremenda Uchaf Farm, Llanarthne</li> </ul> <p>It has also been agreed that upon rural holdings becoming vacant, discussions and site visit will be held with colleagues in Property and the Natural Environment and Sustainability divisions to review the opportunities and ways of enhancing biodiversity on these sites, working with any new tenants</p> <p>Property and Natural Environment and Sustainability divisions continue to work closely to explore opportunities for nature friendly farming and enhancement of biodiversity on CCC farms and tenanted land</p>
	<b>FLOOD DEFENCE</b>		
18060	Develop and promote an integrated approach to the design of nature-based, low maintenance SUDS schemes that will contribute to landscaping requirements, and	1,3	In <b>April 2023</b> , WG's Enabling Natural Resources and Well-being grant funded a 1-day training seminar for 50 delegates in Nature Friendly SUD solutions, CCC officers and consultants. It was delivered by Robert Bray Associates, UK leaders in this field.

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
	provide green infrastructure, and net benefit for biodiversity for larger/major developments		<p>CCC's statutory duty under Schedule 3 of the Flood and Water Management Act 2010 has been to ensure that all new developments implement sustainable drainage systems. An integral part of the consenting process is to ensure that there is an increase in biodiversity and amenity.</p> <p>In <b>2024/25</b> 60% of applications received for sustainable drainage consent were brownfield sites and we have adopted 7260 m<sup>3</sup> of green infrastructure on sites across the county.</p> <p>To ensure that we are meeting the necessary targets in terms of green infrastructure and associated targets, in 2024 an independent review of the sustainable drainage consents was undertaken. This highlighted that 80% of applications reviewed met the standards for amenity creation. The same review stated that 60% of applications reviewed met the standards for biodiversity net gain with 30% of applications meeting a high standard of biodiversity net gain.</p> <p>To continue to meet this requirement, we are continually evolving our pre-application service to ensure that advice is provided to customers on green infrastructure and biodiversity net gain. We have also developed a paper which seeks to offer our customers further guidance.</p> <p>We envisage that this bespoke advice will afford us greater opportunities to influence design and deliver the green infrastructure outcomes we desire.</p> <p>In 2024, we have also seen the development of a blue and green infrastructure guidance and policy by our strategic policy and placemaking colleagues that move developers towards the infrastructure that will help us achieve these goals.</p> <p><a href="#">Sustainable Drainage Systems (SuDS) - Carmarthenshire County Council</a></p>
18062	Pembrey Canal - progress the preparation of a management plan for this site and manage it to deliver flood defence, biodiversity,	2,3,4	Flood Defence developed a management plan for the canal which included provision for the management of trees, the cycle path/active travel, flood risk and invasive species. The actions

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
	control of invasive species and amenity benefits, consistent with the legislation		<p>now lie with the PROW, Natural Environment and Sustainability and flood risk officers to implement accordingly.</p> <p>Work has been completed to remove invasive species that have an adverse impact on the biodiversity associated with the canal in the Pembrey area. With WG grant funding the aquatic invasive plant Parrot’s Feather was partially controlled in 2024 and 2025. This is monitored by local volunteers.</p> <p>Water Voles are now present on the Canal, so any management has to consider their presence and be carried out to an agreed method statement to ensure they are not impacted upon.</p>
	<b>PROPERTY DESIGN</b>		
18063	Evidence that CCC projects deliver CCC’s S6 Biodiversity duty, and its Tree and Woodland Strategy. Adopt low maintenance nature-friendly design solutions. Reflect in briefs for consultants and contractors. Ensure these requirements are delivered, that long- term maintenance requirements have been addressed and funding solutions agreed	1, 2,3	<p>Discussions now take place to include enhancements for biodiversity and Green Infrastructure in CCC projects, e.g. plans for the refurbishment of Wood’s Row in Carmarthen.</p> <p>Project Ecologists now support Property in the design and delivery of projects.</p> <p>The requirements of the Tree and Woodland Strategy are being incorporated into template tender documents and design information.</p>

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
	<b>HIGHWAYS and TRANSPORTATION Professional Design and Active Travel</b>		
18064	Evidence that projects from the concept stage, projects will deliver CCC's S6 Biodiversity duty, and where space permits its Tree and Woodland strategy.	1,2,3	<p>Where space permits biodiversity enhancement is included in the design wherever possible and appropriate (e.g. inclusion of otter dry pipe on bridge restoration projects where appropriate).</p> <p>This is more viable on new schemes which require planning permission e.g. Tywi Valley Path, than on schemes that fall within permitted development.</p> <p>Highway schemes typically involve maintenance or replacement projects that fall under permitted development. These reflect the council's statutory responsibilities as a Highway or Land Drainage Authority. Within available land and considering highway visibility, we assess what provisions can be made for Biodiversity.</p> <p>Ongoing maintenance adheres to the Highway Asset Management Plan, a strategic approach employed by councils to manage and maintain highway networks in line with statutory duties and best practices. For new road projects, we engage early with ecology and biodiversity teams to explore opportunities for enhanced biodiversity and landscaping.</p>
18065	Monitor the delivery of projects to ensure compliance with briefs, and delivery of biodiversity and landscape requirements	1,2,3	<p>Where contractors completed works, the design team monitor the contract for the first 12 months. This responsibility is then passed on to the adopting service.</p> <p>The majority of works involve maintenance and replacement schemes within existing highway boundaries. In these areas, we maximise provisions based on the available land.</p> <p>For schemes delivered by external contractors, we ensure adherence to briefs and compliance with biodiversity and landscaping requirements specified in the contract. Major projects with planting and landscaping include a 5-year maintenance obligation, while smaller projects have a</p>

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
			12-month maintenance period. After these periods, the assets are maintained in line with the Highway Asset Management Plan, a strategic approach adopted by councils to manage and maintain highway networks in accordance with statutory duties and best practices.
18066	Evidence how from the concept stage, Active Travel projects are delivering CCC's S6 Biodiversity duty, and its Tree and Woodland strategy.	1,3	<p>Active Travel consult the Natural Environment and Sustainability division Section on new schemes:</p> <p>e.g. <b>St Clears</b>. A small area of tree planting (300 trees and shrubs) was completed in February 2024 at the Wetland site through which an active travel path was diverted away from the river and a local school and community were be involved in the planting.</p> <p>The area of land left after the path was moved has a project to create wetland feature here and CCC is working with the West Wales Rivers Trust to progress this in 25/26 with the aim to designate the area a Local Nature Reserve. Public Consultation has shown this idea to be supported by those who attended consultation events.</p> <p>The Client-side Project Delivery Group (PDG) has agreed that advice and guidance would be sought from appropriate colleagues in order that early consideration can be given to appropriate nature friendly infrastructure development.</p> <p>Contact has been made with colleagues in order to agree attendance at a future PDG in readiness for 25/26 programme development and delivery.</p>
	<b>ECONOMIC DEVELOPMENT GRANTS and REGENERATION</b>		
18067	Evidence how CCC's Regeneration projects, from the concept stage are designed to deliver CCC's S6	1	The Council's regeneration projects consider ecological issues at concept stage, for example significant areas for biodiversity are retained and enhanced at Cross Hands East site, with ongoing management contributing to protecting and enhancing the biodiversity as part of

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
	Biodiversity duty, and where space permits its Tree and Woodland strategy.		<p>development here.</p> <p>Management of the estate encourages biodiversity outside of the mitigation areas i.e. road verges and swales through and agreed mowing regime.</p> <p>At Parc Gelli Werdd, Cross Hands, development of employment units has considered the impact on surrounding existing boundary trees as well as additional habitat features. A low-maintenance formal landscaping guide had been prepared in collaboration with landscape officer for plot frontages.</p> <p>These elements are also being incorporated into a proposed development of employment units at Beechwood, Llandeilo being developed by Welsh Government via its joint venture with the Council.</p> <p>Applicants for Regeneration grants are encouraged to sign up to the Welsh Government’s Green Growth Pledge and demonstrate their business approach to reducing the impact on the environment. Town Centre enhancement schemes include tree planting where space allows despite challenges ensuring no impact on service ducting.</p>
	<b>COMMUNITIES</b>		
	<b>OUTDOOR RECREATION</b>		
18068	Secure funding for a permanent post that will ensure CCC has the capacity to manage its Local Nature Reserves and similar sites in ways that will conserve and	1	Post secured and post holder is managing CCC’s LNRs and other sites on behalf of Outdoor Recreation

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
	enhance their biodiversity and enable people to enjoy nature.		
18069	Progress designation of Ynys Dawela in Brynamman, and consideration of Kidwelly Fields (nr Kidwelly Quay) St Clears Wetland as a Local Nature Reserves (LNR) with the Rural Natural Environment and Sustainability division Section. Review opportunities for S106 agreements to fund the future management of LNRs	1, 2, 3, 4, 5	<ul style="list-style-type: none"> <li>• <a href="#">Ynys Dawela</a> LNR designation is progressing via Outdoor Recreation. Designation has been agreed with NRW.</li> <li>• Kidwelly Quay – LNR designation process has not started yet. WG funding has enabled fencing to be installed and grazing to take place of key areas within the site. Tree planting proposed for Winter 2025. WG funding has allowed an invertebrate survey to inform management and LNR designation.</li> <li>• St Clears Wetlands. LNR designation process has not started yet. The West Wales Rivers Trust are leading on surveys to inform the creation of wetland features here and this will inform the LNR designation process. Harvest mice have been recorded on site which will inform future management.</li> <li>• S106 funding is available for management at Kidwelly Quay and in St Clears when designation takes place.</li> </ul>
18070	Working with Natural Resources Wales to finalise Section16 management agreement for 44 ha of Llyn Llech Owain Country Park	1, 3, 4, 5	<p>A Section16 management agreement now signed and in place with NRW for the management of 44ha of the 72ha site.</p> <p>NRW, and specifically the National Peatland Action Project, working with Outdoor Recreation and specialist contractors have undertaken extensive peat bog works, carried out in 2024 to restore the peat bog on site. The Wales National Peatland Action Project visited with a group of climate change specialists from the home nations the site in June 2025.</p>
	<b>NEW HOUSING PROJECTS AND MAINTENANCE OF EXISTING</b>		

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
	<b>HOUSING AND SURROUNDING AREAS</b>		
18071	Draft, adopt and promote CCC's Housing Development, Ecology and Biodiversity Guidance	1,6	<p>The Housing Development, Ecology and Biodiversity Guidance document has been drafted and was adopted as a Guidance document by Housing and Regeneration Strategic Team on 26.06.23.</p> <p>It aims to: protect, maintain and enhance ecology and biodiversity in our developments through early engagement in the feasibility and design process. We will embrace ecology and biodiversity from the outset, placing it at the heart of our decision making and ensure that our developments contribute positively to the Council's responsibilities towards maintaining and enhancing ecology and biodiversity.</p> <p>To achieve this we will:</p> <ul style="list-style-type: none"> <li>➤ Ensure that Ecology is included in all of our development briefs;</li> <li>➤ Encourage early engagement and collaboration in the process;</li> <li>➤ Include and involve our Ecology colleagues throughout the development stages;</li> <li>➤ Consider all recommendations made;</li> <li>➤ Do our utmost to incorporate findings into scheme detailed designs;</li> <li>➤ Work with key partners to ensure that they, too, share our values and engage early;</li> <li>➤ Where possible, go the extra mile in exploring innovative solutions to enhance and protect ecology and biodiversity in our developments</li> </ul>
18072	Ensure the Housing Development and Ecology and Biodiversity Guidance is reflected in all project briefs and remains incorporated at	1	<ul style="list-style-type: none"> <li>• Project briefs by Housing include the requirement to include ecology as a key consideration in the proposals for development and to support, maintain and where possible enhance biodiversity in the area for key species following consultation with the Council's Ecologists. This is a standard requirement that is carried out for all of our housing developments.</li> </ul>

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
	all stages of project development and implementation. Ensure Project Ecology is aware of the ecology issues within each scheme which Housing are progressing.		<p>Project Ecology have undertaken:</p> <ul style="list-style-type: none"> <li>• On-going work at a key project site Bryn Mefys, Llanelli, to deliver habitat enhancements for European Protected Species (bats, and dormice).</li> <li>• Training provided to 60 housing operatives.</li> <li>• Responded to 32 enquiries.</li> <li>• Enhancements provided at Housing sites: Ffordd Aneurin Pontyberem 21 Heol Ffynnon, Llanelli</li> </ul>
18073	Work with CCC Project Ecology to train housing officers in Protected Species issues.		<p>A second CCC Project Ecologist was recruited in Dec 23 to work with Housing on maintenance issues. Training is a core function of this role and after a number of sessions completed in 23/24, training completed in 23/24, officer support is usually 1:1.</p> <p>In 2025, Project ecologists continue to work closely with all housing teams (including officers involved with voids, responsive maintenance and planned works) to train and assist in works, ensuring compliance with protected species legislation during works and the Section 6 duty to maintain and enhance biodiversity through all work undertaken.</p>
	<b>ON LAND MANAGED BY HOUSING AND COMMUNITIES</b>		
18074	In collaboration with Rural Natural Environment and Sustainability division, identify opportunities to enhance biodiversity on land managed by Housing, e.g. managing amenity grassland for	1,3	<p>WG Local Places for Nature funding delivered valuable schemes to enhance green infrastructure and engage with residents on the Housing sites across the county. These were delivered by the LPfN officer and included:</p> <ul style="list-style-type: none"> <li>• tree, hedgerow and orchard planting</li> </ul>

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
	pollinators and tree planting consistent with CCC's Tree and Woodland Strategy		<ul style="list-style-type: none"> <li>• enhancement of public open space through the installation of bench planters, paths and raised beds</li> <li>• conversion of 2 former garage sites o Housing land as part of "Grey to Green" projects to create accessible natural space on a former tarmac area.</li> </ul> <p>In 2025 Grounds Maintenance started to manage some areas across the county in line with the <a href="#">strategy-for-grassland-management-for-pollinators-on-the-carmarthenshire-county-council-estate-2024-29.pdf</a>. This will be built on over subsequent years and inform future SLAs.</p>
	<b>EDUCATION</b>		
18075	<p>Evidence that Communities' Education projects deliver CCC's S6 Biodiversity duty, and where space permits its Tree and Woodland strategy. Deliver biodiversity enhancement as part of new build and smaller schemes.</p> <p>Build these requirements in at the concept stage.</p> <p>Evidence adoption low maintenance nature-friendly design solution</p>	1	<p>Whilst <a href="#">Modernizing Education Programme Strategy</a> is under review, Education continues to engage with ecology representatives when developing schemes to ensure we incorporate opportunities to realise our biodiversity duty and tree and woodland strategy, working in a collaborative way.</p>
17795	On land managed by Education (e.g. CCC schools), identify opportunities to enhance	1, 3	<ul style="list-style-type: none"> <li>• Tree planting took place at Neuadd y Gwendraeth (managed by Education) in winter 23/24, funded by CCC's Local Places for Nature grant</li> </ul>

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
	biodiversity e.g., managing some areas of amenity grassland for pollinators, and areas suitable for tree planting, consistent with CCC's Tree and Woodland Strategy		<ul style="list-style-type: none"> <li>• CCC's Tree Safety Officer continues to seek opportunities to plant trees in School grounds where trees must be removed for safety reasons. Several schools are arranging their own planting.</li> </ul> <p>The Associate Educational Support Adviser is in regular contact with the LPfN officer regarding biodiversity support for schools.</p> <p>Tree and woodland planting opportunity surveys in schools are provided by Tree Safety officer Jason Winter and Coed Cymru officer Gus Hellier.</p> <p>A number of schools have participated in the 'Climate Change Garden' teacher training programme again in the last year. All participating schools have developed productive, pollinator friendly growing spaces in their grounds following this training.</p> <p>School Improvement have little input with tree planting and grassland management in school grounds, although our Climate Action Group has referred to the changes needed in its Manifesto.</p>
	<b>PROCUREMENT</b>		
18076	Seek opportunities to progress procurement of phosphate free or low phosphate cleaning products (this action builds on an action in the previous EAFP)	1	The cleaning services team have adopted a policy for the purchasing of only purchases phosphate free chemicals and which is written into the contract with our cleaning chemical supplier Lyreco. This is to ensure that we are using products that are environmentally friendly.
	<b>CORPORATE POLICY</b>		

PIM S ID	ACTION Description	NRAP objective (s) met	Summary of Action delivered 23–25
18077	Evidence reference to CCC's S6 duty in other policy areas	1,6	As of 08/01/24 Committee report templates now include a Biodiversity and Climate change implication box for report authors to complete

## 5.4 Additional action CCC has delivered that was not included in its third Environment Act Forward Plan 2023-2025

**5.4.1** The Council has commenced significant **developments**, e.g. working in partnership to deliver the Pentre Awel site in Llanelli and the 16 km long Tywi Valley Cycle Path from Carmarthen to Llandeilo. Both have had significant ecological issues, and the Council Project Ecologists have work hard on the projects working alongside with engineers, designers and contractor to ensure the ecological issues are adequately addressed.

**5.4.2** The **rivers** in West Wales and the wildlife they support continue to be threatened by pollution incidents the main sources of nutrients are the rural land use sector (fertilisers and manure) and wastewater sewerage (sewage, food waste, detergents). The extreme weather incidents we appear to be experiencing exacerbate these issues as periods of very intense rainfall are challenging for those managing slurry etc. CCC chair and work proactively with the **Nutrient Management Boards (NMB) Technical Advisory Groups across SW Wales**. These include the Agricultural Working Group, Citizen Science Working Group and Monitoring Working Group. The NMB's remit is to identifying actions to enable improvements in water quality designed to restore and conserve favourable condition status, whilst also allowing development to continue within the SAC catchment without increasing the nutrient loading (nutrient neutral development).

**5.4.3** The [Council Transformation Strategy](#) is to provide a strategic framework to underpin a programme of significant organisational change that will support the Council in achieving its wider aims and objectives as set out within its Corporate Strategy.

The Transformation Strategy sets out goals and objectives to help achieve a specific vision, and outlines how the organisation intends to improve its capabilities and the way that it uses its resources to provide more value and benefits to its customers and residents

**5.4.4** The Council has developed and Marketing and Media Communications Plan to increase the understanding on the climate change and nature emergencies. This is linked to the Climate Action Sir Gâr - addressing the climate change and nature emergencies

Having reached the midpoint within our Net Zero Carbon by 2030 programme, we have reviewed the progress to date and have enhanced our original plan. Now that the council has declared both a Climate Change and Nature Emergency it is vital that we consider them together as they are inherently linked. Therefore, nature protection and enhancement play an essential aspect to our revised plan. The revised approach has also widened the scope of the original plan by incorporating work that is being done across the authority and encompasses trajectory modelling and a climate change and nature emergency people and cultural change plan.

## 6. Review of action delivered

### 6.1. Is the approach to the Forward Plan achieving the objectives?

Carmarthenshire CC's approach to developing and delivering its Forward Plan has been to work towards embedding biodiversity and delivery of CCC's S6 duties across its decision-making processes, its projects, plans and working practices. This is being achieved by challenging and supporting officers to look at their individual and service areas of responsibility and helping them to identify where there are opportunities for maintaining and enhancing biodiversity and promoting ecosystem resilience, alongside the delivery of their other obligations, and in some cases making biodiversity a new priority. This approach is often resulting in the need to change, what in some case, are long established working practices. This can take time. While some service areas find this a relatively easy change to make, other find this much harder and where these changes do not come naturally to the service area, they require long-term support and encouragement to make these changes.

The knowledge of the legislation should be more widespread, and it is hope that continued internal scrutiny of all our functions against the Environment Act duty will be maintained. Now that reports to CCC's committees have to refer to the delivery of S6 duties, and this will assist in raising awareness of this legal obligation.

The agreed Forward Plan actions, as set out in Table 1, are monitored via CCC'S Performance Improvement Monitoring System (PIMS) and reported on by the responsible officer every six months. That report is then signed off by the relevant Head of Service. The Natural Environment and Sustainability division Manager and the Biodiversity Officer are responsible for ensuring the plan is delivered and monitored and engaging all appropriate CCC officers in this process. The delivery of each actions requires regular liaison between these officers and those responsible for each individual action. While this approach is time consuming it is essential if working practices are to change.

Perhaps the continued achievement of the Forward Action plan has been as a tool to raise awareness of the need to investigate and be fully aware of the impact of any plan or project on biodiversity at the outset of the project.

## 6.2 Monitoring delivery of the Forward Plan by CCC

To summarise, with the following measures in place, CCC's Forward Plan objectives are being promoted, and delivery of the plan is being monitored:

- Engaging and collaborating with officers via workshop sessions, supporting officers in changing working practices, monitoring and reflect of actions
- Integrating agreed Forward Plan actions with working practices, policies and plans, including Divisional Business Plans
- Reviewing actions, update targets and report to PIMS every 6 months.
- Reporting annually to Scrutiny on delivery of actions.
- Ensuring every report going to the Council's committees makes reference to the Environment Act as appropriate in its Integrated Impact Assessment

CCC have put in place the systems necessary for the on-going development delivery of its Forward Plan, and Table 1 summarises the delivery of the actions set out in the Forward Plan 2023–2025. It is recognised that as familiarity with this approach develops across the organisation it will become easier to deliver further and more ambitious actions. CCC continues to build on its successful actions, and this helps to embed awareness and understanding of the requirements of the Environment Act across the authority, at all levels.

The Council has adopted a practical approach to delivering its Forward Plan. Using its PIMS it is monitoring the actions this plan contains, ensuring that its S6 duty is recognised and understood across the authority, and that appropriate actions are being put in place, delivered and reported on.

## 6.3 What biodiversity issues have occurred 2023–2025?

6.3.1 The **state of Nature** continues to decline. The latest UK State of Nature 2023 report provides a detailed picture of how nature is faring and reveals the devastating scale of nature loss across the UK, the pressures affecting nature, and what is needed to address nature loss. The report reveals the abundance of 753 species studied has declined by 19% on average across the UK since 1970. Using Red List criteria, an assessment of 10,008 species found 16% (almost 1500 species) are now threatened with extinction in Great Britain.

Wales is now one of the most nature-depleted countries on Earth. In the State of Nature Wales 2023 the extinction risk of 3897 species was assessed using Red List criteria and found that 18% (one in six) were at risk of extinction, including species such as Water Vole (areas of Carmarthenshire are important for this species) and more than 2% are already extinct in Wales. Turtle Doves and Corn Buntings have already been lost from Carmarthenshire skies. Well-known species recorded in Carmarthenshire like the Atlantic Salmon and Curlew have also suffered critical declines in Wales. Urgent action is required more than ever.

6.3.2 **Ash die-back** continues to be a major issue for CCC and will affect a significant proportion of the trees in our landscapes and impact on our woodlands. Part of CCC's ash die-back policy will be the need to identify and deliver new tree and woodland planting to compensate for these losses.

Many woodlands with ash trees are suffering from this disease. The Council is addressing its own responsibilities regarding the disease. It has also developed a Communications Plan that will provide advice for land managers and will address the long-term need for tree planting. The Council is mindful of the need to ensure that new tree and woodland planting ensures that the right trees are planted in the right places and that the existing biodiversity value of proposed planting sites is not over-looked.

6.3.3. The future arrangements for **agricultural support from Welsh Government** could have a positive impact on biodiversity associated with our farmed landscapes. Agricultural land and the wildlife habitats associated with it supports much of the county's biodiversity, and the value of this land to biodiversity is extremely vulnerable to changes in the fiscal support for agriculture. Support for farmers through agricultural payments not only could help biodiversity and their associated ecosystem services but could help viability of farming in the face of extreme weather due to climate change.

## 6.4 Conclusions and recommendations regarding the delivery of the 2026–2028 Forward Plan

CCC has taken a structured and pragmatic approach to developing and delivering its 2023–2025 Forward Plan. It has sought to engage and work collaboratively with officers across the authority to develop the individual actions that the plan contains. That approach remains an ongoing requirement to enable service areas to fully understand the implications of the requirement and to embed and to report on work to support biodiversity and ecosystems in a meaningful way.

Therefore, as part of the development and delivery of the 26–28 Forward Plan we will aim to:

- Invest in further training and awareness raising of the requirements of the Environment Act across service areas by holding targeted workshops and working in co-production with relevant sections to consider their individual functions/service delivery. This should result in a better understanding of the Environment Act duty by officers responsible for activities and their managers and highlight the

importance embedding proactive development and practical delivery of the S6 duty with working practices and the importance of reporting what they are doing. That work will also help to establish a high ambition ethos and permit the development of new more ambitious action, ensure that Forward Plan PIMS actions are integrated into all Divisional Plans as appropriate.

- The Environment Act Forward Plan is part of the agenda of Departmental and Corporate Management Teams and Scrutiny Committee and Climate Change, Decarbonisation and Sustainability cabinet member, and that these teams and committees scrutinise the evidence that CCC is continuing to improve in the way it delivers its S6 duties.

## APPENDIX 5

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