

Annual Report Cyngor Gwynedd Climate and Nature Emergency Plan 2024/25



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1. Foreword by the Council Leader



It is my pleasure to submit a report which provides a detailed overview of Cyngor Gwynedd's progress to realise our Climate and Nature Emergency Plan 2024/25. It includes data, information about projects, and an evaluation across many operational areas.

Implementing our Climate and Nature Emergency Plan is a central part of the work to create a Green Gwynedd, which is

one of the priorities in the Cyngor Gwynedd Plan 2023-2028. We are attempting to change how the Council operates in order to reduce the harm caused to the planet, and it is important that all elected members and staff contribute to this work. Having said this, changing work practices and behaviours is no mean feat, and we have a challenge ahead of us if we wish to reach our ambition of being net zero carbon and ecologically positive by 2030.

Nevertheless, positive steps forward were taken during 2024/25. By investing in installing solar panels on 66 sites, we have reduced our energy costs, as well as saving carbon. We also helped residents to make the best of energy-saving technology

which will in turn, hopefully, help reduce the serious problem of fuel poverty.

I am pleased that we are taking big steps forward to change our fleet to electric vehicles. 43% of our cars and vans are now electric vehicles, and the rest will be replaced when the vehicle comes to the end of its lifespan. Our support to the Sherpa'r Wyddfa public bus service has led to a substantial increase in use again this year.

We are all aware how challenging the current financial circumstances are, therefore, every penny of financial investment from us as a Council must lead to the best value when reducing carbon emissions, as well as reduce costs. Since 2019, Cyngor Gwynedd has invested £6.8m in projects that are a part of the Climate and Nature Emergency Plan, but this has enabled us to attract £13.5m in grants from external bodies. These grants have been essential to be able to achieve our work, and more funding is needed if we are to continue with this essential work in the future.

Councillor Nia Jeffreys Leader of Cyngor Gwynedd

2. Background

Cyngor Gwynedd has made it clear that responding to the climate and nature emergency is one of its priorities, and a Green Gwynedd is one of 7 priority areas in the The Cyngor Gwynedd Plan 2023-28.

To understand more about what the Council is trying to achieve, please turn to the <u>Climate-and-Nature-Emergency-Plan.pdf</u> (CNEP) which was adopted by the Cabinet in March 2022.

The ambition of the Plan is "Cyngor Gwynedd will be net-zero carbon and ecologically positive by 2030."

The ambition corresponds with the Welsh Government's target for joint public sector organisations to be net-zero carbon by 2030 and for Wales to be a net-zero country by 2050.

Our Climate and Nature Emergency Plan includes several projects within the main themes –

- buildings and energy
- movement and transport
- waste
- governance
- procurement

- land use
- ecology

The Welsh Government is asking all local authorities and public sector bodies in Wales to present data annually on their carbon emissions and absorption, using a generic data spreadsheet. All data in this report has been extracted from the data submitted to the Government.

The progress with the plan is regularly monitored by the Climate and Nature Board, which has membership of officers and Cabinet Members and representatives from scrutiny committees.

This report will provide an insight into the progress that has been made in each of the CNEP's projects during the 2024/25 year, which is the third year the plan has been operational.

The previous annual reports can be viewed here - <u>Climate and nature: Plans, policies and reports</u>.

This Annual Report will be scrutinised at a meeting of the Communities Scrutiny Committee on 18 September 2025 and then it will be submitted to the Cyngor Gwynedd Cabinet.

3. Section 6 of the Environment (Wales) Act 2016

Our Climate and Nature Emergency Plan (CNEP) declares our ambition to be: "Cyngor Gwynedd will be net-zero carbon and **ecologically positive by 2030**." One of the steps we can take to make this a reality is to act on the contents of Section 6 of the Environment (Wales) Act 2016.

According to Section 6 of the Environment (Wales) Act 2016, public authorities operating in Wales have a duty to maintain and improve biodiversity and to promote the strength of ecosystems.

'Section 6' notes that public authorities should incorporate the need to consider biodiversity and ecosystems in their ideas and initial business plans, including any policies, plans, programmes and projects, as well as their daily activities.

The Welsh Government published a national biodiversity strategy, namely the 'Nature Recovery Action Plan' in 2015 which outlined the commitment to reversing biodiversity loss in Wales, and the objectives for action. It contains 6 objectives for nature recovery in Wales:

Objective 1: Engage and support participation and understanding to embed biodiversity throughout decision-making at all levels

Objective 2: Protecting species and habitats of paramount importance and improving their management

Objective 3: Increasing the resilience of our natural environment by restoring degraded habitats and creating new habitats

Objective 4: Addressing key pressures on species and habitats

Objective 5: Improving our evidence, understanding and monitoring

Objective 6: Implementing a governance framework and support for achieving the objectives

To comply with the duty of Section 6, public authorities must publish a plan of their own outlining what they intend to do to maintain and enhance biodiversity and encourage resilience. Welsh Government guidance states that public bodies should consider basing their Section 6 duty scheme too on the national Nature Recovery Action Plan.

Cyngor Gwynedd is currently developing a revised Nature Recovery Plan, but in the meantime we have also included relevant information in the CNEP. While nature conservation and biodiversity has been woven throughout the CNEP, the Land Use and Ecology sections list the projects that will focus specifically on this work.

At the end of each section of this annual report you will find a description of how the work that has been undertaken contributes to the realisation of one or more of the above 6

objectives, which in turn comply with Section 6 of the Environment (Wales) Act 2016.

Here is a summary of the link between the Climate and Nature Emergency Plan projects and the Objectives of Section 6:

Climate and Nature Emergency Plan

	Objective 1	Objective 2	Objective 3	Objective 4	Objective 5	Objective 6
Buildings and Energy		©	②		②	
Movement and Transport		©	©			
Waste	©		©	(2)		
Governance	©				©	©
Procurement					©	©
Land Use	©	(2)	©	②	©	
Ecology	©	©	©	©	©	©

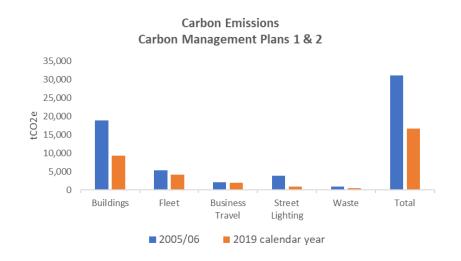
4. Reaching the Current Situation

2010 - 2019

Prior to the existence of the Climate and Nature Emergency Plan the Council had already been taking action for years to try to reduce our carbon footprint. The Carbon Management Plan 1 was published in 2010 and the Carbon Management Plan 2 in 2015. 2005/06 was used as the baseline year to measure the data and progress for both plans.

By investing around £8m in energy consumption reduction measures between 2010 and 2019, we managed to reduce our carbon emissions by 58% in the areas of buildings, business travel, street lighting, fleet and waste.

The reduction per field can be seen in the graph below and it is fair to say that our efforts have resulted in national recognition several times.



Since 2019

In March 2019, Cyngor Gwynedd announced that we faced a climate emergency and committed to taking decisive action to reduce carbon emissions and strive for a zero-carbon future. The next step on this journey was to draw up a strategy and action plan so that we have a clear work programme to follow.

Whilst developing the strategy, it became apparent that we need to give equal attention to the emergency that is facing nature as well, as they are running so closely together. The work concluded with the publication of the <u>Climate-and-Nature-Emergency-Plan.pdf</u> (CNEP) in March 2022. See chapter 2 'Background' for more details.

Measuring our Carbon Emissions

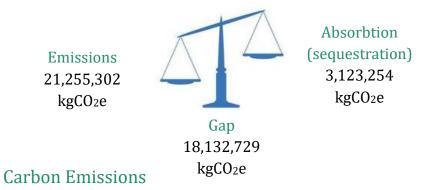
When the Council implemented Carbon Management Plans 1 and 2, we followed the Carbon Trust's recognised carbon emissions measurement methods, and measured progress in 5 areas as indicated by the chart. Since 2019, the Welsh Government has adopted a different system of measuring carbon data and therefore the CNEP has used year 2019/20 data as a new baseline. As there are slight variations between the two measures it would be misleading to make a direct comparison between carbon data before, and after, 2019.

We are now also measuring our carbon emissions in additional areas – procurement, staff commuting, and working from home (since 2021/22). We also measure how much carbon our lands absorb, and in offsetting that figure against total emissions we get a net figure, which is the gap to reach net zero.

5. Carbon Emissions and Absorption 2024/25

Our gap to net zero (**including** procurement) in 2024/25 was 72,857,729 kgCO $_2$ e.

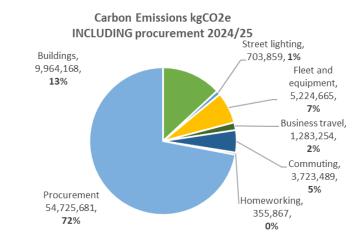
Our gap to net zero (**excluding** procurement) in 2024/25 was 18,132,729 kgCO $_2$ e.

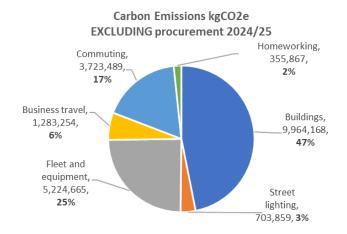


The first chart opposite shows our carbon emissions over 8 headings and includes procurement emissions (purchases of goods and services).

The methodology of measuring carbon emissions resulting from our procurement processes is imperfect because it is based on how much money we spend. The more we spend the greater the emissions.

As the procurement data can create an imperfect picture, the second chart opposite presents data for the remaining 7 headings after procurement is disregarded.



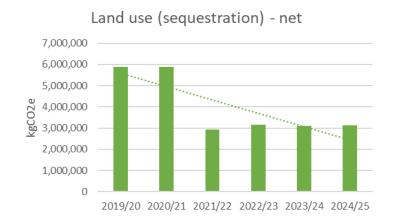


Carbon Absorption

As the chart below shows, carbon absorption levels on Council land have dropped 47% between the 2019/20 baseline year and 2024/25 but increased 1% between 2023/24 and 2024/25.

The reduction since 2019/20 was partly due to changes in the calculation methods, but also as we now own fewer hectares of land. The increase since 2023/24 has occurred as some plots have changed from brownfield land to grassland.

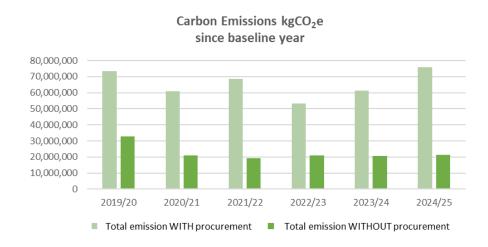
See chapters 11 and 12 for further details on the work done to increase carbon absorption levels on Council land.



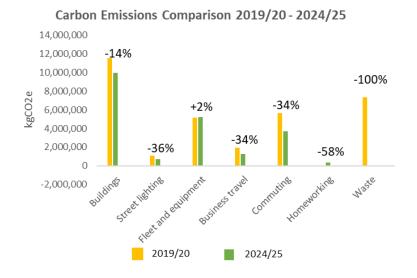
Where are we on the journey of reaching net zero by 2030, and does the 2024/25 data show we are on the right track?

Over the 6 years between 2019/20 and 2024/25, the Council invested £6.8m in the projects in the CNEP, but this more than doubled in value as we also attracted £13.5m in external grants over the same period.

Between 2019/20 and 2024/25, we managed to reduce our carbon emissions by 35% across the fields of buildings and energy, business travel, street lighting, fleet, waste, commuting and working from home.



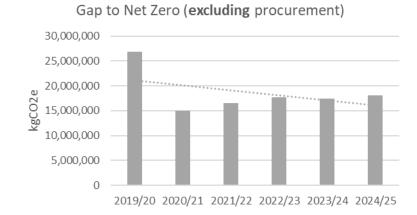
The change since 2019/20 varies according to the individual fields, as shown in the chart below. More information on the reasons behind the change can be found in chapters 6 - 12.



The Gap to Net Zero

In simple terms, the gap to net zero is the amount of CO2e that we need to remove in order to reach our ambition: "Cyngor Gwynedd will be net-zero carbon and ecologically positive by 2030." The total CO2e is calculated by deducting the value of the total carbon being absorbed from the total carbon being emitted.

By looking at our carbon emissions and absorption data, **excluding** procurement data, our gap to net zero is 32% less in 2024/25 compared with 2019/20 and 4% higher than in 2023/24.



The net zero gap for 2024/25 is $18,132,729 \, kgCO_2e$. This is slightly less than the emissions deriving from our buildings, fleet and commuting together. It is also almost 6 times more than the absorption value of our lands.

A substantial drop in emissions and a substantial increase in absorption levels will be required if we are to reach the ambition of being net zero by 2030.

6. Buildings and Energy

Carbon emissions from buildings and energy in 2024/25 is 49% of the total (excluding procurement), representing a 14% reduction from 2019/20 and an 8% reduction from 2023/24.

Carbon emissions from street lighting in 2024/25 are 3% of the total (excluding procurement), representing a 36% decrease from 2019/20 and a 1% increase from 2023/24.

What did we say we would do in 2024/25?

Short-term Priorities 2022/23 – 2023/24

Projects:

- 1. Aim for long-term benefits when planning construction or building renovations.
- 2. De-carbonise the Council's energy supply.
- 3. Use Passivhaus low carbon construction methods in developing our innovative housing pilot scheme.
- 4. Offer advice and information to Gwynedd residents about the benefits and opportunities of using low carbon building methods when building homes and low carbon heating/energy systems to maintain a home.

- 5. Set individual room heating regulations to reduce the energy required to heat a building.
- 6. Upgrade street-lights and traffic signs to use less energy.
- 7. Improve the energy infrastructure in Gwynedd and north Wales to maintain low carbon energy and transport systems.

What did we do?

In reality, each of the above projects have continued beyond the 'short-term' period, either because maintenance work is an ongoing responsibility or because we have seen an increase in the demand for the work.

Project 1 –The work of improving the fabric of buildings to make them more energy efficient (projects 1, 9 & 14) is ongoing work that has been underway by us as a Council for over a decade. See the information about projects 9 and 14 below for more details.

Our long-term goal is to plan developments to the fabric of buildings by modelling them in the *Passivhaus Planning Package* (PHPP), which is a method of designing buildings that are as efficient as possible in terms of energy. **Projects 2 and 7** - The Council has continued to increase the amount of electricity we produce through solar panels, which in turn reduces the amount of electricity needs to be purchased through the national grid and reducing carbon emissions. See the report on Project 9 for more information.

During 2023/24 and 2024/25, the Council worked with Ambition North Wales, the ARUP company and local stakeholders to develop a Local Energy Plan. The Local Energy Plan intends to create an integrated low carbon energy system for Gwynedd, improving existing infrastructure which will in turn support all sectors to transform their current energy use. The plan will be presented to the Cyngor Gwynedd Cabinet in 2025/26, but discussions with regional and national partners continue, in order to agree how the plan can be implemented and funded.

Project 3 – Passivhaus principles are a consideration as the Council plans new buildings, e.g. Ysgol Bontnewydd. The exact construction methods are agreed on a development-by-development basis. See the report on Project 14 for more details.

Project 4 - ECO 4 is a plan that is funded by Welsh Government but is administered by the Council. It provides funding for energy efficiency improvements in the home such as a new central heating system, upgrades to the current heating system and/or insulation and/or solar panels. Our tackling poverty officers and energy advisers have been holding face-to-face

information sessions in our communities as well as answering queries via the website or by phone and helping residents to take advantage of the ECO 4 scheme.

Between October 2022 and April 2025, 753 houses in Gwynedd saw an improvement in their energy performance. The EPC (Energy Performance Certificate) changed for the better, with 70 increasing to A, 563 to B and 101 to C. This means that there has been an expenditure of over £10M on houses in Gwynedd since the beginning of ECO 4.

As well as the ECO 4 scheme, during 2024/25, 656 energy vouchers to the value of £24,719 were distributed to residents in need who are on a pre-payment meter. Since the beginning of the scheme in 2022, 5,671 energy vouchers have been shared, which have helped the people of Gwynedd directly.

Project 5 - We have centralised systems for heat management in buildings, so we do not see the need to move forward with imposing individual room heating regulations at this time. This need may change in future if the Internet of Things project (within the Cyngor Gwynedd Digital Plan 2023-28) demonstrates that there is added value to changing the current system.

Project 6 – This project to change streetlamps and traffic to LED ones started in 2016/17, and the bulk of this project was completed by the end of 2022/23, leading to a substantial reduction in electricity use and financial costs.

During 2022/23, the Council adopted responsibility for large parts of the A487 around Caernarfon from the North and Mid Wales Trunk Roads Agent, and as a result, many additional street lamps that needed to be changed to LEDs, which led to a further increase in cost and electricity use.

By the end of 2024/25, most of this additional work had been completed, and although an increase of 1.2% was seen in spending on electricity compared to the previous year, the fact that we had installed LED lamps led to a 1% reduction in carbon emissions. Although the emissions from streetlights is very small (3% excluding procurement), those emissions derive from the fact that the electricity which powers them comes from the national grid.

Medium-term Priorities 2022/23 – 2026/27

Projects:

- 8. Save 5% of carbon emissions from buildings by bringing them up to the CIBSE 'good practice' standard.
- 9. Reduce our carbon emissions by expanding our use of solar panels to create renewable energy.
- 10. Electrification of building heating systems to reduce carbon emissions.
- 11. Install EC (*electronically commutated*) ventilation fans in buildings in order to reduce the energy required to run them, compared to the usual fans.

12. Upgrade specialist lighting in leisure centres to reduce energy consumption.

What did we do?

Project 8 - Possibly the easiest and most obvious method of reducing emissions from buildings is to reduce the demand and use of energy. The Council has installed a Buildings Management System in over 100 of our buildings, which enables us to take readings and manage energy use remotely. By monitoring this system regularly, it is possible to identify any waste from energy immediately and resolve the problem. This monitoring work saves approximately £250,000-£300,000 per annum, as well as save carbon emissions.

This monitoring work has also shown us that our use of gas has been 10% higher in 2024/25 than in 2023/24, because there were 10% more low temperature days. This increase explains the 8% increase in emissions from buildings during the year. We will continue to be reliant on gas as a heating source until the fabric of our buildings have been adapted, and that they are ready for heat pumps.

Every other project also contributes to the aim of this project of reducing carbon emissions from our buildings.

Project 9 - Following the Council's decision to invest £2.8m to extend our plans to install PV solar panels, by the end of March 2025, solar panels had been installed on 66 of our sites.

There was some delay in the work programme as it emerged that this work needed to be tied in with any other refurbishment or energy planning work done to buildings. We are also restricted to carry out work to school buildings during school holidays only. For example, it took six weeks over the summer holidays in 2024 to install solar panels at Ysgol Llanbedrog, and there was a need to wait until the summer holidays 2025, before doing further work to install heat pumps. We are also busy remodelling how much electricity is needed for several of our buildings as we measure whether we need to install electric vehicle charging points.

Nevertheless, the work is continuing, with plans already afoot to install more PV panels on 22 sites (schools, care homes and offices) by the end of 2025.

Project 10 – The Council successfully attracted a significant grant to fund a pilot project to install heating pumps at 3 sites, and the Council's Cabinet agreed to contribute 10% of equivalent costs (£194,535). Clause 1 of installing the heat pumps on school sites has started during the 2024 summer holidays and will be completed during the 2025 summer holidays. Now, heat pumps have been installed in five of our schools. See also the link between this project and project 9.

Project 11 – Ventilation fans will be installed on 1 school site and 1 care home site as part of the heat pumps project (Project 10).

Project 12 – The Council's Cabinet agreed to contribute £416,617 towards the running costs of a pilot scheme to install LED lighting at six sites. The work of installing the lights has slipped because there was a need to prioritise time to install heat pumps, but the Energy Unit and Maintenance Unit has collaborated to continue with the work in Ysgol Friars over the summer 2025, with the intention to complete the work by the end of the 2025/26 financial year. The carbon and financial savings will be measured before the value of extending the scheme to replace lighting across the rest of the Council estate is decided.

Long-term Priorities 2022/23 – 2029/30

Project:

13. Increase our carbon 'credit' by installing solar farms to produce energy that the Council can use or sell.

What did we do?

Project 13 – This project is not currently a priority because the financial costs of connecting to the national grid are so high, and because the Council, under existing data reporting arrangements, cannot claim the 'carbon credit' on any electricity generated. Nevertheless, the Local Energy Plan has identified

opportunities to develop solar farms, and we will continue to discuss how to fund such pilot projects. See also project 9.

Ongoing Priorities

Projects:

- 14. Improve the fabric of Council-owned buildings to make them as energy efficient as possible.
- 15. Prevent the over-development of fossil fuel energy schemes.
- 16. Maximise the benefits that come from implementing our energy and heating policies.
- 17. Equipment used within Council buildings to be as energy efficient as possible.

What did we do?

Project 14 - In order to get the biggest benefit from any plans to save energy, such as installing solar panels or heat pumps, it is necessary to improve the fabric of buildings first.

During 2024/25, the Council succeeded to attract a grant of £1.7m through the Welsh Government's Low Carbon Heat grant in order to upgrade the Plas Ogwen residential home in Bethesda, to the EnerPHit standard, namely retrofit Passivhaus. This may be the first residential home of its kind in Britain. The work is expected to lead to a saving of 80% in carbon emissions deriving from heating.

Project 15 – This matter has been addressed in the creation of the Local Energy Plan (Projects 2 & 7), and also in the development of the Gwynedd Local Development Plan 2024-2039.

Project 16 – Projects 1-17 contribute to this aim.

Project 17 – After adopting the Cyngor Gwynedd Digital Plan 2023-28, projects are afoot to save energy, reduce the use of paper and reduce waste. Now, in 2025/26, there is a new agreement in place to provide printing and photocopying machines, which will lead to a reduction in financial costs and carbon emissions.

Section 6 of the Environment (Wales) Act 2016

The above projects contribute to the objectives below:

- Objective 2: Protecting species and habitats of paramount importance and improving their management
- Objective 3: Increasing the resilience of our natural environment by restoring degraded habitats and creating new habitats
- Objective 5: Improving our evidence, understanding and monitoring

See Project 15 above.

7. Movement and Transport

Carbon emissions from the Council's fleet in 2024/25 are 24% of the total (excluding procurement) which is a 2% decrease from 2019/20 and a 3% increase from 2023/24.

Carbon emissions from buildings and energy in 2024/25 is 17% of the total (excluding procurement), representing a 34% reduction from 2019/20 and a 6% reduction from 2023/24.

Carbon emissions from business travel in 2024/25 are 6% of the total (excluding procurement) which is a 34% decrease from 2019/20 and a 4% increase from 2023/24.

What did we say we would do in 2024/25?

Short-term Priorities 2022/23 – 2023/24

Projects:

- 1. Move away from using fossil fuel vehicles towards a fleet of ULEV (ultra-low emission vehicles) vehicles (cars and vans).
- 2. Install electric vehicle charging points for Council vehicles.
- 3. Install electric vehicle charging points for Gwynedd residents.
- 4. Reduce business travel.

5. Reduce carbon emissions and parking problems in areas that are popular with visitors.

What did we do?

Project 1 – Since adopting our Green Fleet Plan 2023-29 in January 2023, our policy is to buy new electric vehicles (EV) where possible as the current fleet of petrol and diesel cars reach the end of their lifespan. At the end of 2024/25, the Council succeeded to attract a grant of £124,379 from the Welsh Government in order to purchase 11 electric vehicles: 9 small vans and 2 minibuses. We should see financial savings as well as carbon savings as new cars are used during 2025/26.

By the end of 2024/25, 79 electric vehicles and 9 Hybrid vehicles are in the fleet, which is 43% of all the cars and vans we own. We have calculated the electricity use of these vehicles within the fleet emissions total for 2024/25, rather than within the building electric use, as we did in 2023/24. Nevertheless, our electric fleet is responsible for 0.4% of all the Council's fleet emissions, which shows the difference that this change has done to our net zero journey.

Project 2 – The Council successfully attracted a grant of £406,897 at the end of 2024/25, in order to install 21 charging points on 11 Council sites, as well as 6 batteries on 6 sites which

will be able to store energy being generated by our solar panels, which in turn, could feed the charging points.

By the end of March 2025, there were 52 charging points operational at 11 sites, with a programme of work to install further points over an additional 6 sites having already commenced during 2025/26.

Project 3 - By the end of 2023/24, the Council owns and manages 38 charging points for the public in 10 locations and 14 additional charging points in 4 Council-owned sites are managed by Transport for Wales. As a Council, we are working with Transport for Wales and Eryri National Park in planning the locations of public charging points. A much higher number of machines have been installed but we are waiting for the electricity connection to be authorised.

A grant of £105,000 was attracted from the ULEV fund to enable us to install charging points during 2024/25. Our ongoing programme to install public charging points continues during 2025/26 and this will be reviewed as we assess the needs of the future.

Project 4 – As a Council, we hold several internal and public meetings virtually, including all major Council meetings – Full Council, Cabinet, Scrutiny, Planning – significantly reducing the need to travel to workplaces. This approach has resulted in a significant 34% reduction in carbon emissions from business travel since 2019/20. Nevertheless, a small increase of 4% was seen between 2023/24 and 2024/25 as more meetings and site

visits were conducted in personal petrol and diesel cars, rather than via virtual meetings. Since the Council adopted the Hybrid Working Scheme, staff need to work from a work location for 2 days a week (full-time basis), therefore the number of business journeys has increased.

Moving forward, we have started to enable staff to use the Council's electric fleet vehicles, instead of their personal cars. We are also going to correct the accuracy of the 'grey fleet' carbon emissions, or use of personal vehicles to travel on business journeys, to collect information on electric vehicles as well as petrol and diesel.

Project 5 - One of the great successes of an integrated transport system is the Sherpa'r Wyddfa bus service, which is a network of bus services around the Wyddfa catchment area that increase active travel options to reduce parking problems in popular areas in Eryri. Since the pre-booking system was introduced at the Pen y Pass car park in 2021, and an increased Sherpa'r Wyddfa service, there have only been 2 cases of dangerous parking on Llanberis Pass where the police have been called - an obvious comparison with previous years.

In August 2024, 72,296 people used the Sherpa service, an increase of 79% since August 2023, and this is the first time that the number of passengers exceeded 70,000 in a month.

Long-term Priorities 2022/23 – 2029/30

Project:

6. Have low carbon or zero carbon fuel options for the Council's heavy fleet

What did we do?

Project 6 - 32% of all Council fleet emissions for 2024/25 derive from vehicles (most are HGVs) which are involved with the work of waste transportation. We are not of the opinion that there are suitable electricity or hydrogen options available on the market at present, which will enable us to move away from the existing diesel vehicles. Nevertheless, converting the fleet from heavy vehicles to use electric or hydrogen is a long-term process, and Council officers are collaborating with Ambition North Wales on their Hydrogen Hub project and with the Welsh Local Government Association, to share new developments and good practice amongst local authorities.

Ongoing Priorities

Projects:

- 7. Reduce carbon emissions through staff commuting habits
- 8. Encourage active travel among staff in the interests of health and well-being and to reduce carbon emissions

- 9. Encourage active travel among residents and visitors to Gwynedd to improve physical and mental well-being and reduce carbon emissions of short car journeys
- 10. Increase opportunities for community organisations to access EV or ULEV vehicles or use low carbon technology

What did we do?

Projects 7 and 8 - The Gwynedd and Anglesey Public Services Board, of which the Council is a member, adopted the Active Travel Charter in 2024/25. The Active Travel Task Group in the Council is leading on work to encourage active travel by trialling various initiatives for staff to change their daily travel habits, and our active travel champions have been encouraging staff to change their travel-to-work habits. An exciting new development was the creation of an app which compares the financial cost and carbon emissions of a bus journey and car journey, and this led to setting a challenge for staff to travel on a bus. A session was held during the Wales Climate Week in November 2024 for staff to trial electric bikes, jointly with Yr Orsaf enterprise from Penygroes, and this has led to many similar sessions in 2025/26.

The Council has a Green Car Scheme and a Green Bike Scheme available to most staff, which are salary sacrifice schemes to lease an electric/hybrid car or a new bike. We have been encouraging staff to take full advantage of these opportunities, holding several open days to pilot electric bikes. A total of 32

staff members have taken advantage of the bicycle scheme and 16 have leased an electric or hybrid car during 2024/25.

Project 9 – Several long-term projects were in progress during 2024/25 - Safe walking and cycling paths on Penrhos Road, Bangor; new paths and improved access to Ysgol Rhostryfan and Ysgol Treferthyr, Cricieth, as well as minor improvements to other parts of the network. The Council is protecting and developing a network of Lonydd Glas across the county, which offer a total of 31.5 miles of safe walking and cycling paths. The Lôn Las Ogwen path was reopened during the year, after upgrading the structures along it. The public footpaths, rights of way and paths that are a part of the Wales Coast Path network are also being maintained by Cyngor Gwynedd, for the benefit of residents and visitors. See also Projects 5, 7 & 8 above.

Project 10 – Discussions have commenced during the year between the Council and community energy enterprises in order to investigate the possibility of collaborating on a project to generate renewable energy in car parks. This work will continue in 2025/26.

Further observations

Cyngor Gwynedd took major steps forward during 2024/25 to expand our fleet of electric vehicles, and this has obviously been successful as only 0.4% of all fleet emissions derive from electric vehicles.

32% of the fleet's emissions derive from heavy waste collection vehicles, therefore, it should be noted that these emissions are recorded under the fleet heading, not under waste. As noted above, currently, there are no viable alternative electricity options to diesel HGV vehicles, and therefore it will be very difficult to reduce the waste fleet emissions further.

Although we have replaced small petrol and diesel cars and vans for electric ones as they reach the end of their lifespan, we have unfortunately been unable to reduce the number of vehicles in our fleet. The increasing demand for services, as well as the need to have a fleet which serves a geographically large county, means that reducing the miles being travelled, is a big challenge. Nevertheless, the work is continuing in 2025/26, in order to rationalise the number of vehicles in our fleet to maintain necessary services whilst also reducing the carbon emissions of our fleet's journeys.

Section 6 of the Environment (Wales) Act 2016

The above projects contribute to the objectives below:

Objective 2: Protecting species and habitats of paramount importance and improving their management

One of the positive side effects of increasing the provision of public transport in the Eryri area (Project 5) is that the incidence of irresponsible and dangerous parking has reduced. In turn, this has helped to protect biodiversity on road verges and near locations that support fragile biodiversity.

Objective 3: Increasing the resilience of our natural environment by restoring degraded habitats and creating new habitats

Projects 5, 8 and 9 above run alongside the Council's work to maintain public rights of way, and to maintain grounds. Whilst looking after the county's network of 'lonydd glas', cycle and walking paths we have been protecting path and road verges to maintain and enhance biodiversity.

Cyngor Gwynedd is responsible for a Rights of Way network which is approximately 3,800km long and open to pedestrians, horse riders, cyclists, horse and cart and motor vehicles.

8. Waste

Carbon emissions from Council waste in 2024/25 are 0% of the total (excluding procurement) which is a 100% reduction from 2019/20 and since 2023/24.

What did we say we would do in 2024/25?

Short-term Priorities 2022/23 – 2023/24

Projects:

- 1. Promote a circular economy in order to reduce the number of items being disposed of and reducing carbon emissions in the supply chain from the purchase of new goods
- 2. Reduce the amount of street waste that is disposed and increase the amount of street waste that is recycled
- 3. Reduce paper use

What did we do?

Projects 1, 4, 5 and 6 – The Council worked closely with a number of community initiatives on new projects to boost the circular economy in Gwynedd, all funded by Welsh Government. The following projects ran successfully during 2024/25: Sied Werdd with Antur Waunfawr, Gofodau Ffiws and Ar y Lôn with MSparc, and Repair Cafés. As a part of the Ffiws project, the

Revolving Fund has earmarked grant funding of £319,156 to 24 enterprises across Gwynedd. The purpose of the fund is to support enterprises to act in a more cyclical manner, to reuse and/or reduce their waste. A new services was commenced during 2024/25 when a Paint Shed was commenced in 4 recycling centres to re-distribute paint to the public: Llandegai, Pwllheli, Garndolbenmaen and Dolgellau.

Project 2 – A work programme of installing public recycling bins on popular beaches was completed, with the final ones being installed after completing the redevelopment work in Dinas Dinlle. Work continues to install the bins at our temporary camping sites, Arosfan. We are continually assessing the need to install public recycling bins in sites across the county, therefore we will install bins in the towns of Caernarfon, Pwllheli, Blaenau Ffestiniog and Dolgellau as a part of broader work to 'improve town centres'. As there has been an increase in the bulk of street waste being recycled, by the end of the year it became apparent that we need to take a step back to measure whether we collect the waste in the most efficient way. In 2025/26, we will reassess the waste collection fleet requirements in order to make the best use of our scarce resources.

Project 3 – One change to our internal working arrangements which has remained since the Covid-19 period is reducing the

use of paper in offices, and a decision not to print papers for meeting, unless there is a reasonable exception for doing so.

During the year, we have been preparing a new five-year contract for printers across the Council's sites, with the numbers reduced. By the end of 2024/25, a new plan and tender had been drawn up, ready for publication, and the new arrangements will substantially reduce the use of paper and save energy.

Medium-term Priorities 2022/23 – 2026/27

Project:

4. Reduce the number of items arriving at waste incineration sites by encouraging people to repair and reuse (Repair Cafés)

What did we do?

See Project 1 above.

Ongoing Priorities

Project:

5. Repair and modify equipment that would otherwise be disposed of and incinerated, and sold

6. Reduce food waste by supporting community projects seeking to re-distribute food that would otherwise be discarded

What did we do?

Project 5 – See Project 1 above.

Project 6 - A new Food Grant Fund was opened for 2024/25 to support community schemes which addresses and reduces food waste, redistributes residual food and addresses food poverty and affordability. The fund was financed with a grant of £40,000 from the Welsh Government.

Further observations

When talking about 'waste', we are referring to waste generated by Gwynedd residents and businesses, as well as the waste that Cyngor Gwynedd itself is responsible for as an organisation.

The emissions under the 'waste' heading derives from waste treatment processes, whilst the emissions deriving from collecting and transporting waste for processing are calculated under the 'fleet' heading. 32% of fleet emissions in 2024/25 derived from waste collection and transportation.

Further changes have been made to the methodology of calculating waste carbon emissions in 2024/25. Now, all waste treatment methods, except for landfill (e.g. recycling,

incineration, anaerobic digestion, etc.) give us a figure of zero. All residual waste from Gwynedd residents and businesses is treated on the Parc Adfer site in Deeside, where it is incinerated to generate energy, therefore no waste is taken to landfill.

We also started to develop a new Waste and Recycling Strategy during 2024/25, and this will be published in 2025/26.

Section 6 of the Environment (Wales) Act 2016

The above projects contribute to the objectives below:

Objective 1: Engage and support participation and understanding to embed biodiversity throughout decision-making at all levels

When developing the projects involved in the scheme to boost the circular economy, we consulted continuously with all our community partners, and officers at many levels within the Council have been considering the impact of the projects on biodiversity.

Objective 2: Protecting species and habitats of paramount importance and improving their management

Objective 3: Increasing the resilience of our natural environment by restoring degraded habitats and creating new habitats

Objective 4: Addressing key pressures on species and habitats

Projects 4, 5 and 6 above contribute to objectives 2, 3 and 4 as our food hubs and community gardens have assessed their influence on biodiversity and developed them in a way that will not harm the surrounding environment.

9. Governance

What did we say we would do in 2024/25?

Short-term Priorities 2022/23 – 2023/24

Projects:

- 1. Share information publicly about the work the Council is doing to reduce carbon emissions to encourage others to change habits
- 2. Support communities to plan and deliver local solutions to local needs

What did we do?

Project 1 – We regularly share information about projects the Council is involved in through our social media and press releases and share information about opportunities to save energy and money through the Eco4 scheme.

We held local campaigns in specific communities during the year in an attempt to change the behaviour of residents and encourage them to recycle more.

Resource shortages remain a barrier for us to progress with the broader work of influencing and changing the habits of

residents, but this is a matter that we will address as we review our Climate and Nature Emergency Plan. We are also involved in the work of the Gwynedd and Anglesey Public Service Board to realise their <u>Well Being Plan</u>. One of the 3 Well-being Objectives of the scheme is "We want to work together to support our services and communities to shift towards Net Zero Carbon".

Project 2 - Our energy saving roadshows share information about the financial support available for residents to adapt their homes, as well as offer information about energy and moneysaving methods.

Our other projects as a Council also contribute to helping and influencing residents' habits – Clean and Tidy Communities, circular economy projects such as supporting food hubs, Ffiws/Repair Café (see the 'Waste' chapter for more details).

Medium-term Priorities 2022/23 – 2026/27

Project:

- 3. Elected members and staff who:
 - understand the implications of the impact of climate change

- make decisions based on information about the effects
- act in the most positive manner possible towards mitigating the impact of climate change and being ecologically positive

What did we do?

Project 3 - The Climate and Nature training e-module was launched at the beginning of 2024/25, and it is regularly promoted to encourage staff and elected members to complete it.

The members of the Council's Climate and Nature Board, i.e. the in-house group that sets a strategic direction and monitors the work's development, receives regular information about relevant matters before they make a decision, including financial decisions.

Substantial progress was seen during the year in the information and news of events being shared with staff and members via our new newsletter. The Climate and Nature section on the intranet, the newsletter and the information being shared through the in-house bulletin and staff Facebook page, are effective ways of sharing information and help change behaviour also.

Ongoing Priorities

Project:

- 4. Encourage staff to develop careers in areas that reduce the impact of climate change or are ecologically positive
- 5. Review current Council policies and strategies so that reducing carbon emissions or reducing the impact of climate change is a factor in reaching a decision

What did we do?

Project 4 – The Council has two schemes that are successful in attracting applicants, an apprenticeship scheme and a professional trainee scheme ('Cynllun Yfory') for graduates. In September 2024, the first Climate Change Professional Trainee commenced in post. Work also commenced to recruit an Ecological Planning Professional Trainee and Energy Apprentice for the summer of 2025.

Project 5 - During the year, a lot of time was spent developing a new Local Energy Scheme for Gwynedd which will go before the Cabinet in 2025/26, and an EV Vehicle Charging Strategy is also being developed, again to be adopted in 2025/26.

Section 6 of the Environment (Wales) Act 2016

The above projects contribute to the objectives below:

Objective 1: Engage and support participation and understanding to embed biodiversity throughout decision-making at all levels

Work has been carried out with Town and Community Councils to inform them of their duty under the Environment (Wales) Act 2016.

Objective 6: Implementing a governance framework and support for achieving the objectives

The work carried out under projects 3 and 5 contributes to the realisation of Objectives 1 and 6.

10. Procurement

72% of the Council's carbon emissions during 2024/25 were from our procurement processes, which is a 35% increase from 2019/20 and a 34% increase from 2023/24.

The method of measuring procurement carbon emissions, or the supply chain, is based on spending alone. Simply put, the higher the spending, the greater the emissions. The increasing cost of purchasing goods and services therefore leads to an increase in carbon emissions under the 'procurement' heading. The formula to measure the emissions has also changed since 2023/24, therefore although the increase in spending in a field such as social care is moderate, the increase in the formula leads to a substantial increase in emissions.

The areas where the Council spends most through procurement agreements are: health and social care; food and goods; construction.

What did we say we would do in 2024/25?

Ongoing Priorities

Projects:

1. Providing market support, particularly to local providers, to be able to measure the impact of their operations on their carbon footprint

2. Understanding and measuring carbon emissions when realising contracts in the procurement chain

What did we do?

Project 1 - The Council chose to focus on helping businesses providing health and social care in 2024/25 in order to reduce their carbon emissions and to measure the emissions. This will help reduce Gwynedd's emissions as a county and give us an option as a Council to measure the procurement emissions more accurately - based on Carbon Management Plan reports instead of the financial value of the contract. We collaborated with Business Wales to hold on-line workshops for companies, and then they have received one-to-one support from Business Wales to create a Carbon Management Plan.

We made changes to the requirements in the school transport contracts in 2024/25, placing more emphasis on rewarding providers using less polluting vehicles. We also supported the commencement of a pilot 'Vegetables from Wales for Welsh Schools' scheme, bringing local organic food growers together with local schools. We look forward to seeing the development of this project in 2025/26.

Project 2 - The work under Project 1 above supports providers to be able to measure their carbon emissions more accurately, but in order

to get the best from this, Council officers also need to understand how to support them. To help with this, we reviewed our Sustainable Procurement Policy and developed guidance for staff who commission contracts to supervise how providers report on reducing carbon.

Section 6 of the Environment (Wales) Act 2016

The above projects contribute to the objectives below:

Objective 5: Improving our evidence, understanding and monitoring

Objective 6: Implementing a governance framework and support for achieving the objectives

The two above projects contribute to these two Objectives, as receiving and monitoring Carbon Management Plans give us evidence of how providers are going to protect biodiversity.

10. Land Use

All Council lands (which include 'brownfield' sites that have been constructed) absorbed a value of $3,123,254~kgCO_2e$ net of carbon in 2024/25. This is 47% less than in 2019/20 and a 1% increase from 2023/24.

Offsetting the carbon absorbed against our carbon emissions contributes to reducing the gap to net zero.

What did we say we would do in 2024/25?

Medium-term Priorities 2022/23 – 2026/27

Projects:

- 1. Identify the contribution of Council-owned trees to carbon absorption and storage and flood reduction
- 2. Identify the contribution of Council-owned lands to carbon absorption and storage and flood reduction
- 3. Establish tree nurseries to grow trees ready for planting
- 4. Identify opportunities to plant trees as part of the National Forest for Wales initiative

Conserve agricultural land in Gwynedd and using it for a competent purpose, and managing afforestation projects

What did we do?

Projects 1 and 7 – Essential maintenance work continued to be carried out on 8 sites of Council-owned woodland, and repairs were carried out in Parc Dudley, Waunfawr, and in ancient woodland in Parc Meurig, Bethesda, which is now safe and open to the public to enjoy.

Project 2 - Parcels of Council land were identified to convert to wildflower meadows which increases the land's ability to absorb more carbon. Planting wildflower meadows, particularly on road verges, is now ongoing work, and we regularly share information on the advantages of this with residents.

The Welsh Government continues to collaborate with Data Map Wales on an on-line tool which will enable local government to measure the carbon value of lands in their ownership.

The work of identifying lands for their flood reduction potential occurs with the creation of a Flood Risk Management Strategy (see Section 12).

Projects 3 and 4 - Two small-scale nurseries were established as a part of the Gwynedd Nature Partnership. The purpose of the nurseries is to grow a supply of local trees to plant on public land. The importance of this became apparent after Storm Darragh, when there was a need to replant to replace fallen trees.

The Gwynedd Nature Partnership is partnering with several external organisations to maintain native tree nurseries and trees which are native to Gwynedd. We collaborated with three care homes to promote active gardening, including protecting plant buds for Council use.

Project 5 - During the year, the Ffermio Bro project was launched, which is a nature-friendly farming programme administered by Llŷn AONB - <u>Llŷn AONB - Home</u>.

Ongoing Priorities

Projects:

- 6. Controlling Ash Dieback Disease in trees and compensating for any carbon emissions as a result of felling trees
- 7. Council-owned woods are protected to maximise their potential to absorb carbon and become habitats for nature

What did we do?

Project 6 - Unfortunately, the demand to deal with an increasing number of trees suffering from Ash Dieback disease is placing further pressures on our scarce resources. However, the team responsible for the work has been able to use the Ezytreev software to keep a detailed record of any tree that has to be felled, including its carbon value. They then collaborate with the Biodiversity Team and community organisations to plant new trees.

Project 7 – See Project 1 above.

Section 6 of the Environment (Wales) Act 2016

The above projects contribute to the objectives below:

Objective 1: Engage and support participation and understanding to embed biodiversity throughout decision-making at all levels

Objective 6: Implementing a governance framework and support for achieving the objectives

Cyngor Gwynedd leads the work of the Gwynedd Nature Partnership, a collective of organisations and individuals who act to protect and enhance biodiversity in the county. A fundamental operating principle of the Partnership is to consult with communities to plan projects at grass roots level.

Objective 2: Protecting species and habitats of paramount importance and improving their management

Projects 1 – 7 contribute to the realisation of this objective.

Objective 3: Increasing the resilience of our natural environment by restoring degraded habitats and creating new habitats

Projects 1 – 7 contribute to the realisation of this objective.

Objective 4: Addressing key pressures on species and habitats

Projects 1 – 7 contribute to the realisation of this objective.

Objective 5: Improving our evidence, understanding and monitoring

The Council has continued to collaborate with the Cofnod recording system which helps us to create a baseline for biodiversity across Gwynedd.

11. Ecology

What did we say we would do in 2024/25?

Short-term Priorities 2022/23 – 2023/24

Projects:

- 1. Identify the steps we need to take to protect nature's habitats and biodiversity into the future
- 2. Identify our valuable species and habitats and what measures are needed to protect and restore them

What did we do?

Project 1 - Work had continued during the year to produce our revised Nature Recovery Plan for the county and for the Llŷn Area of Outstanding Natural Beauty, and the plans will be published during 2025/26.

Project 2 - Alongside developing the Nature Recovery Plan, we have also been using Cofnod processes to map species, and this work continues. We are also in the process of drawing up a Green Infrastructure Assessment as part of the work of drawing up a new Local Development Plan.

Medium-term Priorities 2022/23 – 2026/27

Projects:

- 3. Increase the number of pollinators by conserving habitats or planting new habitats (landfill sites)
- 4. Support voluntary and community organisations and town and community councils that protect or enhance nature

What did we do?

Projects 3 and 5 - The work of planting wildflower meadows and new habitats for pollinators continued during 2024/25. The Gwynedd Nature Partnership has created over 50 hectares of wildflower meadows on Council lands, and this is 25% of the national target for the Partnerships across Wales. The work of creating wildflower meadows on road verges is being extended in Meirionnydd, and we will be commissioning work to review the impact of this work on improving local biodiversity.

Projects 3 and 6 - There are two sites in Gwynedd that used to be landfill sites which have now been converted into <u>Wild Landfill sites</u> to protect and promote nature. Maintenance and tree planting work was carried out at Llwyn Isaf near Clynnog and Ffridd Rasus near Harlech and both sites have also received

a 'gold standard' from <u>Restor</u>, the international hub for nature recovery. The links with academic organisations have strengthened, which has led to a path to develop 'green careers' and visits by schools.

Projects 4 & 5 - The Council is leading the work of the Gwynedd Nature Partnership, which is a collection of community organisations, community councils and individuals who work to protect and promote biodiversity in Gwynedd (Wales Biodiversity Partnership - Gwynedd).

A variety of town and community councils received financial support organisations from the Gwynedd Nature Partnership in 2024/25, and the highlights of the year include improvements to community gardens, improvements to urban green spaces, open days in community orchards, citizen science projects, and community maps.

In addition, the Council held many activities for local residents, and they were very popular. Over 300 came to 'trees and nature' open days at Plas Glyn-y-Weddw, and many beach clearing and seagrass seed collections have been organised for the local community by Pen Llŷn a'r Sarnau Special Area of Conservation (SAC).

Information about the work of the Gwynedd Nature Partnership, Pen Llŷn a'r Sarnau, Llŷn AONB and Council biodiversity teams are all shared via social media channels regularly, as well as in the Llygad Llŷn and O Dan y Don magazines.

Project 6 - In addition to the work described under projects 3, 4 and 5, the work of <u>Welcome to Pen Llŷn a'r Sarnau Special</u> <u>Conservation Area website | Pen Llŷn a'r Sarnau</u> is essentially important to protect the health of the biodiversity of the Llŷn and Meirionnydd coast. The work done to plant and protect seagrass makes a substantial contribution to carbon absorption, but it is not possible for us as a Council to calculate the value of this within our own carbon absorption statistics at present.

Ongoing Priorities

Projects:

- 5. Nurturing and maintaining Gwynedd residents' interest in ecological issues so that they want to help conserve nature
- 6. Protecting valuable habitats for nature

What did we do?

Project 5 – See Project 4 above.

Project 6 – See Project 3 above.

Section 6 of the Environment (Wales) Act 2016

The above projects contribute to the objectives below:

Objective 1: Engage and support participation and understanding to embed biodiversity throughout decision-making at all levels

Objective 5: Improving our evidence, understanding and monitoring

Objective 6: Implementing a governance framework and support for achieving the objectives

All the work we undertake as a Council and through the Local Nature Partnership is designed or delivered in collaboration with local organisations, communities or schools.

Projects 1 and 2 also contribute to the above 3 objectives.

Objective 2: Protecting species and habitats of paramount importance and improving their management

Projects 1 – 6 contribute to the realisation of this objective.

Objective 3: Increasing the resilience of our natural environment by restoring degraded habitats and creating new habitats

Projects 1 – 6 contribute to the realisation of this objective.

Objective 4: Addressing key pressures on species and habitats

Projects 1 – 6 contribute to the realisation of this objective.