

ISLE OF ANGLESEY COUNTY COUNCIL	
Report to:	Governance and Audit Committee
Date:	5 December 2024
Subject:	Update on the Council's work to deliver the 'Towards Net Zero' Strategic Plan in 2023/24
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Nature and Reason for Reporting: The Governance and Audit Committee's Terms of Reference has an explicit requirement for the Committee to keep up to date with significant areas of strategic risks and major operational and project risks (3.4.8.8.1). Following a report to the Committee in June 2023, the Committee requested that it be provided with annual updates on the progress towards 'net zero' to show the positive effects of from the Council's work.	

Introduction

In June 2023, the Climate Change Manager provided an update on the Council's progress towards achieving its net zero ambition following the submission of documentation by Audit Wales and Zurich Municipal on the climate change response to a meeting of the Governance and Audit Committee.

It was reported at that time that one of the Council's priorities was to create a baseline to understand the Council's current position together with a dashboard to provide a visual representation of progress being made which can be updated and monitored accordingly.

The Committee requested that it be provided with annual updates on the progress towards 'net zero' so that the Members could be shown the positive effects of the investments made and the developments that have taken place in that time.

This report updates the Committee, with the presentation of the 'Towards Net Zero – Annual Report 2023/24'. The annual report shows the Council's progress in managing the risks of climate change and its progress towards achieving 'net zero' during that year. Additionally, the report includes as an appendix, analysis of the 2023/24 emissions data submitted to Welsh Government.

Recommendation

That the Governance and Audit Committee takes assurance that reasonable measures are in place to manage climate change risks to an acceptable level.



CYNGOR SIR
YNYS MÔN
ISLE OF ANGLESEY
COUNTY COUNCIL

Towards Net Zero Plan 2023 – 2024 Annual Report



Publication date: October 2024

Mae'r ddogfen hon ar gael yn Gymraeg | This document is available in Welsh

Towards Net Zero Strategic Plan Annual Report

Overview

This is the Isle of Anglesey Council's (the Council) annual report on the progress of the Towards Net Zero Strategic Plan March 2023 - March 2025.

It evaluates how we set out to deliver the annual objectives of the plan during 2023 - 2024.

Further information

This publication is available on our website at www.anglesey.gov.wales. If you require this document in an alternative format and/or another language, or if you have any queries about its contents, please contact us using the details provided below.

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We welcome correspondence and phone calls through the medium of Welsh and English. Corresponding in Welsh will not lead to a delay.

Mae'r cyhoeddiad hwn hefyd ar gael yn Gymraeg / This publication is also available in Welsh.

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Background and Purpose of the Report

Climate change is the globally defining challenge of our time and for future generations. This includes Anglesey, its communities and visitors, and it is an important issue for our children and young people. We are already seeing its impact on the most vulnerable in communities across Wales and the world.

Carbon emissions released into the atmosphere have already led to an increase in global temperatures. Without a reduction in carbon emissions the Earth's temperature will continue to increase significantly.

Climate change has been identified as one of the six key strategic objectives in the Council Plan. You can read more about the Council Plan here - [Council Plan 2023 - 2028 \(gov.wales\)](https://www.gov.wales/council-plan-2023-2028).



Figure 1 - The Council's Strategic Objectives

The purpose of this report is to reflect the progress of the Towards Net Zero Strategic Plan during 2023/24 by summarising the Net Zero Annual Action Plan. Appendix 1, attached to the report, provides an analysis of the Council's annual carbon emissions as reported to the Welsh Government in September 2024.

Highlights of the Year

Carbon Emissions Outcomes

The Isle of Anglesey County Council's total Carbon Emissions in 2023/24 was 42,022 tonnes CO₂e. This is a reduction of 19.7% compared to the maximum emissions in 2021/22 (graph 1 - page 8).

Decarbonising Council properties

The Council has been successful in attracting £14M in Welsh Government grant funding to upgrade heating systems and improve energy efficiency in 27 of our assets over 3 years. The assumption is that this investment will lead to a reduction of around 66% in carbon emissions from heating assets and water. It will also form the basis for further future investment.

New homes to carbon neutral standards

The Council has added 28 new homes to its housing stock. With their high energy ratings (EPC A and B), the properties will provide homes for local people and will be affordable to maintain.

Extend the EV charging network and active travel routes

Supported by a Welsh Government grant, the Council has extended the charging network by installing new charging points in Cemaes and Rhosneigr and undertaking preliminary work at numerous additional locations across the Island.

Work has also been undertaken to improve active travel in Holyhead and Trearddur Bay, improving infrastructure for walkers and cyclists, supported by the Welsh Government Active Travel grant.

New Tree Nursery

To support the long-term objectives of planting native trees across Anglesey, a tree nursery has been established near Llangoed.

Climate Change Training

During the year, introduction to climate change training was delivered to Elected Members and senior managers across the Council. The training was provided to raise awareness of climate change, its causes and effects, and identify how to respond to the challenge.

Energy Reduction and Energy Efficiency

Reduce energy usage and improve energy efficiency across our portfolio of assets.

Implement property decarbonisation projects

During a challenging year for the Council due to complexities arising from RAAC, the Council also succeeded in securing a £14M Low Carbon Heat Grant to decarbonise our properties.

Over the next 3 years we will invest to reduce the Council's carbon footprint in 27 Council buildings, e.g., schools, leisure centres and care homes. We will upgrade heating systems, install additional energy efficiency measures and upgrade electricity infrastructure. A 66% reduction in carbon emissions is forecast from heating buildings and heating hot water.

The grant has allowed the Council to accelerate the decarbonisation of our assets by funding 90% of investment costs.

Based on the Council's annual data, there was a 8.5% reduction in carbon emissions from the use of electricity and heat across our assets between 2021/22 and 2022/24.



Figure 2 - Heat Pumps at Ysgol Rhosneigr



Figure 3 - Heat Pumps at Ysgol Kingsland

New homes to carbon neutral standards

As part of our commitment to provide affordable and sustainable housing, the Council has added 28 new homes to its housing stock. With their high energy ratings (EPC A and B), these homes will help to reduce our carbon footprint and provide cost-effective housing for our residents.



Figure 43 - Pentraeth Development



Figure 4 - Parc y Coed

Retrofitting schemes to improve the energy efficiency of our housing stock –

The Council undertook a housing retrofitting and upgrading programme with 93 homes seeing a combined investment of £9.7M to upgrade the properties, improve energy performance or upgrade heating systems.

A survey of all Council housing stock was also undertaken to develop detailed plans of the work required to meet the Welsh Quality Housing Standard and reduce carbon emissions. Delivering the housing stock renovation and upgrading programme in the long term will depend on finance, the type of housing and their potential for improvement.



Figure 5 - Maes Cynfor



Figure 6 – Tyddyn To, Menai Bridge

Transport

Reduce the Council's transport emissions and support low carbon solutions across Anglesey.

Promoting active travel

The Council has continued to invest in active travel infrastructure improvements with budgetary support from Welsh Government and Transport for Wales.

With a £1.7m programme during 2023/24, the Council has begun route improvements between Holyhead and Trearddur Bay, widening multi-use paths, installing signage and raising awareness locally.

Work was also completed in Amlwch, Malltraeth and Valley to improve user safety by way of a number of improvements e.g. improving paths and crossings, new signage and public realm improvements specifically in Malltraeth.



Figure 7 - Active Travel

Development of EV charging infrastructure

Following the establishment of a charging network development programme by the Council in 2022, the number of public charging points across Anglesey has increased.

With £385k of grant support from Welsh Government in 2023/24, 4 new charging points (rapid and fast) have been installed in Rhosneigr and Cemaes. Work is progressing at numerous locations e.g. creating an EV Hub adjacent to Plas Arthur Leisure Centre and undertaking preliminary work in additional locations.

Up to March 2024, the network has provided enough charging to save 221 tonnes of travel carbon emissions, which equates to 1327 trees - a significant contribution to improving the environment and towards net zero carbon.



Figure 8 - New Charging Points

Transforming the Council fleet

The Council's efforts to decarbonise its fleet of vehicles is going from strength to strength. A £100k grant was secured from Welsh Government to install 30 charging points and

electricity infrastructure. In addition, the Council has procured 7 new electric vehicles, bringing the total to 22 electric vehicles.

By the end of 2023/24, the Council has transitioned 10% of the fleet to electric vehicles.

Land Use and Biodiversity

Reducing carbon emissions through carbon positive projects

Improving Biodiversity and woodlands.

During 2023/24, the Council implemented its biodiversity programme in various locations across Anglesey :-

- Through the local places for nature programme, habitats have been improved across the County e.g. pollinator project in 11 schools across the County, establishing ponds to encourage biodiversity at the Breakwater Park.
- Nature restoration work was undertaken in partnership with Natural Resources Wales at the former Penhesgyn landfill site. Native trees have been planted and signage provided to educate visitors to the site about biodiversity projects.
- 2000 trees have also been planted in Holyhead, Bodorgan, Benllech, Carreglwyd and Aberffraw.
- A tree nursery has been established in Llangoed to support the long-term objective of planting native trees on Anglesey.

Area of Outstanding Natural Beauty Plans

The Isle of Anglesey Area of Outstanding Natural Beauty Management Strategic Plan 2023 - 2028 has been established. The purpose of the Plan is to identify the special characteristics of the area and identify the actions required to ensure that those characteristics are protected and enhanced for future generations.



Figure 9 - Tree Nursery near Llangoed



Figure 10 - Ponds, Breakwater Park

Organisation Adaptation, Data and Monitoring

Reducing the Council's emissions whilst adapting and changing the way it works and establishing internal arrangements to allow delivery of the required change.

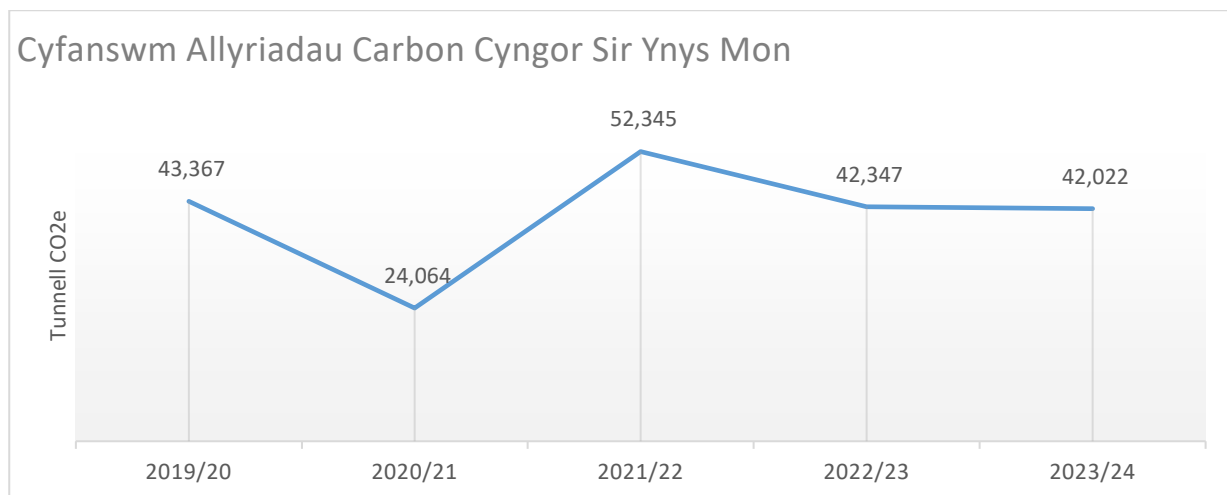
Deliver a climate change training programme

An 'Introduction to Climate Change' course was delivered to elected members, the Leadership Team and the Council's Service Management Teams. More than 60 individuals attended the presentation given by the Climate Change Manager which highlighted the causes of climate change, its impact and the Council's response. Following positive feedback, the intention is to present the course to the wider workforce in 2024/25.

Data reporting to Welsh Government and emissions dashboard

In line with Welsh Government's annual requirements, the Council reports on emissions data on an annual basis. By measuring a range of activities (e.g. use of our assets and fleet, waste, and expenditure on goods and services), the Council's annual carbon emissions can be calculated on a consistent basis.

Based on our annual data, there has been a reduction in the Council's annual carbon emissions but the reduction, in percentage terms, has been at a slower pace between 2022/23 and 2023/24.



Graph 1 - The Council's Carbon Emissions Over Time

It should be noted that steps to decarbonise assets can take up to one year to appear in carbon emissions data. There are also recognised weaknesses in the standard methodology used to calculate emissions from some activities. The task of improving data collection, data quality and reviewing data is ongoing.

It is important to note that carbon data reporting requirements in 2019/20 and 2020/21 were not the same as requirements in subsequent years, which saw additional data reporting

requirements and evolving requirements. With reporting arrangements evolving from year to year, changes in reporting arrangements and annual carbon emissions outcomes are to be expected. See appendix 1 for a further analysis of the Council's carbon emissions.

In parallel, and based on property usage data, the Council has developed a dashboard to allow officers to analyse carbon emissions from property usage. The purpose of the dashboard is to help identify decarbonisation priorities and monitor our journey towards net zero.

The dashboard is in continuous development, following internal consultation, and the main page shows a reduction in emissions from our buildings.

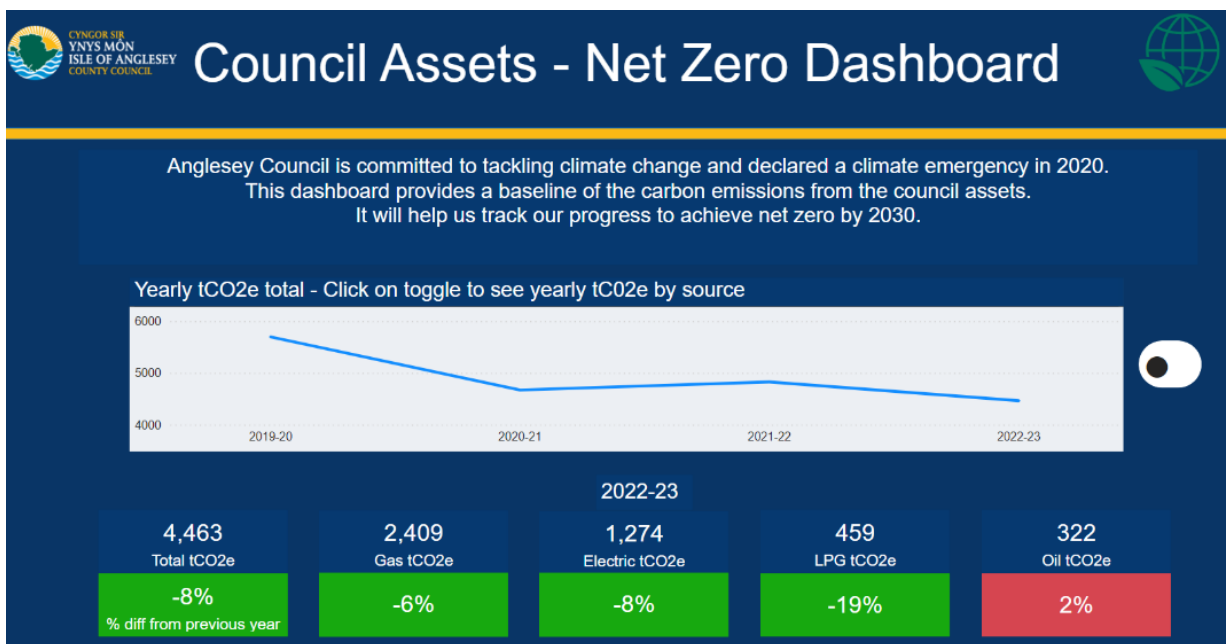


Figure 11 - Sample of the IOACC Emissions Dashboard

Looking Ahead to 2024/2024 and Conclusions

Here is a snapshot of some the developments planned for the coming year:

1. Deliver a £14M investment in low carbon heating systems and capital schemes
2. Continue to transition the Council fleet and facilitate green travel
3. Integrate Climate Change within the Council's new procurement system.
4. Create the next Net Zero Strategic Plan based on Council priorities
5. Develop the Council's awareness of carbon emissions data to support decision making
6. Increased consideration of biodiversity and land use and its role in mitigating climate change

Conclusions

1. The Council has seen an increase in the number of projects across the key priority areas of the Towards Net Zero Plan;
2. £14M of external funding to decarbonise our operational assets through the Low Carbon Heat Grant will allow us to make significant progress in terms of reducing our carbon footprint;
3. The Council continues to target transport emissions by investing in the Council's electric vehicle fleet, public charging points and the active travel programme;
4. Biodiversity and nature restoration projects continue to develop through the AONB Management Plan and Biodiversity Programmes;
5. Internally, the Council has raised awareness and shared climate change information with elected members and senior leaders;
6. Understanding of carbon emissions data continues to improve each year;
7. We can see that total carbon emissions have fallen compared to the previous year, but the rate of reduction has not met our expectations.
8. There is a clear dependency on external funding to deliver decarbonisation schemes, see appendix 2 for a further analysis. Match funding and Service capacity to manage and deliver projects has been essential to secure external grants in 23/24. Consequently, the availability of funding is a key risk to delivering the Towards Net Zero Plan and achieving the net net zero carbon target by 2030.
9. Despite an increase in the number of Council schemes within the Towards Net Zero Strategic Plan, the significant challenge that the Authority continues to face in terms of achieving the net zero carbon target by 2030 should be noted.

Appendix 1 – The Council’s Carbon Emissions 23/24

Background

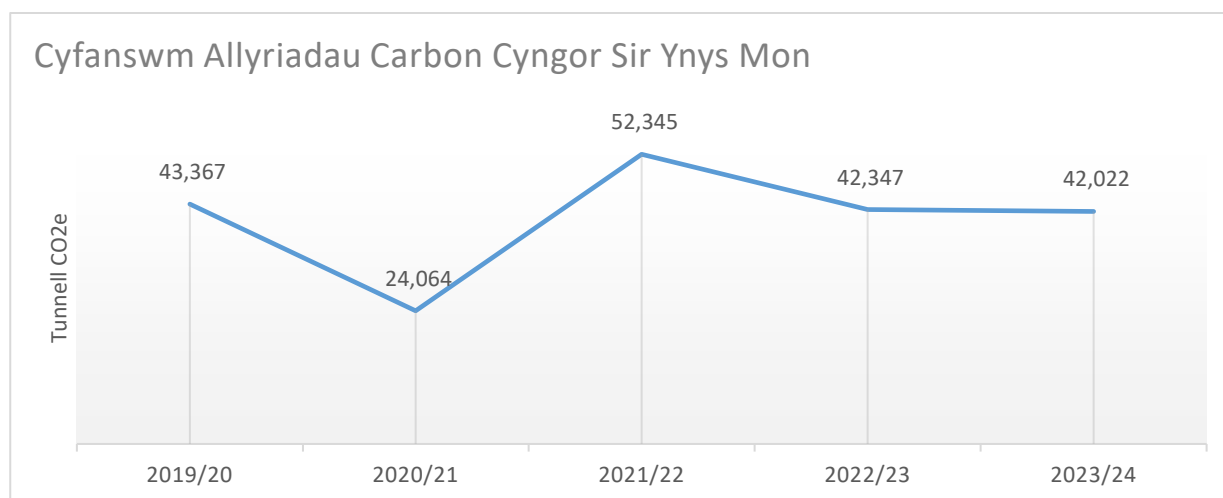
- There is a requirement for all public sector organisations to report on carbon emissions, in accordance with the Welsh Government annual net zero reporting programme.
- The measurement methodology / data requirements are adapted and changed from year to year to reflect developments in carbon measurement.
- There is a consensus within the public sector regarding the weakness of some outcomes due to the current methodology e.g. supply chain and commuting.
- A multi-service officer group gathers the data used to report the Council’s outcomes each year.
- Carbon emissions data can also be used for internal monitoring.
- Due to the annual reporting cycle, the ability to see the outcomes of our decarbonising activities is delayed until the next reporting cycle.

Challenges and Opportunities

- Changes in methodology and analysis of the data for Wales can complicate internal monitoring.
- The lack of availability of internal data can lead to outcomes based on assumptions.
- Opportunities to improve data can be identified following the annual reporting process.
- By using annual data, efforts to decarbonise activities can be prioritised according to the biggest emissions.

Carbon Emissions Outcomes

The Isle of Anglesey Council’s total Carbon Emissions in 2023/24 was 42,022 tonnes CO₂e. There has been a reduction of 19.7% compared to the maximum emissions in 2021/22 (graph 1).

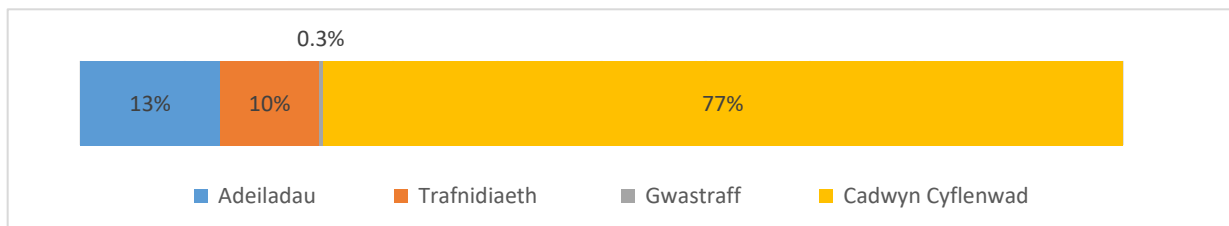


Graph 1 - The Council’s Total Emissions Over Time

Since we started reporting our emissions, Welsh Government reporting requirements have been extended and changed. By following the 23/24 requirements, land use emissions have not been included in the total annual emissions. As a result, the Council's total annual emissions in 23/24 were approx. 1.5% higher.

The total carbon emissions are broken down into 4 main categories within Welsh Government reporting arrangements, namely - Buildings, Transport, Waste and the Supply Chain.

Graph 3 shows the percentage of Council carbon emissions by category in 23/24.

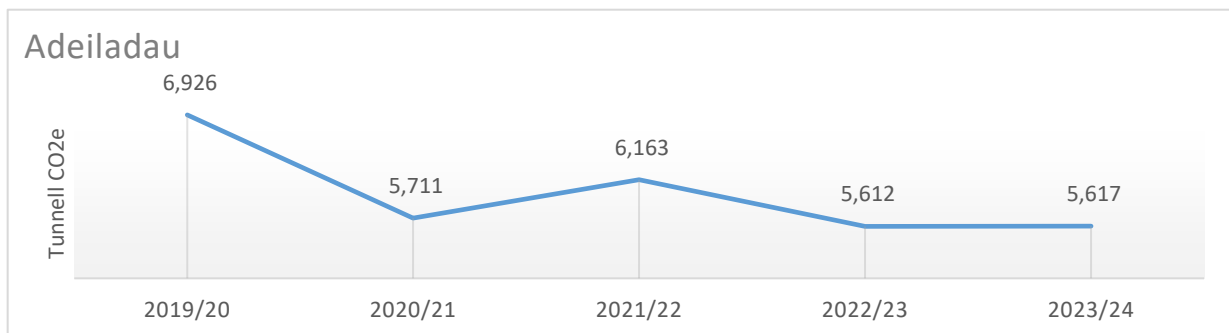


Graph 2 - IOACC Emissions Categories Percentages 23/24

The Council's use of buildings, transport and waste is equivalent to 23% of the Council's total emissions. At 77%, the supply chain, i.e. the goods and services we procure, is the main source of Council emissions.

A further breakdown of the categories is provided below.

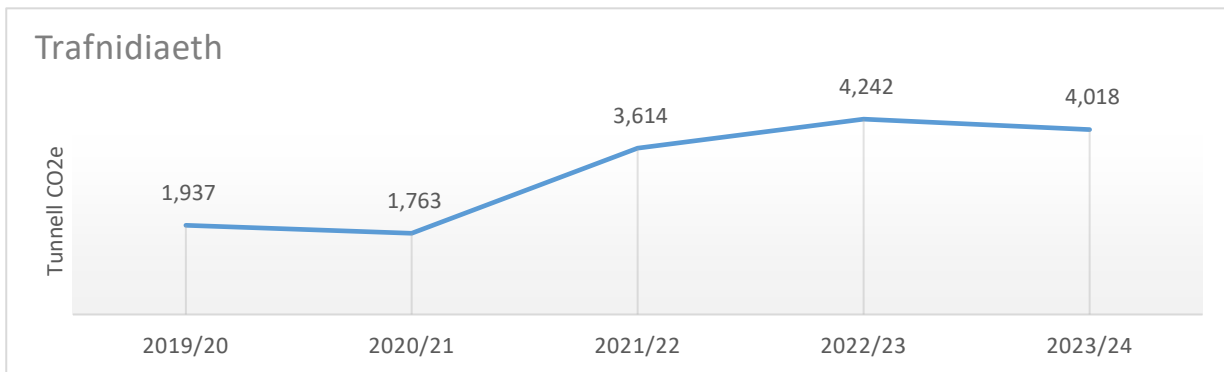
Buildings – 13% of the total carbon emissions in 23/24



Graph 3 - Annual Emissions – Use of Buildings

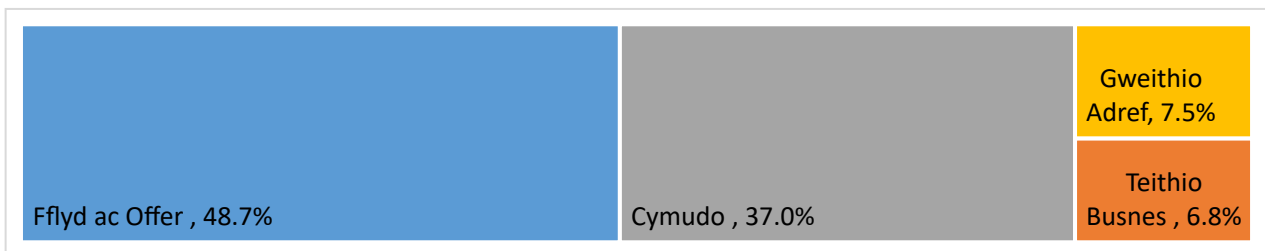
- Graph 4 shows the Buildings emissions category which includes the use of Council buildings (electricity, heat and water) and electricity for street lighting.
- The emissions in 2023/24 show a reduction of 18.8% compared to the use of buildings in 2019/20.
- However, carbon emissions increased by 5 tonnes CO2e between 2022/23 and 2023/24.
- Carbon emissions are expected to continue to fall in future years following our investment in low carbon heating systems.
- By using meters, the data in this category is considered to be of high quality.

Transport – 10% of total carbon emissions in 23/24



Graph 4 - Transport Carbon Emissions

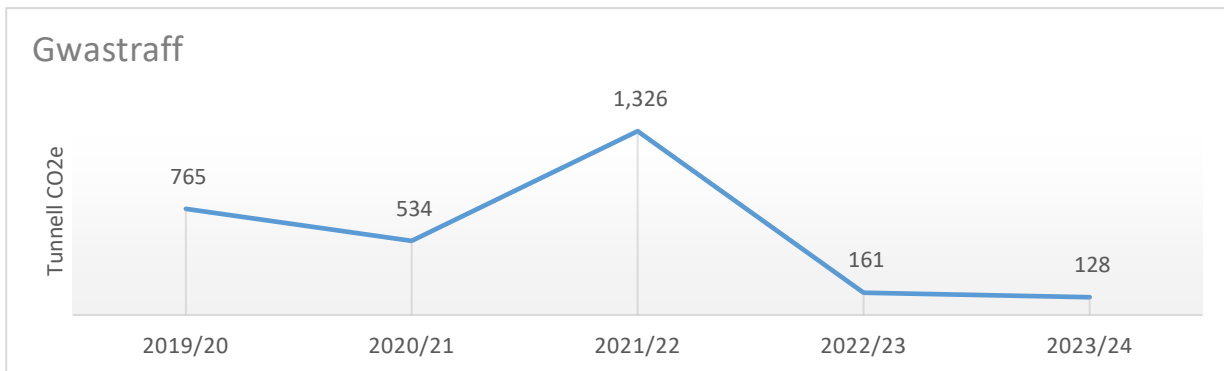
- It shows that total transport emissions have increased over time.
- Between 2022/23 and 2023/24, there has been a reduction of 5% in annual transport emissions.
- The transport category includes use of the Council fleet, staff business travel, staff commuting and working from home.
- Total emissions increased in 2021/22 due to additional activities in this category, coupled with the use of assumptions to calculate emissions.



Graph 5 - Analysis of Travel Modes

- From graph 6, we can see that use of the Council's fleet and equipment equates to 49% of emissions e.g. use of pool vehicles, commercial vehicles and refuse vehicles.
- Fleet and business travel emissions are based on high quality and dependable data.
- Since 2021/22 we also report on commuting and working from home, using national assumptions to create an annual snapshot. Because of this, the emissions data is inferior compared to other activities in this category.
- The quality of commuting and working from home data can be improved by engaging with the workforce, using questionnaires and undertaking a detailed analysis of staff behaviour.

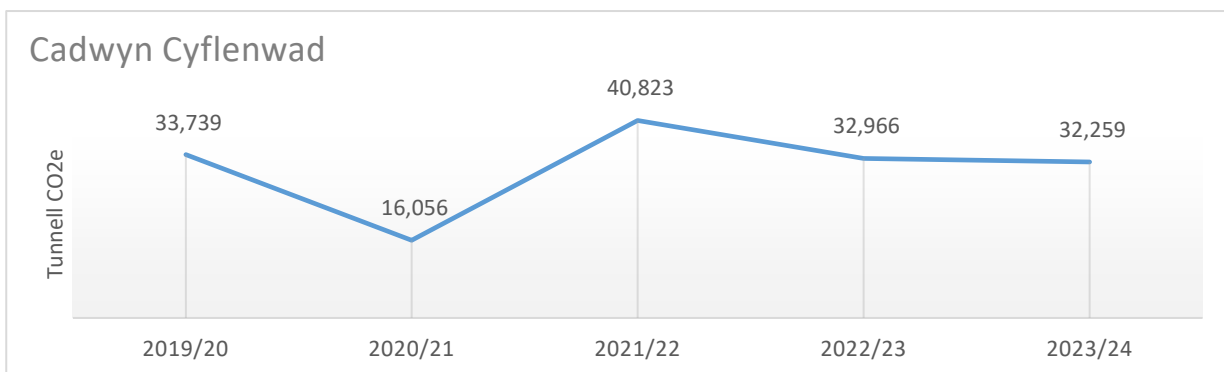
Waste – 0.3% of total emissions in 23/24



Graph - Carbon Emissions from Waste Collection

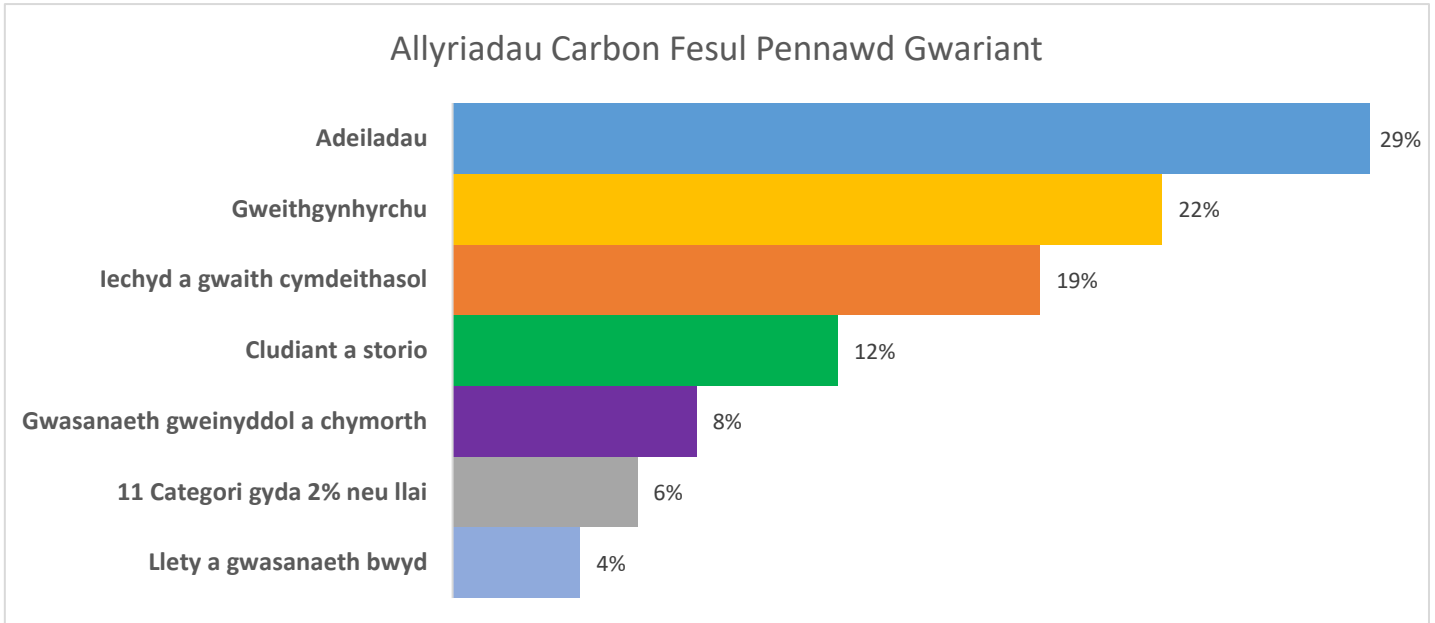
- The Council reports on carbon emissions deriving from the Council's organisational waste and civic waste collected by the Authority.
- The total emissions from waste in 23/24 was 128 tonnes CO₂e - a reduction of over 80% in carbon emissions.
- A significant variation can be seen in our emissions due to changes in collection contracts, improvements in collection processes and organisational waste monitoring systems.

Supply Chain – 75% of total carbon emissions in 23/24



Graph 8 - Carbon Emissions from the Supply Chain

- Carbon emissions from the services and goods we procure represent the majority of the Council's annual carbon emissions.
- Graph 8 shows that the Council's total emissions from the supply chain have fallen since 2021/22.
- It must be highlighted that emissions have been calculated based on the total expenditure under different headings. Consequently, if the Council spends more on goods due to external factors, e.g. inflation, carbon emissions will also increase.
- Despite the weakness of the data, it is useful in terms of enabling the Authority to identify which category generates the biggest expenditure and emissions.
- Graph 9 below shows carbon percentages within the supply chain based on expenditure headings. Expenditure on Buildings, Manufacturing and Health and Social Work generated the highest percentages of emissions within our supply chain in 2023/24.



Graph 6 - Emissions from the Main Expenditure Headings

Conclusions and Recommendations

- The Isle of Anglesey Council's carbon emissions have seen a reduction from 42,347tCO₂e in 2022/23, down to 42,022tCO₂e in 2023/24.
- It demonstrates that direct emissions from the use of buildings, transport and waste accounts for 23% of the Council's annual emissions.
- Emissions from the use of buildings and transport are expected to continue to reduce further as decarbonisation programmes continue to be completed.
- The majority of Council emissions can be attributed to sources from the supply chain, which equate to 77% of the annual total for 2023/24.
- It is recommended that further work is needed to improve data availability and quality to strengthen the Council's annual carbon emissions outcomes.

Appendix 2 - Towards Net Zero Budget 23/24

The table below provides a breakdown of external budgets and Isle of Anglesey Council budgets within the Towards Net Zero Action Plan 2023/2024.

Programme Area	Key Action	23/24 Funding (External Grant)	23/24 Funding (Internal Resources)
Energy Reduction and Energy Efficiency	Implementing property decarbonisation projects	£5.7M	£574,408
Energy Reduction and Energy Efficiency	New homes to carbon neutral standards	£1M (various grants)	£3.9M
Energy Reduction and Energy Efficiency	Retrofitting to improve Council housing stock	£4.45M (various grants)	£4.33M
Transport	Promoting active travel	£1.7M - Welsh Government and Transport for Wales	
Transport	Developing EV charging infrastructure	£385K - WG Grant	
Transport	Transforming the Council fleet	£100K - WG Grant	£390K
Land Use and Biodiversity	Improving Biodiversity and Woodland	£1M (various grants)	
Land Use and Biodiversity	Area of Outstanding Natural Beauty Plans	£1M (various grants)	