



PRIFYSGOL
BANGOR
UNIVERSITY

2024/25 Environment Report

2024/25 Environment Report


Introduction

During 2024/25 the University has continued to demonstrate its commitment to environmental sustainability through the ongoing implementation of its Environmental Management System (EMS). In March 2025, the University successfully retained its certification aligned with the internationally recognised standard for environmental management - ISO 14001:2015. The external certification audit confirmed compliance with the standard and highlighted progress in key areas, including energy management, carbon reduction, and sustainable travel, reflecting the University's proactive efforts to reduce its energy consumption and carbon emissions.

In addition, the University achieved a significant reduction in Scope 1 and 2 carbon emissions through improved operational efficiency measures, including modified heating schedules and the strategic closure of underused teaching and research spaces. These actions contributed to measurable carbon savings and supported the University's broader decarbonisation goals under the 25 by 25 initiative, which aimed to reduce Scope 1 and 2 carbon emissions by 25% by 2025 from 2018/19 baseline levels. By 31 July 2025, the University's carbon emissions had decreased by 39.2%, representing a reduction of 3,720.87 tonnes CO₂e compared to 2018/19.

Biodiversity

Over the course of 2024/25, the University achieved significant progress in enhancing biodiversity across its estate. The *Ardal Natur a Coetir Cymunedol, Parc y Coleg* project commenced in October 2023 and was completed in February 2025. Fully funded by the UK Government's Shared Prosperity Fund, it represents a significant milestone for the University.



The project delivered a comprehensive Woodland Management Plan, including the planting of 1,500 native trees and 15,000 wildflowers and bulbs, as well as the installation of hibernacula and wildlife shelters to support habitat creation. It also delivered key infrastructure upgrades to improve access and enjoyment, including resurfacing existing footpaths, installing log benches, creating a new woodland footpath, and redesigning the pedestrian entrance off Love Lane.

Also, the 30x30 biodiversity initiative grew from five sites to 10, which marked steady progress towards the goal of creating 30 areas to benefit wildlife by 2030. With the help of the Grounds and Gardens team, new management practices are being established for 30x30 sites to enhance existing habitats, to create new ones, and to boost biodiversity and abundance of native plant, animal, and fungi species.

At the University's Treborth Botanic Garden, work continued to implement the measures supported by the Woodland Investment Grant (TWIG), awarded in June 2024. Activities included woodland restoration and enhancement, improved access, and the delivery of a diverse programme of courses, workshops, and training.

Waste and Water Usage

In the area of waste and circular economy, the University generated 673.26 tonnes of municipal waste, a decrease of 64.53 tonnes from the previous year. The overall reuse and recycling rate increased marginally to 56.3%, from 55.28% in 2023/24. The University's *Warp It* platform continued to play a vital role in supporting the internal redistribution of furniture, office equipment, and materials, reducing waste generation and promoting circular economy principles across departments.

Water management remained an important focus during 2024/25. However, overall water consumption increased slightly to 550.0 l/m² and 9,805.43 l/FTE, largely due to two leaks on site, an increase in usage in Halls, and improved reporting. The University recognises that further work is needed to fully implement the [Water Conservation Standards](#), which was approved in April 2024 and set out actions to reduce water use across the University.

Travel and Transport

Sustainable travel and transport continued to be a priority area for reducing carbon emissions, protecting local biodiversity and ecosystems, and promoting health and wellbeing. In 2024/25, the University updated its [Travel and Transport Policy](#), placing greater emphasis on the [Sustainable Travel Hierarchy](#) to encourage lower-carbon travel. In addition, the University signed the [North Wales Healthy Travel Charter](#) in March 2025, which outlines 15 actions that will support active and sustainable travel across the region.

However, challenges remain. Results from the 2023 and 2025 Staff Travel Surveys showed that most staff still commute to work by 'single-occupancy car' - 60% and 71% respectively. Furthermore, the 2025 Survey found that around 9% of staff surveyed walked to work, 8% commuted by shared car, 5% by bicycle, 4% by bus, and less than 2% by train. These findings highlight persistent barriers to mode shift, including limited public transport availability and a lack of safe cycling infrastructure between major towns in Gwynedd and Anglesey.

Summing up

Collectively, these initiatives demonstrate the University's ongoing commitment to reducing its overall environmental footprint, enhancing local biodiversity, and embedding sustainability principles across all areas of University operations. The achievements of 2024–25 provide a strong foundation for continued progress towards a more sustainable, low-carbon future while protecting the wildlife and ecosystems around us.

2024/25 Objectives and Targets

Impact Area	Target	Duration	Status
T1 - Environmental Compliance	Ensure compliance with all relevant legislation and obligations associated with our activities, prevent the pollution of the natural environment, and demonstrate compliance	2024/25	Achieved
T2 - Waste Management	a. Create a process to collect data to quantify waste (tonnage and waste types) from construction and retrofit projects	2024/25	Not Achieved
	b. Produce a report to understand the content of non-recyclable waste from residential buildings to identify opportunities to influence future behaviour	2024/25	Achieved
	c. Implement a framework for University-wide procurement of furniture designed with circular economy principles	2024 - 26	Not Achieved
	d. Achieve Zero waste to landfill and 70% re-use and recycling by 2025	2024/25	Not Achieved
T3 - Procurement	a. Define operational targets and measures that are outcome based and linked to Bangor University's corporate policies and Procurement Strategy	2024/25	Not Achieved
	b. Ensure relevant carbon and environmental KPIs are included within relevant tenders alongside developing guidance to aid measuring, monitoring, and reporting	2024/25	Partially Achieved

2024/25 Objectives and Targets (Continued)

Impact Area	Target	Duration	Status
T3 – Procurement (continued)	c. Identify and deliver sustainable procurement training for all operational staff involved in tender development and contract management	2024/25	Achieved
	d. Communicate sustainability goals and requirements to suppliers alongside broader market engagement actions and communication activities	2024/25	Achieved
T4 - Utilities Water	a. Reduce water consumption by 2% compared to 2023/24, as a function of i) m2 useful floor area and ii) FTE students & staff (through staff and student promotion)	2024/25	Not Achieved
	b. Implement the University's Water Conservation Standards to reduce water consumption and improve water conservation	2024/25	Partially Achieved

2024/25 Objectives and Targets (Continued)

Impact Area	Target	Duration	Status
T5 - Travel and Transport	a. Approve a Travel and Transport Policy	2024/25	Achieved
	b. Rollout of payment system for public Electric Vehicle charging points across the University's estate	2024/25	Achieved
	c. Increase the number of electric vehicles in the University fleet by 10% by 2025	2024/25	Not Achieved
	d. Support and encourage more sustainable travel modes for commuting and inter-site travel, including continuing liaison with public transport companies (communication)	2024/25	Achieved
	e. Audit the provision of cycling facilities (bike parking, showers, lockers etc) across the University estate	2024/25	Achieved
	f. Embed the sustainable travel hierarchy outlined in the University's Travel and Transport Policy in all University policy and practice	2024/25	Partially Achieved

2024/25 Objectives and Targets (Continued)

Impact Area	Target	Duration	Status
T6 - Biodiversity	a. Establish a further five sites for 30x30, bringing the total number to 10	2024/25	Achieved
	b. Complete baseline biodiversity surveys for initial five sites for 30x30	2024/25	Partially Achieved
	c. Integrate the Biodiversity Enhancement Plan into the University's website	2024/25	Not achieved
T7 - Carbon	a. Reduce the location-based CO ₂ e (for Scopes 1 and 2 emissions) from a baseline year of 2018/19 by 25% by the end of the 2024/25 academic year	2024/25	Achieved
	b. Review and update the Carbon Management Plans	2024/25	Achieved
T8 - Construction	Develop a formal document outlining decarbonisation and environmental standards for all major refurbishment and new construction projects at the University	2024/25	Not Achieved

Managing Waste and Circular Economy

The University has adopted the Welsh Government’s target to reuse and recycle 70% of total waste produced by 2025. Although the University did not achieve this target in 2024/25, it continues to make improvements to its waste strategy to achieve better reuse and recycling rates.

Enhancing reuse, recycling, and the circular economy helps to lower carbon emissions and reduce the demand for natural resources. Furthermore, minimising waste and promoting reuse within the local economy contribute to cost savings for the University. Details of the University’s can be found here: [Waste Management Policy](#)

	2024/25	2023/24	% change from previous year
Total Waste Generated (Metric Tonnes - MT)	673.26	737.79	-8.75%
Total Reused and Recycled MT (Percentage of total)	379.07 (56.30%)	407.84 (55.28%)	
Total Sent to Energy Recovery MT (Percentage of total)	294.19 (43.70%)	329.95 (44.72%)	
Total Sent to Landfill MT (Percentage of total)	0.0 (0%)	0.0 (0%)	
Total Reused (Avoided Waste) MT	12.95		









better apart

Help us become a more sustainable University by moving from a mixed recycling system to a separated system.

Your one mixed recycling bin will soon become three:

- plastic, metal & cartons (orange lid)
- paper & card (blue lid)
- glass (red lid)

14th-20th
OCTOBER



WASTE AWARENESS WEEK 2024

14TH OCT | MONDAY

The Big Beach Clean along the Menai Strait with the Students Union
14:45 | Meet outside Ffridd or St Mary's Halls Office
15:00 | Meet outside the front of Pontio

15TH OCT | TUESDAY

Webb Water

10:00 - 12:30 | Ffridd Halls Office

14:00 - 16:00 | St Mary's Halls Office

Sustainable Sewing Workshop*

18:00 | Reichel

16TH OCT | WEDNESDAY

Clothes Swap and Reusable Period Product Giveaway

10:00 - 15:00 | Reusable Fair at the Students Union

Fairtrade Hot Chocolate Giveaway

12:00 - 12:45 | Ffridd and St Mary's Halls Office

Repair Cafe

13:00 - 16:00 | Reusable Fair at the Students Union

17TH OCT | THURSDAY

Community Waste Visit with Gwynedd Council
09:30 | Meet outside Belle Vue Bungalow
19:00 | Brant & Barlowes

18TH OCT | FRIDAY

Laundry Detergent Giveaway!

12:00 - 12:30 | Ffridd and St Mary's Halls Office

Film Night - Down to Earth

20:00 | Acapela

19TH OCT | SATURDAY

Look After your Mate Training*
10:00 | SU Hub Ffridd Village

*Book your place at [shop.bangor.ac.uk](#) as space is limited

#WAW24



2024/25 Waste Targets and Progress

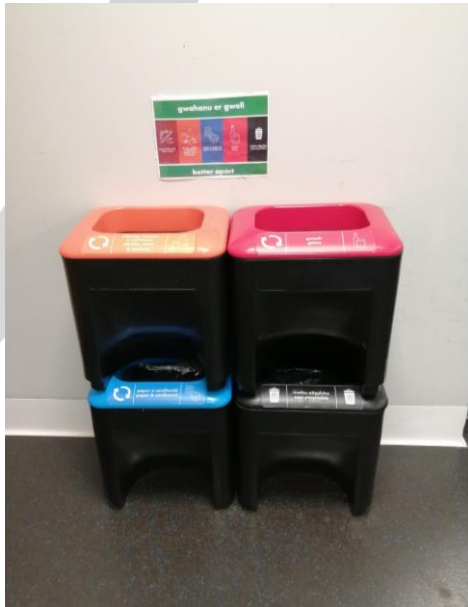
Target a - Create a process to collect data to quantify waste (tonnage and waste types) from construction and retrofit projects

Progress against target – Not Achieved: The process to collect data to quantify waste (tonnage and waste types) from construction and retrofit projects is ongoing.

Target b - Produce a report to understand the content of non-recyclable waste from residential buildings to identify opportunities to influence future behaviour

Progress against target – Achieved: A report was completed identifying that 40% of all non-recyclable waste comes from residential buildings and proposed several initiatives to reduce non-recyclable waste, including:

- ✓ staff training
- ✓ consolidation/centralisation of bins
- ✓ producing a multi-lingual digital recycling guide for students in halls
- ✓ improving signage in halls' kitchens
- ✓ competitions between halls to achieve the best recycling rates,
- ✓ rewarding the best recycling efforts in halls



2024/25 Waste Targets and Progress (continued)

Target c - Implement the framework for University-wide procurement of furniture designed with circular economy principles

Progress against target – Not Achieved: Work is ongoing to develop a framework for University-wide procurement of furniture designed with circular economy principles.

Target d - Achieve Zero waste to landfill and 70% re-use and recycling by 2025

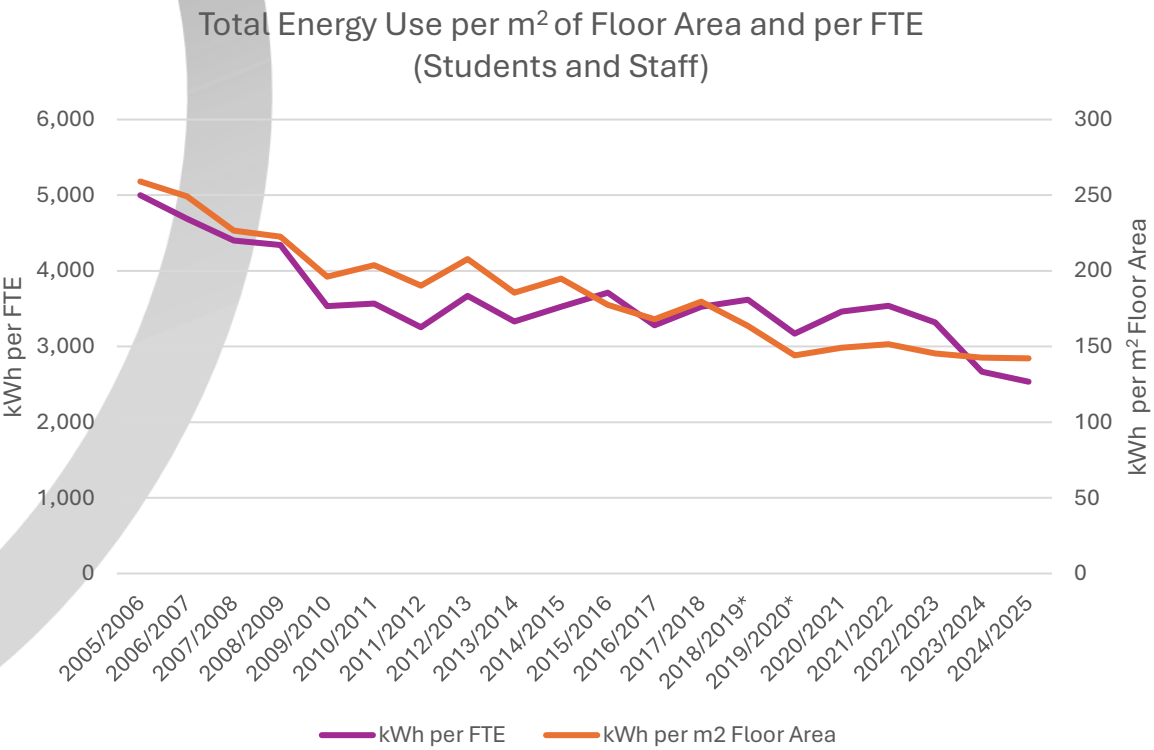
Progress against target – Not Achieved: The target of 70% reuse and recycling by 2025 was not met but remains the University's waste target until it is achieved.

Waste Campaigns and Raising Awareness

The University promoted awareness among staff, students, and visitors through enhanced communication, targeted campaigns, and dedicated initiatives. The key programmes delivered in 2024–25 included Better Apart and Waste Awareness Week. Additionally, new staff received inductions covering the University's approach to the circular economy and waste reduction, while existing staff participated in refresher training sessions.



2024/25 Energy Consumption



*Amended FTE data

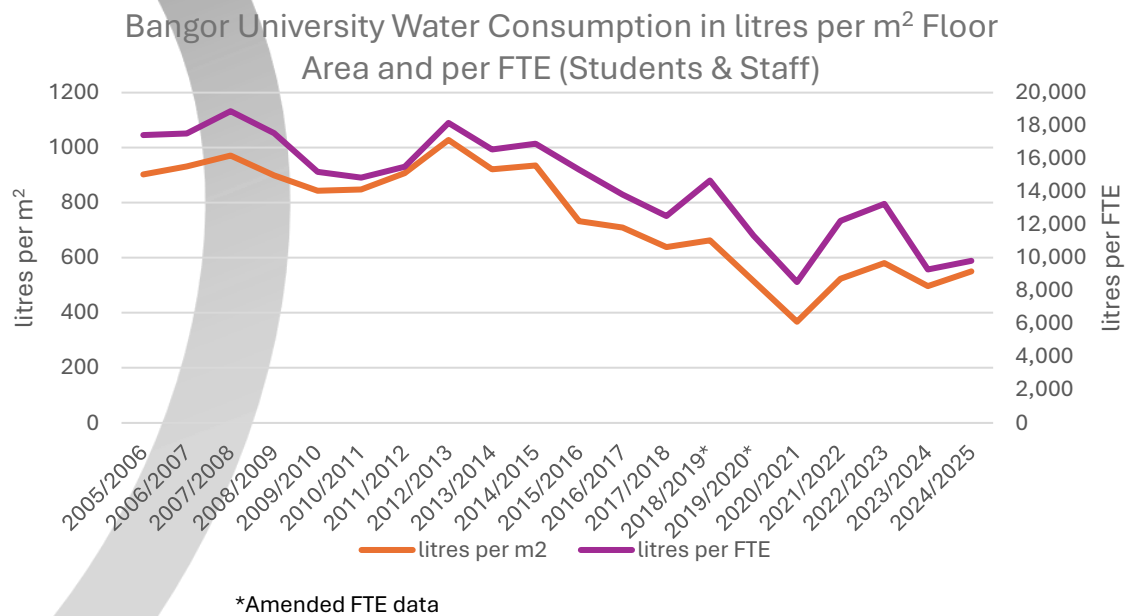


	2024/25	Compared to 2018/19	Compared to 2005/06
Total Energy Consumption	29,911,146.72 kWh	- 20.3%	- 35.8%
Energy consumption per m ²	142.19 kWh/m ²	- 13.1%	- 45.1%
Energy consumption per FTE	2,535.01 kWh/FTE	- 30.0%	- 49.3%

Summary of Energy Consumption

	2024/25
Total Electricity Consumption	13,582,662.14 kWh
Total Gas Consumption	15,414,479.68 kWh
Total Heating Oil Consumption	668,616.20 kWh
Total LPG Consumption	91,632.8 kWh
On-site Generation (Solar)	153,755.90 kWh

2024/25 Water Consumption



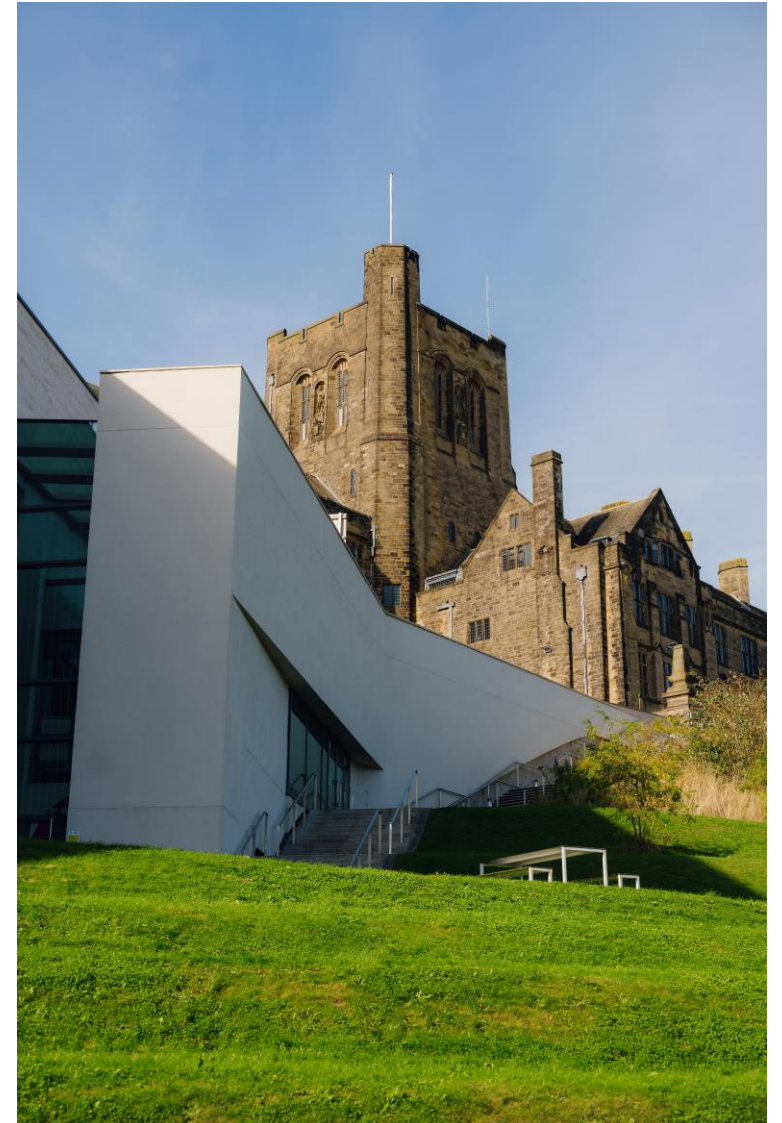
	2024/25	Compared to 2018/19	Compared to 2005/06
Total Water Consumption	115,696.22 m ³	- 24.0%	- 28.7%
Water consumption per m ² useful floor area	550.0 litres/m ²	- 17.1%	- 39.1%
Water consumption per FTE (students & staff)	9,805.43 litres/FTE	- 33.2%	- 43.7%
Rainwater harvesting at two sites measured 116.38 m ³ during 2024/25.			

2024/25 Carbon, Emissions and Discharges

During the 2024/25 academic year the University's carbon emissions from Scope 1 and 2 decreased once again to 5,771.03 tonnes CO₂e, compared to 6,641.66 tonnes CO₂e in 2023/24 and 9,491.9 tonnes CO₂e in 2018/19, based on location-based electricity calculations. Market-based emissions remained the same as location-based emissions as no Renewable Energy Guarantees of Origin (REGO) certificated renewable electricity was procured during the year.

Total Scope 1 & 2 Emissions	2024/25	Compared to 2018/19
i. Location-based Method	5,771.03 tonnes CO ₂ e	-39.2%
ii. Market-based Method	5,771.03 tonnes CO ₂ e	-39.2%

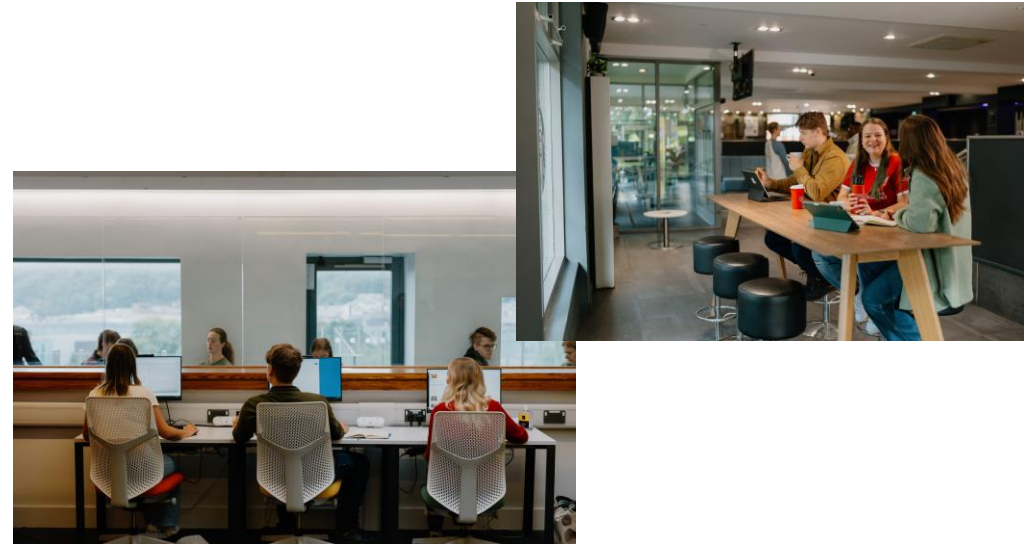
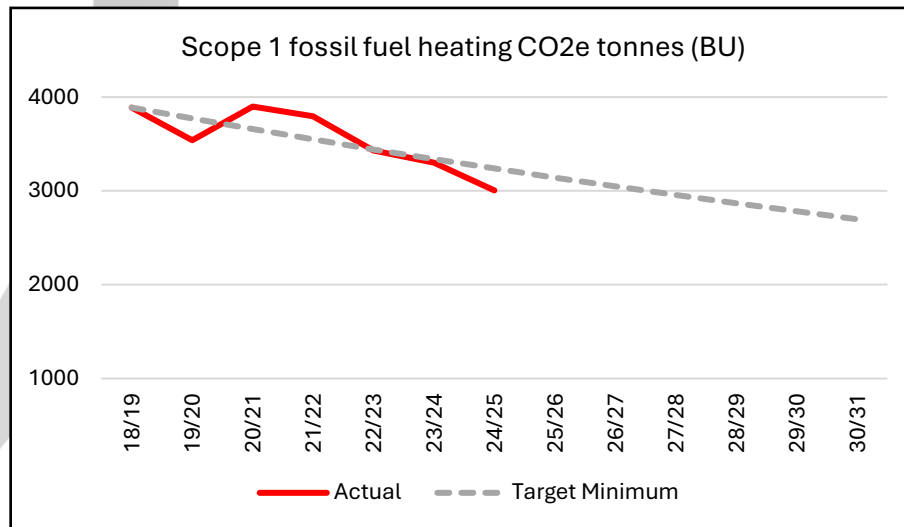
A comparison of Scope 1 and 2 activities between 2023/24 and 2024/25 showed a slight reduction in electricity and natural gas use, and air conditioning refrigeration F-gases while heating oil, LPG use and agricultural activities increased. Fuel use for our fleet and machinery also decreased, all of which contributed to further reductions in Scope 1 and 2 carbon emissions. This year also saw an increase in University solar output.



2024/25 Carbon, Emissions and Discharges (Continued)

University KPI 1.6 - Reduce Scope 1 CO₂e fossil fuel heating emissions by, on average, at least 3% per annum

Progress against KPI - Achieved: the University's KPI to reduce Scope 1 CO₂e fossil fuel heating emissions by, on average, at least 3% per annum is running ahead of target minimum, with emissions reducing by 22.71% (883t) since 2018/19.



Within Scope 3 emissions, activity decreased across the supply chain, leased vehicles, and grey fleet.

Although the University made greater use of its Travel Agent for business travel bookings, air-travel emission factors fell significantly, leading to lower emissions in this category.

Other categories saw only minor changes, resulting in an overall reduction in our Scope 3 carbon emissions.

2024/25 Carbon, Emissions and Discharges – Summary Table

Scope 1 Emission by Source	
Gas Consumption	2,820.23 tonnes CO2e
Heating Oil Consumption	164.99 tonnes CO2e
LPG Consumption	19.66 tonnes CO2e
Petrol Consumption	11.10 tonnes CO2e
Diesel Consumption	39.55 tonnes CO2e
Air conditioning & Refrigeration F-gases	7.23 tonnes CO2e
Agricultural Activities	304.14 tonnes CO2e
Scope 1 Total	3,366.90 tonnes CO2e
Scope 2 Emissions by Source	
Electricity Consumption - (Location-based Method)	2,404.13 tonnes CO2e
Electricity Consumption - (Market-based Method)	2,404.13 tonnes CO2e
Scope 3 Emissions by Source	
Water Consumption	22.13 tonnes CO2e
Wastewater Produced	17.06 tonnes CO2e
Waste	3.82 tonnes CO2e
Grey Fleet	106.53 tonnes CO2e
Leased Vehicles (Car and Van Hire)	21.47 tonnes CO2e
Business Travel ¹	488.91 tonnes CO2e
Supply Chain (Procurement)	16,047.90 tonnes CO2e
Scope 3 Total	16,707.82 tonnes CO2e
Sequestration by land holdings	
Land based emissions	-894.91 tonnes CO2e
Total with location-based electricity	22,478.85 tonnes CO2e
Total with market-based electricity	22,478.85 tonnes CO2e

¹ Business Travel contains only part of the rail and air travel emissions which have been quantified via the University's Travel Agent.

Travel and Transport 2024/25 - Targets and Progress

The University's [Travel and Transport Policy](#) was approved in October 2024 to further promote and encourage sustainable and active travel among staff, students, and visitors. The amended policy reinforces the University's commitment to reducing carbon emissions from travel, improving accessibility, and supporting healthier, lower-impact commuting options across the campus community.

In February 2025, the University signed the [North Wales Healthy Travel Charter](#), which pledges commitment to a range of initiatives to further sustainable travel objectives, including upgrades to cycling infrastructure, improved access to public transport, and engagement campaigns to improve staff's awareness of cyclists and pedestrians when driving. Regular staff and student travel surveys continue to provide data about travel modes and patterns, which help to inform future actions and ensure progress toward the University's sustainability goals.

There were six travel and transport targets in 2024/25:

Target a - Approve Travel and Transport Policy

Progress against target – Achieved: a revised Travel and Transport Policy was approved in 2024/25.

Target b - Rollout the payment system for public Electric Vehicle charging points across the University's estate

Progress against target – Achieved: the Evolt Network installed an app-based payment system for all publicly accessible electric vehicle (EV) car charging points across the University.



Travel and Transport 2024/25 - Targets and Progress (Continued)

Target c - Increase the number of electric vehicles in the University fleet by 10% by 2025

Progress against target – Not Achieved: due to financial constraints the number of electric vehicles in the University fleet has not increased.

Target d - Support and encourage more sustainable travel modes for commuting and inter-site travel, including continuing liaison with public transport companies

Progress against target – Achieved: work continued to develop messaging around sustainable travel in Staff and Student Bulletins and through social media and to liaise with public transport companies.

Target e - Audit the provision of cycling facilities (bike parking, showers, lockers etc.) across the University estate

Progress against target – Achieved: an audit of cycling facilities was completed in July 2025.

Target f - Embed the sustainable travel hierarchy outlined in the University's Travel and Transport Policy in all University policy and practice

Progress against target – Partially Achieved: This target is ongoing.

Read more about Travel and Transport at the University here: [Travel and Transport - Sustainable Travel Guidelines](#)



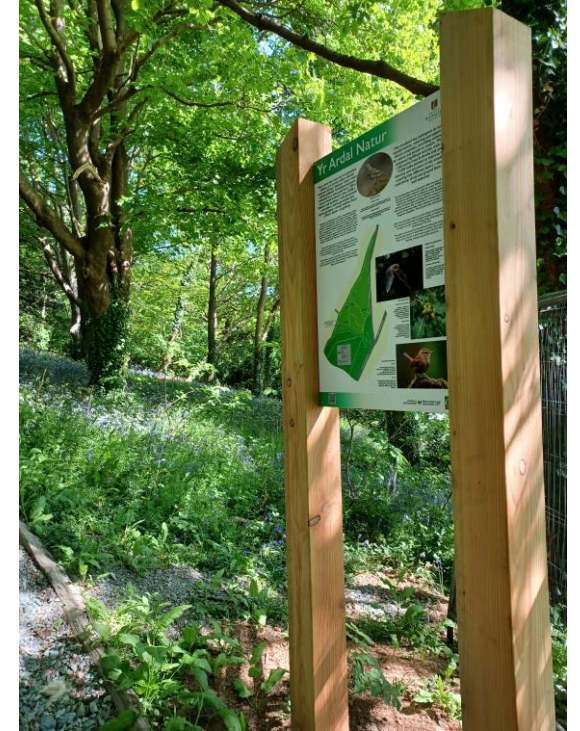
Biodiversity 2024/25 - Targets and Progress

In 2022, the University set a target to preserve and enhance 30% of its existing greenspace and to create 30 new sites across its estate to support wildlife by 2030. This aspiration is now being advanced through the 30x30 initiative, which aims to establish diverse habitats for local species, strengthen ecological connections with nearby wild areas, and contribute to increased local biodiversity and species abundance.

During 2024/25 the *Ardal Natur a Coetir Cymunedol, Parc y Coleg* project was completed, which was fully funded by the UK Government's Shared Prosperity Fund and is now a dedicated 30x30 site. The project delivered a comprehensive Woodland Management Plan, which prescribed the planting of 1,500 native trees and 15,000 wildflowers and bulbs. In addition, hibernacula and wildlife shelters were installed to support habitats. The project also delivered the following infrastructure upgrades within Ardal Natur to improve access and allow the re-opening of the top path from Love Lane to Main Arts and Pontio:

- a new footpath through part of the woodland
- resurfacing existing footpath surfaces
- rebuilding the retaining wall along the top path using stone-filled gabion baskets
- redesign of the Love Lane entrance incorporating tactile pavement and pedestrian gate

In 2024/25, three biodiversity targets were set — two supporting the delivery of the 30x30 initiative, and one focused on integrating the Biodiversity Enhancement Plan into the University's website.





Biodiversity 2024/25 - Targets and Progress (Continued)

Target a - Establish a further five sites for 30x30, bringing the total number to 10

Progress against target – Achieved: a further 5 sites were established during 2024/25, which included:



- Ardal Natur, Parc y Coleg
- Cae Derwen Villa – Rear Meadow
- Rathbone Hall – Sloping Meadow
- Main Arts Terrace – South Meadow
- New Arts - Meadow



Target b - Complete baseline biodiversity surveys for initial five sites for 30x30

Progress against target – Partially Achieved: vegetation surveys were completed for the initial five 30x30 sites:

- The Management Centre
- John Phillips Hall – North Meadow
- John Phillips Hall – South Meadow
- Gartherwen Hall
- Rathbone Hall – North Meadow

Biodiversity 2024/25 - Targets and Progress (Continued)

Target c - Integrate the *Biodiversity Enhancement Plan* into the University's website

Progress against target – Not Achieved: owing to internships not being awarded, the Biodiversity Enhancement Plan has not yet been incorporated into the University's biodiversity webpages.

For detailed information about biodiversity at Bangor University, please go to:

[Section 6: The Biodiversity and Resilience of Ecosystems Duty - 2025 Report](#)





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