Performance Report

2024

CONTENTS

1. INTRODUCTION AND OVERVIEW

This 2024 report provides an overview of Environmental Sustainability performance of Swansea University aligned with our Objectives Goal Strategies and Measures (OGSM) and our Environmental Management System ISO 14001.

N.b. Due to varying reporting requirements and periods the latest published data is used wherever possible to provide timely official information. For example, carbon emissions data is derived from published HESA data 2022/23 whereas, EMS performance information may be consolidated and presented for 2023/24.

GENERAL UPDATES

- Last annual ISO14001:2015 external audit conducted by NQA, 10th-13th July 2023. This was a surveillance visit and the **University maintained full accreditation**.
- **University Sustainability Policy** was reviewed for updates with no additions in February 2024.
- **The Sustainability Committee meets quarterly,** including Faculty, PSU, Union and SLT and Student representatives and oversees the progress of the OGSM.
- **The Sustainability & Climate Emergency Strategy** covers the period 2021-2025, so will therefore begin a review process during 2024 for republication.

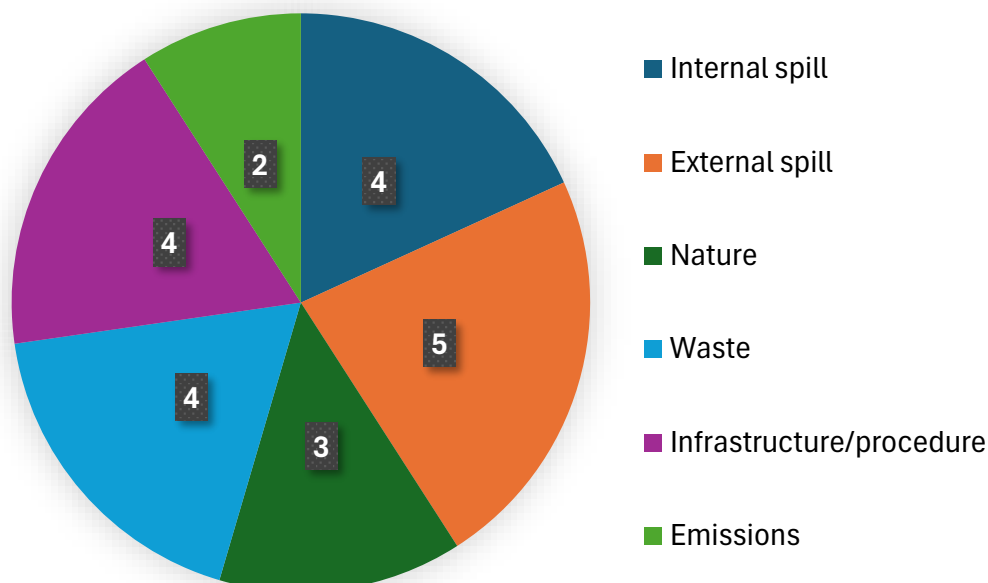## 2. NON-CONFORMITIES AND OPPORTUNITIES FOR IMPROVEMENT

- **Zero Non-Conformities** were identified in 2023 external audit.
- **15 OFIs** were recorded across 3 internal audits.

Opportunities for improvement – OFIs (from 2023 External Audit):

- The university could usefully consider the wants, needs & expectations of 'Pobl' at the 3-year review of the Stakeholders Plan. Pobl provide management of some student residencies. The Stakeholder Plan already includes Estates
- The university could usefully review the other compliance requirements that the university has decided to comply with, above & beyond legal requirements. The work is partially completed within the LUS portal, & also in the Compliance Obligations spreadsheet.
- Certain waste bins at Ty Beck could usefully be identified for the type of waste they are designated for. The majority of waste bins on site are colour coded & standardised. Only a few bins, in smaller kitchen areas, would benefit from this identification, as the standard bins won't fit in these areas.
- There is an opportunity for the university to work closer with the residents of Ty Beck in developing the garden areas.

3. ENVIRONMENTAL ADVERSE EVENTS

- 22 environmental adverse events reported July 2023-April 2024 via the university adverse event reporting system, categorised below.
- Investigations and associated corrective/preventative actions are tracked to closure through the EMS system. Key actions from this period include:
    - A review of the external spill procedure and spill training programme.
    - Review and removal of roof netting, with continuous condition assessment.

Pie chart legend:
- Internal spill: 4
- External spill: 5
- Nature: 3
- Waste: 4
- Infrastructure/procedure: 4
- Emissions: 2

4. SUSTAINABILITY STRATEGY OGSM PERFORMANCE

		Sustainability and Climate Emergency Strategy			
			Base	23/24	24/25
Goals	1	People and Planet League position	10 out of 154	Goal 8 / Actual 8th	7
	2	Sustainable Development Goal THE Impact Rating	101 - 200th	Goal <125 / Actual tbc	<100
	3	Zero Carbon Operations (Scope 1 and 2) Zero by 2035	17602 tCO2e	Goal 35% / Actual 31% (22/23)	45%
	4	Net Zero Carbon Services (Scope 3) -50% by 2035	40395 tCO2e	G 20%% / A tbc	22.5%
	5	QS Sustainability Ranking	321-340th	Goal <200 / Actual 80th (ER= 198)	<150

4. ENVIRONMENTAL PERFORMANCE

UNIVERSITY SCOPE 1 & 2 EMISSIONS 22/23 VS BASELINE (TONNES CO_2E)

31% reduction from 2015/16 baseline: 17,603tCO_2e to 12,142tCO_2e.

42% reduction on Singleton baseline from 9,416tCO_2e to 7,867tCO_2e.
7% increase on Bay baseline from 3,875tCO_2e to 4,160 tCO_2e*.

*Increase on Bay campus due to energy consumption, grid electricity carbon intensity, and the addition of 5 new buildings plus the addition of new PV's and CHP units.

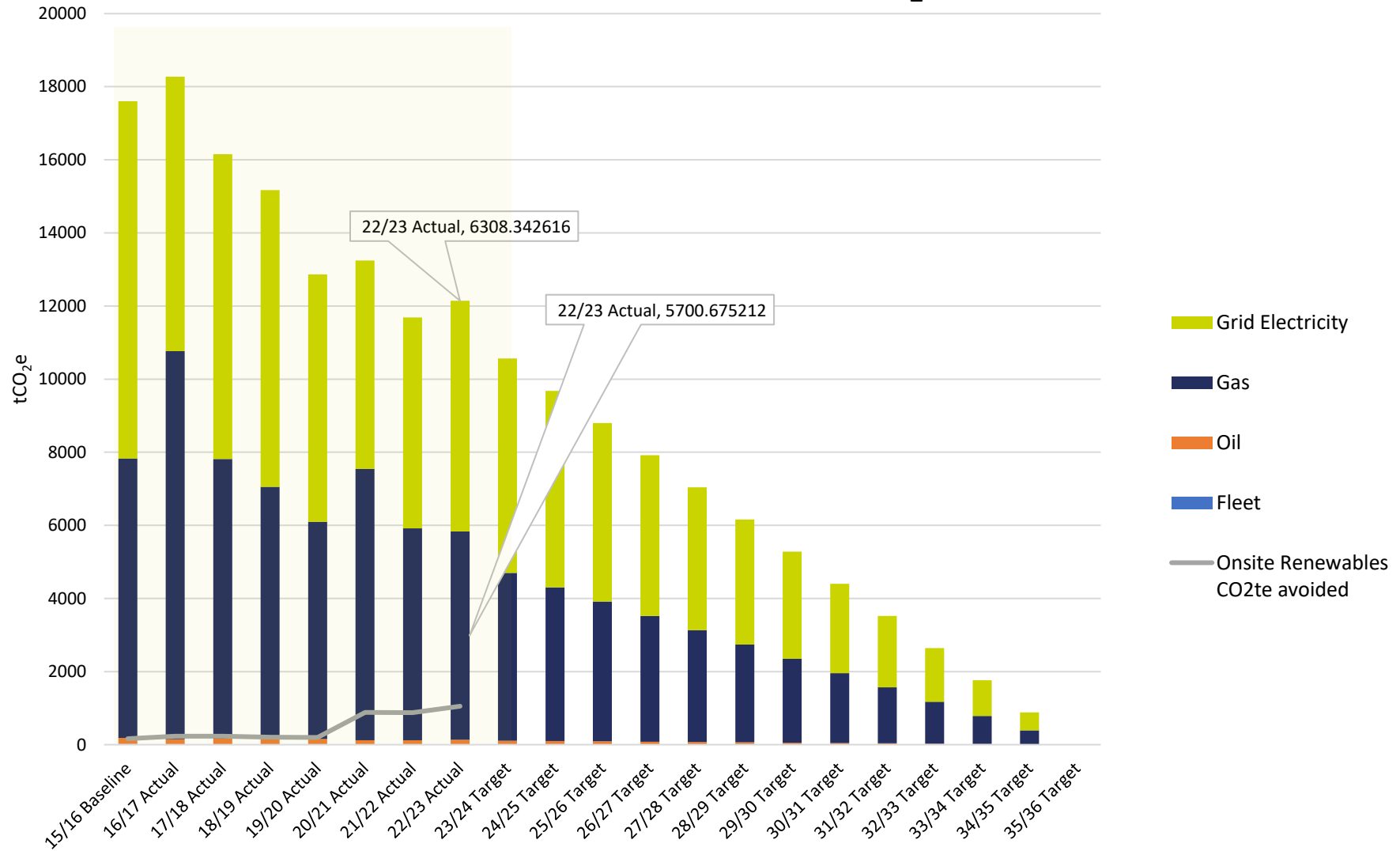### UNIVERSITY SCOPE 1 & 2 EMISSIONS 22/23 VS 21/22 (TONNES CO_2E)

457tCO_2e increase in 22/23 from 21/22.

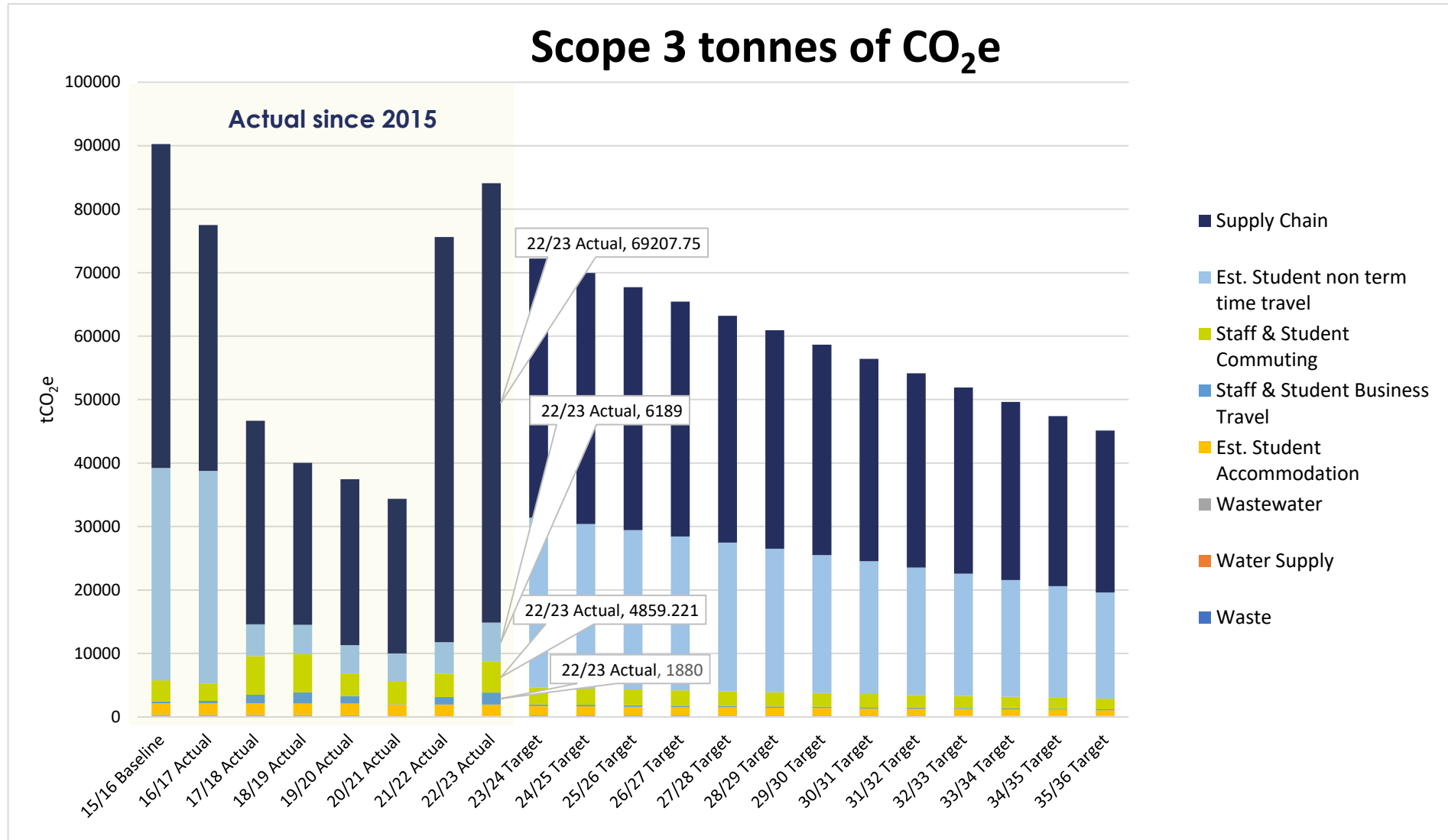**0.2% increase on Singleton from 7,851tCO_2e in 21/22 to 7,867tCO_2e in 22/23.**

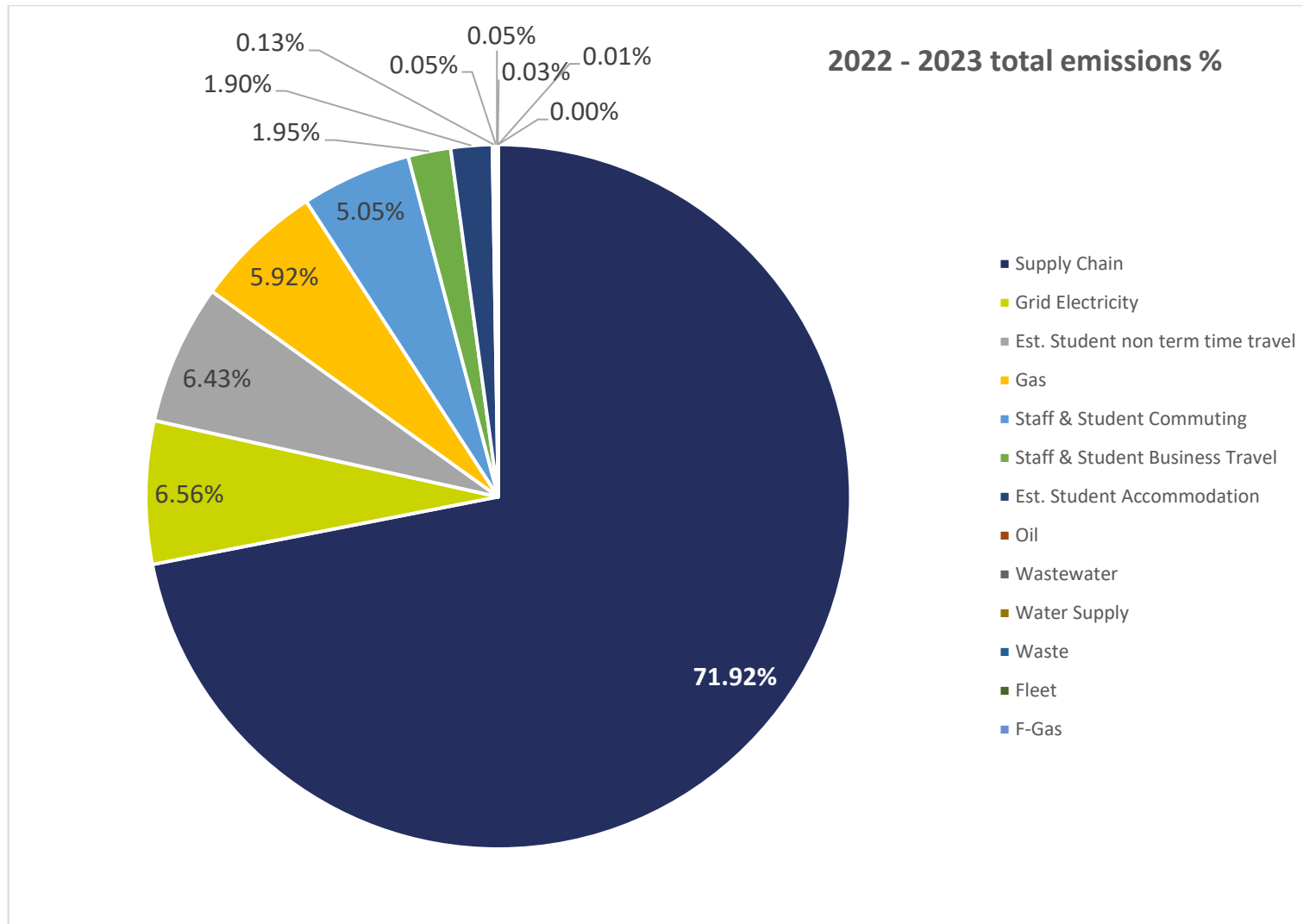**10.9% increase on Bay from 3,748tCO_2e in 21/22 to 4,160tCO_2e in 22/23.**

52.5% score for Carbon Reduction in the 23/24 People and Planet Green League table compared to 22.5% in 22/23.

Scope 1 & 2 tonnes of CO_2e

22/23 Actual, 6308.342616

22/23 Actual, 5700.675212

Legend:
- Grid Electricity
- Gas
- Oil
- Fleet
- Onsite Renewables CO2te avoided

y-axis: tCO_2e

x-axis categories: 15/16 Baseline, 16/17 Actual, 17/18 Actual, 18/19 Actual, 19/20 Actual, 20/21 Actual, 21/22 Actual, 22/23 Actual, 23/24 Target, 24/25 Target, 25/26 Target, 26/27 Target, 27/28 Target, 28/29 Target, 29/30 Target, 30/31 Target, 31/32 Target, 32/33 Target, 33/34 Target, 34/35 Target, 35/36 Target

2022 - 2023 total emissions %

0.13%
0.05%
0.05%
0.01%
1.90%
0.03%
1.95%
0.00%
5.05%
5.92%
6.43%
6.56%
71.92%

- Supply Chain
- Grid Electricity
- Est. Student non term time travel
- Gas
- Staff & Student Commuting
- Staff & Student Business Travel
- Est. Student Accommodation
- Oil
- Wastewater
- Water Supply
- Waste
- Fleet
- F-Gas

UNIVERSITY SCOPE 3 EMISSIONS (TONNES CO$_2$E)

84,083tCO$_2$e total Scope 3 emissions in 22/23
compared to 75, 595tCO$_2$e in 21/22.

13% increase in Scope 3 emissions since 2015/16 baseline increasing from 90,260tCO$_2$e.

Supply chain accounts for >70% of university emissions. As a result of improved accuracy of data and an increase in university supply chain expenditure GHGs have increased from 2021/22 to 2022/23.
Waste, water, and wastewater emissions continue to be ahead of targeted reductions.

RENEWABLE ENERGY GENERATION 22-23

1,050,646kWh generated in 22/23, compared to 876,577kWh in 21/22.

Includes onsite and offsite generation.

WATER CONSUMPTION

11.9% increase in water consumption in 22/23 from 21/22.

251,720m^3 consumed in 22/23, from 221,705m^3 in 21/22.

9.97% decrease
in water consumption since 2015/16 baseline year: 279,613m^3.

27.8% score for Water Consumption in People and Planet Green League table.

DEC SCORES

Category B (DEC) now covers the highest area of Non-residential GIA (m^2), an improvement from DEC C in 21/22.

Category C (DEC) now covers the highest area of residential GIA (m^2), the same as 21/22.
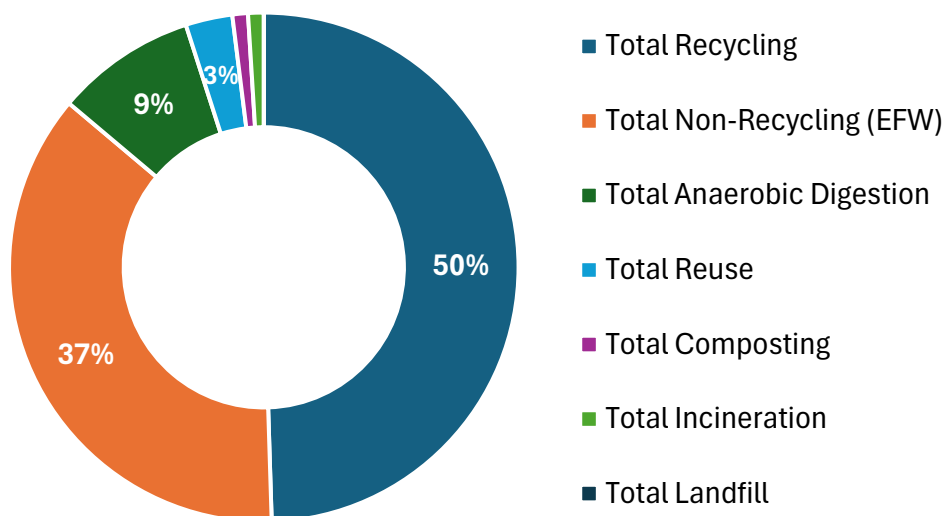
WASTE AND RECYCLING

29 Tonnes CO_2e (Scope 3) produced from waste in 22/23 compared to 17tCO_2e in 21/22.

1,570 tonnes of total waste mass produced in 22/23, compared to 950t in 21/22.

779 tonnes (49.6%) of waste recycled in 22/23, compared to 481t (50.6%) in 21/22.

£85,951 & 48,317kg CO2 saved via the WARP-IT furniture reuse platform within the University since launching.

Legend:
- Total Recycling
- Total Non-Recycling (EFW)
- Total Anaerobic Digestion
- Total Reuse
- Total Composting
- Total Incineration
- Total Landfill

50%, 37%, 9%, 3%

	Tonnes 22/23	Tonnes 21/22
Total waste mass recycled (t)	779.000	481.000
Total waste mass incineration (t)	15.000	16.000
Total waste mass composting (t)	11.000	3.000
Total waste mass anaerobic digestion (t)	141.000	76.000
Total waste mass landfill (t)	0.000	0.000
Total waste mass used to create energy (t)	581.000	330.000
Total waste mass other (t)	43.000	44.000
Total waste mass (t)	1,570.000	950.000

62.5% score for Waste and Recycling in the People and Planet Green League table.

UNIVERSITY SUSTAINABILITY RANKINGS

8th out of 151 universities

in the People and planet Green League for 2023/24. With 100% being scored for *Policy and Strategy*, *Staff & HR*, and *Environmental Auditing & Management Systems.*

Ranked 101-200

in the Times Higher Impact Rankings for 2023, with improvements seen **for SDGs: 3, 12, 16, and 17** compared to 2022. We were ranked lowest for SDGs 7, 9, and 17.

Ranked 80th out of 1397

universities assessed in the QS Sustainability rankings, rising from 321-340th in 22/23.
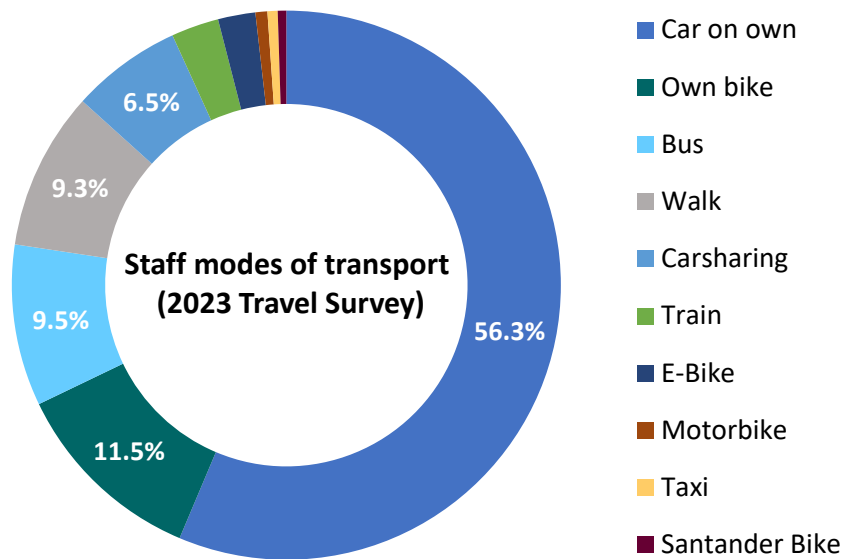
SUSTAINABLE TRAVEL

CFE Gold status maintained with the next audit due

May 2025.

1600 Staff bus pass holders (active for 2023/24).

76 Cycle to work scheme sign ups in 23/24.

4x cycle roadshows since October 2023, with

800 lights and locks given to students, and 500 bikes safety checked.

Staff modes of transport (2023 Travel Survey)

- Car on own — 56.3%
- Own bike — 11.5%
- Bus — 9.5%
- Walk — 9.3%
- Carsharing — 6.5%
- Train
- E-Bike
- Motorbike
- Taxi
- Santander Bike

8,517tCO$_2$e Total emissions from staff and student commuting in 22/23, a 4859tCO$_2$e increase from 21/22.

1,880tCO$_2$e Total emissions from staff and student business travel, a 681tCO$_2$e increase from 21/22.

SUSTAINABLE CATERING

Fairtrade University Award

achieved in 2023, highlighting work on sustainable procurement, ethical supply chains, and education for sustainable development.

Sustainable Restaurant Association

one star rating was achieved by the University catering in October 2022. This is valid until October 2024, and we are currently working to increase this to 2 stars.

90% People & Planet score

was achieved for Sustainable food criteria in 22/23. An extra 5% would be achieved by gaining 2-star Food Made Good rating, and 10% by gaining 3 stars*.

[56% score](#) for Ethical Investment and Banking in the People and Planet Green League table.

BIODIVERSITY

565,000m³ of Crymlyn Burrows SSSI in active management (this includes controlling invasives and spread of woodland and scrub and searching for invasives to actively control).

12,000m² of campuses being managed for wildflowers.

10 beach cleans on Bay Campus, and 7 beach cleans on Singleton, with litter picked up being used to create recycled plastic merchandise for Go Green Week.

Experimental verge enhancement along Abbey Road – 1/3 overseeded with wildflower seed, 1/3 planted with wildflower plug plants and 1/3 left to grow (650m²).

ENGAGEMENT, EVENTS, AND COMMUNICATIONS

Number of students and staff registered on the SWell platform at the end of 2022 vs the end of 2023:
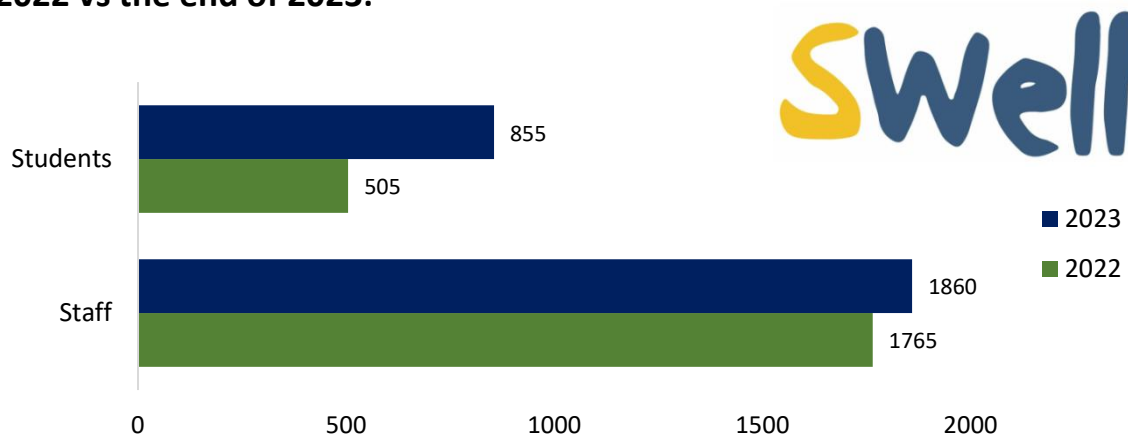
174,560 sustainable actions completed by the end of 2023, compared to 83,538 by the end of 2022.

An estimated total of 334,416kgCO² saved since November 2021 by the end of 2023.

LEARNING AND COMMUNICATION

Carbon Literacy Training attended by 124 staff and students as of March 2024.

106 students have submitted assignments

to the Global Citizen Award, with 10 students completing and gaining the Award.

3 LEAF gold awards achieved in FSE and FMHLS

and 11 other Bronze and Silver awards gained.

10 Green Impact teams signed up

made up of a total of 41 users and gaining a total of 450 points by March 2024.

Global Citizen Award
Gwobr Dinesydd Byd-Eang

effaith gwyrdd
green impact

Over 100 Sustainability events

in 2023, including our regular events: gardening sessions, beach cleans, and conservation volunteering, as well as SOS-UK student training, Food Waste Action Week, Wales Nature Week, and Tir Awel farm volunteering.

HIGHLIGHTS & INITIATIVES

Highlights	Initiatives for 24/25
8th position in the People and Planet Green League, our highest position ever. **80th Position in the global QS Sustainability ranking**.	Exploring option to use **waste heat from data centres** to heat up the Wales National Pool. E&FM Singleton campus **heat decarbonisation techno economic study** progressing.
Winner of the Navitas Impact Award for sustainability and zero carbon research, teaching and operations, and embedding the United Nations' Sustainable Development Goals in everything it does.	**Carbon Trust Report West Phase.** Building Fabric: new windows to be installed in Amy Dilwyn, Union House, Margam, Glyndwr & new entrance screen glazing in Grove, £537,000.
Go Green Week 2024 included 29 sustainable events, 35 sustainable stalls, interactive workshops for staff, students, and the local community, and engagement with over 60 school children on the UNSDGs.	**Carbon Trust Report East Phase.** BMS Improvements, including occupancy detection with setback mode, £355,000.
Highly commended entry for the 2023 Green Gown Awards with our Buzz Across the Bay project, awarding our work to create wildlife corridors to help deliver more resilient ecosystems in the face of climate change as well as creating better habitat for humans.	Continuation and growth of current programmes and initiatives such as **Carbon Literacy Training, LEAF, Green Impact, Cycle Friendly Employer Accreditation 2025, and the Global Citizens Award**.
1,050,646kWh of renewable energy generated in 22/23, compared to 876,577kWh in 21/22.	HEFCW Funded **Net Zero Vision dashboard** and nearing completion and available via PowerBi.
Two successful Repair cafes held on campus for the first time, with around 25 repairs completed from 30 attendees at each event, promoting reuse and extending life of products, reducing waste, and supporting the circular economy.	**Review and republishing of the Sustainability & Climate Emergency Strategy**, assessing our 2021-25 achievements and targets to inform the next iteration.
400 bikes marked since October 2023. **Travel engagement sessions have engaged 1000 students since January 2024,** including Halls To House Groups, Cycle User Groups, Bus User Groups, and Student Reps.	Aiming to have **100 active bikes within the new Swansea bike scheme by 26th September 2024,** aligning with Welsh gov healthy travel Wales day.
A Swansea University Student has produced a map for all bus services serving students and the wider community that is	

now being used in bus stops across Swansea.	

4B. OBJECTIVES & TARGETS FOR 24/25

Strategy Theme	Key Sustainability Indicator
Climate Emergency	Scope 1 & 2 emissions (inc. reduction from previous year).
	Scope 3 carbon emissions (pa inc. reduction from previous year).
	% energy consumption generated through renewables.
	BREEAM Refurbishment and Fit Out (RFO) standard for all infrastructure projects – No. of buildings refurbished to BREEAM/RFO.
	P&P League table carbon reduction criteria.
Natural Environment	Nature Positive Universities Programme baselining and year on year improvements.
	Welsh Government Net Zero Public Sector reporting for CO2 of land use - GIS mapping for benchmarking and improving biodiversity and climate change mitigation.
	Biodiversity duty report, required under section 6 of the Environment (Wales) Act (every 3 years).
Working Environment	Total diversion of waste from Landfill / Energy from Waste (EFW)**
	% of major contracts (>£25k) with sustainability built into selection criteria (>5%) and subsequent contract KPIs.
	Catering - Sustainable Restaurant Association (target SRA 3 star).
	P&P Ethical Investment and banking scores.
	% community benefit funds towards university sustainability strategy
	Scope 3 emissions from Procurement and Waste.
	P&P League table sustainable procurement, ethical banking and investment and waste and recycling and Water criteria.
Our Travel	Maintain CFE award (target gold).

	Annual Travel Survey results.
	Scope 3 Travel emissions.
	P&P League table carbon management and reduction criteria.
Learning, Capacity, Skills and Engagement	Staff engagement/awareness (No. of activities and volunteering opportunities) Number of discreet corporate sustainability initiates pa
	SWell sign ups & proportion rate %. Numbers of staff involved in SWell and/or other initiatives pa
	P&P League table- Sustainability staff and student engagement criteria.
	Time Higher Impact and QS ranking for sustainability.
	P&P league criteria for education for sustainable development and ethical careers and recruitment.

5.CHANGING CIRCUMSTANCES (PESTLE ANALYSIS)

Only new additions from the comprehensive 2023/24 corporate environmental PESTLE analysis are included here for information. (Political, Economic, Sociological, Technological, Legal and Environmental)

P	Risks - Changes to government policy- Changes to government guidance could have a resource implication. - League tables- Impact on student numbers and recruitment. - International political conferences- Potential increased targets/ reporting on relevant actions arising and associated impact on resources available to deliver. - Corporate commitment- Changes in staff structures due to VES and redesign process could result in loss of leadership and progress. Opportunities - League tables- Improved collaboration between internal departments and teams.

	- Corporate commitment- Visibility of the sustainability agenda increased due to Sustainable Development Committee and the requirement to commit to progress strategy commitments. - Staff engagement- Improved social media awareness campaigns raising awareness and interaction of sustainability in general as well as the work of the University.
E	Risks - Contracts- Contracts and sub-contractors not following approved University procurement policy/processes. Opportunities - EMS deployment cost- Focus on volunteer environmental co-ordinators and sustainability champions. - Significant decisions- Sustainability strategy review due to commence in 2024.
S	Risks - Staff retention/changes- Loss of key staff through redesign process can impact skill & knowledge retention. - Loss (TBC) of sustainability staff (1 x change agents, 1 x env. officer) and uncertainty of recruitment Opportunities - Increased expectations from stakeholders to demonstrate environmental responsibility- Community support and active participation and engagement on sustainability schemes/work streams e.g. Outreach (e.g. Community Fridge)
T	Risks - Funding availability for technologies- Internal budgets reduced for renewable energy technologies and projects.

	- HEFCW merging Higher & Further education funding pots resulting in less availability for higher education overall. Opportunities - Funding availability for technologies - Funding available from Welsh Government Energy Service (WGES) - Offsetting travel levy pilot commencing. - Existing infrastructure- Lab procurement working group set up. - Infrastructure committee to look at asset management
L	Risks - Cost of compliance- Increased costs associated with compliance may detract funding from other areas e.g new waste regulations. - Staff awareness & knowledge- Changes in staff structures could cause uncertainty e.g. staff responsibilities, who to notify in adverse events etc. including current redesign process. Opportunities - General Data Protection Regulation- Improved document and record keeping. - Staff awareness & knowledge- New faculty structures and committees e.g. doing committee and HSR & Sus CR committees offer opportunities for regular updates with Heads of schools and key personnel.
E	Risks - Climate Change- Removal of on-site district heating system due to costs. - Existing infrastructure- Retrofitting and refurbishment of existing buildings generate significant and hazardous waste.

	Opportunities
	- <u>Institution's impact on the environment</u>- Review of Sustainability and Climate Emergency Strategy 2021-25 due for review, opportunity to set ambitious new targets.
	- <u>Resource availability</u>- Potential for grants and financial support through green initiatives in response to climate change mitigation and adaption etc.

6. RECOMMENDATIONS FOR IMPROVEMENT

- Sustainable Restaurant Association Food Made Good score: an improvement to 2/3 stars in order to achieve 100% in the People and Planet Sustainable Food criteria.
- Ethical Investment and Banking People and Planet score requires our Ethical banking policy to screen out arms and border industry companies.
- Reductions in Water consumption (m^3) per FTE and increase in grey water use needed to increase our score for Water Reduction in People and Planet.
- Increases in the percentage of waste recycled, composted or anaerobically digested, excluding construction waste per head of FTE students and staff would increase the People and Planet score for Waste and Recycling (currently scoring 25/50% here).

Further improvement within the People & Planet Green League will require consideration of new criteria added, including the following for 24/25:

- Ethical Investment and Banking: A commitment in policy to screen out Border Industry Companies has increased in value from 10% to 15%.
- Managing Carbon: Sustainable Travel Policies must now prohibit all flights between mainland UK destinations to score the full 5%.
- Sustainable Food: New criteria introduced, awarding 10% of the Sustainable Food score if the University has a plant-based food outlet on campus. N.b. the criteria states this must be University-run, and not Students Union, so even with Root we still may not have received points here. This has taken 10% out of the Community food section where we previously scored 20/20%.
- Education for Sustainable Development: New criteria added, awarding 5% if the university have published criteria for the acceptance of research funding, donations, gifts and sponsorship via external partnerships and collaborations.