



ARTS UNIVERSITY BOURNEMOUTH

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ENVIRONMENT COMMITTEE: 13 OCTOBER 2023

Environmental Management System: annual report 2023-2024

As part of its commitment to sustainability and net zero the University has developed a Sustainability and Net Zero Programme that sets out its priorities and targets for environmental sustainability.

The Plan owned and monitored by Environment Committee, reports progress to the Vice-Chancellor's Group of the Board of Governors.

AUB has ISO14001:2015 and EcoCampus Platinum certification.

There are six immediate areas of focus.

- **Energy and Water**
- **Sustainable Resource Management**
- **Travel**
- **Sustainable Campus**
- **Biodiversity**
- **Social Justice**

Progress Report 2022-2023

Introduction

Arts University Bournemouth achieved ISO14001:2015 and EcoCampus Platinum certification in January 2020.

This is the annual progress report discussed at Environment Committee meeting October 13, 2024, and recorded within this document.

The report will cover the following agenda:

1. Actions from previous management reviews
2. Progress towards Environmental Objectives
3. Environmental performance
 - a. Findings from internal audits
 - b. Findings from evaluation of compliance including compliance status
 - c. Findings from external audits
 - d. Status of corrective actions
4. Changes in external and internal issues relevant to the EMS, the needs, and expectations of interested parties, compliance obligations, significant environmental aspects and risks and opportunities.
5. Communications including complaints
6. Resources for the EMS

1. Actions from previous management reviews

The 2023/24 EMS review raised no actions.

Progress towards environmental objectives

Sustainability and Net Zero programme covers the objectives. Below is more specific update on associated projects.

Project Colour	Description
Red	Project not started
Amber	Project to be started within next 12 months
Green	Project underway

5.1 Net Zero Targets and Projects

Emission Source	Target	Project	Date	Baseline tCO ₂ e	Approx. tCO ₂ e Saving
Gas	0% emissions	Install Heat pumps	2030	502.488	502.488
ASHP project for North Building, Library, and 'Northlights' is underway.					
Electric	0% emissions	Maintain renewable energy through REGO or PPA	2030	641.601	(*) 641.601
Maintained REGO electric energy have temporarily postponed PPA application					
Vehicle fleet	0% (onboard) emissions	Electric vehicles	2030	12.923	12.923
AUB vans are still fossil fuel driven, we have one hybrid for long distance travel and the rest of the fleet is now electric.					
Operational waste	25% decrease (tonnes weight)	Investigate waste streams and reduction opportunities through behaviour change and procurement	2030	5.597	1.079
Looking to set up a sustainable procurement group. Have had initial discussions with MP and OU.					
Water	18% reduction (m3)	Behaviour change, waterless toilets	2030	5.925	1.066
No water projects have been started yet.					
Wastewater	18% reduction in water (m3)	Behaviour change, waterless toilets	2030	12.193	2.195
Reliant on water projects starting.					

Commuting	Reduce 48%	Behaviour changes and travel incentives	2025	1,045.690	461.040
Travel to AUB has reduced emissions with improved data and (hopefully) behaviour change.					
T&D	Electricity projects	Electricity projects	2030	55.809	11.195
Requires electricity usage to decrease – see sustainability section energy and water					
Baseline Total tCO₂e					2,282.226
Savings tCO₂e					1,633.587
2030 Total tCO₂e					648.639

Table 1. Net zero inventory – market-based reported. (*) heat pumps will increase electric use but calculated as minus from gas use due to REGO – emission saving is market-based net zero inventory exclusively and zeroed for location-based Sustainability pathway below.

5.2 Sustainability - Energy and Water

Focus Area	Target	Project	Date	Baseline tCO ₂ e (unless stated otherwise)	Approx. tCO ₂ e Saving
Gas	0% emissions	Install heat pumps to replace gas boilers	2030	502.488	502.488
ASHP project for North Building, Library, and 'Northlights' is underway.					
Gas	0% emissions	Change cooking heat from gas to electric	2025	Not known	Saving already counted (SAC)
Transition when West Building is converted from gas to alternative.					
Electric	0% emissions	Maintain renewable energy through REGO or PPA	2030	641.601	(*) 0
Maintained REGO electric energy have temporarily postponed PPA application.					
Electric	8% reduction (kWh)	Investigate, encourage, and promote behaviour changes	2030	(641.601) 2,510,176.056 (kWh)	51.328 200,814.084 (kWh)
Energy committee established to promote behaviour change.					
Electric	Increase PV power input by 50% by 2025 and across all available roof space by 2030	Extend PV provision throughout campus	2025 and 2030	(641.601)	3.085 (2025)
PV Feasibility study concluded with payback within 7 to 9 years.					

Electric	Investigate benefits.	Introduce battery technology for electric storage in buildings	Investigate benefits by 2025	N/A	N/A
Battery storage only beneficial to the Library building on campus.					
Electric	10% reduction (kWh)	Investigate ISO5001 implementation	2025 to complete (begin 2023)	(641.601) 2,5101,176.056 (kWh)	64.160 251,017.605 (kWh)
Would require energy management software to granulise energy data for this to be effective – energy management software project on hold.					
Electric	Reduce printers throughout campus 40%	Decreasing the number of printers to lower energy and paper use	Aiming for 40% reduction in printers by September 2023	(641.601)	TBC
AE update					
Electric	Migrate 15% of AUB systems (virtual & physical)	Moving to cloud storage will lower energy use from system use and cooling requirements	2025	(641.601)	TBC
AE update					
Electric	AUB computer base to at least 60% laptops	Reduce desktop computers (personal and suites) and replace with laptops	2023	(641.601)	TBC
AE update					
Monitoring	Purchase SMART monitoring technology	Purchase or acquire use of energy and water monitoring software	September 2023	648.957 (electric and water only)	64.896 (based on 10% saving)
Project not going ahead for the foreseeable future.					
Water	8% reduction (m3)	Reduce water use through behaviour change	2030	5.925 and 17,222m ³	0.474 and 1,377.76m ³
Require consistent water data first from new buildings and new supplier.					
Water	10% reduction (m3)	Install non-water urinals and toilets (investigate chemical use)	2024	5.925 and 17,222m ³	0.592 and 1722.2m ³

This target has not been started. Investigation needed to clarify effectiveness and appropriateness.					
Wastewater	18% reduction in water (m3)	Behaviour change, waterless toilets	2030	12.193 17,222 m3	2.195 tCO ₂ e 3,099.960m3
Dependent on water usage projects for reductions.					
Water	Investigate potential to use grey water for toilet flushing or other potential water flushing requirements	Harvest rainwater	2023 target to have investigated possibility of water harvesting	TBC	TBC
Have not started this project yet.					
Baseline Total tCO₂e					1162.207
Savings tCO₂e					689.218
2030 Total tCO₂e					472.989

Table 2. * Saving is net-zero only, and not deducted from Sustainability total. Totals in blue are repeat baseline data and not included in total. An increase in emissions from electricity associated with transition to heat pumps will subsequently change the total.

5.3 Sustainable Resource Management

Focus Area	Target	Project	Date	Baseline tCO ₂ e (unless stated otherwise)	Approx. tCO ₂ e Saving
Waste	25% reduction (t weight)	Investigate waste streams and associated reduction opportunities through behaviour change and procurement activity	2030 overall reduction 12% by 2025	5.597 tCO ₂ e 202.17t (weight)	1.079 tCO ₂ e 50.55t (weight)
Initial discussions have been held regarding forming a sustainable procurement group					
Waste	20% food waste reduction	Investigate food procurement, portion size, increase food waste capture, increase food	2026	6.464t (weight)	SAC (0.028 tCO ₂ e and 1.294t (weight))

		giveaway schemes			
'Too-good-to-go' scheme run to limit food waste. Further improvements needed.					
Waste	Recycling rate 65% (adjust for accommodation waste)	Waste audit, procurement opportunities, education	2030	59%	SAC 11t (weight) of waste going to energy from waste
Recycle rate back at 56% (non-accommodation) for 2023/24 – do not wish for it to drop further – need a 'push' again in 2024/25.					
Waste	zero one-use coffee cups on campus	Restrict one-use coffee cup use to visitors, Open Day, or other-special events and only served from one eatery	Advertise/communicate from September 2023 no longer using one-use coffee cups. Sell AUB reusables in all AUB coffee outlets	TBC	TBC
New scheme starts in September 2024.					
Baseline Total tCO₂e					5.597
Savings tCO₂e					1.079
2030 Total tCO₂e					4.518

Table 3. Sustainable Waste Management. Blue data is repeated baseline data and not included in total.

5.4 Travel

Focus Area	Target	Project	Date	Baseline tCO ₂ e (unless stated otherwise)	Approx. tCO ₂ e Saving
Travel	Zero staff car commuting emissions	Car permits to include off-set	September 2023	461.040	461.040
Complete.					
Travel	Reduce staff car use by 8%	Other travel incentives	2025	461.040	SAC 6.521 tCO ₂ e
Cyclescheme, subsidized bus permits, Beryl Bike minute giveaways.					
Travel	Zero emissions for AUB fleet vehicle	Replace Fiat 500 with EV (or hydrogen) vehicle	2022	2.644	2.644
Replaced with electric vehicle					
Travel	Zero emissions	Replace Ford Crew	2029	1.459	1.459

	for AUB fleet vehicle	with EV (or hydrogen) vehicle			
No electric replacement yet due to use and range of vehicle required					
Travel	Zero emissions for AUB fleet vehicle	Replace Renault Van with EV (or hydrogen) vehicle	2029	1.311	1.311
No electric replacement yet due to use and range of vehicle required					
Travel	Zero emissions for AUB fleet vehicle	Replace Smart Car with EV (or hydrogen) vehicle	2023	1.444	1.444
Replaced with electric vehicle					
Travel	Zero emissions for AUB fleet vehicle	Replace i30 with EV (or hydrogen) vehicle	Replace with electric vehicle if technology supports long distance travel by road	2.028	2.028
Replaced with electric vehicle					
Travel	Zero emissions for AUB fleet vehicle	Replace i800 with EV (or hydrogen) vehicle	2029	1.213	1.213
Replaced with a hybrid vehicle for longer distances by car					
Travel	Zero emissions for AUB fleet vehicle	Replace Luton Van with EV (or hydrogen) vehicle	2029	1.163	1.163
No electric replacement yet due to use and range of vehicle required					
Travel	Zero emissions for AUB fleet vehicle	Replace Relay with EV (or hydrogen) vehicle	2029	1.661	1.661
No electric replacement yet due to use and range of vehicle required					
Travel	Zero emissions of AUB bus fleet	Electrification of the bus fleet (by contract negotiation)	2035	TBC (Sept 2022)	TBC (Sept 2022)
It is on the agenda for all bus contract meetings and Southwest Travel keen to adopt when viable.					
Travel	Data capture	Obtain flight data through automated procedure	September 2023	N/A	N/A

Flight data obtained from Finance.					
Travel	Data capture	Obtain rail data through automated procedure	September 2023	1.78	N/A
Rail data obtained from Finance.					
Travel	Data capture	Obtain hire vehicle data through automated procedure	September 2023	N/A	N/A
Informed that vehicle hire companies do not keep good records. Calculated now using supply chain calculations					
Travel	Delivery emissions	Keep using current calculation until further clarity on procurement	On-going	41.290	TBC
Either calculated via post room data or supply chain calculations					
Travel	Data capture	Obtain overnight stay data for emission calculation	September 2023	N/A	N/A
Calculated under 'business travel'					
Baseline Total tCO₂e					517.033
Savings tCO₂e					473.963
2030 Total tCO₂e					43.070

Table 4. Travel. Blue data is repeated baseline data and not included in total.

5.5 Sustainable Campus

Focus Area	Target	Project	Date	Baseline tCO ₂ e (unless stated otherwise)	Approx. tCO ₂ e Saving
Food	Improve healthy options and lower associated emissions year on year	Improve sustainable, ethical, and healthy eating options in eateries	On-going	N/A	Student survey and food audit/assessment
Many improvements to healthy food options have been made and ethically sourced products – new survey required					
Buildings	Refurbishments to existing buildings to raise energy, heat, and water efficiency	Existing buildings will need refurbishment to lower energy, heat and water	Refurb report 2025/26	648.957 (electric and water only)	TBC

		costs and improve efficiency and net zero			
Northlight Studios has improved insulation and heating.					
Buildings	All new builds to be at least one of net-zero, BREEAM, or WELL standard	Eliminates potential net-increase from campus expansion	2022	648.957 (electric and water only)	No increase from campus expansion or refurbishment
All new buildings (or planned for buildings) have net zero and / or BREEAM very good engineered in at the design stage					

Table 5. Sustainable Campus. Blue data is repeated baseline data and not included in total.

5.6 Biodiversity

Focus Area	Target	Project	Date	Baseline tCO ₂ e (unless stated otherwise)	Approx. tCO ₂ e Saving
Biodiversity	Demonstrate year on year net-biodiversity gain	Increase biodiversity net-gain through various projects	On-going	Set a baseline	Use a net-biodiversity gain matrix for 2024 onwards
Biodiversity increasing on the campus – need to use a matrix to improve measurement.					
Pollinators	Set a percentage target to increase pollinator friendly ecology and habitats to mitigate against the ecological crisis	Introduce, improve pollinator friendly ecology	On-going	Set a baseline	Use a net-biodiversity gain matrix for 2024 onwards
Biodiversity increasing on the campus – need to use a matrix to improve measurement.					
Hedgehogs	Obtain hedgehog friendly campus status	Work towards gold certification over the next three years	December 2024 gold certification	No certification	Gold certification
Hedgehog Friendly Campus timetable has altered so completion may be delayed by a year. We are no longer part of the certification scheme but can use the portal and undertake the clauses all the same.					

Table 6. Biodiversity

5.7 Social Justice

Focus Area	Target	Project	Date	Baseline tCO ₂ e (unless stated otherwise)	Approx. tCO ₂ e Saving
Governance	Ensure all AUB policies reflect net zero commitments	Assess all policies to ensure		No policies checked	All policies assessed
JR is assessing and it is an ongoing process.					
Palm Oil	Reduce / eliminate uncertified palm oil use	AUB signed up (11/21) so an initial analysis will set a baseline and then target improvements	Catering – September 2022 and then new target for other contracts	Non-signatory	Signatory
AUB is a fully signed up champion of this scheme.					
Fairtrade	Maintain Fairtrade certification	Re-certify every two years	2022, 2024, 2026, 2028 and 2030	Uncertified	Certified
Fairtrade certified.					
Procurement	Contract tender procedures consolidated. Data capture started for 'other' procurement	Investigate emissions and social justice issue's upstream in the supply chain	2022 and ongoing to 2030	N/A	Data capture and calculations will move aspects into other categories and net zero inventory
Initial discussions have been held regarding forming a sustainable procurement group.					

Table 7. Social Justice

Student and Staff Engagement – 2024/25

Annual Planner Engagement 2022/23
Beryl Bike – free minute giveaways
Fairtrade Information Flood
Beach Cleans
Accommodation
Student Sustainability Awards
Sustainability Procurement Group
AUB Human

Table 8. Annual planner for student and staff engagement. These projects are predetermined as taking place in 2024/25 but does not include engagement events that will be planned and held during this timeframe. Progress is reported in the 2024/25 annual Sustainable and Net Zero report.

5.8 Emission Inventory – Net Zero

Emission Source	Baseline	Projects Saving	2030
Gas	502.488	502.488	0

Electric	641.601	641.601	0
Vehicle Fleet	12.923	12.923	0
Operational Waste	5.597	1.079	4.518
Water	5.925	1.066	4.859
Wastewater	12.193	2.195	9.998
Commuting	1,045.690	461.040	584.650
Transmission and Distribution	55.809	11.195	44.614
Total	2,282.226	1,633.587	666.12

Table 9. Net Zero, Market-Based reported, inventory

5.9 Emission Inventory - Sustainability

Emission Source	Baseline	Projects Saving	2030
Gas	502.488	502.488	0
Electric	641.601	118.573	523.028
Vehicle Fleet	12.923	12.923	0
Operational Waste	5.597	1.079	4.518
Water	5.925	1.066	4.859
Wastewater	12.193	2.195	9.998
Commuting	1,045.690	461.040	584.650
Transmission and Distribution	55.809	11.195	44.614
Total	2,282.226	1,110.559	1,171.919

Table 10. Sustainability, Location-Based reported, inventory

2. Environmental performance

3.

a) Findings from internal audits

Alex Hobbins (EcoCampus) conducted the internal audit on 13/08/24. It summarized:

An internal audit of the Arts University Bournemouth's (AUB) environmental management system (EMS) was conducted to determine the extent to which it conforms with the requirements of ISO14001:2015. The system continues to provide an effective level of control of environmental risk and meets the clause requirements.

The audit raised two *Opportunities for Improvement* that have now been actioned/corrected.

Below are the findings from the internal audit:

Date	Assessor	Recommendation	Action	Date
08/24	Alex Hobbins	The Compliance Obligations Register should be updated to include key legal requirements relating to persistent organic pollutants,	Updated	08/24

		biodiversity net gain and upcoming changes to waste and food waste segregation.		
08/23	Alex Hobbins	It was noted that the target set within the draft Sustainability and Net Zero Programme are slightly different to those listed within the Environmental Objectives, KPI's and action planner. The planner should be updated to align with the new SNZ programme.	Updated in accordance with SNZ 2024 v2.	08/24

b) Findings from evaluation of compliance including compliance status.

The Environment and Sustainability Manager evaluated the EMS system 08/24 for compliance with version control update. The compliance obligations register updated monthly with any new legislation monitored.

Risks and opportunities, Aspects and Impacts, and PESTLE reviewed as part of the document review process by two members of Campus Services.

c) Findings from external audits

Date	Assessor	Recommendation	Action	Date
09/23	Khaled Belgasmi	The responsibility for arranging waste collections and day to day waste management has now been transferred to the Campus Services Operations team. James previously had this responsibility. The roles & responsibilities register did not make this explicit.	Updated the register.	09/23
09/23	Khaled Belgasmi	AUB may benefit from incorporating a completed objectives tab that would serve as a store of historical objectives and previous successes e.g., the carbon neutral status for staff commuting achieved in December 2022.	Objectives planner updated.	09/23

2024/25

Keep Satisfied	
Mazaars	Auditors
Architects	Architects
Ofs	Ofs
Central Government	Central Government
Energy utility companies	Energy utility companies
Manage Closely	
Students	Students
Staff	Staff
Board of Governors	Board of Governors
Chartwells	Catering
Prospective students	Prospective students
AUBSU	AUBSU
People & Planet	People & Planet
Environment Agency	Environment Agency
DEFRA	DEFRA
Derwent FM	FM contractor
Fairtrade	Ethical framework
Monitor	
BCP	Local Authority
Local businesses & residents	Local businesses & residents
Contractors	Builders
Contractors	Maintenance
Morebus	Bus transport
Suppliers	Suppliers
Visitors	Visitors
Medical/volunteer	Student Services
Accommodation owners	Accommodation owners
Police	Police
Institution societies	Societies
HESA	HESA
UK Research Councils	UK Research Councils
Higher education associations	Higher education associations
Water utility companies	Water utility companies
Talbot Village Trust	Landlord (section of AUB estate)
Keep Informed	
Suez	Waste
Bournemouth University	Neighbour

Compliance Obligations – Environment and Sustainability Manger reviewed with two members of Campus Services.

Interested Parties - Environment and Sustainability Manger reviewed with three members of Campus Services.

Environmental Aspects - Environment and Sustainability Manger reviewed with two members of Campus Services.

Risks and Opportunities – Environment and Sustainability Manger reviewed with two members of Campus Services.

All relevant documents to be provided to committee and any points raised stated here:

5. Communications including complaints
 - a) Communication channels include stories on the AUB website, Campus Services Instagram page and AUB Environment page.
 - b) TV screen showing environmental information available at the Arts Bar.

6. Resources for the EMS

AUB has allotted funds towards an internal and external audit for 2024/25.

7. Opportunities for improvement

- Update to AUB Sustainability and Net Zero Programme
- Adaptation Plan
- New builds or refurbishments net zero
- Offset through EAUC.
- Creative environment – Fairtrade project and AUB Human etc.
- Biodiversity net-gain
- Hedgehog Friendly Campus
- Sustainable Palm Oil Champion
- People and Planet steering group
- Fairtrade recertification
- Salix funding application
- Heat Decarbonisation Plan

8. AOB