

# UNIVERSITY OF HUDDERSFIELD ENVIRONMENTAL SUSTAINABILITY REPORT: 2024-2025

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#### Introduction

University of Huddersfield is committed towards achieving sector-leading sustainability performance. The university has several targets and plans regarding minimising its impact on the environment and society while also maintaining financial viability. From reducing its direct and indirect emissions, to lowering waste generation, to preserving biodiversity, the university is focused on every relevant issue.

The university has an ambitious target of achieving net-zero Scope 1 (direct) and Scope 2 (grid-electricity-related) carbon emissions by 2030. Net-zero Scope 3 (indirect value chain) emissions are planned for 2045, while an upper quartile position in People and Planet and other national and global sustainability rankings is another goal. In addition, the university has adopted key sustainability-related building and operational standards such as the WELL Building Standard, Building Research Establishment Environmental Assessment Methodology (BREEAM), and Laboratory Efficiency Assessment Framework (LEAF).

This report is intended to provide information on outcomes in 2024/25 regarding the university's efforts to be environmentally sustainable.

## 1 Transport

#### 1.1 Revision of the university's Travel Plan

A new version of the university's Travel Plan has been approved by the University Council for the 2024-2030 academic years. It is the third version of the Plan, with previous versions prepared in 2009 and then in 2018. It is intended to cover all aspects of university-related transportation, including staff and student commuting, vehicle parking, business travel, university fleet, external partnerships, and green transport awareness. The Plan is available on the university's website at <a href="https://www.hud.ac.uk/media/assets/document/estates/policies/TravelPlan.pdf">https://www.hud.ac.uk/media/assets/document/estates/policies/TravelPlan.pdf</a>.

#### 1.2 Cycling sessions

The Sustainability Team partnered with an organisation, Colne Valley Cycle Therapy, to provide free 'Learn to Ride'Return to Ride' cycle training sessions on campus. These were practical sessions for complete beginners or those wishing to improve/relearn skills such as braking, turning corners, safe stopping, and gear selection.

#### 1.3 Travel survey

A travel survey was conducted at University of Huddersfield in 2025 to collect data on staff commuting patterns. 210 staff (over 11% of the staff population) took part in the survey. Survey questions are provided as an appendix.

Student travel data was collected earlier in 2023. Going forward, a combined staff and student travel survey will be conducted.



- 1.3.1 Staff modes of transport: Based on the responses of staff to the statement, 'Please select your main mode of travel to/from campus each day of the week':
  - More than half of staff do not travel alone by car.
  - Almost a quarter of staff participate in active travel (walking or cycling)
  - Nearly 20% commute by public transport.

The table below provides a breakdown of this data.

Transport	Main means of transport	Average weekly	Proportion of total		
category		number of users	respondents (%)		
Active travel	Bike/electric bike (e-bike)	7	3.33		
	Walking/running	43	20.48		
Public transport	Bus	20	9.52		
	Train	21	10		
Private vehicle	Single occupancy vehicle	92	43.81		
	Taxi/lift	2	0.95		
	Car share	22	10.48		
	Other private transport	2	0.95		
<u>Other</u>	Homeworking	1	0.48		
	Total	210	100		

The proportion of single-occupancy car users (43.81%) has dropped since 2021, when it was 50.24%. On a similarly positive note, 23.81% of staff reported being pedestrians or cyclists, which is a very significant improvement on the 2021 figure (13.3%). Conversely, there is a drop in the use of public transport from 23.9% in 2021 to 19.52% in 2025.

1.3.2 Perceptions of cycling: The survey also provided some insight into the reasoning behind staff travel choices. The table below outlines staff responses regarding why they do not cycle to and from work.

Reason for not cycling	Number o	f Proportion of
	respondents	respondents (%)
Traffic/safety	123	55
Weather	86	38
Lack of changing/drying facilities	23	10
Distance/time	106	47
Lack of secure cycle parking	15	7
Cost	24	11
Mobility or fitness issue	22	10
Inability to ride and/or maintain a bike	19	8



Carrying heavy baggage/items	57	25
I don't want to say	2	1
Other	34	15

Some of the reasons given under 'Other' include: 'I don't like cycling', 'Dropping kids off/picking up from school', 'Needing to get home to children in an emergency', 'Massive hills', 'My bike is elsewhere', 'Don't have room to store a bike at my address', 'Do not need a bike', and 'Scared'.

1.3.3 Suitability of public transport: When asked if the public transport options available within the region are adequate, the responses were split equally, with about 44% of respondents replying 'Yes', 44% replying 'No', and the remaining 12% replying 'Undecided'. The table below outlines staff responses regarding the main reason why available public transport options are inadequate.

What is the main reason for public	Number of	Proportion of
transportation being inadequate?	respondents	respondents (%)
Bus stop or train station is too far from	9	9.78
home/campus		
Infrequent or inconsistent transport times	30	32.61
High cost of tickets	19	20.65
Bus/train departure times do not align with	8	8.7
work hours		
Unsuitable for caring responsibilities (e.g.,	6	6.52
school runs)		
I need to carry too many things to/from	3	3.26
campus		
Other	17	18.48
Total	92	100

Some of the reasons given under 'Other' include: 'TransPennine route upgrade is making train travel from Leeds nearly impossible', 'I don't enjoy them', 'No direct service, so have (sic) to take 2 trains and last-minute cancellations/delays can significantly impact on journey time', and 'Public transport is cramped, noisy, uncomfortable'.

1.3.4 Other results: When asked if they would like a university car share scheme, the majority of respondents (68%) replied 'No', with only 14% saying 'Yes' and 17% undecided. Also, only 29% of respondents said they would be interested in using electric vehicle charging points on campus, with 45% replying 'No' and 26% undecided. These responses suggest a limited level of willingness to trust and/or participate in the university's green transport schemes.

## 1.4 2025/26 targets and/or actions

The university has set sustainable-travel-related targets and actions for the period 2024-2030. These can be viewed in the university's <u>Travel Plan</u>. They have been used to set goals for 2025/2026 which are highlighted in the table below.



Category	Objective(s)	Target(s)	Current status	2025/26 action(s)
Active travel and public transport	Keep the university campuses pedestrian friendly.  Maintain and further develop cycle infrastructure on campus.	At least 50% of staff commuting is via public transport and active travel.  At least 75% of student commuting is via public transport and active travel.	43% 68%	Continue the salary sacrifice cycle purchase scheme for staff.  Work with local partners to provide cycling support to staff and students in the form of cycle training and bike maintenance sessions.  Continued provision of discounted public transport tickets to staff.
Car sharing	Encourage car sharing for both commuting and business travel.	At least 15% of staff car share journeys to and from the university.	11%	Explore the reintroduction of Liftshare or other relevant schemes for staff, and review options for a similar scheme for students.
Vehicle parking	Encourage the use of greener vehicles.	Introduce public electric vehicle (EV) charging facilities on campus.	None	Explore funding and partnership opportunities for the provision of public EV charging.
Business travel	Apply a centralised system of collecting business travel data.	Complete a business travel data collection exercise.	N/A	Engage with School and Service teams to prepare a business travel monitoring and evaluation framework.

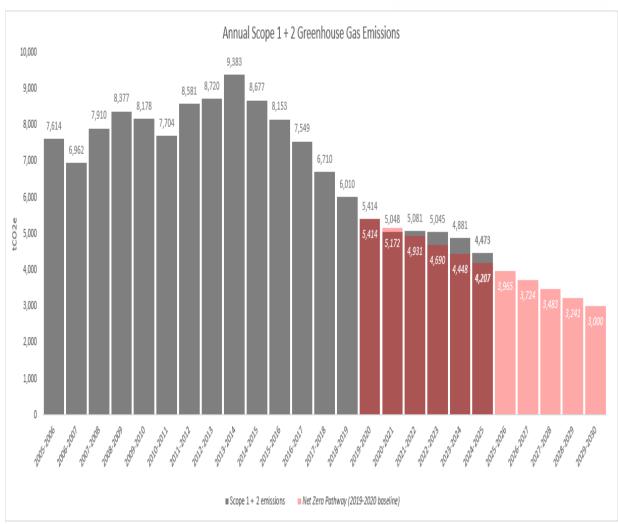
## 2 Emissions

#### 2.1 Performance

The university's total Scope 1 (direct) and Scope 2 (grid-electricity-related) emissions in 2024/25 is  $4473 \, tCO_2e$ . The vast proportion of this is due to the university's energy consumption, while 329 tonnes (about 7%) can be attributed to the release of fluorinated gases (e.g., refrigerant gases).

The 2024/25 figure represents a third consecutive annual drop in Scopes 1 and 2 emissions. Despite this positive, the university's emissions are slightly higher than where they need to be based on the Science Based Targets initiative's (SBTi's) net-zero carbon pathway. Further investment in the decarbonisation plan is required if the university is to meet its ambitious target of net-zero Scopes 1 and 2 emissions by 2030.





Regarding Scope 3 (indirect value chain) emissions, a more robust monitoring and evaluation framework is required in order to capture impacts across the entire value chain. The university currently does not capture all Scope 3 emissions across its value chain activities, but it has a target of achieving net-zero Scope 3 emissions by 2045.

#### 2.2 2025/26 targets and/or actions

The university has set Scopes 1 and 2 emissions reduction targets to be met by 2030, and Scope 3 targets to be met by 2045. These can be viewed in the university's <u>Net-Zero Carbon Emissions</u> <u>Plan</u>. They have been used to set goals for 2025/2026 which are highlighted in the table below.

Category	Objective(s)	Target(s)	Current	2025/26 action(s)
			status	



			I		
	1	Keep in line with	Reduce Scopes 1	4473	New solar photovoltaic
and 2		the Science Based	and 2 emissions to	tCO <sub>2</sub> e	(PV) installations on
		Target Initiative	3965 tCO₂e.		Queensgate Campus.
		(SBTi) net-zero			Continuation of the Light
		pathway.			Continuation of the Light-
					emitting Diode (LED)
					installation project across
					Queensgate Campus.
					Continuation of the eco-
					refurbishment of the
					Ramsden building.
					Use of the Energy
					Management Plan to
					conduct building audits
					and building user
					engagement, in order to
					identify new green
					, ,
					opportunities.
Scope 3		Implement a fully	Design and/or	N/A	Work with the Catering
		comprehensive	procure a robust		Team regarding the
		carbon accounting	Scope 3 carbon		adoption and testing of the
		framework	accounting tool		My Emissions carbon
			(or set of tools)		calculator (or a similar
			,		software) for catering
					operations.

# 3 Utilities

# 3.1 Energy

The university's electricity and gas consumption figures are provided below.

Year	Electricity	Gas
	k\	Wh
2019-20	12,487,241	12,788,083
2020-21	11,328,078	13,831,492
2021-22	12,852,765	13,597,652
2022-23	12,582,803	13,326,151
2023-24	12,313,830	11,638,411
2024-25	12,106,240	10,033,863



The university reduced its gas consumption for the 4<sup>th</sup> consecutive year, and its electricity consumption for the 3<sup>rd</sup> consecutive year, which is a positive development. In addition, the university gained around £355,000 of savings in energy costs due to various measures including:

- An energy audit programme at the Laura Annie Wilson building that achieved engagement with building users, reduction in compressed air usage, lighting control changes, and optimisation of the pantograph pump
- The Big Christmas Switch-off
- Shortening of building opening times
- Insulation jackets at Laura Annie Wilson
- Reduction of activity in the Ramsden building due to its refurbishment
- Review of heating time schedules to reduce overnight heating
- Display lighting switch-off at the Daphne Steele, Barbara Hepworth and Laura Annie
   Wilson buildings
- Control upgrades and improvements across the Building Management System.

#### 3.2 Water

The total billed water consumption for 2024-2025 is 53,454 m³. This included some 'catch-up' billing to account for underbilling in previous years. There have been historic issues with some water meters being inaccessible for reading, and with meters generally not being read often. Water consumption figures are expected to drop next year now that most of the billing issues have been resolved.

#### 3.3 2025/26 targets and/or actions

The Energy Manager makes the following recommendations:

- Work with the water utility supplier to increase the frequency of meter readings
- Consider installing Automated Meter Reading (AMR) meter data loggers to increase the frequency of data generation, identify any leaks, and identify new energy and water saving opportunities
- Work and engage with colleagues in services and schools to identify causes of significant energy and water consumption on campus.

## 4 Waste management

#### 4.1 Waste recycling and reuse

The university generated 298.26 tonnes of waste in 2024/25, of which 135.15 tonnes (45.3%) was recyclable waste. The figure below provides an overview of waste generation during the year.

Category	Quantity (tonnes)
Total tonnage collected	298.263
Non-recyclable tonnage	163.455
Recyclable tonnage	135.151
General waste, wet – with organics	105.841



General non-hazardous waste	57.614
Dry mixed recycling	17.180
Cardboard/paper	24.423
Mixed packing glass	3.640
Scrap metal	28.480
Tin cans/aluminium	2.357
WEEE waste (scrap)	0.343
Fridges	30.000
Food waste	20.300
Coffee	9.600
Confidential waste	22.270
Feminine hygiene	6.558
Skip/bulk waste	65.24

The volumes of recyclable waste generated in each month, and its proportion of the total monthly waste generated, are provided below.

	August	September	October	November	December	January	February	March	April	May	June	July
Recyclable Tonnage	9.735	11.578	13.686	15.201	10.373	10.484	9.793	12.102	11.292	12.120	9.355	9.432
% Recycable	52.5%	41.3%	46.2%	50.4%	45.8%	42.4%	35.1%	32.9%	56.5%	51.5%	51.3%	51.9%

In addition, 9.6 tonnes (3.2%) of waste was composted and a further 17.44 tonnes (5.9%) was useable for anaerobic digestion.

## 4.2 Item collection banks on campus

In April 2025, the university started a partnership with Revive, a reuse shop in Huddersfield, to set up two collection banks on campus where unwanted but still useable clothing and other items can be put in for circulation back into the local community for purchase at very low prices.





#### 4.3 2025/26 targets and/or actions

The university has set waste objectives and targets in its current <u>Waste Management Plan</u>. As part of this, in 2025/26 there will be a focus on introducing a specific Furniture Policy to address the reuse and refurbishment of furniture and related items in a more structured manner and further reduce their disposal as waste.

#### 5 Buildings

#### 5.1 Ramsden eco-refurbishment

As part of the wider refurbishment of the Ramsden building, a number of decarbonisation measures are being introduced in the building. Air source heat pumps will become the primary heat source for space heating, replacing a gas-powered Low Pressure Hot Water system. Additionally, the roof and external wall insulation at Ramsden are being enhanced, and secondary glazing is being added to windows.

The decarbonisation of the Ramsden building has a budget of £5,000,000 and is expected to contribute an over 10% reduction in the university's direct ('Scope 1') and indirect ('Scope 2') carbon emissions to meet 2030 carbon reduction targets.

#### 5.2 Lighting replacement

Light-emitting Diode (LED) lighting is being fitted across campus and will replace less energy-efficient variants that are still in use.

# 5.3 Heating systems optimisation

One of the university's contractor companies is Kendra Energy Solutions, a leading provider of intelligent building energy management systems. As part of their working agreement with the university, Kendra had staff present on campus at various times of the year to optimise the heating systems of various buildings including Sparck Jones, Harold Wilson, and Barbara Hepworth. This helped improve the energy efficiency of these buildings.

#### 5.4 Oastler works

Various mechanical works at the Oastler building have helped reduce the building's carbon impacts and energy costs. Repairs were made to Oastler's immersion heater and air source heat pump controls, and the building's Combined Heat and Power (CHP) equipment was switched off.

## 5.5 Schwann pipework project

Heating pipes were replaced in the Schwann building. As a result, the boilers were turned off for 2-3 months, reducing the carbon impact of the building during the interval.

## 5.6 WELL thermal comfort survey

A summer thermal survey of the Daphne Steele and Jo Cox More in Common Centre was hosted on the Qualtrics platform on June 2025 as part of meeting WELL Building Standard compliance



requirements for the two buildings. By the second week of August, 62 people had taken part in the Daphne Steele survey, which meets the WELL requirement that 35% of 'regular building occupants' (in this case, employees) participate in the survey. 4 questions were asked and are included as an appendix.

5.6.1 Satisfaction with building thermal performance: Based on the responses to the statement, 'Please rate your satisfaction level with the thermal environment in this space', just over half of respondents (51.6%) were at least 'slightly satisfied' with the building's thermal performance, while 37.1% reported a degree of dissatisfaction. The table below provides a breakdown of this data.

Satisfaction/dissatisfaction level	Number of respondents	Proportion respondents (%)	of
Very dissatisfied	5	8.07	
Dissatisfied	7	11.29	
Slightly dissatisfied	11	17.74	
Neutral	7	11.29	
Slightly satisfied	11	17.74	
Satisfied	17	27.42	
Very satisfied	4	6.45	
Total	62	100	

5.6.2 Possible reasons for dissatisfaction: In order to understand why some respondents were dissatisfied with the building's thermal performance, those who answered 'Very dissatisfied', 'Dissatisfied', or 'Slightly dissatisfied' were asked how they view the prevailing temperature within the building. The majority (58.62%) thought that the building was too warm in summer.

Is the building too?	Number of respondents	Proportion of respondents
		(%)
Cold	3	10.35
Cool	4	13.79
Slightly cool	5	17.24
Slightly warm	5	17.24
Warm	4	13.79
Hot	8	27.59
Total	29	100

A more detailed dive into respondents' dissatisfaction produced the results in the table below. Respondents were allowed to pick more than one cause of discomfort. Nearly a quarter of the responses expressed dissatisfaction with the thermostat set-point temperature, while over a quarter indicated that discomfort is felt at certain times rather than constantly.

Specific cause of discomfort	Number of responses	Proportion	of	responses
		(%)		



23	24.21
16	16.84
11	11.58
11	11.50
	0.40
	8.42
3	3.16
4	4.21
8	8.42
1	1.05
4	4.21
1	1.05
1	1.05
4	4.21
1	1.05
1	1.05
1	1.05
8	8.42
	16  8 3 4 8 1 1 1 1 1 1 1 1 1

5.6.3 Preferred level of heating/cooling overall: The survey provided some insight into all respondents' heating and cooling preferences during summer. Encouragingly, the number of people who think that there should be no change to the current thermal environment (24, or 38.71% of respondents) is higher than the number of people who want the building to be either cooler (35.48%) or warmer (25.81%).

Preference	Number	of	Proportion	of
	respondents		respondents (%)	
Cooler	11		17.74	
Slightly cooler	11		17.74	
None	24		38.71	
Slightly warmer	13		20.97	
Warmer	3		4.84	
Total	62		100	

#### 5.7 2025/26 targets and/or actions

The Sustainability Team will support the Space Manager on the ongoing space reallocation project on campus, evaluating carbon-saving impacts and providing guidance on how to achieve optimum energy and carbon savings.



As part of compliance with the WELL Building Standard, biannual (winter and summer) thermal comfort surveys will be conducted at Daphne Steele and Jo Cox More in Common Centre. In addition, an annual occupancy survey will be held in the two buildings.

## **6 Biodiversity**

#### 6.1 Tree planting

Since 2023, the university has partnered with Kirklees Council and White Rose Forest to deliver a tree planting programme across Kirklees. In 2024-25, a total of 104 staff and student volunteers planted over 1600 trees. This amounts to a carbon capture potential of over 35 tonnes per year when the trees reach maturity.

#### 6.2 Planting allotments and other initiatives/events

Through the Feel Good Gardening Gang scheme, the university encourages students and staff to have mini-allotments and planters on campus where they can grow their own fruit and vegetables. All 26 allotments were snapped up by volunteers.

Various gardening workshops and social events were held during the year. These included 'Tiny Tinned Tomatoes', which involved providing tomato planting kit to staff and students. The event was sold out, with more people attending than the Sustainability Team had planting kits for. Another event was a Plant Swap, which had 35 attendees exchange plants they had grown with each other (or simply take a free plant home).

# 6.3 2025/26 targets and/or actions

The Sustainability Team has set the following biodiversity actions and targets for 2025/26:

Category	Objective(s)	Target(s)	Current status	2025/26 action(s)
Tree planting	Conduct tree planting sessions from November to February	Plant at least 2000 trees	1639	Run tree planting sessions under the Tree Planting group and as a Sustainability Champions activity
Tree maintenance	Launch a tree maintenance programme for March and April	Run 5 sessions for the pilot	N/A	Remove old guards at sites where trees have previously been planted and are now growing well.



## 7 Engagement

#### 7.1 Healthy herbal tea stall

The Sustainability Team ran a pick-and-mix healthy herbal tea stall at the Staff Wellbeing Fair. 153 staff attended the event, and the sustainability stand was rated the 2<sup>nd</sup> most favourite by attendees. The Sustainability Team also ran the stand at the Jo Cox Great Together, which is the UK's annual celebration of everything that unites communities. 67 people attended the event.

#### 7.2 Picnic at the Planters

A picnic was held at the plant allotment site next to the canal on 2<sup>nd</sup> July. 40 people attended the event. This included staff, international students who had recently arrived in Huddersfield and were looking to make friends, and a team of architects – including a university alumnus – from the company AHR who were on a campus visit.

#### 7.3 University Council tour of green spaces

On 3<sup>rd</sup> July, 7 members of the University Council (which is the university's principal decision-making body) were shown around biodiversity features at the Queensgate campus, including plant allotments, geese, the woodland walk, and future landscaping project sites outside Barbara Hepworth and across from Jo Cox More in Common Centre. They asked the Sustainability Team questions about how students used the allotments and watered them over the holidays, solar panel performance in extreme heat, team roles, and barriers to implementing more biodiversity initiatives in future.

#### 7.4 University sustainability rankings

The university is currently 61<sup>st</sup> on the UK's People and Planet rankings, and it places in the '2:1' category. On the Times Higher Education Impact Rankings 2025, which ranks 2,526 universities from 130 countries/territories based on their progress towards the United Nations' Sustainable Development Goals (SDGs), the university has a position of 101-200. And on the QS World University Rankings: Sustainability 2025, the university is 331<sup>st</sup> out of nearly 1800 universities worldwide.

#### 7.5 2025/26 targets and/or actions

The Sustainability Team has set the following engagement actions and targets for 2025/26:

Category	Objective(s)	Target(s)	Current status	2025/26 action(s)
University	Rise up the	Climb to 37 <sup>th</sup>	61st	Provide guidance to
rankings	People and	in the league		Schools and Services
	Planet league			on how they can rework
				various policies with
				specific
				wording/clauses to gain
				maximum People and



Sustainability	Grow the	Gain a core of	N/A	People points in the related categories.  Explore external Environmental Management System (EMS) certification options for the university in order to achieve the full 100% scoring in the 'Auditing and EMS' category.  Run Sustainability
Champions	Sustainability	Champions	13//1	Champions as an
	Champions	who commit		umbrella programme
	scheme	to at least one		delivered through the
		sustainability		Student Union's (SU's)
		activity per		Sustainability Society,
		month		the Global Professional
				Award (GPA), Unison, and the Sustainability
				Team.
Surveys	Explore new and engaging ways of conducting staff and student data collection	Trial at least one new form of data collection	Questionnaires only	Design gamified tools that can be used for edutainment as well as surveys.



## **Appendices**

## 1 Staff travel survey questions

- 1) What type of staff member are you?
  - o Postgraduate researcher
  - Support services staff
  - o Affiliate
  - o Students Union
  - o Academic staff
- 2) Please input your postcode.
- 3) Please select your main mode of travel to/from campus each day of the week
  - Walking/running
  - o Bicycle
  - o Bus
  - o Single occupancy car or van
  - Car sharing
  - o Taxi
  - o Train
  - o Electric bike
  - o Motorbike
  - Homeworking
  - o Other public transport
  - Other private transport
- 4) If you do not cycle, what are your main reasons? You may select more than one option.
  - Traffic/safety
  - o Weather
  - Lack of changing/drying facilities
  - o Distance/time
  - o Lack of secure cycle parking
  - o Cost
  - o Mobility of fitness issue
  - o Inability to ride and/or maintain a bike
  - o Carrying heavy baggage/items
  - o I don't want to say
  - o Other
- 5) Are you interested in using an electric bike (e-bike) for your commute to/from campus?
  - o Yes
  - o No
  - Undecided
- 6) If you answered 'Yes' to question 5 above, would you be interested in any of the following (you may select more than one option)?
  - o Purchasing an e-bike



- o Participating in a free or reduced cost e-bike hire scheme
- o E-bike maintenance workshops on campus
- 7) Are the public transport options available to you adequate at present?
  - o Yes
  - o No
  - Undecided
- 8) If you answered 'No' to question 7 above, how is the public transport available to you currently inadequate?
  - o Bus stop or train station is too far from home/campus
  - o Infrequent or inconsistent transport times
  - High cost of tickets
  - o Flexibility of tickets
  - o Bus/train departure times do not align with work hours
  - o Unsuitable for caring responsibilities (e.g., school runs)
  - o I need to carry too many things to/from campus
  - o Other
- 9) If you drive, where do you normally park your car?
  - o On campus car parks
  - o Off campus
  - o Either
- 10) Would you be interested in a university car share scheme?
  - o Yes
  - o No
  - Undecided
- 11) Do you currently own or lease an electric vehicle (EV)?
  - o Yes
  - o No
- 12) Are you or would you be interested in using EV charging points on campus?
  - o Yes
  - o No
  - Undecided
- 13) Is there anything else you would like to share about travel to the University?

## 2 Thermal comfort survey questions

- 1) Please indicate which building you use?
  - o Daphne Steele
  - o Jo Cox More in Common Centre
- 2) Please rate your satisfaction level with the thermal environment in this space
  - o Very dissatisfied
  - Dissatisfied



		. 55 .
	0	Slightly dissatisfied
	0	Neutral
	0	Slightly satisfied
	0	Satisfied
	0	Very satisfied
Wo	uld	you prefer this area to be:
	0	Cooler
	0	Slightly cooler
	0	None
	0	Slightly warmer
	0	Warmer
_		answer to question 1 contains the word 'Dissatisfied' please answer the following estions: how do you generally perceive the thermal environment in this area?
	0	Cold
	0	Cool
	0	Slightly cool
	0	Slightly warm
	0	Warm
	0	Hot
Ple	ase	mark the potential source ( or sources) of your thermal discomfort:
	0	Inappropriate room thermostat set point temperature
	0	Daily variations in room temperature (such as higher temperature in the afternoon)
	0	Occasional variations in room temperature (such as being occasionally warm or cold)
	0	Parts of the room are too hot
	0	Parts of the room are too cold
	0	Humidity level is too high
	0	Dry air

3)

4)

5)



- o Air movement is too high
- o Air movement is too low
- o Hot/cold air coming from windows
- Hot/cold walls
- o Solar radiation
- Heat from equipment and appliances
- o Strict dress code
- Furniture causing hot/cold thermal discomfort or sweating
- o Others