Mobility Plan University of Worcester

— Net Zero what does this mean and what is the University of Worcester doing to achieve this?

Katy Boom - Director of Sustainability

Twitter and Insta: @UW_Sustain

www.susthingsout.com

www.worc.ac.uk/about/sustainability



Contents

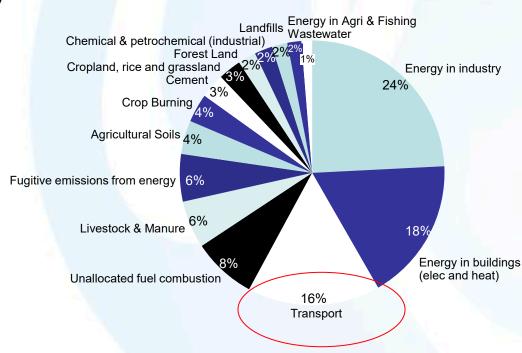
- 1. What does Net Zero Carbon mean?
- 2. What is the University of Worcester mobility carbon footprint?
- 3. Measurement
- 4. Two main action examples Bikeshare and Electric Vehicle charging points
- 5. Barriers

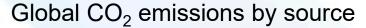


What does Net Zero Carbon mean?

- Set in UK Law (Climate Act 2008, amended in 2019) to reach net zero by 2050
- University of Worcester set net zero carbon by 2030 including scope 3 mobility carbon
- Net zero means:

emissions = offset or sequestered







www.worcester.ac.uk

What is the University of Worcester's mobility carbon footprint?

						,		'		
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21		
FTE Students	7,675	7,377	7,772	8,109	8,403	8,153	7,852	7,495	-4.55%	6 44%
FTE Staff	938	981	1,009	1,035	1,138	1,151	1,011	971	-3.96%	46%
FTE Total	8,613	8,358	8,781	9,144	9,541	9,304	8,863	8,466	-4.48%	6 44%
GIA	76,140	76,140	80,978	81,328	81,090	81,172	81,172	81,904	0.90%	6 73%
									4	
Fleet	32	71	51	57	51	42	30	12	-58.49%	6 -66%
Hire Car	28	40	20	33	23	50	23	1	-97.43%	-96%
Hire Car - FTE	0.0032		0.0023	0.0036		0.0053		0.0001		
niie cai - i i L	0.0032	0.0040	0.0023	0.0030	0.0024	0.0055	0.0020	0.0001	-37.3170	3170
Taxi	5	3	4	4	2	3	4	1	-75.29%	
Taxi FTE	0.00053	0.00034	0.00047	0.00039	0.00019	0.00032	0.00039	0.00010	-74.13%	
TGMTTE		,	,	,	,	1	1			
Rail	13	16	15	18	20	18	13	0.3	-97.85%	-98%
Rail - FTE	0.0015	0.0019	0.0017	0.002015	0.002086	0.001964	0.001467	0.000033	-97.75%	-99%
						[]	1/			
Air	271	318	577	500	451	395	196	19	-90.44%	-93%
Air - FTE	0.031	0.038	0.066	0.055	0.047	0.042	0.022	0.002	-89.99%	-93%
						<u> </u>	<u> </u>			
Mileage Expense Claims	25	111	68	86	78	42	38	5	-86.60%	
Mileage Expense - FTE	0.0029	0.0133	0.0078	0.0094	0.0082	0.0046	0.0043	0.0006	-85.98%	
						<u></u>	<u></u> /			
Commute	5,823	5,683	5,979	7,817	5,748	8,190	4,552	5,519	21.24%	6 2%
Commute - FTE	0.68	0.68	0.68	0.85	0.60	0.88	0.51	0.65	26.92%	-29%
						<u> </u>	/			
Coach	17	15	16	14	24	22	11	3	-74.29%	
Coach - FTE	0.002	0.002	0.002	0.001	0.003	0.002	0.001	0.0003	-73.08%	
	I	<u>. </u>				<u>, </u> J	<u>. </u>			1



Measurement



Modes of	f travel by percen	ıtage						Number of staff/student		.t				
	Car			Bus	Train				2019/20					
Staff	70.4%	4.1%	6 0.7%	6 2.6%	% 3.4	,%		Staff (headcount)	1120	<u>/</u>				
Student	34.9%	6.6%	6 0.0%	6 5.7%	% 28.3	%		Student (headcount)	8516	4				
								Total	9636					
Number (of people by each	a CO2 producing	mode											
	Car	Car-Share	Motorcycle	Bus	Train			Distance from home	Car	Car-Share	Motorcycle	Bus	Train	
Staff	788.48	45.92	2 7.84	4 29.12	12 38.0	J8		Staff	19.17	7 17.81	1 34.75	6.3	3 40.33	1
Student	2972.084	562.056	5 0	0 485.412	2410.02	28		Students	33.52	31.1	1 34.75	16.69	9 52.05	4
rypical D	ay Communted D	istance (km)												
	Car	Car-Share	Motorcycle	Bus	Train			Typical Daily Distance (kn						
Staff	30,230.3	881.7	544.9	366.9	9 3,071.	.5			Car		Motorcycle	Bus	Train	
Student	199,248.5	19,728.2	-	16,203.1	1 250,883.	.9		Staff	38.34	1 19.2	2 69.5			4
Total	229,478.8	20,609.8	544.9	16,570.0	253,955.	4		Students	67.04	35.1	1 69.5	33.38	8 104.1	4
Annual Co	ommunited Dista													
	Car			Motorcycle	Bus	Train		Typical Working Week				Adjustme	ents for Cov	/id-
Staff	3,750,841.6	109,392.9	3,860,234.5	26,154.2	2 45,524.	.8 381,101.9			Weeks	Av. Days	Annual Days	·		
Student	20,995,467.6				1,707,368.	.7 26,436,459.0		Staff	48	3 2.6	6 124.075472			
Total	24,746,309.2	2.188.214.2	26,934,523.4	26,154.2	2 1,752,893.	.4 26.817.560.8	55.531.131.9	Students	37	7 2.8	105.4	4		

Summary	Browse responses	Views	Advanced			
				Export •	Display 🕶	Jump ▼
ection A						
Has Covid	l 19 changed the way you	u travel to c	ampus?			<
	Yes		53 (19.7%)			
	No				172	(63.9%)
I h	nave not travelled to campus since Covid 19.		44 (16.4%)			
Did you cy	cle for leisure during loc	kdown?				
, 2.a you o,						

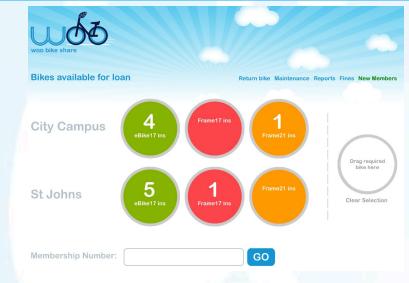
					-			
Annual Communited Distance (km)								
	Car	Car-Share	Car Total	Motorcycle	Bus	Train		
Staff	3,750,841.6	109,392.9	3,860,234.5	26,154.2	45,524.8	381,101.9		
Student	20,995,467.6	2,078,821.4	22,063,294.6	-	1,707,368.7	26,436,459.0		
Total	24,746,309.2	2,188,214.2	25,923,529.1	26,154.2	1,752,893.4	26,817,560.8		
· ·	· '		Total Direct	i				
			GHG	i				
· ·	['		kg CO₂e per unit	4				
Mode of travel	Distance (km)	Conversion factors		4				
Small Petrol Car (up to 1.4))	13,624,383	0.13758	1,874,442.7					
Medium Petrol Car (1.4-2.0)	4,817,616	0.16496	794,713.9	4				
Large Petrol Car (over 2.0)	196,373	0.20721	40,690.4	4				
Small Diesel Car (up to 1.7)	1,552,258	0.14946	232,000.4	4		Car Total	4,385,296	
Medium Diesel Car(1.7-2.0)	4,808,253	0.18785	903,230.4	4		Staff and Studer	nt commute ton	ines
Large Diesel Car (2.0 and over)	1,935,641	0.27909	540,218.0	4			Staff	Student
Motorcycle (Average petrol Motorcycle unknown engine	26,154	0.11355	2,969.8	4		Motorcycle	2.970	-
Bus (Average local bus)	1,752,893	0.10227	179,268.4	4		Bus	4.656	174.613
Train (National Rail)	26,817,561	0.03549	951,755.2	4		Train	13.525	938.230
	55,531,131.94	Tonnes	5,519			Car	587.812	3,797.484



Bikeshare

- Staff and students individuals
- Teaching/Research
- Local Government pilot employers





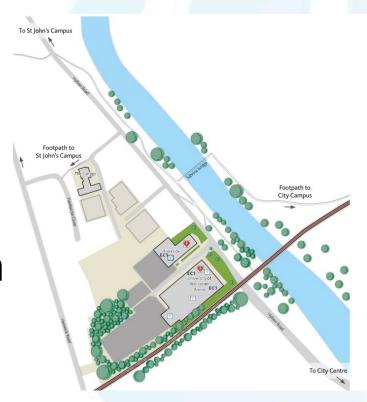




www.worcester.ac.uk

Electric Vehicles (EV)

- 100 EV chargers
- Car Clubs?
- Student Research





Severn Campus

WR2 5JN 01905 544444 www.worcester.ac.uk

- R Main reception
- Car park
- ☑ Disabled parking
 ☐ Bus stop
- Drinking water fountain
- Defibrillator

EC1Evac Chair - first floor



Barriers

- Communication
- Staff subsidised purchase EVs delayed
- Bus company reduced service
- Poor cycling infrastructure



