

Carbon Emissions Performance Summary

Fig 1: USW Annual Carbon Emissions Totals – all Scopes (tCO2e)

	Total emissions tCO2e				% of total		
Year	Scope 1	Scope 2	Scope 3	Total	Scope 1	Scope 2	Scope 3
2018-19 (Scope 1 and 2 baseline)	3,147	4,385	20,754	28,286	11%	16%	73%
2019-20	2,468	4,026	17,660	24,155	10%	17%	73%
2020-21	2,173	2,350	16,306	20,828	10%	11%	78%
2021-22	2,492	2,187	14,277	18,956	13%	12%	75%
2022/23 (Scope 3 baseline)	2,490	2,278	37,871	42,639	6%	5%	89%
2023-24	2,570	2,215	29,312	34,094	8%	6%	86%
2024-25	2,314	1,838	44,812	48,964	5%	4%	92%
% change 2018-19 to 2024-25	-26%	-58%	116%	73%			

Note: Prior to 2022/23, Scope 3 emissions were not accurately calculated or representative of all the activities associated with the university.

Fig 2: Annual Energy Emissions (tCO₂e)

The following table provides a summary of the carbon emissions attributable to the total energy consumed across the University estate. This information is reported to the Higher Education Statistics Agency (HESA) annually.

Fuel	2005/06 (BY)	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024-25
Electricity	6,651	6,868	7,840	11,995	8,413	7,098	6,070	4,385	4,026	2,350	2,187	2,278	2,215	1,838
Gas	4,154	4,156	5,234	4,647	4,030	3,326	3,486	3,093	2,468	2,171	2,458	2,185	2,363	2,068
Total	10,805	11,024	13,074	16,642	12,443	10,424	9,556	7,478	6,494	4,521	4,645	4,463	4,578	3,906
% change from 2005/06 BY		2%	21%	54%	15%	-4%	-12%	-31%	-40%	-58%	-57%	-59%	-58%	-64%
% change from previous year		2%	19%	27%	-25%	-16%	-8%	-22%	-13%	-30%	3%	-4%	3%	-15%

Fig 3: Residential Energy and Water Emissions (tCo2e)

The following table provides a summary of the carbon emissions attributable to energy and water use that are generated from our Residential accommodation. This information is reported to the Higher Education Statistics Agency (HESA) annually.

Source	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Electricity	603	434	315	307	321	306	295
Gas	340	681	684	764	675	764	638
Water supply	13	11	4	5	7	7	8
Water treatment	25	21	7	8	7	8	7
Total water emissions (tCO2e)	38	32	11	12	14	15	14
Total (energy) emissions (tCO2e)	943.00	1115.00	999.00	1071.00	996.00	1070.13	933.00
% change from BY		18%	6%	14%	6%	13%	-1%
% change from previous year		18%	-10%	7%	-7%	7%	-13%
% of total University energy emissions		17.17%	22.10%	23.06%	22.32%	23.38%	23.89%

Note: in 2021/22, the emissions factor for water supply and treatment dropped in relation to the adoption of more recent data.