

Appendix 2 – Comparison Data from 2021/22 – 2022/23

Emission Source	Consumption Data 2021/22	Consumption Data 2022/23	Difference	Unit	Emission Factor 2021/22	Emission Factor 2022/23	Difference	Unit	Emissions (tCO2e) 2021/22	Emissions (tCO2e) 2022/23	Difference	Comments
Grid Electricity (generation)	53918367	51655669	-4.2%	kWh	0.21233	0.19338	-8.9%	kgCO2e/kWh	11448.5	9989.2	-12.7%	Operational Buildings
Grid Electricity (transmission & distribution losses)	53918367	51655669	-4.2%	kWh	0.01879	0.01769	-5.9%	kgCO2e/kWh	1013.1	913.8	-9.8%	Operational Buildings
Natural Gas	81457335	77444925	-4.9%	kWh	0.18316	0.18254	-0.3%	kgCO2e/kWh	14919.7	14136.8	-5.2%	Operational Buildings
Gas Oil	7485830	6589203	-12.0%	kWh	0.25679	0.25679	0.0%	kgCO2e/kWh	1922.3	1692	-12.0%	Operational Buildings
Burning Oil (kerosene)	12152246	10404862	-11.2%	kWh	0.24677	0.24677	0.0%	kgCO2e/kWh	2998.9	2567.6	-11.2%	Operational Buildings
LPG	3014066	3204761	6.3%	kWh	0.21449	0.21449	0.0%	kgCO2e/kWh	646.5	687.4	6.3%	Operational Buildings
Biomass (wood chips)	1485892	1294543	-12.9%	kWh	0.01513	0.01053	-30.4%	kgCO2e/kWh	22.5	13.6	-39.6%	Operational Buildings
Biomass (wood pellets)	7201610	1224600	-83.0%	kWh	0.01513	0.01053	-30.4%	kgCO2e/kWh	109	75.1	-31.1%	Operational Buildings
Biomass (wood pellets)	1633400	1224600	-25.0%	kWh	0.01513	0.01053	-30.4%	kgCO2e/kWh	24.7	12.9	-47.8%	Operational Buildings - heat from third party
Water – Supply	301,456	409,021	35.7%	m <sup>3</sup>	0.11	0.1	-9.1%	kgCO2e/m <sup>3</sup>	33.2	40.9	23.2%	Water Usage

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Water – Treatment	286383	388570	35.7%	m <sup>3</sup>	0.23	0.19	-17.4%	kgCO2e/m <sup>3</sup>	65.9	73.8	12.0%	Sewerage
Grid Electricity (generation)	9989763	8654997	-13.4%	kWh	0.21233	0.19338	-8.9%	kgCO2e/kWh	2121.1	1673.7	-21.1%	Street Lighting
Grid Electricity (transmission & distribution losses)	9989763	8654997	-13.4%	kWh	0.01879	0.01769	-5.9%	kgCO2e/kWh	187.7	153.1	-18.4%	Street Lighting
Diesel (average biofuel blend)	2924842	2892182	-1.1%	litres	2.51233	2.55784	1.8%	kgCO2e/litres	7348.2	7397.7	0.7%	Fleet Diesel
Petrol (average biofuel blend)	38922	40771	4.8%	Litres	2.19352	2.16185	-1.4%	kgCO2e/litres	85.4	88.1	3.2%	Fleet Petrol
Diesel (average biofuel blend)	598674	618405	3.3%	Litres	2.51233	2.55784	1.8%	kgCO2e/litres	1504.1	1581.8	5.2%	Roads – Red Diesel
LPG litres	743331	679699	-8.6%	Litres	1.55709	1.55709	0.0%	kgCO2e/litres	1157.4	1058.4	-8.6%	Roads - LPG Quarries
Gas Oil	1586	2023	27.6%	litres	2.75857	2.75857	0.0%	kgCO2e/litres	4.4	5.6	27.3%	Roads – Harbour
LPG	13181	12080	-8.4%	litres	1.55709	1.55709	0.0%	kgCO2e/litres	20.5	18.8	-8.3%	Roads – Propane

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LPG	17514	19499	11.3%	litres	1.55709	1.55709	0.0%	kgCO2e/ litres	27.3	30.4	11.4%	Landscape – Greenhouses
Diesel (average biofuel blend)	54539	64012	17.4%	litres	2.51233	2.55784	1.8%	kgCO2e/ litres	137	163.7	19.5%	Landscape – Red Diesel
Refuse Municipal to Landfill	3188	2933	-8.0%	tonnes	446.2415	446.20411	0.0%	kgCO2e/ tonnes	1422.6	1308.7	-8.0%	Internal Waste
Refuse Municipal/Commercial/ Industrial to combustion	4	247	6075.0%	tonnes	21.29356589	21.28019	-0.1%	kgCO2e/ tonnes	0.1	5.3	5200.0%	Internal Waste
Mixed Recycling	1371	1326	-3.3%	tonnes	21.29356589	21.28019	-0.1%	kgCO2e/ tonnes	29.2	28.2	-3.4%	Internal Recycling
WEEE (Mixed Recycling)	27	48	77.8%	tonnes	21.29356589	21.28019	-0.1%	kgCO2e/ tonnes	0.6	1	66.7%	Internal Mixed WEE, Lamps, ICT
Construction (Average) Recycling	270	290	7.4%	tonnes	0.98914	0.98471	-0.4%	kgCO2e/ tonnes	0.3	0.3	0.0%	Internal Waste – construction (new this year)
Organic Garden Waste and food waste -Composting	1572	1462	-7.0%	tonnes	8.950697674	8.91058	-0.4%	kgCO2e/ tonnes	14.1	13	-7.8%	Landscape Garden Waste and arisings

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Average Car – unknown fuel	7570394.4	9,440,320	24.7%	Miles	0.17148	0.17067	-0.5%	kgCO2e/mile	1,298.2	1,611.2	24.1%	Business miles - car
Rail (National)	106084	132713	25.1%	Passenger km	0.03549	0.03549	0.0%	kgCO2e/passenger km	3.8	4.7	23.7%	Business National Rail
Domestic Flight (average passenger)	24140	79194	228.1%	Passenger km	0.24587	0.24587	0.0%	kgCO2e/passenger km	5.9	19.5	230.5%	UK Internal Flights
Short Haul Flights (average passenger)	3144	102625	3164.2%	Passenger km	0.15353	0.15353	0.0%	kgCO2e/passenger km	0.5	15.8	3060.0%	UK-Europe Flights
Homeworking Emissions	27	2795897	NA – Change in method for calculation	21/22 = % of total FTEs home-based 22/23 = FTE Working Hour	0.3	0.34075	NA – Change in method for calculation	tCO2e/FTE/annum	839.2	952.7	13.5%	In 2021/22 it was 27 %FTE staff WFH 2022-23 it is 27% of FTE WFH 60% of the week converted into hours
<b>TOTAL</b>									<b>49304</b>	<b>46335</b>	<b>-6.0%</b>	<b>2969</b>