

Appendix 2 – Comparison Data from 2020/21 – 2021/22

Emission Source	Consumption Data 2020/21	Consumption Data 2021/22	Difference	Unit	Emission Factor 2020/21	Emission Factor 2021/22	Difference	Unit	Emissions (tCO2e) 2020/21	Emissions (tCO2e) 2021/22	Difference	Comments
Grid Electricity (generation)	45602630	53918367	18.2%	kWh	0.23314	0.21233	-8.9%	kgCO2e/kWh	10632	11448.5	7.7%	Operational Buildings
Grid Electricity (transmission & distribution losses)	45602630	53918367	18.2%	kWh	0.02005	0.01879	-6.3%	kgCO2e/kWh	914	1013.1	10.8%	Operational Buildings
Natural Gas	73978042	81457335	10.1%	kWh	0.18387	0.18316	-0.4%	kgCO2e/kWh	13602	14919.7	9.7%	Operational Buildings
Gas Oil	6651007	7485830	12.6%	kWh	0.25672	0.25679	0.0%	kgCO2e/kWh	1708	1922.3	12.5%	Operational Buildings
Burning Oil (kerosene)	12152246	11715452	-3.6%	kWh	0.24666	0.24677	0.0%	kgCO2e/kWh	2998	2891	-3.6%	Operational Buildings
LPG	2549734	3014066	18.2%	kWh	0.21448	0.21449	0.0%	kgCO2e/kWh	547	646.5	18.2%	Operational Buildings
Biomass (wood chips)	2655432	1485892	-44.0%	kWh	0.01545	0.01513	-2.1%	kgCO2e/kWh	55	22.5	-59.1%	Operational Buildings
Biomass (wood pellets)	6882000	7201610	4.6%	kWh	0.01545	0.01513	-2.1%	kgCO2e/kWh	118	109	-7.6%	Operational Buildings
Biomass (wood pellets)	1713000	1633400	-4.6%	kWh	0.01545	0.01513	-2.1%	kgCO2e/kWh	27	24.7	-8.5%	Operational Buildings - heat from third party
Water – Supply	471933	301,456	-36.1%	m <sup>3</sup>	0.11	0.11	0.0%	kgCO2e/ m3	52	33.2	-36.2%	Water Usage

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Water – Treatment	448336	286383	-36.1%	m <sup>3</sup>	0.23	0.23	0.0%	kgCO2e/ m3	103	65.9	-36.0%	Sewerage
Grid Electricity (generation)	10644949	9989763	-6.2%	kWh	0.23314	0.21233	-8.9%	kgCO2e/ kWh	2482	2121.1	-14.5%	Street Lighting
Grid Electricity (transmission & distribution losses)	10644949	9989763	-6.2%	kWh	0.02005	0.01879	-6.3%	kgCO2e/kWh	213	187.7	-11.9%	Street Lighting
Diesel (average biofuel blend)	2597995	2924842	12.6%	litres	2.54603	2.51233	-1.3%	kgCO2e/ litres	6615	7348.2	11.1%	Fleet Diesel
Petrol (average biofuel blend)	34845	38922	11.7%	Litres	2.16802	2.19352	1.2%	kgCO2e/ litres	76	85.4	12.4%	Fleet Petrol
Diesel (average biofuel blend)	235337	598674	154.4%	Litres	2.54603	2.51233	-1.3%	kgCO2e/ litres	599	1504.1	151.1%	Roads – Red Diesel
LPG litres	309518	743331	140.2%	Litres	1.55537	1.55709	0.1%	kgCO2e/ litres	481	1157.4	140.6%	Roads - LPG Quarries
Gas Oil	1568	1586	1.1%	litres	2.75776	2.75857	0.0%	kgCO2e/ litres	4	4.4	10.0%	Roads – Harbour
LPG	8528	13181	54.6%	kWh	1.55537	1.55709	0.1%	kgCO2e/ kWh	13	20.5	57.7%	Roads – Propane

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LPG	5609	17514	212.2%	litres	1.55537	1.55709	0.1%	kgCO2e/ litres	9	27.3	203.3%	Landscape – Greenhouses
Diesel (average biofuel blend)	43829	54539	24.4%	litres	2.54603	2.51233	-1.3%	kgCO2e/ litres	112	137	22.3%	Landscape – Red Diesel
Refuse Municipal to Landfill	2641	3188	20.7%	tonnes	437.372	446.2415	2.0%	kgCO2e/ tonnes	1155	1422.6	23.2%	Internal Waste
Refuse Municipal/Commercial/Industrial to combustion	4	4	0.0%	tonnes	21.317	21.29356589	-0.1%	kgCO2e/ tonnes	0.1	0.1	0.0%	Internal Waste
Mixed Recycling	1238	1371	10.7%	tonnes	21.317	21.29356589	-0.1%	kgCO2e/ tonnes	26	29.2	12.3%	Internal Recycling
WEEE (Mixed Recycling)	136	27	-80.1%	tonnes	21.317	21.29356589	-0.1%	kgCO2e/ tonnes	3	0.6	-80.0%	Internal Mixed WEE, Lamps, ICT
Construction (Average) Recycling	NA	270	NA	tonnes	NA	0.98914	NA	kgCO2e/ tonnes	NA	0.3	NA	Internal Waste – construction (new this year)
Organic Garden Waste and food waste - Composting	1575	1572	-0.2%	tonnes	10.204	8.950697674	-12.3%	kgCO2e/ tonnes	16	14.1	-11.9%	Landscape Garden Waste and arisings

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Average Car – unknown fuel	5277248	7570394.4	43.5%	Miles	0.1714	0.17148	0.0%	kgCO2e/mile	905	1,298.2	43.4%	Business miles - car
Rail (National)	60796	106084	74.5%	Passenger km	0.03694	0.03549	-3.9%	kgCO2e/passenger km	2	3.8	90.0%	Business National Rail
Domestic Flight (average passenger)	35464	24140	-31.9%	Passenger km	0.2443	0.24587	0.6%	kgCO2e/passenger km	9	5.9	-34.4%	UK Internal Flights
Short Haul Flights (average passenger)	5626	3144	-44.1%	Passenger km	0.15553	0.15353	-1.3%	kgCO2e/passenger km	1	0.5	-50.0%	UK-Europe Flights
Homeworking Emissions	57	27	-52.6%	percentage of total FTEs home-based	0.3	0.3	0.0%	tCO2e/FTE/annum	1805	839.2	-53.5%	Estimated %FTE staff WFH
<b>TOTAL</b>									<b>45282</b>	<b>49304</b>	<b>8.9%</b>	<b>-4022</b>