

READING BOROUGH COUNCIL: GREENHOUSE GAS (GHG) REPORT 2019 - 20

Reading Borough Council (RBC) is committed to reducing its Greenhouse Gas emissions across its estate and operations.

This year (2019/20) the Council had a 2.6% decrease in absolute gross corporate emissions against our 2018/19 levels and a 63.5% decrease against our 2008 baseline. In 2019/20 The Council's emission reductions exceeded the 2020 target, by 13.5%. The gross emissions of the wider influence of the Council also decreased in 2019/20 compared to 2018/19 levels, by 6.5% and a 49.9% decrease against our 2008 baseline.

Reading Borough Council's 'Carbon Plan, 2015-2020', was approved in July 2015, which reinforced the organisation's target to reduce carbon emissions by 50% against the 2008/9 baseline. In addition, a renewable energy target was set to generate renewable energy equivalent to 15% of total energy consumed, by 2020.

Notwithstanding this progress and in acknowledgement of the scale of the on-going challenge, on the 26th of February 2019 the Council declared a Climate Emergency and resolved to take action to accelerate a carbon neutral Reading by 2030. A new 'Carbon Plan, 2020-2025' has also been approved, setting out actions to meet a carbon emissions reduction target of 85% by 2025. This also introduces three new targets; to generate renewable energy equivalent to 50% of total energy consumed by 2025, to reduce water consumption by 5% per annum, and to reduce fossil fuel consumption by 50% by 2025.

1 Introduction

1.1 Our Vision

As part of Reading Borough Council's commitment to 'Reading's Climate Change Strategy 2013-2020; Reading Means Business on Climate Change', the council supported the vision that

'Reading will be at the forefront of developing solutions for reducing carbon emissions and preparing for climate change. Low carbon living will be the norm in 2050.'

And work with others to *'...reduce the carbon footprint of the borough in 2020 by 34% compared with levels in 2005.'*

The Council is working closely with the Reading Climate Change Partnership in implementing the new Reading Climate Emergency Strategy which was launched in November 2020, and its vision of *'a net zero, resilient Reading by 2030'*.

1.2 Leading by Example

Reading Borough Council has been leading by example by actively reducing its carbon emissions. On the 26th February 2019 Reading Borough Council declared a climate emergency, one of the first councils in the country to do so. An ambitious target has been set for the whole borough to be carbon neutral by 2030. We have already reduced our own carbon footprint by over half since 2008 and in Reading as a whole by 47% since 2005.

The Council has a long history of carbon reduction initiatives and signed the Nottingham Declaration on Climate Change in March 2006. There have been numerous local and national policies and targets, and legislation which have influenced the council's energy management work. In 2007 RBC worked with the Carbon Trust to produce Reading's Local Authority Carbon Management Plan (LACM). Since 2008 the authority has managed a rolling investment programme in energy efficient technologies to achieve carbon reduction.

The Council has been working in partnership with other public sector organisations, businesses and local residents to reduce emissions and dependency on fossil fuel, as reflected in its key priority '*Keeping Reading's environment clean, green and safe*' outlined in the Corporate Plan 2018-21.

This priority encompasses the following aspects which have been identified as important for the Council and which, in turn, fed into the priorities identified in the Carbon Plan 2015-2020.

- *We will continue to work to improve neighborhoods and the environment*
- *We will need to continue to reduce our carbon footprint.*

1.3 Carbon Plan

Reading Borough Council's 'Carbon Plan, 2015-2020', was approved in 2014/15, which reinforced the organisation's target to reduce carbon emissions by 50% against the 2008/9 baseline. In addition a renewable energy target was set to generate renewable energy equivalent to 15% of total energy consumed by 2020. Building on this, the new Carbon Plan 2020-2025 has set even more ambitious targets, including a commitment to reduce carbon emissions by 85% by 2025, and will be a guiding factor in upcoming efforts to reduce carbon emissions in the council and across the borough.

2 Reading Borough Council Greenhouse Gas (GHG) Emissions

2.1 The Organisation

Reading Borough Council is a unitary local authority. RBC is now comprised of three directorates; Directorate of Economic Growth & Neighbourhood Services (DEG&NS); Directorate of Resources; and Directorate for Adult Care & Health Services (DAC&HS). The Directorate for Children, Education & Early Help Services (CE&EHS) has been replaced by Brighter Futures for Children, which is a not-for-profit company whose primary objective is to look after the children of Reading. Carbon

management for the Council is managed in the Sustainability Team, within the Directorate of Economic Growth & Neighbourhood Services.

This report covers the RBC corporate GHG footprint and the 'wider influence' GHG footprint for 2019/20 (1st April 2019 to 31st March 2020).

2.2 Scope

RBC reports carbon emissions from corporate activities under its direct operational control separately from those activities which are (only) under its influence. As such, all schools (including community, voluntary aided, diocese, Academy and Free Schools) and managed services (including Rivermead Leisure centre and Reading Buses) will be reported in Scope 3, where RBC can influence, rather than control, the operations.

The list of GHG activities measured by RBC is as follows below. A detailed breakdown of the activities that are reported, and within which scope, can be found in Appendix 1.

Scope 1 (Direct emissions)

- Fossil fuels - natural gas and burning oil consumption
- Transport fleet
- Fugitive emissions from air conditioning units only (excluding emissions from domestic fridges and freezers)
- Self-supplied renewably generated electricity or heat

Scope 2 (Indirect Emissions)

- Purchased electricity

Scope 3 (Other Indirect Emissions)

- Electricity losses from transmission and distribution
- Managed assets - business travel
- Schools (Community, Voluntary Aided, Diocese, Academy and Free Schools)
- Outsourced services (1 leisure centre and 1 bus company)

Outside Scopes

- None this year

Renewable electricity

- Renewably generated electricity from systems owned by RBC, but supplying electricity to other parties

2.3 Baseline Year and reporting

The Council has been reporting its carbon footprint since 2005/6. Since this time, the reporting systems have changed several times and data collection has improved. The Council's baseline year for the purposes of the current and future Carbon Plan is 2008/9.

Since 2013/14, the Council is no longer required to annually report carbon emissions for the Carbon Reduction Commitment Energy Efficiency Scheme.

The emissions factors for the GHG footprint 2019/20 (1st April 2019 to 31st March 2020) are those published by DEFRA, based on a 1-year average factor for each year. <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2019>.

2.4 Weather Correction

A considerable contribution to the greenhouse emissions of the Council is from space heating. With changing heat demand depending on the weather of each year there can be increased or decreased fuel demand, which will have an impact on our emissions. Weather correction calculations can be undertaken to adjust for this bias. Weather corrected figures can be found in Appendix 2. The official annual reported emissions are uncorrected.

2.5 Reading Borough Council Greenhouse Gas carbon footprint, 2019/20

Reading Borough Council's absolute (gross) corporate carbon emissions for 2019/20 were 7,219 tCO₂, down 2.6% against 2018/19 (7,409 tCO₂) emissions. Renewably generated electricity, exported to the grid, or sold to third parties can be netted off against this gross figure, to the sum of 371 tCO₂, giving net corporate carbon emissions of 6,848 tCO₂.

The absolute carbon emissions of the organisations' wider activities were 14,060 tCO₂ for 2019/20. Carbon emissions from schools were 5,451 tCO₂ (gross) for 2019/20, down 9.4 % compared to 2018/19 figures.

The GHG carbon footprint figures for 2019/20 are illustrated in Table 2.1 below, compared against 2018/19 data. A full breakdown of the data can be found in Appendix 3.

YEAR	2018/19	2019/20
	tCO ₂	tCO ₂
SCOPE 1 - Corporate		
	3,871	4,010
SCOPE 2 - Corporate		
	3,114	2,801
SCOPE 3		
<i>CORPORATE</i>	424	409
<i>SCHOOLS</i>	6,013	5,451
<i>MANAGED ASSETS/SERVICES</i>	1,611	1,390
GROSS EMISSIONS - Scope 1, 2, 3 - CORPORATE	7,409	7,219
GROSS EMISSIONS - ALL	15,034	14,060
ELECTRICITY EXPORTED/SOLD TO GRID/OTHERS	412	371
NET EMISSIONS - Scope 1, 2, 3 - CORPORATE	6,997	6,848
NET EMISSIONS - ALL	14,622	13,689

Table 2.1: Reading Borough Council GHG Emissions 2019/20, compared to 2018/19 figures.

2.6 Intensity Measurement

This measures an organisation's GHG emissions against a specific relevant activity. There are a number of factors that determine and influence the level of GHG emissions of an organisation, such as size of buildings, number of employees (activity ratios), financial turnover of the business (financial ratio) etc.

For Reading Borough Council, the intensity ratio is measured by number of Full Time Equivalent (FTE) staff working for the Council. The recommended methodology by the Defra/DECCs guide is to measure using direct emissions (Scope 1 and 2) only which occurs as a direct result of staff activities.

In January 2019 Reading Borough Council created Brighter Futures for Children (BFfC) which is a not-for-profit company separate from the Council. This change took place in January 2019, the last quarter of the 2018/19 reporting year, so the employment intensity ratio for that year includes FTE staff from Brighter Futures for Children as well as Reading Borough Council staff.

The employee intensity ratio for Reading Borough Council as a whole (not including BFfC) , for 2019/20 was

$$\text{tCO}_2\text{e per FTE} = \frac{6,811}{1,471.7} = 4.63 \text{ tCO}_2\text{e/FTE}$$

The employee intensity ratio for Reading Borough Council, for 2018/19 was

$$\text{tCO}_2\text{e per FTE} = \frac{6,985}{1,837.83} = 3.71 \text{ tCO}_2\text{e/FTE}$$

2.7 Progress against target

Reading's Climate Change Strategy 2008 - 2013 set a reduction target of 4% per annum for Reading's owned estate and operations. The subsequent Reading Climate Change Strategy 2013-20, a collaborative strategy with business, community and public sector, set a target for borough-wide carbon emissions reductions of 34 % by 2020, against a 2005 (2005/6) baseline. This would be achieved in part by encouraging participants to achieve a 7% per annum reduction. The Council's target from 2013 to 2020 therefore was increased to 7% per annum. Figure 2.1 below illustrates RBC's corporate emissions reductions, compared against the annual reduction targets.

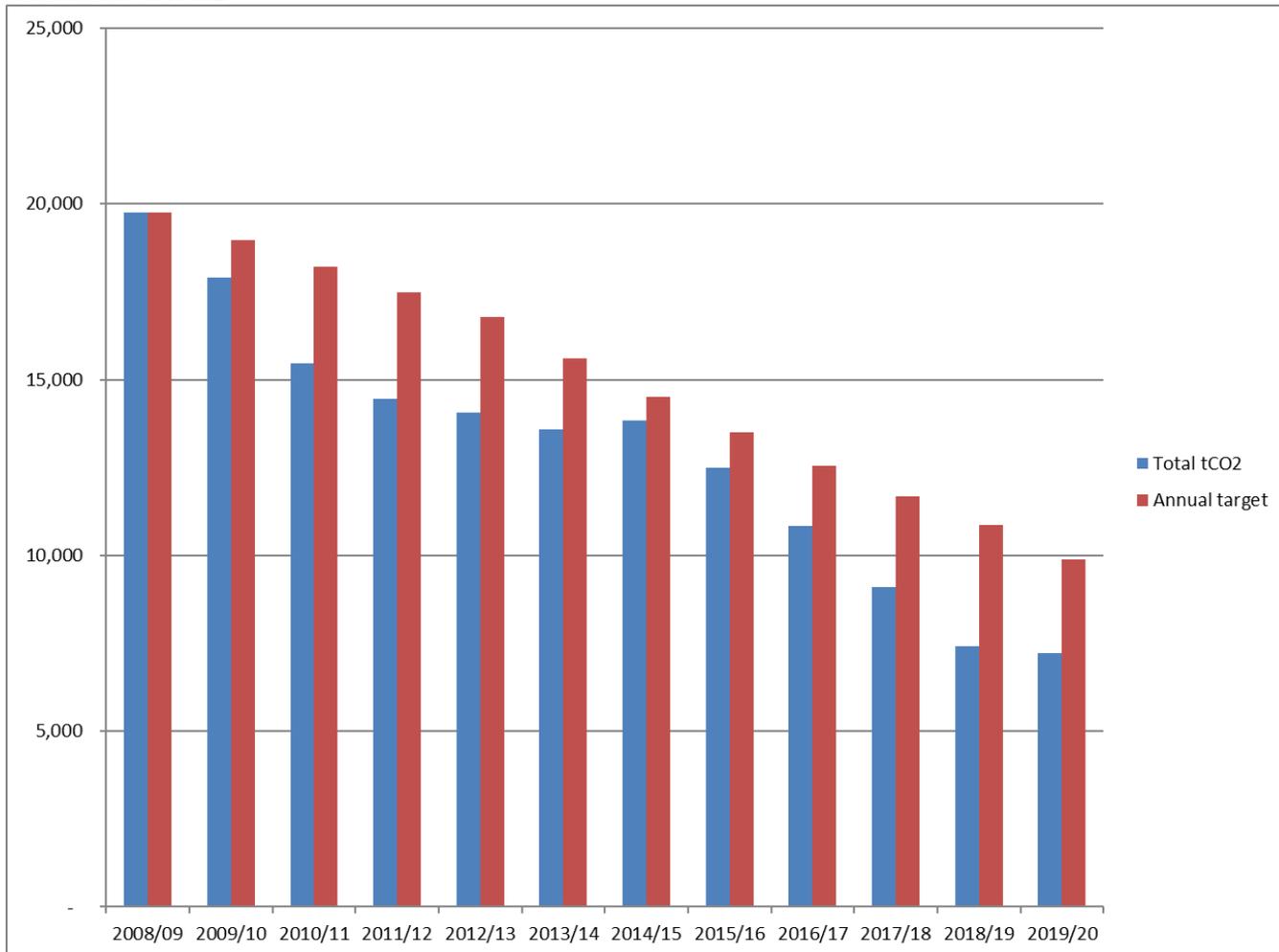


Figure 2.1: Reading Borough Council’s corporate GHG emission performance against annual target from the Baseline year (2008/9) through to 2019/20

2.8 Renewable / low carbon energy

Reading Borough Council owns over 500 PV arrays, and has shareholdings in a community PV generation scheme in the borough, which in total generated 1,567,012 kWh of electricity in 2019/20, of which over 650,000 kWh was deemed to have been exported to the National Grid. Twenty-three systems generated and self-supplied 174,847 kWh to RBC sites, whilst the remaining arrays generated and supplied 495,051 kWh to schools and other parties in 2019/20. The renewably generated electricity leads to 371 tCO₂ carbon emissions savings, which are ‘netted off’ against the RBC gross emissions (excluding those ‘self-supplied’).

Some schools own their own PV arrays, self-supplying and generating electricity on site. In 2019/20 these systems generated an estimated 53,398 kWh.

In 2015, a project to install photovoltaic solar panels onto 457 Council houses was completed. Tenants benefit from free electricity from the panels and the Council receive payment from the Feed in Tariff and export of electricity to the National Grid. In 2019 the solar PV on these properties generated 831,939 kWh from the systems installed. 50% of this is deemed to be exported to the Grid and 50% is deemed to be supplied to the tenant.

3. Risks and Opportunities

There is overwhelming global consensus that society should rise to the challenge of tackling climate change. In times of economic uncertainty and with the planet facing unprecedented pressures on natural resources, energy reserves and land use, Reading Borough Council is committed to playing its part in averting the risks of severe climate change. We will act locally in the global interest, but we will not overlook the local opportunities and benefits of this action. These benefits include improving the efficiency and resilience of our local communities and infrastructure.



References

Environmental Reporting Guidelines: Including mandatory greenhouse gas emissions reporting, June 2013

Reading's Climate Change Strategy 2008-2013. Stepping forward for Climate Change

Reading's Climate Change Strategy 2013-2020; *Reading Means Business on Climate Change*

The Reading Climate Emergency Strategy 2020-25

Reading's Local Authority Carbon Management Plan (LACM) 2007

Shaping Reading's Future. Our Corporate Plan 2018 - 2021

The Carbon Plan 2020-2025: Reading Borough Council - our pathway to net zero Carbon

Appendices

Appendix 1: GHG Protocol scope and treatments of renewables

Reporting of GHG emissions for RBC, divided into 3 scopes	
Scope 1 (Direct emissions): Emissions from activities owned or controlled by your organisation that release emissions into the atmosphere. They are direct emissions.	
Fossil fuels - Natural Gas and burning oil consumption	Direct emissions from combustion of natural gas and oil
Transport Fleet	Direct emissions from combustion of diesel and petrol
Fugitive emissions from air conditioning units only (excluding emissions from domestic fridges and freezers)	Emissions released from equipment leaks
Self-supplied renewably generated electricity or heat	Direct emissions at site (zero emissions). See Figure A1 below for further detail on treatment of renewables.
Scope 2 (Energy indirect): Emissions released into the atmosphere associated with your consumption of purchased electricity, heat, steam and cooling. These are indirect emissions that are a consequence of your organisation's activities but which occur at sources you do not own.	
Purchased electricity	Electricity purchased from supplier. Emissions at source, outside RBC control.
Scope 3 (Other indirect): Emissions that are a consequence of your actions, which occur at sources which you do not own or control and which are not classed as scope 2 emissions.	
Electricity losses from transmission and distribution	Emissions as a result of losses from transmission and distribution of electricity on the national grid
Managed Assets - Business travel	Emissions as a result of travel by means not owned or controlled by RBC
Schools (Community, Voluntary Aided, Diocese, Academy and Free Schools)	Emissions from activities within schools, which are not controlled by RBC
Outsourced services (5 car parks, 2 leisure centres and bus company office)	Emissions from activities within managed services, which are not controlled by RBC
Outside Scopes:	
CO ₂ equivalent emissions from biofuels	Other GHG emissions from combustion of biofuels. Awaiting emissions factors
Renewable electricity:	
Renewably generated electricity from systems owned by RBC, but supplying electricity to other parties	Emissions avoided by generating electricity renewably at site. See Figure A1 below for further detail on treatment of renewables.

Exclusions:

Water supplied & sewerage: to date the data available for reporting emissions from water use is not sufficiently robust. Work is being undertaken to enable this for future years.

Fleet fuel data from Managed Services (Reading Buses) in Scope 3 are quoted, but not included in total carbon footprint figures, due to some missing data (2014/15).

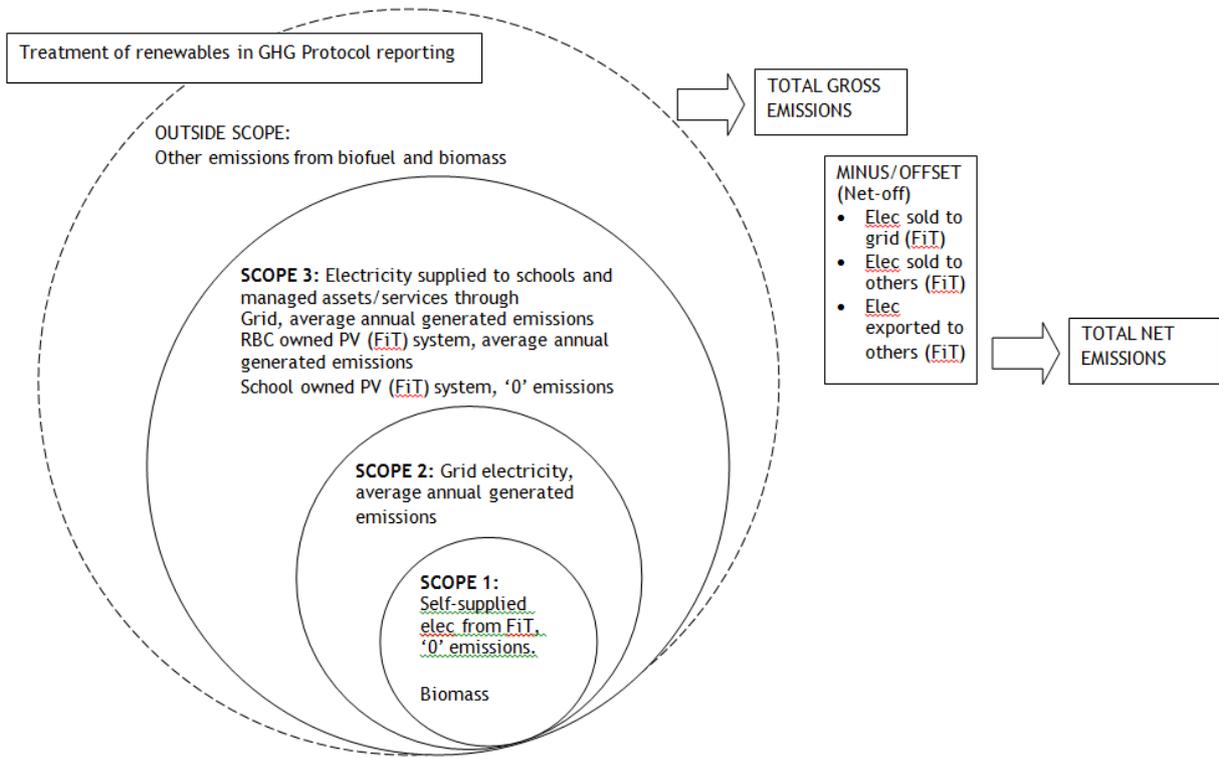


Figure A1: Treatment of renewables in GHG Protocol reporting, depending on system ownership and reporting scope

Appendix 2: Historic data

YEAR	REPORTING UNITS	BASELINE: 2008/09			2014/15			2015/16			2016/17			2017/18		
		kWh/litres/km/m ³ /kg	conversion factor	tCO2	kWh/litres/km/m ³ /kg	conversion factor	tCO2	kWh/litres/km/m ³ /kg	conversion factor	tCO2	kWh/litres/km/m ³ /kg	conversion factor	tCO2	kWh/litres/km/m ³ /kg	conversion factor	tCO2
SCOPE 1																
GAS	kWh	#####	0.1836	4,888	17,244,563	0.18437	3,190	17,930,037	0.18445	3,307	16,507,378	0.184	3,037	16,830,923	0.2	3,100
OIL	litres	329,462	0.2468	81	15,702	2.53797	40	13,851	2.53215	35	18,700	2.53215	47	19,181	2.5	49
FLEET - DIESEL	litres	616,794	2.5725	1,587	526,743	2.6024	1,371	474,783	2.5839	1,227	416,684	2.61163	1,088	466,509	2.6	1,213
FLEET - PETROL	litres	16,717	2.2450	38	12,538	2.1914	27	11,577	2.1944	25	44,938	2.19637	99	11,094	2.2	24
FUGITIVE - R12	kg			-			-		0				-	23,714	3.0	
FUGITIVE - R22	kg			-	0.65	1810	1	-	0	-			-			-
FUGITIVE - R407C	kg				10.3	1526	16	-	0	-				5	1,810.0	9
FUGITIVE - R134A	kg							0	1300	0			0			-
FUGITIVE - R410A	kg				0.31	1725	0.5	-	0	-	37	2088	76			-
FUGITIVE - R436	kg							-	0	-			-			-
FUGITIVE - R404a	kg							4	3921.6	14.5			0			-
CHP - GAS	kWh			-	509,368	0.18437	94	-	0	-	-		-			-
CHP - ELECTRICITY	kWh			-	146,961	0	-	-	0	-	-		-			-
BIOMASS				-			-	-	0	-	61	0	-			-
ELECTRICITY FROM RENEWABLES	kWh			-	77,214	0	-	179,520	0	-	196,925	0	-	18	-	-
TOTAL				6,594			4,740			4,609			4,348			4,395
SCOPE 2																
ELECTRICITY FROM GRID	kWh	24,416,536	0.4853	11,850	16,751,671	0.49426	8,280	15,256,177	0.46219	7,051	14,015,798	0.41205	5,775			4,134
CAR CLUB - SMALL	km	-	-	-	13,491	0.16061	2	12,843	0.15853	2	4,879	0.16027	1			0.7
CAR CLUB - MEDIUM	km	-	-	-	5,755	0.20088	1	5,000	0.19331	1	1,945	0.20033	0.4			0.3
TOTAL				11,850			8,283			7,054			5,776			4,135
SCOPE 3																
<i>CORPORATE</i>																
ELECTRICITY FROM GRID T&D	kWh	24,416,536	0.0391	954	16,751,671	0.0432	724.01	15,256,177	0.0382	582	14,015,798	0.03727	522	11,758,772	0.0329	387
BUSINESS MILEAGE - average fuel unknown	km	1,742,835	0.2086	364	1,320,563	0.1894	250.15	1,284,393	0.1864	239	1,067,231	0.1856	198	923,957	0.1824	169
BUSINESS MILEAGE - average petrol											2,585	0.19184	0.5		0.1857	-
BUSINESS MILEAGE - supermini petrol											932	0.16285	0.2		0.1587	-
BUSINESS MILEAGE - dual purpose 4 x 4															0.252	-
BUSINESS MILEAGE - luxury															0.3369	-
BUSINESS MILEAGE - MPV petrol											225	0.20761	0.0		0.2022	-
BUSINESS MILEAGE - MPV diesel											80	0.18965	0.0		0.1855	-
BUSINESS MILEAGE - executive petrol											93	0.24707	0.0		0.2411	-
BUSINESS MILEAGE - executive diesel											398	0.19118	0.1		0.1852	-
BUSINESS MILEAGE - lower medium petrol											554	0.19027	0.1		0.1848	-
BUSINESS MILEAGE - small petrol														25,274	0.1565	4
BUSINESS MILEAGE - med petrol														26,608	0.1949	5
BUSINESS MILEAGE - large petrol														782	0.2854	0
BUSINESS MILEAGE - small diesel														298	0.1455	0
BUSINESS MILEAGE - med diesel														2,574	0.1738	0
BUSINESS MILEAGE - large diesel														182	0.2183	0
BUSINESS CYCLE	km				12,992		-	-			13,626		-	7,754	0.17	0
BUSINESS MOTORCYCLE	km				1,794	0.1196	0.21	-			-		-		0.22	0
WATER SUPPLIED	m ³			-			-	-		-			-			-
WATER SEWERAGE	m ³			-			-	-		-			-			-

YEAR	REPORTING UNITS	BASELINE: 2006/09			2014/15			2015/16			2016/17			2017/18		
		kWh/litres/km/m ³ /kg	conversion factor	tCO ₂	kWh/litres/km/m ³ /kg	conversion factor	tCO ₂	kWh/litres/km/m ³ /kg	conversion factor	tCO ₂	kWh/litres/km/m ³ /kg	conversion factor	tCO ₂	kWh/litres/km/m ³ /kg	conversion factor	tCO ₂
SCOPE 3																
<i>SCHOOLS</i>																
GAS	kWh	12,243,654	0.1836	2,248	17,814,444	0.1850	3,295	17,306,100	0.1845	3,192	17,015,787	0.184	3,131	16,391,168	0.18	3,031
OIL	litres	4,375,859	0.2468	1,080	120,654	2.5380	306	100,637	2.5322	255	128,863	2.53232	326	127,077	2.53	322
ELECTRICITY FROM GRID	kWh	3,593,802	0.4853	1,747	8,121,358	0.4943	4,014	7,939,271	0.4622	3,669	7,576,362	0.41205	3,122	7,860,976	0.35	2,764
ELECTRICITY FROM GRID T&D	kWh	3,593,802	0.0391	141	8,121,358	0.0432	351	7,939,271	0.0382	303	7,576,362	0.03727	282	7,860,976	0.03	258
ELECTRICITY FROM RBC FIT	kWh		0.4853	-	77,970	0.4943	39	145,993	0.4622	67	160,795	0.41205	66	139,338	0.35	49
ELECTRICITY FROM RENEWABLES	kWh		-	-	20,431	0.0000	-	19,383	0.0000	-	19,383	0	-	21,373	-	-
WATER SUPPLIED	m ³			-			-			-			-			-
WATER SEWERAGE	m ³			-			-			-			-			-
FUGITIVE - R410A	kg			-			-				8	2088	16	11	2,088	24
<i>MANAGED ASSET SERVICES</i>																
GAS	kWh	6,108,386	0.1836	1,121	4,847,143	0.1850	897	4,952,281	0.1845	913	4,082,951	0.184	751	3,420,805	0.18	630
OIL	litres			-			-			-			-			-
ELECTRICITY FROM GRID	kWh	3,822,312	0.4853	1,855	3,838,088	0.4943	1,897	3,405,270	0.4622	1,574	3,220,481	0.41205	1,327	3,116,522	0.35	1,096
ELECTRICITY FROM GRID T&D	kWh	3,822,312	0.0391	149	3,838,088	0.0432	166	3,405,270	0.0382	130	3,220,481	0.03727	120	3,116,522	0.03	102
ELECTRICITY FROM RBC FIT			0.4853	-	78,782	0.4943	39	83,326	0.4622	39	73,692	0.41205	30	70,733	0.35	25
ELECTRICITY FROM RENEWABLES	kWh		-	-			-			-			-			-
FLEET - DIESEL	litres	3,817,389	2.5725	9,820				3,561,684	2.5839	9,203	3,044,721	2.61163	7,952	3,155,306	2.60	8,204
FLEET - CNG	tonnes	-	-	-				957	2,726.05	2,610	957	2,715.83	2,599	1,105	2,814	3,110
WATER SUPPLIED	m ³			-			-			-			-			0
WATER SEWERAGE	m ³			-			-			-			-			0
TOTAL				9,659			11,978			10,964			9,894			8,866
OUTSIDE SCOPE																
FLEET - DIESEL - BIOFUEL MIX	litres				526,743			474,783			416,684			466,509		
FLEET - PETROL - BIOFUEL MIX	litres				12,538			11,577			44,998			11,034		
CNG	litres															
BIOMASS											61			18		
TOTAL																
GROSS EMISSIONS - CORPORATE				19,761			13,997			12,485			10,846			9,095
GROSS EMISSIONS - ALL				28,103			25,000			22,628			20,018			17,395
GROSS EMISSIONS - CORPORATE - weather corrected				19,606			13,971			12,521			10,573			8,763
GROSS EMISSIONS - ALL - weather corrected				27,809			24,941			22,710			19,374			16,644
ELECTRICITY EXPORTED/SOLD TO GRID/OTHERS	kWh				346,924	0.53748	186	735,091	0.50035	368	1,356,908	0.44932	610	1,293,637	0.3844	500
NET EMISSIONS - CORPORATE				19,761			13,997			12,117			10,236			8,595
NET EMISSIONS - ALL				28,103			24,814			22,260			19,409			16,896
NET EMISSIONS - CORPORATE - weather corrected				19,606			13,785			12,153			9,963			8,264
NET EMISSIONS - ALL - weather corrected				27,809			24,754			22,343			18,764			16,144

Note: Fleet fuel data in 'Managed Services' Scope 3 are not included in total emissions figures

Appendix 3: Full breakdown 2019/20 GHG data

YEAR	REPORTING UNITS	BASELINE: 2008/09			2018/19			2019/20			
		kWh/litres/km/ m3/kg	conversion factor	tCO2	tCO2	kWh/litres/km/ m3/kg	conversion factor	tCO2	kWh/litres/km/ m3/kg	conversion factor	tCO2
SCOPE 1											
GAS	kWh	26,624,860	0.1836	4,888	3099.64992	13,479,123	0.18396	2,480	13,617,789	0.18385	2,504
OIL	litres	329,462	0.2468	81	48.57261715	18,900	2.53627	48	22,500	2.54042	57
FLEET - DIESEL	litres	616,794	2.5725	1,587	1212.999306	444,243	2.62694	1,167	436,640	2.59411	1,133
FLEET - PETROL	litres	16,717	2.2450	38	24.38897459	12,029	2.20307	27	13,310	2.20904	29
FLEET - GAS OIL						23,085			21,229	2.75821	59
FUGITIVE - R12	kg			-					-		0
FUGITIVE - R22	kg			-		0			-		0
FUGITIVE - R407C	kg				9.05		1774		11	1774	20
FUGITIVE - R134A	kg				0		0		-		0
FUGITIVE - R410A	kg				0	72	2088		47	2088	98
FUGITIVE - R49a	kg				0				-		0
FUGITIVE - R404a	kg				0				28	3922	110
CHP - GAS	kWh			-	0	-	0		-	0	-
CHP - ELECTRICITY	kWh			-	0	-			-	0	-
BIOMASS				-	0	7	0		-	0	-
ELECTRICITY FROM RENEWABLES	kWh			-		187,902	0		-	174,847	0
TOTAL				6,594	4394.660818			3,871			4,010
SCOPE 2											
ELECTRICITY FROM GRID	kWh	24,416,596	0.4853	11,850	4133.913884	10,996,861	0.28307	3,113	10,957,750	0.2556	2,801
CAR CLUB - SMALL	km	-	-	-	0.693565589	3,714	0.15565	1	554	0.15371	0
CAR CLUB - MEDIUM	km	-	-	-	0.30392934	1,075	0.19386	0.2	99	0.19228	0
TOTAL				11,850	4134.911379			3,114			2,801
SCOPE 3											
SCHOOLS											
GAS	kWh	12,243,654	0.1836	2,248	3,031	17,506,254	0.18396	3,220	17,139,950	0.18385	3,151
OIL	litres	4,375,859	0.2468	1,080	322	143,139	2.53627	363	64,810	2.54042	165
ELECTRICITY FROM GRID	kWh	3,599,802	0.4853	1,747	2,764	7,743,950	0.28307	2,192	7,566,730	0.2556	1,934
ELECTRICITY FROM GRID T&D	kWh	3,599,802	0.0391	141	258	7,743,950	0.02413	187	7,566,730	0.0217	164
ELECTRICITY FROM RBC FIT	kWh		0.4853	-	49	172,350	0.28307	49	91,973	0.2556	24
ELECTRICITY FROM RENEWABLES	kWh		-	-	-	53,398	0	-	53,398	0	-
WATER SUPPLIED	m3			-	-	-					
WATER SEWERAGE	m3			-	-	-					
FUGITIVE - R410A	kg				24	1	2088		2	2088	13
FUGITIVE - R407C	kg				-		1774		-	1774	-
MANAGED ASSETS/SERVICES											
GAS	kWh	6,108,386	0.1836	1,121	630	3,301,373	0.18396	607	3,355,325	0.18385	617
OIL	litres			-	-	-					
ELECTRICITY FROM GRID	kWh	3,822,312	0.4853	1,855	1,096	3,194,976	0.28307	904	2,751,938	0.2556	703
ELECTRICITY FROM GRID T&D	kWh	3,822,312	0.0391	149	102	3,194,976	0.02413	77	2,751,938	0.0217	60
ELECTRICITY FROM RBC FIT	kWh		0.4853	-	25	79,072	0.28307	22	38,733	0.2556	10
ELECTRICITY FROM RENEWABLES	kWh		-	-	0						
FLEET - DIESEL	litres	3,817,389	2.5725	9,820	8,204	3,451,905	2.62694	9,068	2,935,195	2.59411	7,614
FLEET - CNG	tonnes	-	-	-	3,110	1,752	2,746.63	4,812	1,758	2542.04	4,469
WATER SUPPLIED	m3			-	0						
WATER SEWERAGE	m3			-	0						
TOTAL				9,659	8,865			8,049			7,250
OUTSIDE SCOPE											
FLEET - DIESEL - BIOFUEL MIX	litres										
FLEET - PETROL - BIOFUEL MIX	litres										
CNG	litres										
BIOMASS							18				
TOTAL											
GROSS EMISSIONS - CORPORATE											
GROSS EMISSIONS - ALL				19,761	9,095			7,409			7,219
GROSS EMISSIONS - CORPORATE - weather corrected				28,103	17,395			28,914			26,233
GROSS EMISSIONS - ALL - weather corrected				19,606	8,763			7,318			7,030
GROSS EMISSIONS - ALL - weather corrected				27,809	16,643			28,672			25,659
ELECTRICITY EXPORTED/SOLD TO GRID/OTHERS											
ELECTRICITY EXPORTED/SOLD TO GRID/OTHERS	kWh				500	1,340,503	0.3072	412	1,338,767	0.2773	371
NET EMISSIONS - CORPORATE											
NET EMISSIONS - CORPORATE				19,761	8,595			6,997			6,848
NET EMISSIONS - ALL				28,103	16,895			28,502			25,862
NET EMISSIONS - CORPORATE - weather corrected				19,606	8,263			6,906			6,659
NET EMISSIONS - ALL - weather corrected				27,809	16,144			28,260			25,288