



DISTRICT COUNCIL  
NORTH OXFORDSHIRE

# Greenhouse Gas Report

## Reporting Year 2019 - 2020

Cherwell District Council

**Date:** February 2021  
**Owner:** Climate Action Team

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## 1 Executive Summary

- 1.1. During 2019/20 Cherwell District Council reduced its carbon emissions by 9.2% (419.38 tonnes CO<sub>2</sub>e), from 4573.69 in 2018/19 tonnes CO<sub>2</sub>e to 4154.31 tonnes CO<sub>2</sub>e in 2019/20. This represents a 38.9% reduction against our baseline of 2008/09.

## 2 Context

- 2.1. Cherwell District Council provides services to residents, businesses and communities across the whole county. The following are the key service services are provided by the Council (but not an exhaustive list)
- leisure services
  - housing
  - planning
  - landscape and ground maintenance
  - public convenience
  - waste collection.
- 2.2. The Council either provides these services directly or commissions them from other organisations. Most of these services are statutory – things we are obliged by law to do.

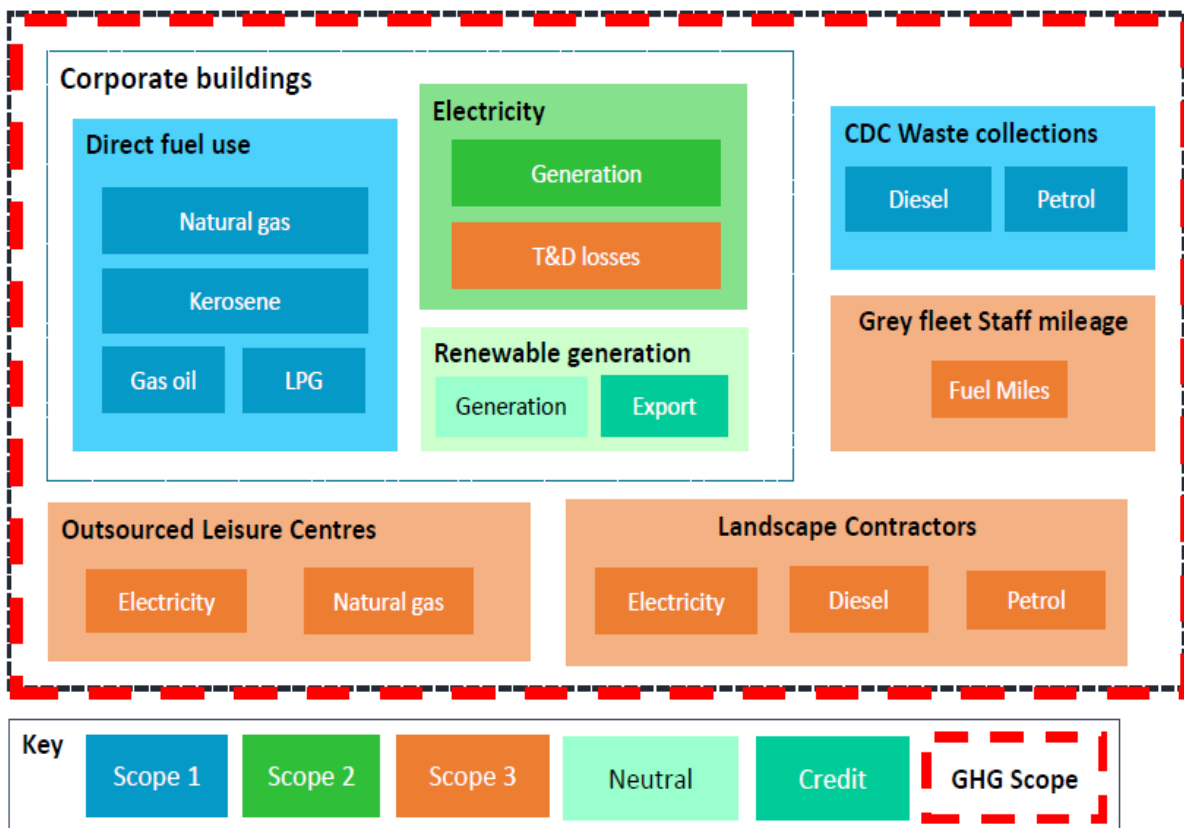
## 3 Reporting Period

- 3.1. This report covers GHG emissions from April 2019 to March 2020 with comparisons to previous years

## 4 Introduction, boundary and conversion factors

- 4.1. Each year, Cherwell District Council publishes details of its greenhouse gas (GHG) emissions in accordance with the guidance published by the Department of Business, Energy and Industrial Strategy (BEIS).
- 4.2. The Council is committed to improving our GHG reporting in line with the latest BEIS guidance. We will be auditing our data in 2020/21.
- 4.3. **Figure 1** shows the scope of our reported GHG emissions boundary. The council reports on emissions from its:
- Corporate buildings, public conveniences, waste collection fleet & business mileage
  - Outsourced leisure centres
  - Outsourced landscape service.
- These have historically been included in our carbon footprint.
- 4.4. In July 2019 the council committed to becoming carbon neutral by 2030 for all its reported emission sources, which include corporate and contractor emissions.
- 4.5. The carbon factor methodology applied are the 2019 advanced carbon factors for the emissions generated in the financial year 2019-20, which can be found at [Greenhouse gas reporting: conversion factors 2019 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2019)

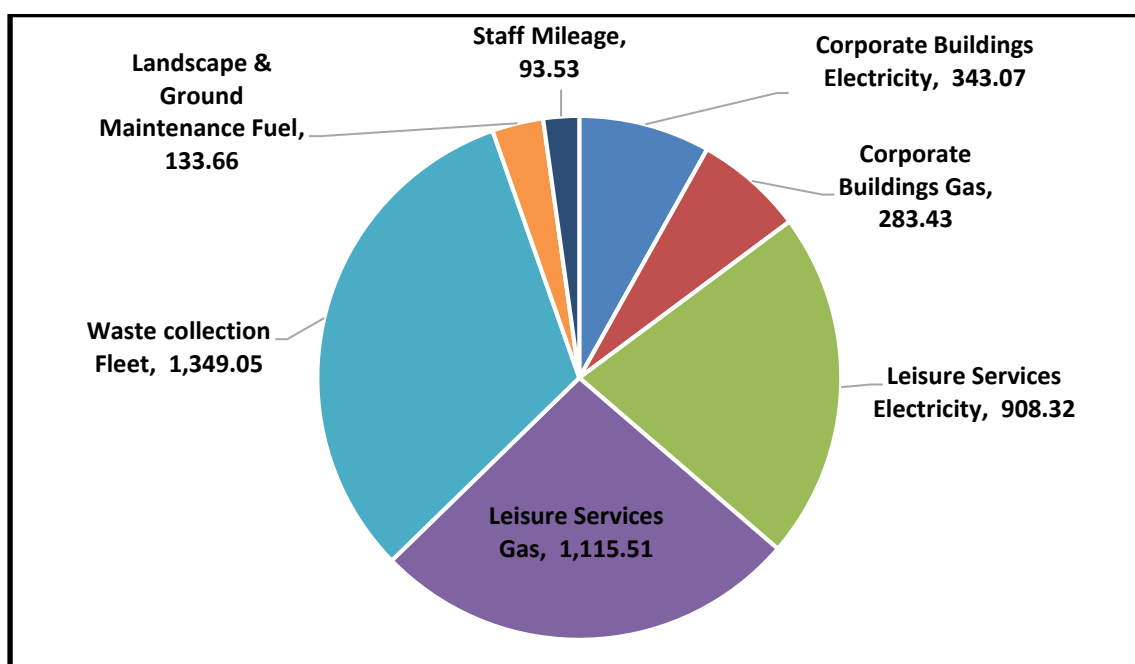
**Figure 1: CDC GHG Emissions Boundary**



## 5 Greenhouse Gas (GHG Emissions) 2019/20

- 5.1. **Figure 2** shows that for **2019/20** gross emissions from Cherwell District Council were **4,154.31** tonnes of CO<sub>2</sub> equivalent (CO<sub>2e</sub>) split across the six service areas and fuel types. This includes offsetting from solar exports in corporate and leisure centre buildings (as highlighted in Table 1).

**Figure 2: Total GHG emissions breakdown per sector and fuel type (tonnes CO<sub>2</sub>e)**



## 6 Change from Previous Year

6.1. Total emissions in **2019/20** fell from 4,573.69 tonnes of CO<sub>2</sub>e to 4,154.31 tonnes of CO<sub>2</sub>e, a reduction of **9.2%** (419.38 tonnes of CO<sub>2</sub>e).

- Emissions from **corporate buildings, public conveniences, waste collection fleet & business mileage** fell from 2,239.69 tonnes of CO<sub>2</sub>e to 2,029.35 tonnes of CO<sub>2</sub>e, a reduction of 9.4%. This includes offsets from Solar PV exports.
- Emissions from **outsourced leisure centres and outsourced landscape service** fell from 2,334.01 tonnes of CO<sub>2</sub>e to 2,124.96 tonnes of CO<sub>2</sub>e, a reduction of 9%. This includes offsets from Solar PV exports.

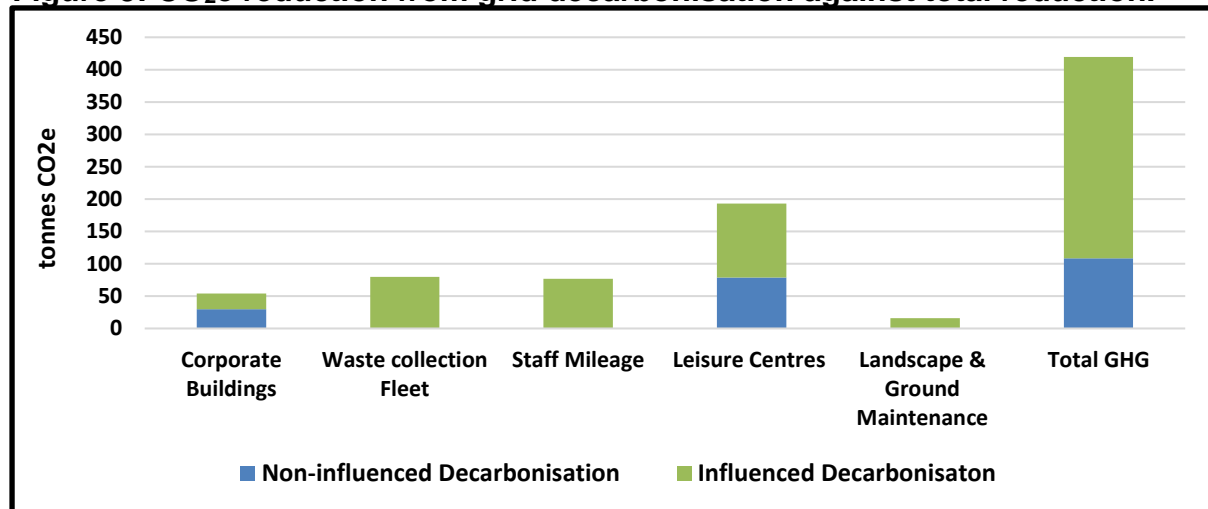
6.2. **Table 1** below shows the comparison of emissions in 2019/20 against 2018/19.

**Table 1: Emissions Comparison 2018/19 and 2019/20 (tonnes CO<sub>2</sub>e)**

2018/19 and 2019/20 Comparison			
	2018/19	2019/20	Reduction
Corporate Buildings	665.81	621.65	-6.6%
Public Conveniences	5.05	4.85	-3.9%
Waste collection Fleet	1,428.73	1,349.05	-5.6%
Staff Mileage	170.08	93.53	-45.0%
Solar Export Corporate (offset)	29.99	39.74	
<b>Total - Corporate building, public conveniences, waste collection fleet &amp; business mileage</b>	<b>2,239.68</b>	<b>2,029.35</b>	<b>9.4%</b>
Leisure Services	2,259.37	2,023.83	-10.4%
Landscape & Ground Maintenance	149.75	133.66	-10.7%
Solar Export Leisure Centre (offset)	75.11	32.53	
<b>Total - Leisure Services &amp; Landscape Contractors</b>	<b>2,334.01</b>	<b>2,124.96</b>	<b>-9.0%</b>
<b>Total Emissions</b>	<b>4,573.69</b>	<b>4,154.31</b>	<b>-9.2%</b>

- 6.3. Non-influenced decarbonisation (due to electricity grid decarbonisation and annual changes to carbon factors) accounted for 108.79 tonnes CO<sub>2</sub>e, 25.94% of total reduction, with influenced decarbonisation (due to changes in consumption) accounting for the remainder.

**Figure 3: CO<sub>2</sub>e reduction from grid decarbonisation against total reduction.**



- 6.4. Gas consumption in 2019/20 increased in line with expectations due to weather differences between 2018/19 and 2019/20. Cherwell District Council will be investigating the option to install automatic meter readers to improve the accuracy of gas consumption data.

## 7 Comparison against baseline year and reduction target

Cherwell District Council track emissions against the baseline year of 2008/09.

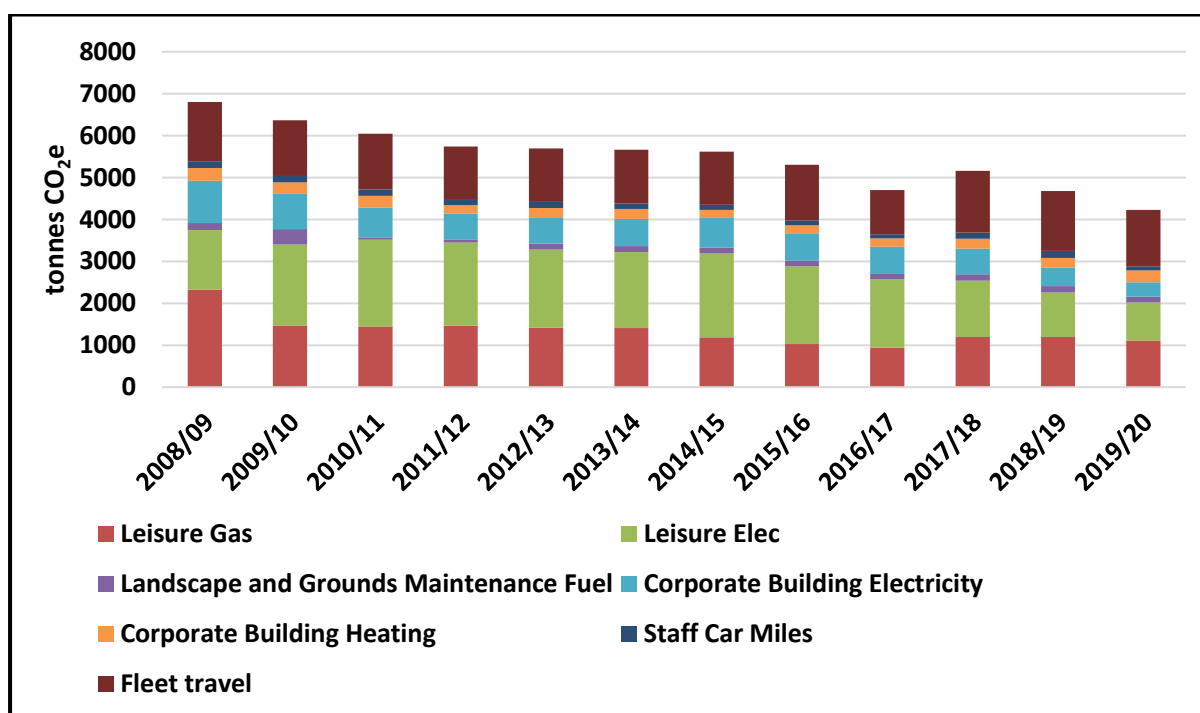
- 7.1. **Total emissions** were **6,804.06** tonnes of CO<sub>2</sub>e in 2008/09 and **4,154.31** tonnes CO<sub>2</sub>e in 2019/20. This represents a decrease of 2,649.75 tonnes of CO<sub>2</sub>e or **38.9%** since the baseline year, equivalent to an average reduction of **3.54%** per year.
- Emissions from **corporate buildings, public conveniences, waste collection fleet & business mileage** have reduced by 29.7% since 2008/09, an average reduction of 2.7% per year.
  - Emissions from **outsourced leisure centres and outsourced landscape service** have reduced by 45.7% since 2008/09, an average reduction of 4.15% per year.
  - Table 2** below shows the comparison of emissions in 2019/20 against the baseline year 2008/09. (refer Annex B for breakdown of data)

**Table 2: Emissions Comparison 2008/09 and 2019/20 (tonnes CO<sub>2</sub>e)**

2008/09 and 2019/20 Comparison			
	2008/09	2019/20	Reduction
Corporate Buildings	1,277.96	621.65	-51.4%
Public Conveniences	37.41	4.85	-87.0%
Waste collection Fleet	1,418.59	1,349.05	-4.9%
Staff Mileage	153.99	93.53	-39.3%
Solar Export Corporate (offset)	-	39.74	
<b>Total - Corporate building, public conveniences, waste collection fleet &amp; business mileage</b>	<b>2,887.96</b>	<b>2,029.35</b>	<b>-29.7%</b>
Leisure Services	3,747.68	2,023.83	-46.0%
Landscape & Ground Maintenance	168.42	133.66	-20.6%
Solar Export Leisure Centre (offset)	-	32.53	
<b>Total - Leisure Centres &amp; Landscape Contractors</b>	<b>3,916.10</b>	<b>2,124.96</b>	<b>-45.7%</b>
<b>Total Emissions</b>	<b>6,804.06</b>	<b>4,154.31</b>	<b>38.9%</b>

7.2. **Figure 4** below shows carbon emissions from the baseline year 2008/09 to 2019/20, with a breakdown of consumption by sector and fuel type.

**Figure 4: Annual carbon emissions by sector from baseline year 2008-2009**



## 8 Measurement, data quality, methodology and refinements

- 8.1. Cherwell District Council collect the data from property invoices, staff millage claims and fleet travel records.

### Annex A - Operational Scope breakdown

- Central Offices (Scopes 1 and 2)

- Operational Depots (Scope 1 and 2)
- EV Fleet (Scope 2)
- Fleet (Scope 1)
- Business miles (including cycling)- corporate estate and activities (Scope 3)
- Transmission and Distribution (Scope 3)
- Vacant properties - (in Scope 3)
- Outsourced Leisure Centre's (Scope3)
- Landscape Contractors (Scope 3)

### **Not included in current reporting and reasoning**

We do not currently include the following in our reporting for a variety of reasons but will annually review this situation:

- Water - Scope 3 - currently no reliable data available
- Supply Chain - Scope 3 – no data available
- Staff Commuting to work - Scope 3 - no data available
- Business mileage from public transport and walking - Scope 3 - currently no data available.



## Annex B – Detailed Breakdown of emissions from 2008/09 to 2019/20

	2008/2009		2009/2010		2010/2011		2011/2012		2012/2013		2013/2014		2014/2015		2015/2016		2016/2017		2017/2018		2018/2019		2019/2020		
SCOPE 1	Total Units	Emissions (tCO2e)	Total Units	Emissions (tCO2e)	Total Units	Emissions (tCO2e)	Total Units	Emissions (tCO2e)	Total Units	Emissions (tCO2e)	Total Units	Emissions (tCO2e)	Total Units	Emissions (tCO2e)	Total Units	Emissions (tCO2e)	Total Units	Emissions (tCO2e)	Total Units	Emissions (tCO2e)	Total Units	Emissions (tCO2e)	Total Units	Emissions (tCO2e)	
Gas (kWh) (from 17/18 m3)	1522167	279	1375293	253	1360012	252	939397	174	1097712	203	1096581	202	914741	169	879601	162	962024	177	98409	206	98573	202	123521	251	
Council fleet vans (km)		0		0		0		0		0		0		0		0		0		0		0		0	
Council fleet refuse trucks (km)		0		0		0		0		0		0		0		0		0		0		0		0	
other vehicles (litres)		0		0		0		0		0		0		0		0		0		0		0		0	
unknown (km)		0		0		0		0		0		0		0		0		0		0		0		0	
Fleet (litres) diesel	456535	1174	427176	1099	418815	1082	396876	1025	402399	1040	403127	1048	399219	1039	419719	1085	334043	872	456361	1187	440234	1156	420109	1090	
Landscaping petrol tools		0		0		0		0		21909		49		24376		54		20173		44		15614		34	
Landscaping diesel car		0		0		0		6995		18		23		12933		34		12415		32		13243		34	
Landscaping diesel van >1.25<3.5T	54201	139	116446	300	17136	44	15534	40	17828	46	10570	27	14702	38	17402	45	24504	64	31181	81	22820	60			
Biomass (tonnes) wood pellets		0		0		0		0		0		0		8		0		27		1		0		0	
Biomass (tonnes) wood chips		0		0		0		0		0		0		5		0		4		0		0		0	
Total emissions scope 1		1593		1651		1378		1258		1362		1365		1324		1362		1147		1519		1478		1341	
SCOPE 2																									
Electricity (kWh)	1666636	823	1388890	686	1243515	572	1091084	502	1097191	505	1165194	519	1143688	565	1136842	525	1254089	517	1361027	478	1250382	354	1085743	278	
Total emissions scope 2		823		686		572		502		505		519		565		525		517		478		354		278	
SCOPE 3																									
Business mileage inc WTT																									
small petrol cars (km, from 12/13 miles)	125230	25	119667	24	102257	20	124241	25	90792	29	106420	33	86448	27	90501	28	79221	24	101057	32	113820	36	0	0	
medium petrol cars (km, from 12/13 miles)	349842	87	246713	62	253217	63	213440	53	111919	45	91848	36	88704	34	92915	36	67628	26	27852	11	46070	18	0	0	
large petrol cars (km, from 12/13 miles)	38207	13	43713	15	60584	22	38073	14	19833	11	6695	4	7098	4	8783	5	4993	3	38028	22	27941	16	0	0	
small diesel cars (km, from 12/13 miles)	26956	5	44806	8	47359	8	42747	7	46886	13	70928	19	74085	21	72375	20	59561	17	9101	3	46385	13	0	0	
medium diesel cars (km, from 12/13 miles)	94088	20	162426	35	158974	34	152362	32	93667	32	85324	29	82330	29	69109	24	68996	24	7100	2	60047	21	0	0	
large diesel cars (km, from 12/13 miles)	10383	3	26137	8	34812	10	52403	15	30448	14	23511	11	16029	7	20256	9	13388	6	19122	8	102811	44	0	0	
small other/hybrid (km, from 12/13 miles)																				2518	1	0	0	0	
medium other/hybrid (km, from 12/13 miles)																				0	0	0	0	0	
larger other/hybrid (km, from 12/13 miles)																				126	0	0	0	0	
unknown diesel (km, from 12/13 miles)																				4841	2	63354	17	0	0
unknown petrol (km, from 12/13 miles)																				19134	7	17938	4	0	0
unknown other/hybrid (km, from 12/13 miles)																				100	0	0	0	0	
unknown (km, from 12/13 miles) bike from 18/19																				0	159283	59	81	0	0
Average Car Diesel																							156489	82	
Average Car Petrol																							124724	8	
Average Car Hybrid																							1120	0	
Average car unknown																							63111	4	
landscaping petrol tools																							20287	47	
landscaping diesel car																							0	0	
landscaping diesel van >1.25<3.5T																							23234	60	
leisure centre gas (kWh, from 17/18 m3)	11532557	2117	7309029	1342	6447775	1325	6502140	1336	6325957	1300	6657551	1225	5659508	1047	4925436	908	4496877	827	495906	1040	514931	1054	486143	987	
WTT (gas)																							486143	128	
leisure centre electricity (kWh)	2351934	1161	3193055	1577	3629230	1670	3489954	1605	3258963	1499	3233654	1441	3228551	1596	3219266	1488	3175709	1309	3011202	1059	3002189	850	2874600	735	
T & D, WTT T & D and WTT gen (electricity)																							2874600	174	
leisure biomass wood chips (tonnes, from 15/16 kWh)		0		0		0		0		0		0		45		2		898140		12		1084260		14	
T & D, WTT T & D and WTT gen (electricity)	4018570	447	4581945	510	4872745	540	4581039	508	4356154	483	4398848	503	4372239	547	4356108	491	4429797	464	4372229	412	4252571	296	1085743	66	
WTT (gas)	13054724	234	8684322	156	7807786	149	7441537	142	7423669	142	7754131	218	6574248	163	5805036	144	5458901	136	594316	188	613504	175	123521	33	
WTT (liquid fuels)																				0		0		0	
WTT fleet (litres) diesel	456535	244	427176	228	418815	244	396876	232	402399	235	403127	233	399219	231	419719	244	334043	185	456361	283	440234	272	420109	259	
WTT landscaping petrol tools		0		0		0		0		21909		10		24376		12		20173		9		15614		7	
WTT landscaping diesel car		0		0		0		6995		4		5		12933		7		12415		7		13243		8	
WTT landscaping diesel van >1.25<3.5T (from 17/18 all landscaping)	54201	29	116446	62	17136	10	15534	9	17828	10	10570	6	14702	9	17402	10	24504	14	31181	19	22820	14	23234	14	
WTT biomass wood chips (tonnes)		0		0		0		9		1		7		0		6		1		50		3		4	
WTT biomass wood pellets (tonnes)		0		0		0		0		48		9		34		2		8		1		27		4	
WTT biomass wood chips (kWh)																				898140		15		1084260	
Total emissions scope 3		4388		4027		4095		3983		3838		3781		3737		3453		3068		3160		2847		2608	
Total emissions (all scopes)		6804		6364		6045		5742		5705		5665		5626		5340		4731		5158		4679		4227	
Corporate Carbon offset (solar PV) (kWh)		0		0		4335		2		13060		6		318522		142		360210		160		357080		176	
Leisure Carbon offset (solar PV) (kWh)																									
Total overall emissions		6804		6364		6043		5737		5563		5505		5450		5173		4592		5044		4649		4154	
Change from 2008/2009 baseline				-6		-11		-16		-18		-19		-20		-24		-33		-26		-32		-39	
change from previous year				-6		-5		-5		-3		-1		-1		-5		-11		10		-8		-11	