



**OXFORDSHIRE
COUNTY COUNCIL**

Greenhouse Gas Report

Reporting Year 2021 - 2022

Oxfordshire County Council

Date: October 2022

Owner: Climate Action Team

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1. Executive Summary

- 1.1. The council reports data from its own operational emissions (those included in our Net Zero by 2030 target), as well as a limited range of other data sources including maintained schools and some contractor emissions. The council intends to expand the range of emissions included in its reporting in future reports, particularly major suppliers.
- 1.2. Owing to resuming of activity following the Covid lockdown data 21/22 shows an upward trend in some areas. However, comparison with the pre-covid year continues to show an overall downward trend in emissions
- 1.3. Although there was a 1.5% increase in emissions in 2021/22 as compared to the previous year, there was an overall reduction of 11% since 2019/20 (Pre covid). This equates to an average reduction of 5.5% annually in the last two years and 74.6% reduction against our baseline in 2010/11.
- 1.4. The emissions from the scope of our net zero 2030 target (corporate estate and activities) reduced by 3.6% (402 tonnes CO₂e) in 2021/22 compared to the previous year. This is 21% since 2019/20 and a 58.9% reduction against our baseline in 2010/11.
- 1.5. It should be noted that the strict COVID lockdown from March 2020 through to spring 2021 resulted in a significant reduction in emissions due to building closures and other reductions in activities and cannot be attributed fully to carbon reduction progress. In 2021/22 the emissions have increased as buildings and activities returned to near normal operation. Emissions from staff mileage remain lower than the 2019/20 pre-COVID levels due to an increase in virtual meetings.
- 1.6. As part of the council's commitment to continuously improve and expand its data reporting, during 2021/22 four additional data sources were added:
 - Agency staff business miles,
 - Wallingford and Cherwell Depot – OCC fleet minibus fuel,
 - Daily hire car miles,
 - Fuel used in OCC vehicles from depots managed by OCC's Highways maintenance contractor Milestone has now been moved from Scope 3 contractors to Scope 1 fleet.
- 1.7. To allow a direct comparison 2019/20, 2020/21 and 2021/22 figures now include the new fuels.
- 1.8. In 2021/22 electrical grid decarbonisation resulted in a reduction of 774 tCO₂e from electricity in 2021/22.
- 1.9. **Figure 1** shows comparison of tonnes of CO₂ split by business sector during **2019/20, 2020/21 and 2021/22**.

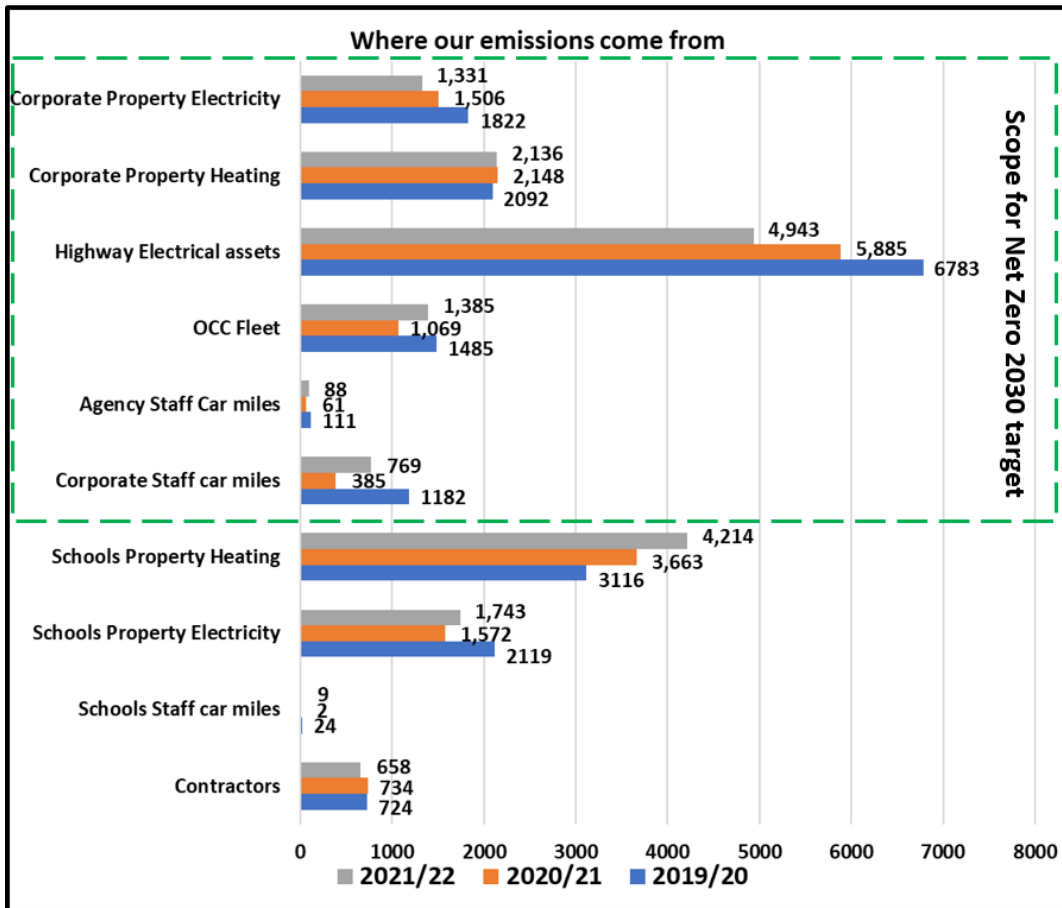
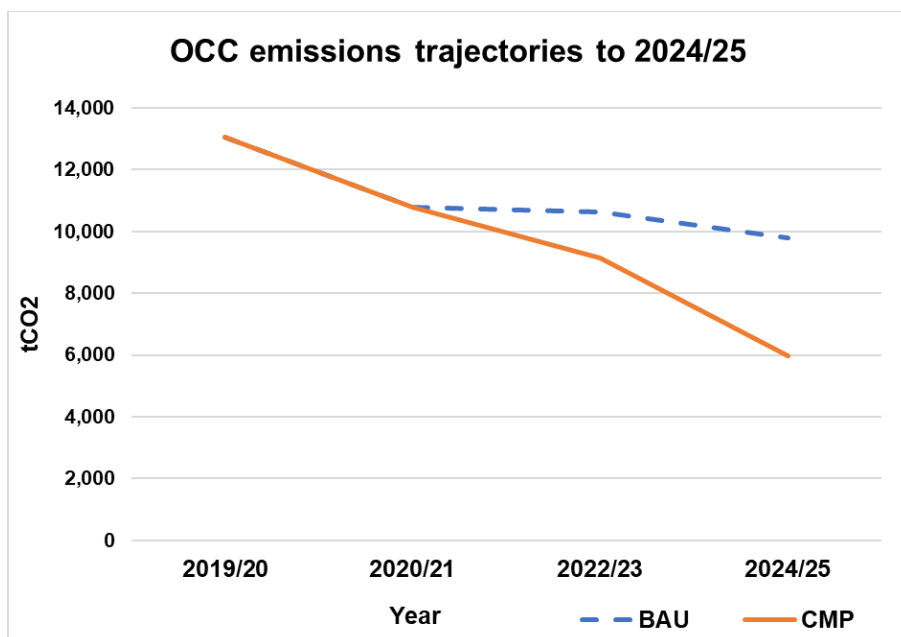


Figure 1: Emissions Breakdown during 2019/20, 2020/21 and 2021/22

1.10. Oxfordshire County Council prepared a [Carbon Management Plan](#) to set out activities for property, highways electrical assets, fleet, and staff travel to reduce emission between **2022 and 2025**. It includes a trajectory of planned reduction up to 2025 against business as usual (figure 2 below).



2. Context

- 2.1. Oxfordshire County Council provides services to residents, businesses, and communities. We are responsible for around **80%** of local government spending in Oxfordshire. The following core services are provided by the Council:
- adult social care
 - Children's Services
 - services for public health including mental health
 - fire and rescue
 - roads and transport planning
 - waste disposal
 - libraries and museums
 - coroners' and registration services
 - trading standards
- 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.

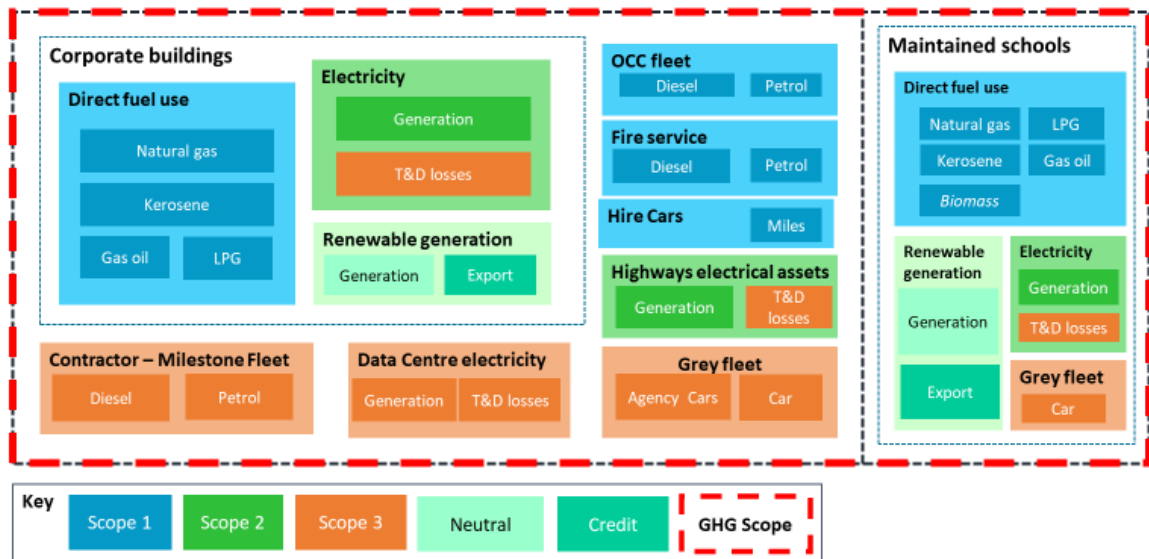
3. Reporting Period

- 3.1. This report covers GHG emissions from **April 2021 to March 2022**

4. Introduction, boundary, and conversion factors

- 4.1. Each year, Oxfordshire County Council publishes details of its greenhouse gas (GHG) emissions in accordance with 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.
- 4.3. Figure 3 shows the scope of our reported GHG emissions boundary. The council reports on emissions from its:
- corporate estate and activities (excluding contractors)
 - maintained schools
 - Limited data from Contractors - Milestone highway fleet fuel and outsourced Data Centre electricity consumption.
- 4.4. In 2019 the council committed to become carbon neutral for its corporate estate and activities (excluding contractor emissions) by 2030. This report shows progress against that scope in section 8.
- 4.5. The carbon factor methodology applied are the 2021 carbon factors for the emissions generated in financial year 2021/22 which can be found at: <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021>

Figure 3: OCC GHG Emissions Boundary



5. Greenhouse Gas (GHG Emissions) 2021/22

- 5.1. Table 1 shows that for 2021/22 reported gross emissions from Oxfordshire County Council were 17,276 tonnes of CO₂e equivalent (CO₂e) split across the three scopes. This includes offsetting from solar exports.
- 5.2. Our corporate estate and activities (the scope of our carbon neutrality target for 2030) amounted to 10,652 tonnes CO₂e (61.7%) of the total GHG emissions.
- 5.3. Emissions from maintained schools were 5,966 tonnes CO₂e (34.5% of the total emissions).
- 5.4. Emissions from fleet used by our highways maintenance contractor (Milestone) and electricity consumption by our outsourced Data Centre servers were 658 tonnes CO₂e, 3.8% of total emissions. The council intends to report a larger range of contractor emissions in its 22/23 reporting.

Table 1: Total GHG Emissions (Corporate estate and activities, Maintained Schools and Highways contractor fuel and data center)

	Corporate Estate & Activities	Maintained Schools	Contractors (Milestone Fleet & Datacenter ONLY)	Total
Scope 1	3,513	4,214	-	7,726
Scope 2	5,776	1,652	-	7,428
Scope 3	1,368	155	658	2,181
Total Emissions	10,657	6,020	658	17,335
Solar Export Corporate (offset)	-4.6	54.5	-	59.1
Total Emissions (after solar offset)	10,652	5,966	658	17,276

6. Change from Previous Year

- 6.1. Total GHG emissions included in this report were 1.5% higher than in 2020/21, a total increase of 250 tonnes CO₂e. Electricity grid decarbonisation and annual changes to carbon factors reduced CO₂e from electricity by 774 tonnes. This reflects the bounceback in emissions following the covid year particularly the reopening of schools. However, emissions remain lower than the 2019/20 pre-COVID levels.

New emissions for agency staff miles, hire car miles, fleet fuel from depot were added to the corporate estate this year along with some emissions from our highways maintenance contractor on discovering our fleet refill vehicle fuel at their depots.

- 6.2. Emissions from the Council's corporate estate and activities (excluding outsourced contractors and maintained schools) fell from 11,054 tonnes CO₂e in 2020/21 to 10,652 tonnes CO₂e in 2021/22, a reduction of 3.6% (402 tonnes CO₂e). This includes offset from Solar PV exports from onsite generation. Electricity grid decarbonisation reduced CO₂e from electricity by 600 tonnes CO₂e as compared to the grid's carbon intensity for last year. This reflects the bounce back in non-electricity emissions sources following the covid year.
- 6.3. Emissions from maintained schools increased by 13.9% (728 tonnes CO₂e) from 5,238 tonnes CO₂e in 2021/22 to 5,966 tonnes CO₂e in 2021/22 (this includes offset from schools Solar PV exports). An increase in emissions was expected after the lifting of all COVID restrictions resulting in schools fully reopening. Electricity grid decarbonisation reduced CO₂e from electricity by 172 tonnes.
- 6.4. Emissions from the Council's Contractors (Milestone highway fleet fuel and outsourced data center electricity consumption) fell by 8.6% during this period from 734 tonnes in 2020/21 to 658 tonnes CO₂e in 2021/22. 10% of this reduction is due to some fuel moving to the corporate emissions. Electricity grid decarbonisation accounted for 3 tonnes CO₂e.
- 6.5. In addition to resuming of activities following the covid year a number of other activities have influenced our emissions:
- As buildings reopened gas consumption has increased from the pre-COVID levels due to legislative changes in air handling.
 - Street lighting LED conversion has continued to reduce emissions.
 - Electricity use from property has decreased
 - Emissions from electricity will continue to reduce from grid decarbonisation.
 - Staff mileage may remain lower than pre-COVID levels due to the use of virtual meetings on Microsoft Teams.
- 6.6. Gas consumption – annual weather data (degree day data) indicated heating fuel demand should not be significantly affected by weather changes in 2021/22. Gas consumption increasing by 303 tonnes CO₂e was

due to schools reopening fully after COVID restrictions ended and changes in air handling requirements.

- 6.7. Table 2 below shows the comparison of emissions in 2021/22 against 2020/21. A further breakdown of consumption at source is detailed in Annex A, B, C, D & E.

Table 2: Emissions Comparison 2020/21 and 2021/22 (tonnes CO₂e)

2021/22 and 2020/21 Comparison (Tonnes CO₂e)			
	2020 21	2021/22	Reduction
Corporate Estate & Activities	11,059	10,657	-3.6%
Solar Export Corporate (offset)	-5.3	-4.6	
Total Corporate Estate & Activities	11,054	10,652	-3.6%
Schools	5,301	6,020	13.6%
Solar Export Schools (offset)	-63.8	-54.5	
Total Schools	5,238	5,966	13.9%
(Milestone Fleet & Datacenter ONLY)	734	658	-10.4%
Total Net Emissions	17,025	17,276	1.5%

7. Comparison against baseline year and reduction target

- 7.1 Oxfordshire County Council tracks emissions against a baseline year of 2010/11. Total emissions for 21/22, against a baseline year were 17,276 tonnes CO₂e in 2021/22 and 68,041 tonnes of CO₂e in 2010/11; a decrease of 75%. An average annual reduction of 6.8% per year. This does not include the effect of purchasing green energy in 2010/11 or REGO¹ backed electricity in 2020/21. The 2010/11 figure does include schools prior to Academy conversions. This is addressed in 7.4.
- 7.2 Although we are purchasing REGO backed energy we have chosen not to count this as a carbon offset as we are committed to reduce our reliance on grid electricity. We have an energy hierarchy approach to energy reduction as set out in our 2020 [Climate Action Framework](#).
- 7.3 Emissions from our corporate estate and activities excluding contractor emissions & maintained schools (the scope of our carbon neutrality target) have reduced by 72% since 2010/11, an average annual reduction of 6.6% per year. Note: If we include the effect of REGO backed electricity in 2010/11 accounting to 12,179 tonnes and 7,428 tonnes CO₂e in 2021/22 the reduction would have been 82% since 2010/11 (7.5% per year).
- 7.4 Emissions from 2010/11 list of 284 maintained schools have reduced by 79% since the baseline year 2010/11. This is largely an accounting effect of 158 schools converting to academies and therefore falling outside the Council's reporting. Emissions from the remaining 126 maintained schools (adjusted

¹ Renewable Energy Guarantees of Origin (REGO) show electricity has been generated from renewable sources. Electricity suppliers use REGOs to show customers the renewable content of electricity they've supplied to a customer each year

to remove the effect of schools converting to academies) have reduced by an estimated 19.4% since 2010/11, an average of 1.8% per year.

7.5 The contractor emissions (Milestone fleet fuel and ICT Data Centers) currently shown in this report have reduced by 43% since 2010/11; an average annual reduction of 4% per year.

7.6 Table 3 shows the comparison of emissions in 2021/22 against baseline year 2010/11. A further breakdown of consumption at source is detailed in Annex F.

Table 3: Emissions Comparison 2021/22 and 2010/11

2021/22 and 2010/11 Comparison (Tonnes CO ₂ e)			
	2010/11	2021/22	Reduction
Corporate Estate & Activities	26,510	10,657	59.8%
Solar Export Corporate (offset)	-	-4.6	-
Total Corporate Estates & Activities	26,510	10,652	59.8%
Academies	32,963	0	100%
Maintained Schools	7,404	6,020	18.7%
Solar Export Schools (offset)	-	-54.5	-
Total Schools	40,368	5,966	85.2%
(Milestone Fleet & Datacenter ONLY)			
	1,163	658	43.5%
Total Net Emissions	68,041	17,276	74.6%

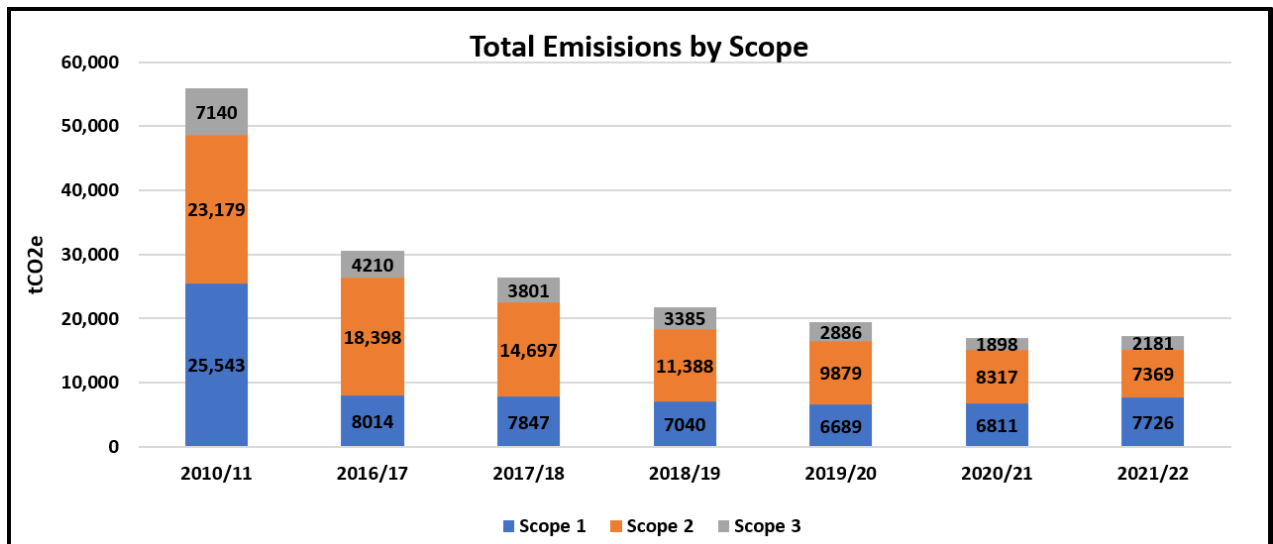


Figure 4: Emissions Comparison by scope from 2010/11 to 2021/22

8. Carbon Neutrality Target 2030

- 8.1. In 2019 the council committed to become carbon neutral for its corporate estate and activities (excluding contractor and maintained school's emissions) by 2030².
- 8.2. Figure 5 below shows the boundary of our Carbon Neutrality 2030 target.
- 8.3. Figure 6 shows carbon neutrality performance since baseline year 2010/11

Figure 5: OCC Carbon Neutrality 2030 Target Boundary

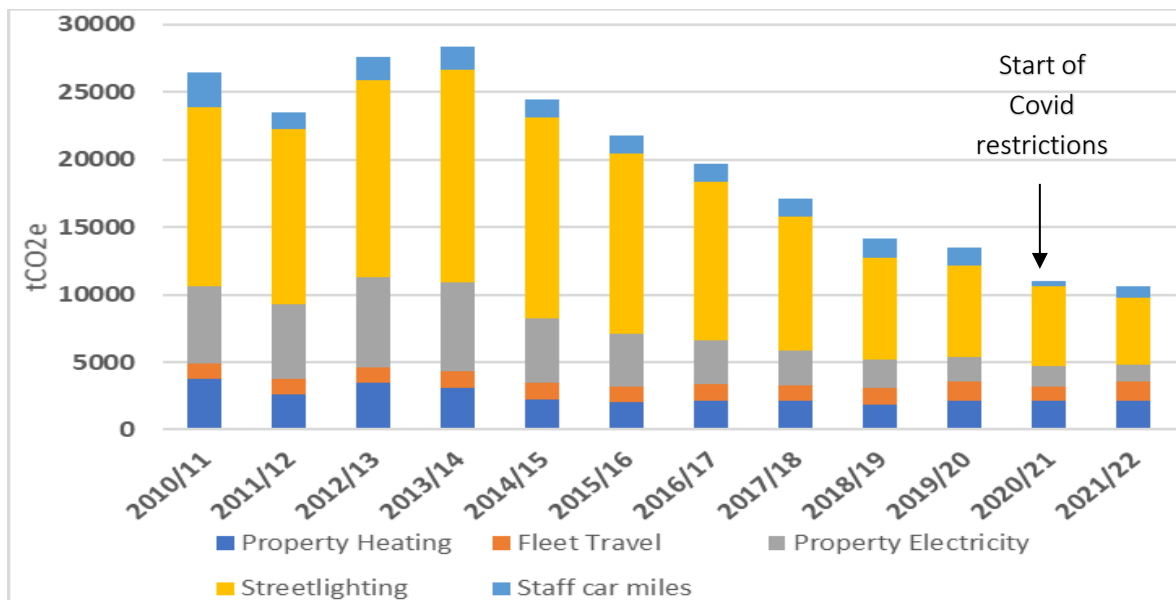
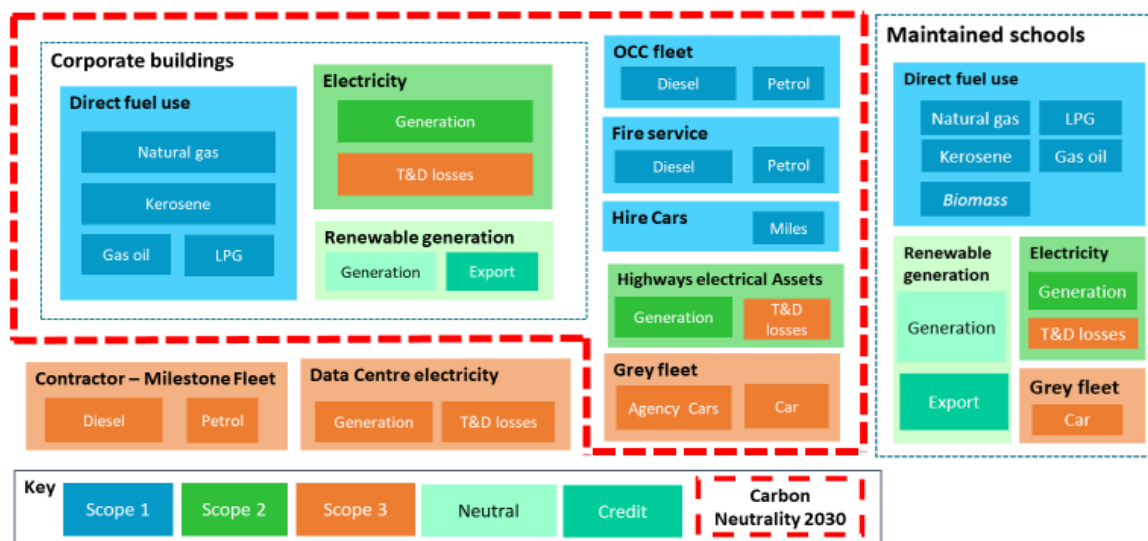


Figure 6: Carbon Neutrality performance

² Further information about the council's carbon reduction strategy:
[Climate action in Oxfordshire | Oxfordshire County Council](#)
[What we are doing to reduce our greenhouse gas emissions | Oxfordshire County Council](#)
[2020 Climate Action Framework \(oxfordshire.gov.uk\)](#)

9. Measurement, data quality, methodology and refinements

9.1. Oxfordshire County Council wish to collect high-quality data and has invested in AMR (Automatic meter reading), loggers and meter upgrades.

9.2. Our data quality is as follows:

- 91% of our electricity data is from actual meter data and the remaining 9% is based on invoiced annual consumption.
- 100% of our oil data is from delivered fuel invoices/ Fuel card data
- 85% of our gas data is from actual meter data and 15% is based on invoiced annual consumption.
- Street lighting data is calculated from *Elexon BSCP520 –Unmetered supplies Registered in SMRS*
- Fleet fuel data is collected from petrol stations.
- Fire Service fuel is collected from both on site storage and petrol stations.
- Mileage data for business miles is collected from claim forms (as is cycle mileage) through staff expenses claims.
- We also collect motorbike business mileage through staff expenses claims.
- Agency staff mileage data is collected from the agencies expenses claims.
- Hire car mileage data is provided monthly by our contracted hire car company.

10. Energy Efficiency measures and carbon reduction projects 2021/22

Below is a list of some of the energy efficiency projects undertaken to reduce both energy and carbon emissions.

- 7,610 street lighting lanterns have been replaced with LEDs as part of an ongoing programme to convert 51,000 lanterns by 2025/26. This will result in savings 4,183,397 kWh in electricity usage (967 tonnes CO₂e) during 2022/23.
- New energy efficient boilers were installed at 4 schools. Based on a 10% reduction in gas consumption a reduction of 9.69 tonnes CO₂e is expected in 2022/23.
- Projects funded by the Public Decarbonisation Fund are expected to reduce CO₂e by around 234 tonnes during 2022/23.
- A LED replacement programme at two Park & Ride sites completed at the end of 2020/21 resulted in a 54% reduction in electricity consumption at these two sites.

Annex A – GHG Data Breakdown at Source

Scope	Energy source	Units	2020/21		2021/22		Year on year Change
			Quantity	tCO2e	Quantity	tCO2e	
1	Corporate gas	kWh	11,531,018	2,120	11,541,808	2,114	-6
	Voluntary Aided Schools gas	kWh	16,896,133	3,107	18,619,703	3,410	304
	Total gas	kWh	28,427,151	5,227	30,161,511	5,524	297
	Corporate gas oil	litres	5,586	15	2,002	6	-10
	Church of England funded Schools oil	litres	149,953	414	199,968	552	138
	Total gas oil	litres	155,539	429	201,970	557	128
	Corporate burning oil (kerosene)	litres	0	0	0	0	0
	Community Schools (kerosene)	litres	41,144	105	76,567	194	89
	Total burning oil	litres	41,144	105	76,567	194	89
	Corporate LPG	litres	8,132	13	10,735	17	4
	Community Schools LPG	litres	24,909	39	36,656	57	18
	Total LPG	litres	33,041	51	47,391	74	22
	Corporate diesel - Fire Service	litres	142,923	384	177,031	479	95
	Corporate diesel - OCC fleet	litres	187,380	504	274,825	744	240
	Schools Minibus fuel	litres	49,732	134	37,919	103	-31
	Total diesel	litres	380,035	1,021	489,775	1,325	304
	Corporate Petrol - OCC fleet	litres	4,811	10	5,141	12	2
	Corporate Petrol - Fire Service	litres	1,489	3	2,094	5	2
	Total petrol	litres	6,300	14	7,235	17	3
	Hire Car Unknown Fuel	Miles	27,526	8	1,021	0	-7
	Hire Car Diesel	Miles	29,607	8	26,887	7	-1
Hire Car Petrol	Miles	58,317	16	90,250	25	9	
Hire Car Hybrid Unknown Fuel	Miles	3,717	1	5,246	1	0	
Hire Car Hybrid Diesel & Petrol	Miles	0	0	3,290	1	1	
Total Hire Car	Miles	119,167	33	126,694	35	2	
Corporate fuel oil	litres	1	0	21	0	0	
Fire Service fuel oil	litres	25	0	0	0	0	
Vehicle fuel oil	litres	26	0	21	0	0	
2	Corporate electricity	kWh	5,245,231	1,223	5,293,557	1,124	-99
	Travellers Sites	kWh	722,938	169	484,198	103	-66
	Community Schools electricity	kWh	6,460,130	1,506	7,778,071	1,652	145
	Total Electric charging (OCC sites)	kWh	0	0	37,239	8	8
	Highway Electrical Assets	kWh	23,244,363	5,419	21,388,773	4,541	-878
	Total electricity	kWh	35,672,662	8,317	34,981,837	7,428	-889

3	Corporate Average unknown car	Miles	1,392,986	384	796,173	220	-165
	Corporate Diesel	Miles	0	0	835,314	226	226
	Corporate Petrol	Miles	0	0	1,094,737	307	307
	Corporate Hybrid Diesel	Miles	0	0	2,051	0	0
	Corporate Push Bike	Miles	0	0	1,541	0	0
	Corporate Hybrid Petrol	Miles	0	0	68,169	13	13
	Corporate Plug in Hybrid Petrol	Miles	0	0	1,008	0	0
	Corporate Electric	Miles	0	0	15,420	1	1
	Corporate Biogas	Miles	0	0	2,019	0	0
	Agency Average unknown car & Motorbike	Miles	222,232	61	318,334	88	27
	Schools Average unknown car	Miles	8,280	2	4,336	1	-1
	Schools Diesel	Miles	0	0	10,533	3	3
	Schools Petrol	Miles	0	0	18,285	5	5
	Schools Hybrid Diesel	Miles	0	0	0	0	0
	Schools Hybrid Petrol	Miles	0	0	70	0	0
	Schools Plug in Hybrid Petrol	Miles	0	0	0	0	0
	Schools Electric	Miles	0	0	34	0	0
	Schools Biogas	Miles	0	0	0	0	0
	Total business travel	Miles	1,623,498	448	3,168,024	865	417
	Corporate business travel Motorbike	Miles	3,026	1	3,643	1	0
	Milestone diesel	Miles	204,202	549	181,986	492	-56
	Total Milestone Contractor Diesel	Miles	204,202	549	181,986	492	-56
	Milestone petrol	Miles	66,090	153	56,810	133	-20
	Total Milestone Contractor Petrol	Miles	66,090	153	56,810	133	-20
	Electricity Transmission losses	kWh	35,799,925	718	35,122,603	660	-58
	Data Centre Contractor Electricity	kWh	127,263	30	140,765	30	0
	Solar Export Corporate	kWh	-22,686	-5	-21,716	-5	1
	Solar Export Schools	kWh	-273,560	-64	-256,821	-55	9
	Total Solar Export	kWh	-296,246	-69	-278,537	-59	10
	Total Emissions		17025		17,276		251

Annex B – Total GHG emissions summary (Corporate Estate*, Contractors & Schools)

Table 1. Total GHG emissions for period 1 April 2021 to 31 March 2022					
2021/22	Total Units	CO ₂	CH ₄	N ₂ O	Total
Scope 1					
Gas (kWh)	30,161,511	5,514,128	7,540	3,016	5,524,382
Gas Oil (litres)	201,970	550,201	568	6,380	557,148
Kerosene (litres)	76,567	193,548	461	482	194,491
LPG (litres)	47,391	73,689	57	46	73,792
Diesel (litres)	489,775	1,306,754	127	18,220	1,325,101
Petrol (litres)	7,235	16,827	53	49	16,928
Hire Car Unknown Fuel	1,021	280	0	2	282
Hire Car Diesel	26,887	7,207	0	81	7,289
Hire Car Petrol	90,250	25,219	46	52	25,318
Hire Car Hybrid Unknown Fuel	5,246	998	1	9	1,009
Hire Car Hybrid Diesel	3,290	626	1	6	633
Fuel Oil (litres)	21	66	0	0	66.7
Scope 1 Total		7,689,542	8,855	28,343	7,726,439
Scope 2					
Electricity (kWh)	34,981,837	7,351,783	27,985	47,925	7,427,694
Scope 3					
Electricity transmission and distribution (kWh)	35,122,603	653,280	2,459	4,215	659,954
Contractor diesel (litres)	181,986	485,552	47	6,770	492,370
Contractor petrol (litres)	56,810	132,121	416	381	132,918
Business Travel average unknown car (miles)	1,118,843	306,485	302	1,969	308,756
Business Travel Diesel (miles)	845,847	226,721	8	2,563	229,292
Business Travel Petrol (Miles)	1,113,022	311,023	568	646	312,236
Business Travel Hybrid Diesel (Miles)	2,051	390	1	4	394
Business Travel Hybrid Petrol (Miles)	68,239	12,987	18	120	13,125
Business Travel Plug in Hybrid Petrol (Miles)	1,008	156	1	1	157
Business Travel Electric	15,454	1,348	5	9	1,362
Business Travel Biogas (Miles)	2,019	0	0	0	0.40
Business travel average motorbike (miles)	3,643	653	9	3	666
Data Centre Electricity (kWh)	140,765	29,583	113	193	29,889
Scope 3 Total		2,160,300	3,946	16,873	2,181,119
Scope 1, 2 & 3 Total (kg)		17,201,625	40,787	93,141	17,335,252
Offsetting (Solar)		278,537			59,142
Total (tonnes)		17,201.6	40.8	93.1	17,276

* Contractor emissions ONLY includes - Milestone Fleet Fuel and Outsourced Data Center Electricity

Annex C – Corporate Estate GHG emissions

Table 2. Corporate GHG emissions for period 1 April 2021 to 31 March 2022					
2021/22	Total Units	CO ₂	CH ₄	N ₂ O	Total
Scope 1					
Gas (kWh)	11,541,808	2,110,073	2,885	1,154	2,113,998
Gas Oil (litres)	2,002	5,454	6	63	5,523
Kerosene (litres)	0	0	0	0	0
LPG (litres)	10,735	16,692	13	10	16,715
Diesel (litres)	489,775	1,306,754	127	18,220	1,325,101
Petrol (litres)	7,235	16,827	53	49	16,928
Hire Car Unknown Fuel	1,021	280	0	2	282
Hire Car Diesel	26,887	7,207	0	81	7,289
Hire Car Petrol	90,250	25,219	46	52	25,318
Hire Car Hybrid Unknown Fuel	5,246	998	1	9	1,009
Hire Car Hybrid Diesel	3,290	626	1	6	633
Fuel Oil (litres)	21	66	0	0	66.68
Scope 1 Total		3,490,196	3,133	19,647	3,512,861
Scope 2					
Electricity (kWh)	27,203,767	5,717,144	21,763	37,269	5,776,176
Scope 3					
Electricity transmission and distribution (kWh)	27,203,767	505,990	1,904	3,264	511,159
Business Travel Average unknown car (miles)	1,114,507	305,297	301	1,962	307,559
Business Travel Diesel (miles)	835,314	223,898	8	2531	226,437
Business Travel Petrol (Miles)	1,094,737	305,913	558	635	307,107
Business Travel Hybrid Diesel (Miles)	2,051	390	0.6	3.6	394
Business Travel Hybrid Petrol (Miles)	68,169	12,973	18	120	13,112
Business Travel Plug in Hybrid Petrol (Miles)	1,008	156	0.5	0.6	157
Business Travel Electric	15,420	1345	5	9	1,359
Business Travel Biogas (Miles)	2,019	0	0	0	0.40
Business Travel Motorbike	3,643	653	9	3	665.72
Scope 3 Total		1,356,616	2,806	8,528	1,367,950
Total (kg)		10,563,956	27,702	65,444	10,656,987
Offsetting (Solar)	21,716				-4,611
Total (tonnes)		10,564.0	27.7	65.4	10,652

Annex D - Maintained schools GHG emissions

Table 2. Schools GHG emissions for period 1 April 2021 to 31 March 2022					
2021/22	Total Units	CO ₂	CH ₄	N ₂ O	Total
Scope 1					
Gas (kWh)	18,619,703	3,404,054	4,655	1,862	3,410,385
Gas Oil (litres)	199,968	544,747	562	6,317	551,626
Kerosene (litres)	76,567	193,548	461	482	194,491
LPG (litres)	36,656	56,997	44	36	57,077
Scope 1 Total		4,199,345	5,722	8,696	4,213,578
Scope 2					
Electricity (kWh)	7,778,071	1,634,639	6,222	10,656	1,651,518
Scope 3					
Electricity transmission and	7,778,071	144,672	544	933	146,150
Business Travel Average unknown ca	4,336	1,188	1	8	1,197
Business Travel Diesel (miles)	10,533	2,823.3	0.1	31.9	2,855
Business Travel Petrol (Miles)	18,285	5,109.6	9.33	10.61	5,129
Business Travel Hybrid Diesel (Miles)	0	0.0	0.0	0.0	0.0
Business Travel Hybrid Petrol (Miles)	70	13	0.02	0.12	13
Business Travel Plug in Hybrid Petrol	0	0	0	0	0
Business Travel Electric	34	3	0	0	3
Business Travel Biogas (Miles)	0	0	0	0	0
Scope 3 Total		153,809	555	984	155,348
Total (kg)		5,987,794	12,500	20,336	6,020,444
Offsetting (Solar)	256,821				54,531
Total (tonnes)		5,988	12	20	5,966

Annex E - Contractor GHG emissions (ONLY - Milestone Fleet Fuel and Outsourced Data Center Electricity)

Annex E. Contractor GHG emissions for period 1 April 2021 to 31 March 2022					
2021/22	Total Units	CO ₂	CH ₄	N ₂ O	Total
Scope 1					
Gas (kWh)	0	0	0	0	0
Gas Oil (litres)	0	0	0	0	0
Kerosene (litres)	0	0	0	0	0
LPG (litres)	0	0	0	0	0
Diesel (litres)	0	0	0	0	0
Petrol (litres)	0	0	0	0	0
Scope 1 Total	0	0	0	0	0
Scope 2					
Electricity (kWh)	0	0	0	0	0
Scope 3					
Electricity (kWh)	140,765	29,583	113	193	29,889
Diesel (litres)	181,986	485,552	47	6,770	492,370
Petrol (litres)	56,810	132,121	416	381	132,918
Electricity transmission and	140,765	2,618	10	17	2,645
Scope 3 Total		649,875	586	7,361	657,821
Total (kg)		649,875	586	7,361	657,821
Total (tonnes)		650	1	7	658

Annex F - Total GHG CO2 Emissions Summary

Annex F: GHG emissions for period 1 April 2010 to 31 March 2022												
Tonnes of CO ₂ e	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Scope 1												
Gas/Kerosene/Oil/LPG/Petrol/Diesel	25,543	17,948	22,293	19,356	10,873	9,088	8,076	7,954	7,119	6,692	6,881	7,726
Scope 2												
Purchased Electricity	35,358	31,865	33,264	31,100	25,228	21,619	18,398	14,697	11,388	9,950	8,317	7,428
Scope 3												
Electricity Transmission & Distribution/ Business Travel/ Energy used in contractor's office	7,140	6,015	5,894	6,567	5,588	4,855	4,210	3,801	3,385	2,885	1,898	2,181
Total Gross Emissions	68,041	55,828	61,451	57,023	41,688	35,562	30,684	26,452	21,893	19,528	17,095	17,335
Carbon offsets	0	0	0	0	0	0	0	0	0	0	0	7,428
Green tariff	12,179	0	0	0	0	0	0	0	0	0	0	0
Renewable electricity	0	0	35	70	94	58	63	107	79	-72	-69	-59
Total annual net emissions	68,041	55,828	61,416	56,953	41,595	35,505	30,621	26,345	21,814	19,457	17,026	17,276

Annex G – Carbon neutrality GHG CO2 Emissions Summary

Annex G: Carbon Neutrality GHG emissions for period 1 April 2010 to 31 March 2022												
Tonnes of CO2e	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Scope 1												
Gas	3,652	2,502	3,335	2,933	2,153	1,970	2,006	2,061	1,867	2,088	2120	2,114
Kerosene	100	10	9	9	5	7	-	-	-	-	-	-
Gas Oil	26	51	82	90	50	29	95	27	13	2	15	6
LPG	-	84	57	58	40	9	-	9	3	1	13	16.7
Fire Service Diesel	571	542	553	543	479	583	648	635	626	588	384	479
Fire Service Petrol	5	4	1	1	7	-	5	3	3	3	3	5
OCC Fleet Diesel	567	597	601	682	739	608	648	568	586	748	637	846
OCC Fleet Petrol	-	-	4	1	7	5	5	19	35	39	11	12
OCC Fleet Electric	-	-	-	-	-	-	-	-	-	-	0	8
Hirecar	-	-	-	-	-	-	-	-	-	105	33	35
Fire Service Fuel Oil	-	-	-	-	-	-	-	-	-	-	0	0.0
Corporate Fuel Oil	-	-	-	-	-	-	-	-	-	0.01	0.08	0.07
Scope 2												
Electricity Corporate Buildings	5,215	5,014	6,162	6,190	4,412	3,580	2,916	2,280	1,881	1,683	1391	1,227
Electricity Highways Assets (Street Lightin	12,179	11,969	13,632	14,626	13,623	12,329	10,801	9,123	6,993	6,252	5419	4,541
Scope 3												
Corporate T&D losses	469	449	460	453	386	296	264	213	162	143	120	109
Highways Assets T&D losses	1,094	1,075	1,018	1,071	1,191	1,018	977	853	603	531	466	402
Electric vehical T&D	-	-	-	-	-	-	-	-	-	-	-	-
Grey Fleet (unknown car / fuel)	2,633	1,194	1,729	1,673	1,377	1,385	1,311	1,346	1,411	1,292	446	857
Vacant Properties Elec	-	-	-	-	-	-	-	-	-	-	-	-
Vacant Properties Gas	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Offsetting												
Green tariff	-12,179	-	-	-	-	-	-	-	-	0.00	-6811	-5768
Renewable electricity generation	-	-	-	-	-	-	-	-	-	0.00	0	0.00
Renewable electricity export	0.00	0.00	0.00	0.00	-25.11	-5.04	-5.73	-4.74	-4.40	-3.99	-5	-4.61
Total annual net emissions	26,510	23,491	27,644	28,328	24,444	21,813	19,671	17,132	14,179	13,473	11054	10,652

Annex H - Operational Scope breakdown

- Central Offices (Scopes 1 and 2)
- Fire Stations (Scopes 1 and 2)
- Libraries (Scopes 1 and 2)
- Highway Depots (Scope 1 and 2)
- EV Fleet (Scope 2)
- Fleet (Scope 1)
- Business miles (including cycling)- corporate estate and activities & schools (Scope 3)
- Gypsy and Travelers sites communal lit areas (Scope 2)
- Maintained community schools (Scope 1 and 2)
- VC and Foundation Schools (Scope 1 and 2)
- Day Centers (Scope 1 and 2)
- Children's Homes (Scope 1 and 2)
- Highways electrical assets and car parks (Scope 2)
- Street lighting and traffic signals (Scope 2)
- Milestone Fleet (Scope 3)
- Data Centres (Scope 3)
- Transmission and Distribution (Scope 3)
- Vacant properties (Scope 1)

Not included in current reporting and reasoning

OCC is committed to continually improving the scope of GHG reporting. We do not currently include the following in our reporting:

- Leisure Centers - Scope 1 & 2 - complex use arrangements between District Councils, City Council, maintained Schools and academies
- Academy Schools - not in scope - leased on 125-year leases to separate operational trusts. Data not Available.
- Care homes – Scope 1 & 2 - complex use arrangements as long term leased to third parties - currently no data available
- Water - Scope 3 - currently no reliable data available
- Supply Chain - Scope 3 - currently reporting Milestone fleet Fuel and Data Centre. No further data currently collected.
- Staff Commuting to work - Scope 3 - no data available
- Business mileage from public transport and walking - Scope 3 - currently no data available.