



Lancaster City Council

Carbon Dioxide Emissions Report 2019

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2 CARBON DIOXIDE EMISSIONS REPORT 2019

2.1 SUMMARY

This report summaries the tonnes of carbon dioxide equivalent emissions (tCO₂e) attributable to Lancaster City Council's activities.

2.2 ORGANISATIONAL INFORMATION

Lancaster City Council is a Tier 2 Local Authority providing a range of social, environmental and other services to residents in the north of Lancashire, England. Its main address is the Town Hall, Dalton Square, Lancaster LA1 1PJ.

2.3 REPORTING PERIOD

1st April 2018 to 31st March 2019

2.4 QUANTIFICATION AND REPORTING METHODOLOGY

We have followed the methodology recommended in the HM Government's *Environmental Reporting Guidelines* (2019), and used conversion factors most recently updated by the UK Government in 2018. The conversion factors used in the preparation of this report are summarised below:

Activity	Unit	Year	Conversion Factor to Calculate tCO ₂ e
Diesel (100% mineral diesel)	Litres	2018	2.68779
Electricity (consumed in buildings)	Kilowatt hours	2018	0.28307
Electricity (exported to grid)	Kilowatt hours	2018	0.28307
Electricity (used by supermini electric vehicles)	Kilometres	2018	0.04815
Natural Gas	Kilowatt Hours	2018	0.18396
Petrol Cars (Small)	Kilometres	2018	0.15565
Business Travel (Staff owned cars)	Kilometres	2018	0.18064 ¹

Source: HM Government, 2018

2.5 ORGANISATIONAL BOUNDARY

Only those emissions relating to activities which can be directly controlled by Lancaster City Council have been used in this report. Exclusions are detailed in Section 2.6.

¹ Average car size and unknown fuel type used

2.6 TCO₂E EMISSIONS FOR LANCASTER CITY COUNCIL

The Table below summarises the tCO₂e emissions for Lancaster City Council

Category	2018-19 (tCO ₂ e)	Comments
SCOPE 1		
Gas Consumption	1,116.21	Excludes residential and commercial properties
Owned transport (diesel)	1,213.52	Excludes pool cars
Business Travel (Pool Cars)	4.43	Electric vehicles are recorded under Scope 2
Fugitive Emissions	Not quantified	Emissions from air conditioning in office buildings excluded as it is not possible to differentiate the energy used from other consumption
Total Scope 1	2,334.16	
SCOPE 2		
Electricity consumed (Buildings)	653.48	Excludes residential and commercial properties
Electricity consumed (Electric Vehicles)	0.37	None
Total Scope 2	653.85	
SCOPE 3		
Business travel (Staff owned vehicles)	31.52	Calculations based on an average car size and unknown fuel type
Employee commuting activities	Not quantified	n/a
Total Scope 3	31.52	
Total Emissions (Gross)	3,019.53	Exclusions as detailed above
Exported renewable electricity reduction	22.35	
Total Emissions (Net)	2,997.18	Exclusions as detailed above

2.7 INTENSITY MEASUREMENT

Using the staffing levels as of 1st April 2019, Lancaster City Council emitted 4.62tCO₂e (net) per full time equivalent employee.

2.8 CARBON OFFSETS

Lancaster City Council purchases no carbon credits or Woodland Carbon Credits.

2.9 ELECTRICITY GENERATION

Renewable electricity generated from owned or controlled sources: 250.8MWh² generated through on site solar PV. This equates to 71tCO₂e³.

Electricity exported to the grid: 78,955.53kWh⁴.

2.10 CHANGES IN EMISSIONS

Lancaster City Council's previous baseline year was 2008/09 during which emissions attributable to the council were 4,782.28tCO₂e. The emissions total from 2018/19 therefore represents a 37.33% (net) reduction on the baseline figure.

The observed reductions attributable to the council's buildings has reduced through a re-profiling of the council's portfolio which has seen the closure of buildings such as St Leonards House and 38 Cable Street. Further reductions have been achieved through the introduction of various energy related improvements at a number of key sites, most notably Salt Ayre Sports Centre.

The reductions in the council's travel related emissions has been achieved by an improvements in vehicle management assisted by schemes such as vehicle tracking. The council has also introduced pool cars for staff business travel, which also includes two electric vehicles for staff travel.

To enable the council to continue to measure tCO₂e in a meaningful way, 2018/19 will form a new baseline year and will be used to measure future performance.

3 REFERENCES

Conversion Factors (2018); HM Government; downloaded from <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2018> on 17/04/2019

Environmental Reporting Guidelines (2019); HM Government; downloaded from <https://www.gov.uk/government/publications/environmental-reporting-guidelines-including-mandatory-greenhouse-gas-emissions-reporting-guidance> on 17/04/2019

² Data for Salt Ayre Sports Centre only included up to 22/12/2018

³ Any change in emissions resulting from electricity generation will be observed in a reduction in electricity consumed at the applicable sites and only electricity exported to the grid can be offset against the council's gross emissions. This figure is therefore included for reference purposes only.

⁴ Although the figure stated is the most accurate available, the export claimed is calculated quarterly in arrears so does not represent the final figure due.