



Derbyshire County Council

# Greenhouse Gas Emissions Annual Report 2019-20

## Introduction

This report summarises the greenhouse gas emissions produced from the estate and operations of Derbyshire County Council in the year 2019-20.

The Council is committed to reducing emissions of greenhouse gases in accordance with its corporate Environment Policy. In November 2019, Cabinet members approved a new Carbon Reduction Plan which details how we will take action to reduce emissions from our own estate and operations with a target to have net zero greenhouse gas emissions by 2032.

## What do we Measure?

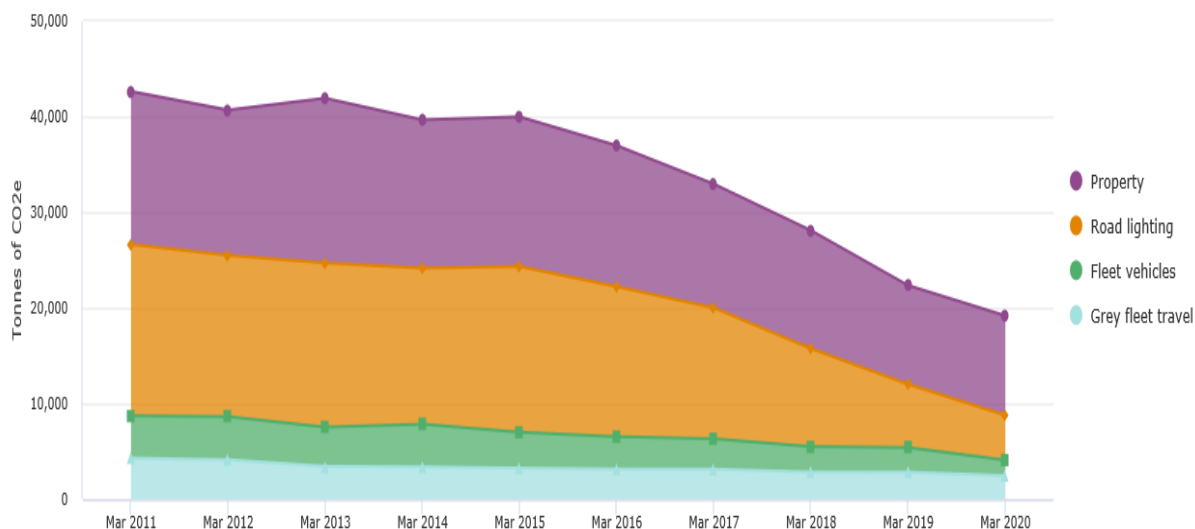
Emissions are recorded as tonnes of carbon dioxide and equivalent greenhouse gases (CO<sub>2</sub>e). Emissions from four sources are currently included in the data:

- Property: council-owned property and buildings
- Street and road lighting
- Grey fleet: any personal vehicle driven by a member of staff for council business
- Core fleet: council-owned vehicles, for example, heavy goods vehicles used for gritting roads.

Emissions from school buildings are recorded separately in order to keep the data consistent. Including schools would lead to inconsistent results because the local authority school portfolio continues to reduce in size as more schools become academies.

The graph below shows the overall reduction in greenhouse gas emissions from 2009-10 to 2019-20.

### Breakdown of CO2e emissions by main sources



Greenhouse gas emissions in tonnes of carbon dioxide and equivalent greenhouse gases from the Council's estate and operations for successive years between 2009-10 and 2019-20 is provided in the table below:

Year	Property (excl. schools)	Street & road lights	Core Fleet	Grey Fleet	Total (excl. schools)
2009-10	15,666	18,121	4,590	4,590	42,966
2010-11	15,989	17,918	4,413	4,331	42,652
2011-12	15,180	16,865	4,508	4,147	40,700
2012-13	17,215	17,162	4,090	3,466	41,933
2013-14	15,500	16,307	4,462	3,408	39,678
2014-15	15,642	17,325	3,746	3,281	39,994
2015-16	14,744	15,685	3,388	3,175	36,992
2016-17	12,942	13,687	3,172	3,166	32,967
2017-18	12,322	10,239	2,662	2,863	28,087
2018-19	10,023	6,617	2,564	2,861	22,066
2019-20	10,399	4,691	1,633	2,483	19,206

Work to reduce emissions from other sources, which we currently do not quantify, such as waste, water and procurement, continues to be undertaken.

### Analysis

- The data highlights a continuing decline in the amount of greenhouse gas emitted by Derbyshire County Council since the baseline year of 2009-10.

Emissions have fallen from 42,966 tonnes of CO<sub>2</sub>e in 2009-10, to 19,206 tonnes of CO<sub>2</sub>e in 2019-20, a reduction of 55.3%.

- The majority of the Council’s emissions in 2018-19 were generated from Council property (54%), followed by street lighting (24%), whilst core fleet (9%) and grey fleet (13%) account for the remainder of the emissions.
- The most significant reduction in emissions occurred in street lighting with a reduction of 1,926 (29.1%) tonnes of CO<sub>2</sub>e since 2018-19. This is mainly due to the Council’s continuing programme of work to install new energy-efficient LED street lighting across the county. Other approaches such as part-night lighting and night-dimming, as well as an increase in renewable energy generation in the national grid have also contributed to the reduction.
- Also of significance is the reduction in emissions from the core and grey fleet. This is due to a change in the way emissions from the core fleet are assessed and a reduction in the mileage of the grey fleet.
- The impact of the Covid-19 pandemic on Council emissions is expected to be seen during 2020-21.

### Emissions Projections

Derbyshire County Council has pledged to reduce its greenhouse gas emissions by 55% by March 2022 compared to the 2009-10 baseline, with the ultimate goal of becoming net zero carbon by 2032.

<b>Year</b>	<b>Council emissions (tonnes CO<sub>2</sub>e)</b>	<b>Emissions reduction target (against a 2009-10 baseline)</b>
2009-10	42,965	-
2021-22	18,944	55%
2026-27	8,056	81%
2031-32	2,760	93%

As shown in the table above, current projections suggest that by 2031-32 the Councils CO<sub>2</sub>e emissions could be reduced to 2,760 tonnes. Other factors such as ever advancing technological solutions and changes in behaviour could further reduce this amount. However, should this not be possible, then the utilisation of carbon sequestration (uptake and storage of carbon dioxide, notably by trees) would enable the offsetting of any remaining emissions.

The Council has achieved its target to achieve a 55% reduction in greenhouse gas emissions against its baseline year two years earlier than planned. This progress is expected to continue because of the following factors:

- Due to the Covid-19 pandemic, Council staff are working from home where feasible. A more flexible way of working is likely to continue in the future changing the source and pattern of emissions.

- The streetlighting LED programme will continue until 2022 further reducing emissions from electricity use
- The Council is investing in low emission vehicles for business travel reducing tailpipe emissions

### Conclusion

The Council is pleased with the progressed being made to reduce emissions but is aware that there is much still to do. The figures presented here do not include indirect or 'hard-to-measure' emissions though the Council is taking measures to reduce these.