



GREENHOUSE GAS EMISSIONS REPORT

Greenhouse Gas Emissions from Forest of Dean District

2005 - 2017

Introduction

This document contains a summary of the estimated CO₂ emissions reported for the Forest of Dean District by the **Department for Business, Energy & Industrial Strategy**, published in June 2019.

More detailed information, including full data tables and methodology, can be accessed at: <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-to-2017>

Estimated emissions are available from 2005 to 2017 and cover the following four areas: Industry and Commercial, Domestic, Transport and Land Use, Land Use Change and Forestry (LULUCF).

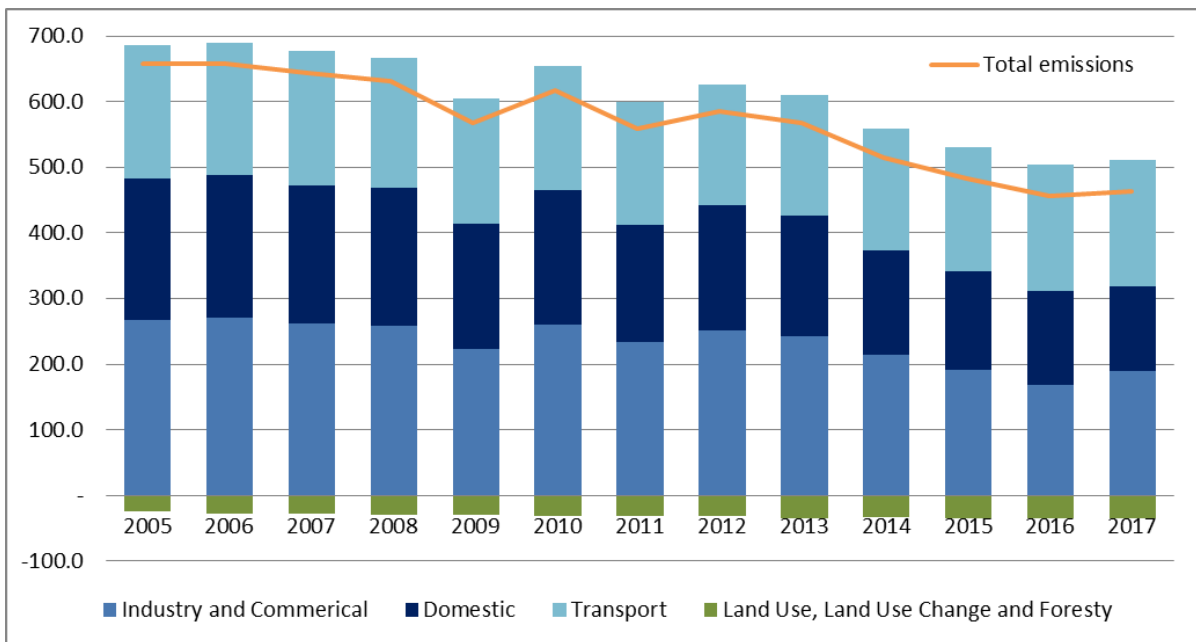
Overview

Total estimated CO₂ emissions for the District were **475.9 k tonnes in 2017**, which is a **28% reduction** in emissions from 2005.

This equates to **5.5 tonnes CO₂ emissions per capita (2017)** ([vs 5.3 tonnes CO₂ for the region](#)). It is estimated that for the UK to achieve 80% reduction in emissions by 2050, per capita emissions would have to be 2 tonnes by 2050.

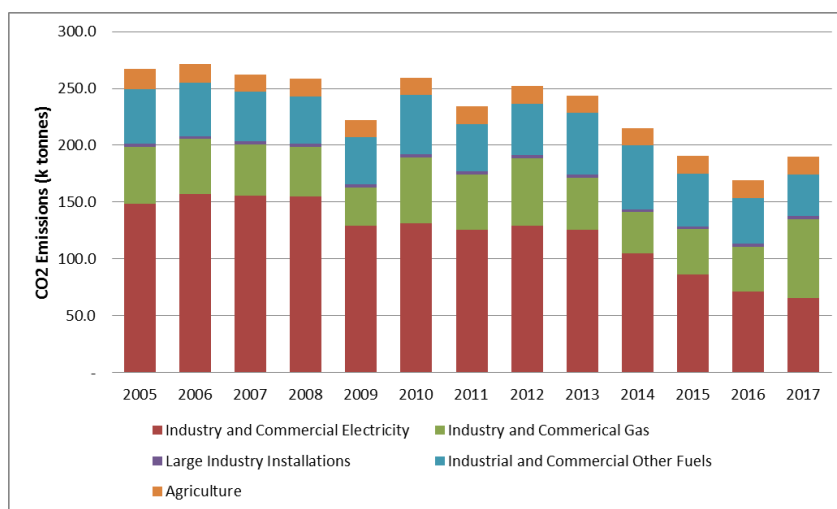
The majority of emissions come from the **transport sector** (193.7 k tonnes CO₂), with the industry and commercial sector following close behind (190 k tonnes CO₂). Domestic emissions are estimated to be 127.8 k tonnes CO₂ and net LULUCF is estimated to be a carbon sink (-35.6 k tonnes CO₂).

Total estimated emissions are steadily decreasing at an average rate of 15.5 k tonnes CO₂ per year. **If** we were to maintain this rate of reduction, in theory, carbon neutrality would be achieved in approximately 2048.



Industry and Commercial

Emissions from **industry and commercial electricity** have decreased significantly (53%) since 2005/6 and in 2017 they are now the second largest proportion of industry and commercial emissions for the District (34%). **Industry and commercial gas** has increased since 2005/6 and is now the largest proportion of such emissions (37%). Large industrial installations (2%) and agriculture (8%) make up the smallest proportions.



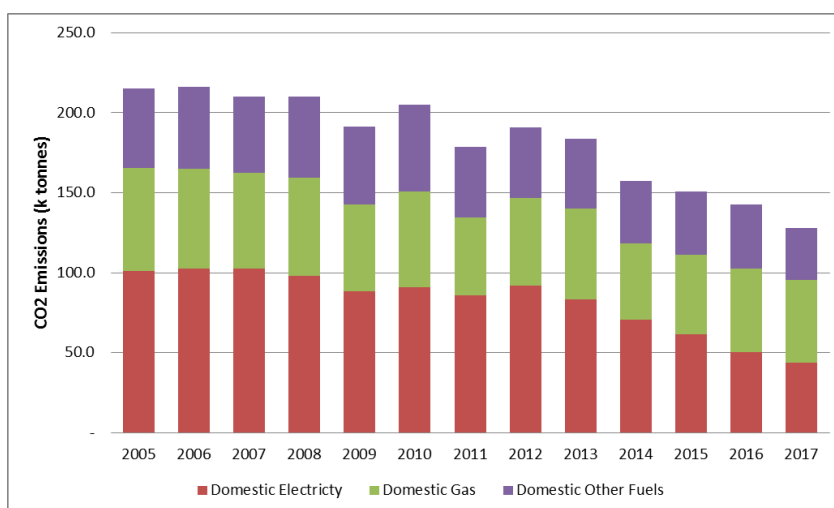
Domestic - Energy

In 2017 **10.9% of households** were reported to be **fuel poor** (BEIS, 2019) and in 2016/17 excess winter mortality was reported to be 40 (Office for National Statistics, 2018).

39% of homes are not connected to the gas network (Gloucestershire Energy Strategy, 2019) and the [Gloucestershire Energy Strategy](#), 2019, identified the Forest of Dean as an ideal location for testing 'fossil free heating zones'.

Up to 2017 there were **2,161 installations of renewable electricity** in the District, 99% of which are PV. The remaining 1% consists of anaerobic digestion, onshore wind and hydro (BEIS, 2018).

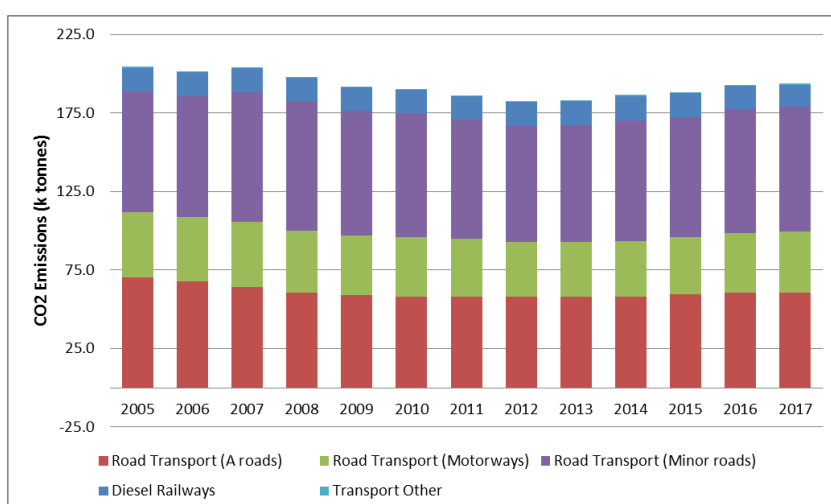
Domestic estimated CO₂ emissions have reduced by over 85 k tonnes CO₂ since 2005 and now contribute to 23% of total District emissions.



Transport

The majority of District estimated transport emissions come from road transport. In 2017 this was specifically **92%** of total transport emissions.

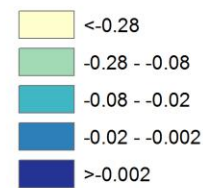
Total transport emissions reached their lowest point in 2012/13 for the period 2005-2017. Since 2013 total emissions from transport have slowly increased, and these increases have come from road transport.



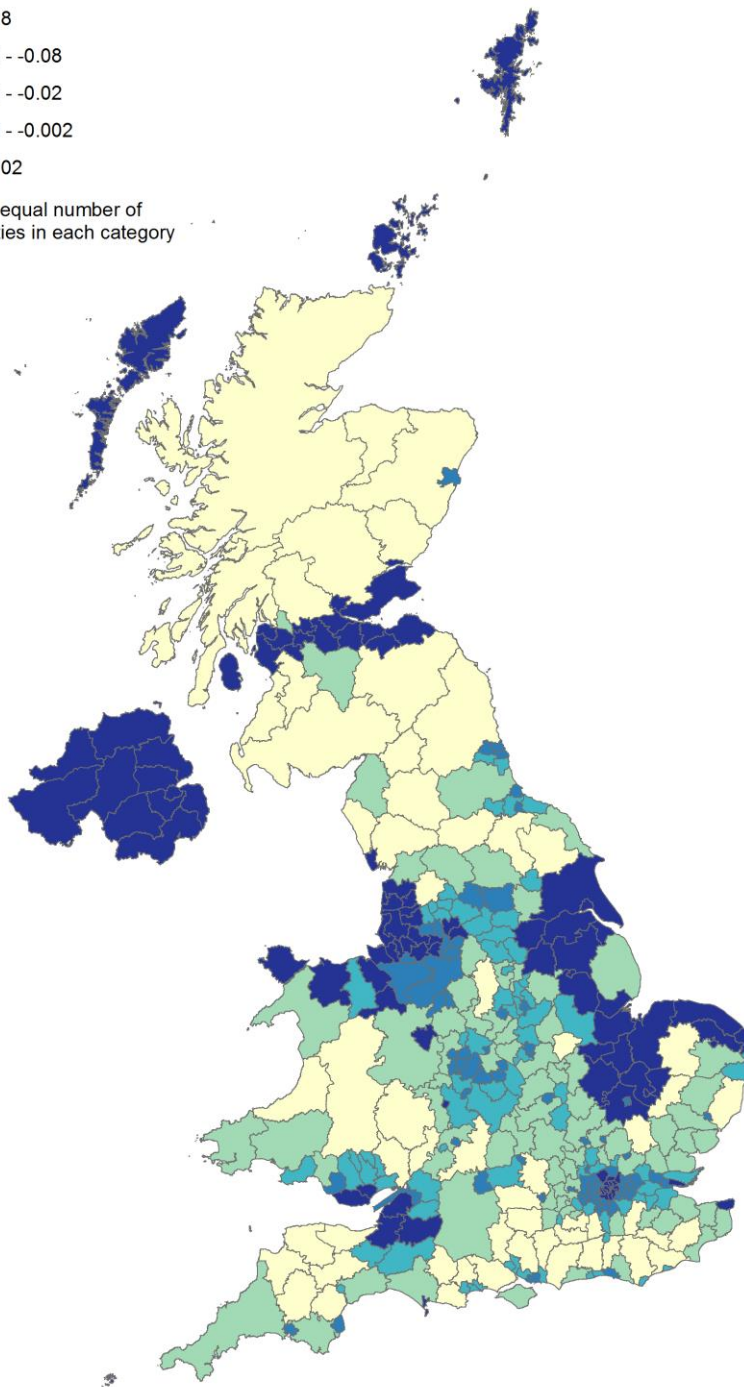
Land Use, Land Use Change and Forestry

England as a whole is a net sink of LULUCF emissions (-5086 k tonnes CO₂, 2017). In 2017 the Forest of Dean specifically had a net sink of LULUCF emissions of -35.6 k tonnes CO₂, contributing 4.5% to South West England's total net sink of LULUCF emissions (-800 k tonnes CO₂).

See the map on the next page for LULUCF CO₂ emissions per capita by Local Authority (tonnes CO₂ per capita) for 2017.



There are an equal number of Local Authorities in each category



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More detailed information on how emissions from LULUCF have been calculated can be accessed here:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/812153/LULUCF_Local_Authority_mapping_report_2017.pdf