



CO₂ Emissions in the Greater Cambridge region 2005-2017

August 2019



Carbon
Neutral
Cambridge

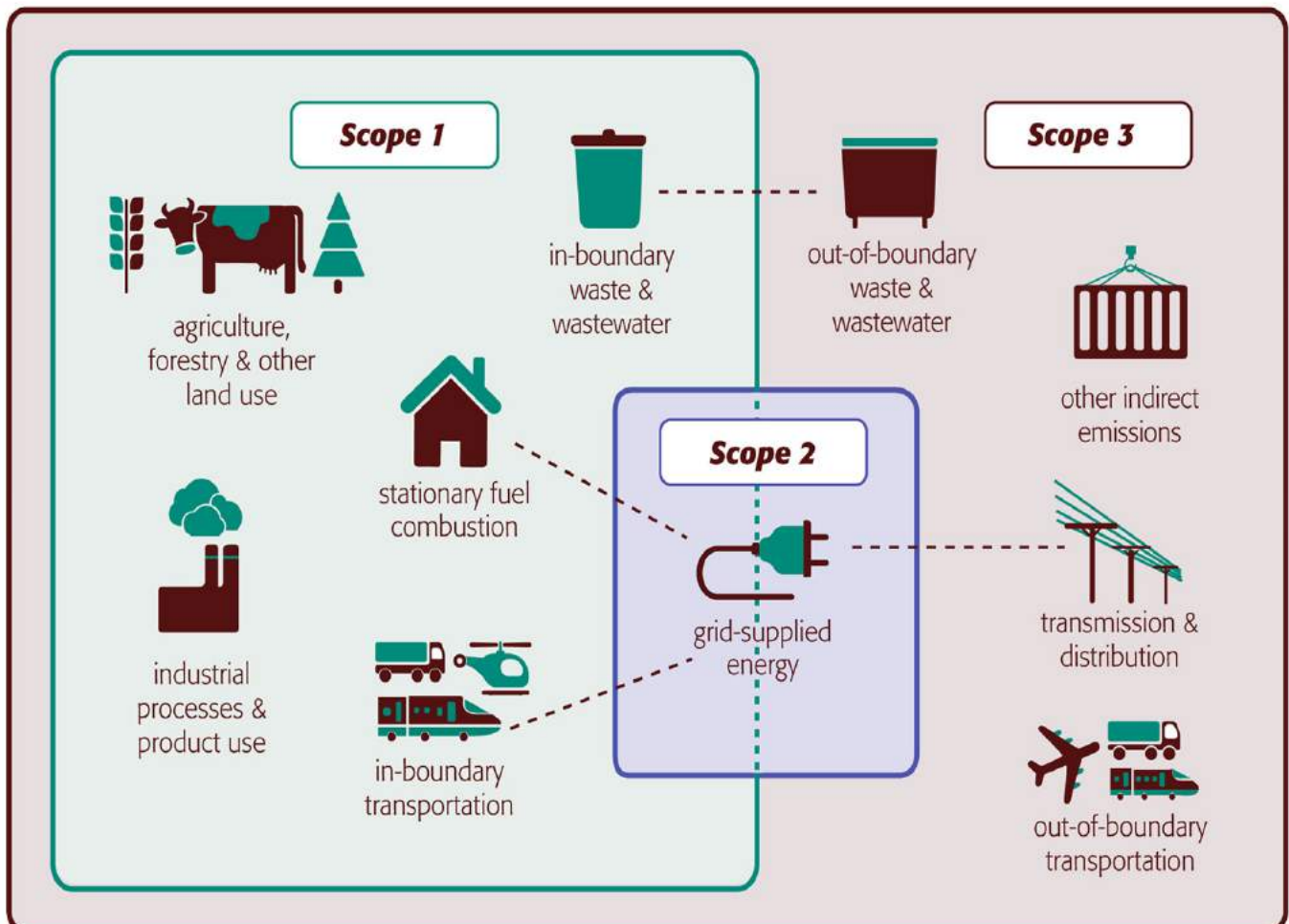
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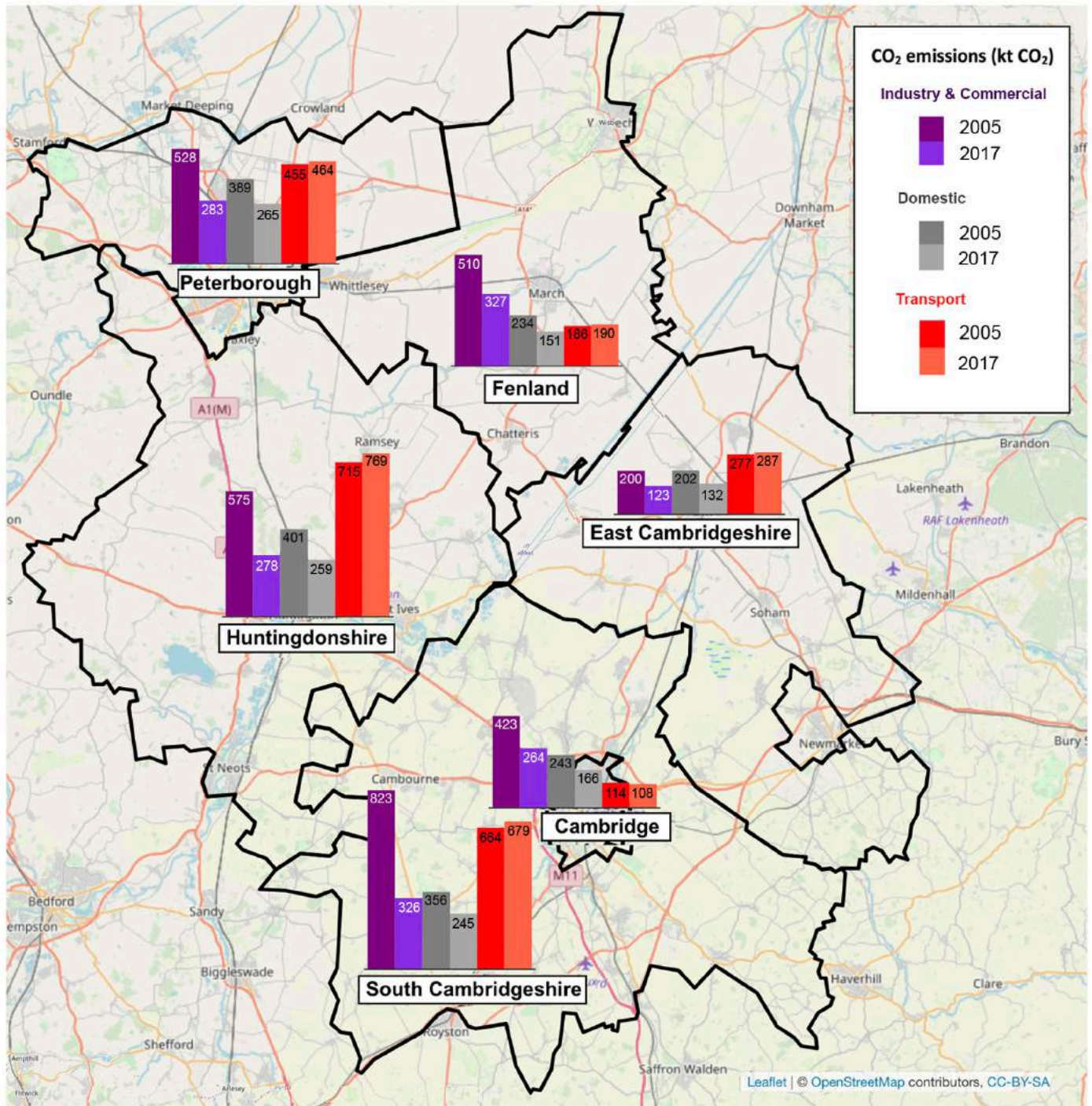
Introduction

This report has been prepared by Carbon Neutral Cambridge in order to provide an overview of the CO₂ production emissions from Local Authorities in the Greater Cambridge region. Data has been taken from the UK Department for Business, Energy and Industrial Strategy (BEIS) annual statistics.

Production emissions do not include emissions associated with goods and services produced outside of a Local Authority area. A truer reflection of regions' carbon footprint is provided by 'Consumption Emissions', which include Scope 3 emissions. Unfortunately, consumption emissions are more difficult to estimate and do not form part of most international climate agreements. All local authorities within the Combined Authority region base their reporting on production emissions.



Emissions Overview for the Combined Authority

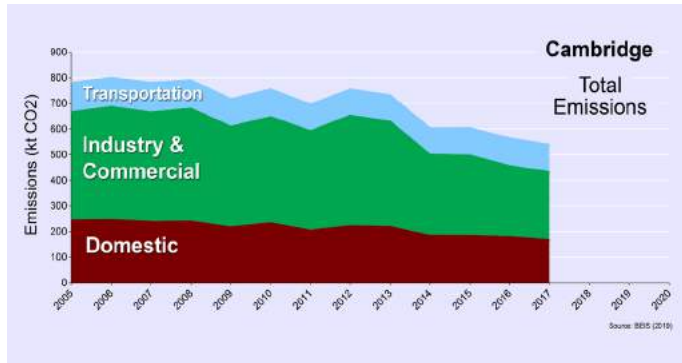


Key points to note include:

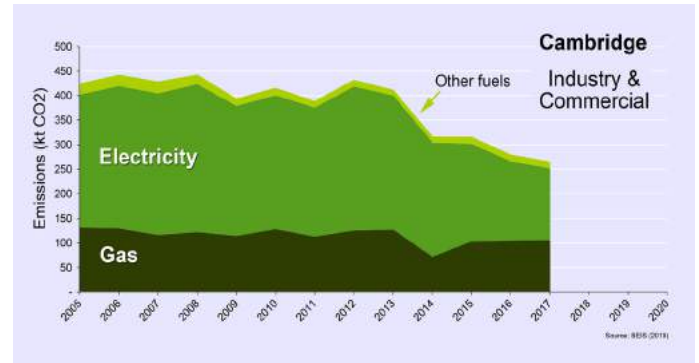
- For the period from 2005-2017, total CO₂ emissions have fallen in each of the six constituent Local Authorities.
- There have been significant emissions reductions in the sectors of ‘Industry & Commerce’ and ‘Domestic’.
- By contrast, emissions associated with transport have risen slightly in every Local Authority apart from Cambridge, which shows only a small decrease.
- Emission reductions across the entire Combined Authority for 2005-2017 were ca. 2.2% per annum. At this rate it would take three decades to half emissions and is very far removed from even the UK Government’s target for net Zero Carbon emissions by 2050.

Emissions from Cambridge Local Authority

Total Emissions



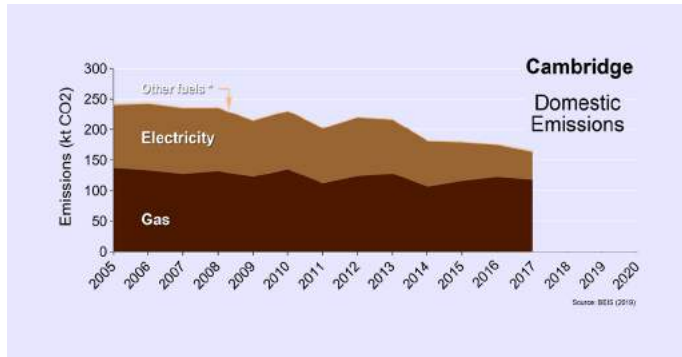
Industrial Emissions



- Total emissions have fallen from ca. 780 kt CO2 in 2005 to ca. 540 kt CO2 in 2017. This represents a decrease of ca. 31% from 2005-2017 or ca. 2.4% per annum.
- The majority of this decrease has taken place since 2012.

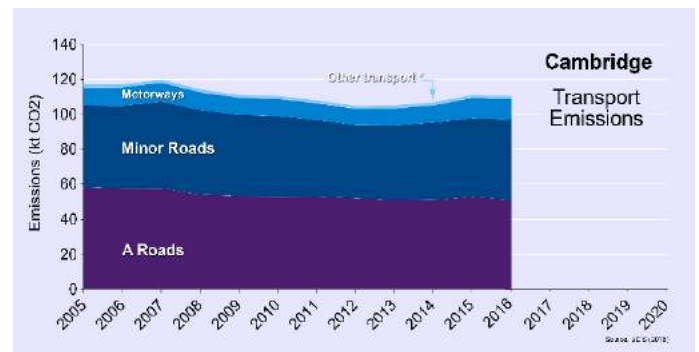
- Total industrial emissions have fallen from ca. 425 kt CO2 in 2005 to ca. 265 kt CO2 in 2017. This is a decrease of ca. 38% from 2005-2016 or ca. 3% per annum.
- The majority of this decrease has taken place since 2012.
- Over the 2005-2017 period, emissions from industrial gas use have declined at ca. 1.5% per annum and those from industrial electricity use have declined at ca. 3.6% per annum.

Domestic Emissions



- Total domestic emissions have fallen from ca. 245kt CO2 in 2005 to ca. 165 kt CO2 in 2017. This represents a decrease of ca. 32% or ca. 2.5% per annum.
- Emissions from domestic gas are declining at only ca. 1% per annum.
- Emissions associated with domestic electricity have declined from ca. 105kt CO2 in 2005 to ca. 45 kt CO2 in 2017. This represents a decrease of 4.3% per annum.
- The UK grid intensity has declined by ca. 3.5% per annum since 2005 as coal-fired power stations have been retired. This accounts for the majority of the emissions decline seen in Cambridge.

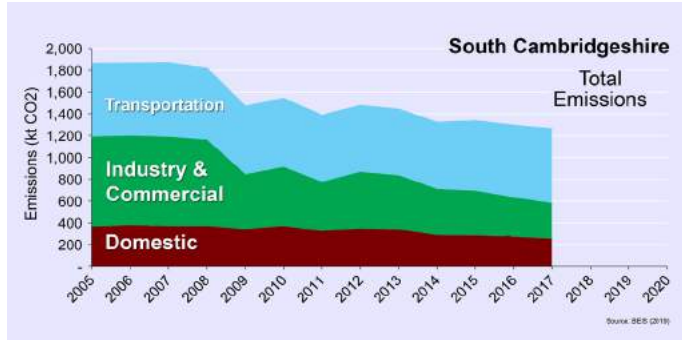
Transport Emissions



- Total transport emissions are almost unchanged (ca. 114 kt CO2 in 2005; ca. 108 kt CO2 in 2017).
- For the last four years (2013-2017) transport emissions have grown by ca. 1.1% per annum.

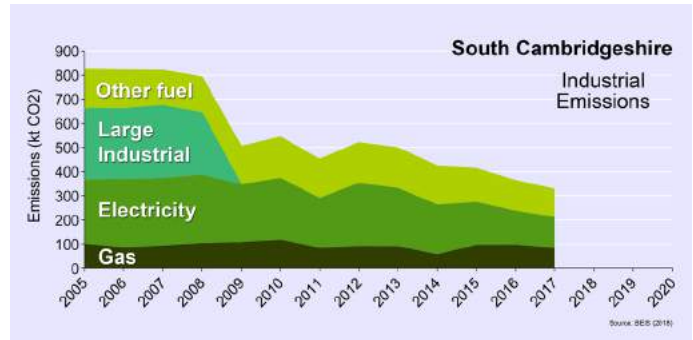
Emissions from South Cambridgeshire L.A.

Total Emissions



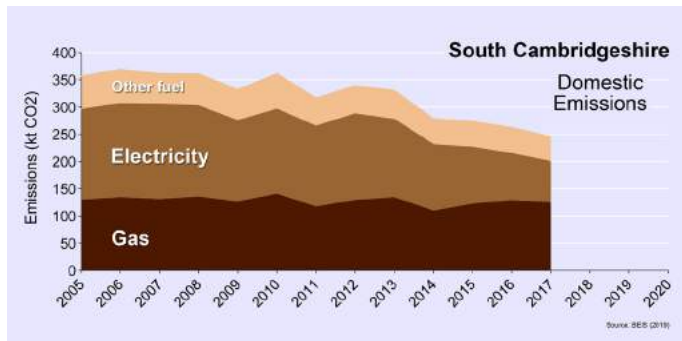
- Total emissions have fallen from ca. 1860 kt CO2 in 2005 to ca. 1250 kt CO2 in 2016. This represents a average decrease of ca. 2.5% per annum.
- The majority of this decrease resulted from the closure of the Barrington cement works

Industrial Emissions



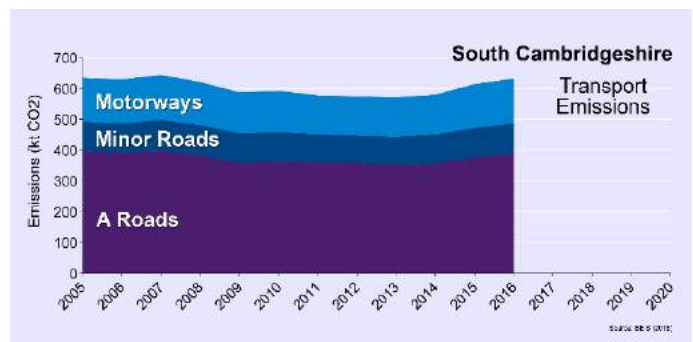
- Total industrial emissions have fallen from ca. 825 kt CO2 in 2005 to ca. 325 kt CO2 in 2017. The major part of this reduction resulted from the closure of the Barrington cement works.
- Emissions from industrial gas use have decreased by ca. 1.3% per annum and those from industrial electricity use by ca. 4.0% per annum. Industrial emissions from other fuels have decreased by ca. 2.3% per annum.

Domestic Emissions



- Total domestic emissions have fallen from ca. 355kt CO2 in 2005 to ca. 245 kt CO2 in 2017. This represents a decrease of ca. 31% from 2005-2017 or ca. 2.4% per annum.
- Emissions from domestic gas have declined at only ca. 0.2% per annum. Those from 'other fuels' have declined by 2% per annum.
- Emissions associated with domestic electricity have declined by ca. 4.2 per annum. The UK grid carbon intensity has declined from 2005 to 2017. at ca. 3.5% per annum

Transport Emissions



- Total transport emissions have increased slightly (ca. 665 kt CO2 in 2005; ca. 680 kt CO2 in 2016).
- For the last four years (2013-2017) transport emissions have grown by 75 kt CO2, or ca. 3.1% per annum.