

## Statistics Update – June 2015

### UK Local Authority And Regional Carbon Dioxide Emissions 2005-2013

A new set of UK local authority and regional carbon dioxide emissions national statistics for 2005-2013 were released on Thursday 25th June 2015.

Emissions on an end-user basis (i.e. where emissions are distributed according to the point of energy consumption or point of emission if not energy related) have been assigned to all 406 Local Authorities in the UK.

A full official analysis from DECC is available at:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/437384/2005\\_to\\_2013\\_UK\\_local\\_and\\_regional\\_CO2\\_emissions\\_statistical\\_release.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/437384/2005_to_2013_UK_local_and_regional_CO2_emissions_statistical_release.pdf)

The activity data used to produce these estimates come from four main sources:

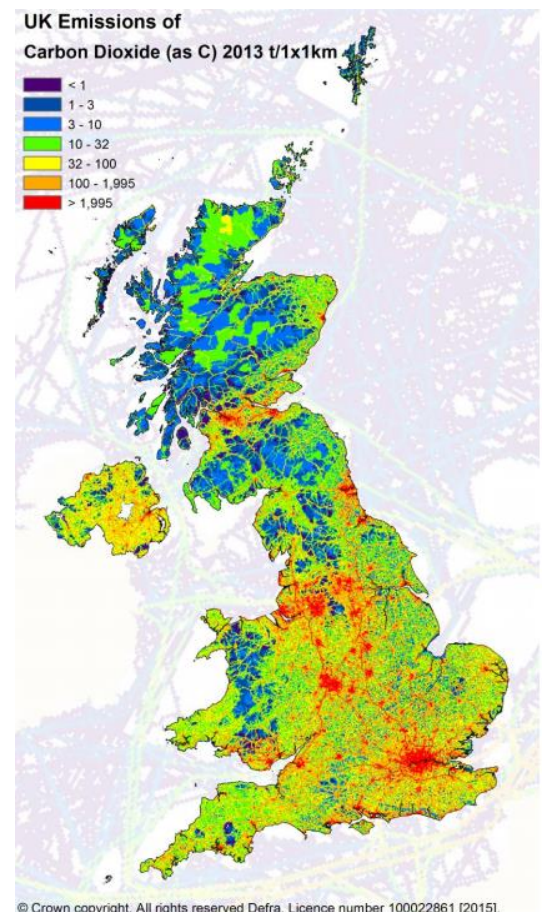
- DECC sub-national gas and electricity consumption statistics;
- Point source emissions from large industrial installations;
- High resolution emissions distribution maps developed under the NAEI programme; and,
- Land use, land use change and forestry (LULUCF) regional data supplied by the Centre of Ecology and Hydrology (CEH).

This APSE Energy summary highlights a few of the key findings of the above publication.

#### Overall Emissions in 2013

Since 2012, emissions have decreased in 88% of Local Authorities, consistent with the decrease in overall UK emissions from 2012 to 2013. The main drivers of the decrease in UK emissions in 2013 were a decrease in the use of coal and gas for electricity generation.

Overall in 2013 the end-user emissions assigned to Local Authority areas were 43% industry and commercial sector, 30% domestic sector, and 27% transport. There are wide local variations on this.



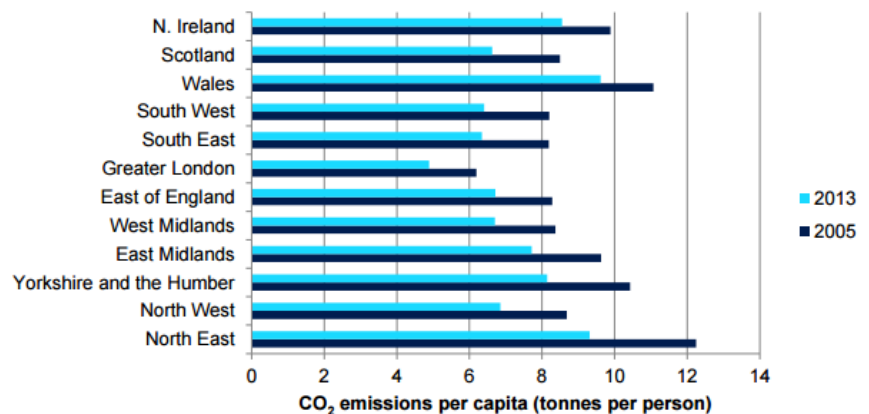
## Regional Trends 2005 - 2013

Since 2005 emissions have decreased in all regions. On a regional level it is useful to consider both total end-user emissions and per capita emissions in order to make some allowance for the different size of regions.

The largest percentage decrease in emissions (22%) and the largest decrease in per capita terms of 2.9 tonnes per person were seen in the North East.

The smallest decreases in per capita terms of 1.3 tonnes per person were seen in Greater London and Northern Ireland.

Regional emissions per capita in 2005 and 2013



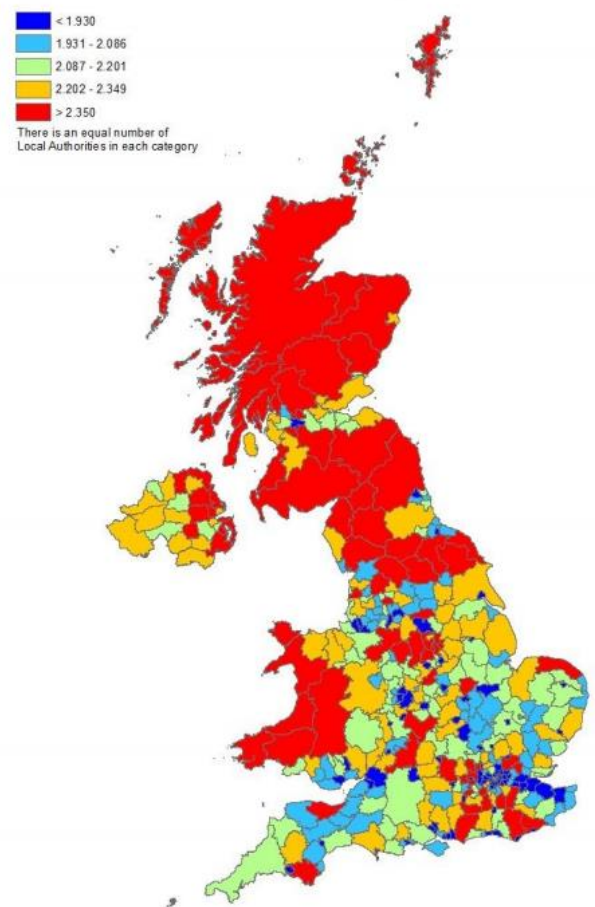
Domestic CO<sub>2</sub> per capita emissions by Local Authority (tonnes CO<sub>2</sub> per capita) for 2013

## Local Trends 2005 - 2013

When the Local Authority emissions are aggregated, estimated total carbon dioxide emissions decreased by around 16% between 2005 and 2013. Out of 406 Local Authorities, 399 have shown a decrease in total emissions between 2005 and 2013. This reflects the decrease in overall emissions for the UK during this period driven mainly by reductions in emissions from power stations, industrial combustion and passenger cars.

The largest percentage decrease in **total emissions** was in Northumberland (down 112%). This was due to the conversion of a large industrial power station from generating electricity for its own use, to exporting electricity to national grid users. Following this, emissions from this site are reallocated to final users, meaning the 'Large industrial installations' sector has virtually zero emissions in 2013.

The two Local Authorities with the largest decrease in **domestic sector** end-user emissions since 2005 are both in the North West of England - Knowsley and Blackpool - where there have been reductions of more than 20 percent.



The largest decrease in emissions from the **industrial and commercial sector** was in Gravesham (down 81%). This was primarily due to the closure of a cement works during 2008.

The largest decrease in emissions from **transport** was in Wandsworth (down 23%).

When Local Authority figures are aggregated, 2013 emissions are lower than 2005 emissions in all sectors and sub-sectors except for 'Diesel Railways' and 'Transport Other'.

The 3 largest absolute decreases were in the following sub-sectors:

- Industry and commercial electricity (-17.8 million tonnes)
- Large industrial installations (-15.1million tonnes)
- Domestic electricity (-9.6 million tonnes)

### **“Scope of Influence” of Local Authorities**

Alongside the full dataset, DECC have also published a subset which represents carbon dioxide emissions that they consider to be “within the scope of influence of Local Authorities”. The full dataset includes all the emissions that occur within the boundaries of each Local Authority; however, the dataset of emissions within the scope of Local Authorities excludes emissions that Local Authorities don't have direct influence over.

The emissions removed from this data set are:

- Motorways
- EU Emissions Trading System (EU ETS) sites
- Diesel railways
- Land Use, Land Use Change, and Forestry

It is debateable however as to how much influence Local Authorities have over many of the remaining emissions sources in the data, trends within which are largely influenced by industrial emissions.

The sub-set data can be found at:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/437284/2005\\_to\\_2013\\_UK\\_local\\_and\\_regional\\_CO2\\_emissions\\_subset\\_dataset.xlsx](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/437284/2005_to_2013_UK_local_and_regional_CO2_emissions_subset_dataset.xlsx)

### **Future Updates**

The next National Statistics on Local Authority carbon dioxide emissions estimates, covering the period 2005-2014, will be published in June 2016.

## References

The full set of data tables and methodology documents can be found at:

<https://www.gov.uk/government/statistics/uk-local-authority-andregional-carbon-dioxide-emissions-national-statistics-2005-2013>

These include:

- **Statistical summary.** This document provides a commentary on trends and patterns shown in the data.

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/437384/2005\\_to\\_2013\\_UK\\_local\\_and\\_regional\\_CO2\\_emissions\\_statistical\\_release.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/437384/2005_to_2013_UK_local_and_regional_CO2_emissions_statistical_release.pdf)

- **Methodology summary.** This report provides a summary to the methodology used to calculate carbon dioxide emissions (CO2) at local authority (LA) level.

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/437422/2005\\_to\\_2013\\_UK\\_local\\_and\\_regional\\_CO2\\_emissions\\_methodology\\_summary.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/437422/2005_to_2013_UK_local_and_regional_CO2_emissions_methodology_summary.pdf)

- **Technical report** for the Local and Regional CO2 Emissions Estimates for 2005 - 2013 for the UK. It provides a detailed technical description of the methodology.

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/437426/2005\\_to\\_2013\\_UK\\_local\\_and\\_regional\\_CO2\\_emissions\\_technical\\_report.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/437426/2005_to_2013_UK_local_and_regional_CO2_emissions_technical_report.pdf)

- **Full dataset.** This is provided in detail in an excel spreadsheet

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/437281/2005\\_to\\_2013\\_UK\\_local\\_and\\_regional\\_CO2\\_emissions\\_full\\_dataset.xlsx](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/437281/2005_to_2013_UK_local_and_regional_CO2_emissions_full_dataset.xlsx)

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This update was produced for APSE Energy by Ailsa Gibson and the CLASP sustainability network ([www.claspinfo.org](http://www.claspinfo.org))