

## QA process for CO<sub>2</sub> and non CO<sub>2</sub> provisional emissions estimates

### Description of the dataset

The dataset contains provisional emissions estimates of the six greenhouse gases of the Kyoto basket on a source basis.

Carbon dioxide emissions are reported in National Communication format, while emissions from the other gases are reported as total.

### Timing

Provisional greenhouse gas emissions estimates are published on the last Thursday in March each year, 3 months after the end of the year in question. This coincides with the publication of the March edition of *Energy Trends*, which is the first release of statistics covering UK energy use in the most recent year (i.e. year t-1).

### Methodology and QA process

CO<sub>2</sub> provisional emissions estimates do not come from the greenhouse gas inventory, but are very simple estimates based on the change in energy use between year t-2 and year t-1. It is assumed that the percentage change in CO<sub>2</sub> emissions between year t-2 and year t-1 is the same as the percentage change in energy use between the two years.

The March edition of *Energy Trends* is published by the Energy Statistics team in DECC, who also collect and quality assure the data of this publication - <http://www.decc.gov.uk/en/content/cms/statistics/publications/trends/trends.aspx>.

If absolute and percentage differences between the two consecutive years are higher or lower than an agreed value, a further check is required by the Energy Statistics team in order to identify any data processing errors.

The calculations are conducted by the Climate Change Statistics team; the results are then submitted to the Energy Statistics team for additional revision.

Non-CO<sub>2</sub> provisional emissions estimates, similarly, do not come from the inventory but are estimated based on a simple approach which assumes that the trend for the other 5 gases of the Kyoto basket<sup>1</sup> will be half way between 'no change' on the latest year and a repeat of the trend over recent years.

The calculations are conducted by the Climate Change Statistics team.

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<sup>1</sup> Methane (CH<sub>4</sub>), Nitrous Oxide (N<sub>2</sub>O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs) and Sulphur hexafluoride (SF<sub>6</sub>).

## **Revision of the data**

The greenhouse gas provisional emissions estimates will be subject to revision when the final estimates are published 13 months later (t+1); however, they provide an early indication of emissions in the most recent full calendar year. In the last 4 years provisional estimates were within 1 per cent of the final figures.

## **2009 improvement**

2009 is the first year in which details of the sectoral breakdown of the provisional estimates of carbon dioxide emissions have been included in the statistical release. To ensure consistency with other National Statistics publications on UK greenhouse gas emissions, these breakdowns have been based on National Communication sectors.

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