

Statistical bulletin

Greenhouse gas emissions, UK: provisional estimates, 2025

Measuring the air emissions generated by UK economic activities.

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Release date:
28 October 2026

Next release:
To be announced

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1 . Main points

- Provisional 2025 UK greenhouse gas emissions on a residence basis decreased by 1.0%, from 478 million tonnes of carbon dioxide equivalent (Mt CO₂e) in 2024 to 473 Mt CO₂e in 2025.
- UK emissions in 2025 (provisional), were 42.4% below 1990 levels, the first year for which we have data.
- Manufacturing saw the largest emissions decrease among industries, from 64 Mt CO₂e in 2024 to 58 Mt CO₂e in 2025.
- Consumer expenditure (consumption of fuels and other products by individuals in the UK, as opposed to the production of these by industry) remained the largest single contributor to UK emissions, at 26.5% of the 2025 UK total, followed by the transport sector, at 16.4%.
- UK emissions intensity was unchanged in 2025 compared to 2024, remaining at 0.14 thousand tonnes of CO₂e per £ million of gross value added (GVA).

2 . Greenhouse gas emissions

Provisional UK greenhouse gas emissions (reported on a [residence basis](#), aligned with the national accounts) were an estimated 473 million tonnes of carbon dioxide equivalent (Mt CO₂e) in 2025. This was a 1.0% decrease from 2024, continuing a general downward trend since the time series began in 1990.

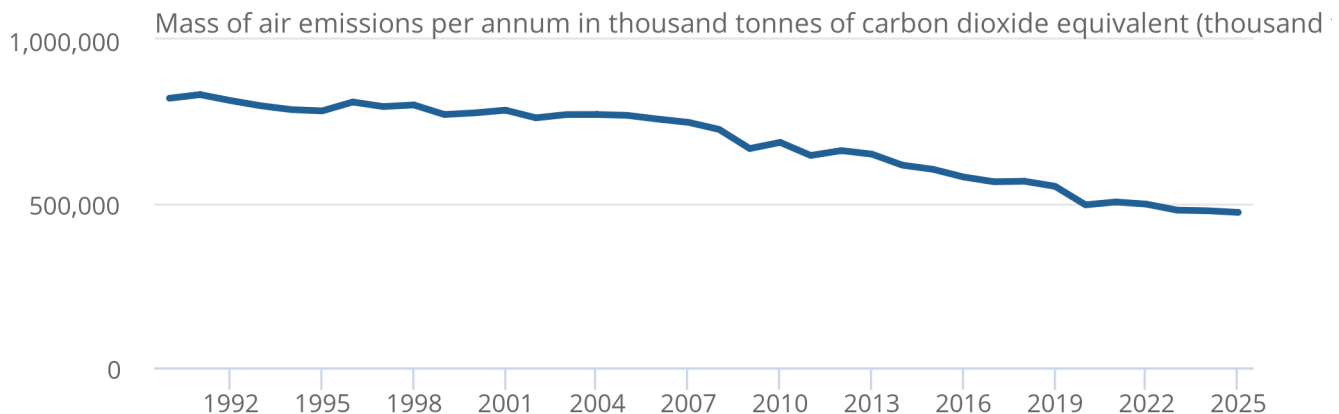
The manufacturing industry was the largest contributor to this decrease in 2025, falling by 9.7% from 2024.

Figure 1: UK greenhouse gas emissions (on a residence basis) have fallen by 42.4% since 1990

Trend for greenhouse gas emissions, UK, 1990 to 2025

Figure 1: UK greenhouse gas emissions (on a residence basis) have fallen by 42.4% since 1990

Trend for greenhouse gas emissions, UK, 1990 to 2025



Source: Ricardo Energy and Environment, UK Environmental Accounts from the Office for National Statistics

Notes:

1. Industry aggregations are based on the UK Standard Industrial Classification (SIC) 2007. Households include "consumer expenditure" and "activities of households as employers; undifferentiated goods and services - producing activities of households for own use" (for example, employing a cleaner and growing vegetables for your own consumption). The electricity, gas, steam and air-conditioning supply sector is referred to as the energy supply sector. The transport and storage sector is referred to as the transport sector.
2. Greenhouse gas emissions include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃).
3. The Air Emission Accounts data come from only include direct residence-based emissions, defined as "scope 1" under the [greenhouse gas protocol guidance](#).

More information on different emissions measures is available in our [Measuring UK greenhouse gas emissions methodology](#).

3 . Household emissions

Residence-based emissions treat households' or consumer expenditure as an industry (consumption of fuels and other products by individuals in the UK, as opposed to the production of these by industry). Emissions from consumer expenditure remains the single largest contributor (26.5%) to total UK greenhouse gas emissions on a residence basis since 2015.

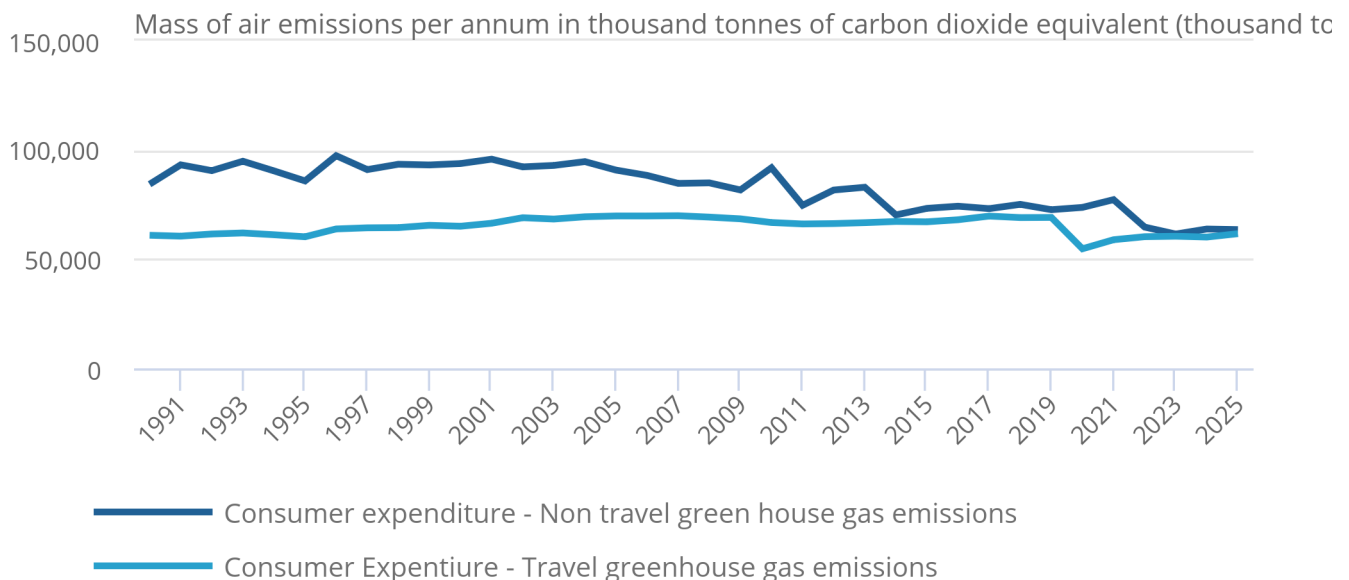
Consumer expenditure emissions rose by 1.0% in 2025, to 125 million tonnes of carbon dioxide equivalent (Mt CO₂e) from 124 Mt CO₂e in 2024. This was led by a 2.6% rise in consumer travel emissions.

Figure 2: Consumer expenditure greenhouse gas emissions have increased in 2025, led by increased consumer travel emissions

Residence-based greenhouse gas emissions from households measured through consumer expenditure, UK, 1990 to 2025

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Residence-based greenhouse gas emissions from households measured through consumer expenditure, UK, 1990 to 2025



Source: Ricardo Energy and Environment, UK Environmental Accounts from the Office for National Statistics

Notes:

1. Industry aggregations are based on the UK Standard Industrial Classification (SIC) 2007. Households include "consumer expenditure" and "activities of households as employers; undifferentiated goods and services - producing activities of households for own use" (for example, employing a cleaner and growing vegetables for your own consumption).
2. Non-travel related emissions are from the consumption of fuels and other products by individuals in the UK, as opposed to the production of these by industry. Travel-related emissions consist almost entirely of road transport emissions.
3. The Air Emission Accounts data come from only include direct residence-based emissions, defined as "scope 1" under the [greenhouse gas protocol guidance](#).

4 . Data on environmental accounts

[Atmospheric emissions: acid rain precursors by industry and gas](#)

Dataset | Released 28 October 2026

The emissions of sulphur dioxide, nitrogen oxide, ammonia and total acid rain precursors, by industry (SIC 2007 group - around 130 categories), UK, 1990 to 2024 and 2025 provisional.

[Atmospheric emissions: greenhouse gas emissions by industry and gas](#)

Dataset | Released 28 October 2026

The emissions of carbon dioxide, methane, nitrous oxide, hydro-fluorocarbons, perfluorocarbons, sulphur hexafluoride, nitrogen trifluoride and total greenhouse gas emissions, by industry (SIC 2007 group - around 130 categories), UK, 1990 to 2024 and 2025 provisional.

[Atmospheric emissions: greenhouse gas emissions intensity by industry](#)

Dataset | Released 28 October 2026

Greenhouse gas and carbon dioxide emissions intensity - the level of emissions per unit of economic output, by industry (SIC 2007 group - around 130 categories), UK, 1990 to 2024 and 2025 provisional.

[Atmospheric emissions: other pollutants by industry and gas](#)

Dataset | Released 28 October 2026

The emissions of PM10, PM2.5, carbon monoxide, non-methane volatile organic compound, benzene and 1,3-butadiene, by industry (SIC 2007 group - around 130 categories), UK, 1990 to 2024 and 2025 provisional.

5 . Data sources and quality

These provisional estimates form part of the UK Environmental Accounts. The Environmental Accounts are "extended" accounts, aligned with but not part of the main UK National Accounts.

They are compiled in accordance with the United Nations' (UN's) [System of Environmental Economic Accounting \(SEEA\) Central Framework](#), which closely follows the UN System of National Accounts (SNA).

All 2025 data in this release are provisional. To produce provisional 2025 greenhouse gas and other air emissions data, 2024 data on activities (for example, distance in kilometres driven by cars) are updated using information on production activities for 2025, where available, or using appropriate proxy information if necessary. Emission factors from 2025 that estimate the mass of emissions associated with those activities (by type of gas or pollutant) are then applied.

Air emissions

The air accounts in the UK Environmental Accounts are compiled by Ricardo Energy and Environment on behalf of the Office for National Statistics (ONS).

In this bulletin, we provide air emissions estimates detailing greenhouse gas emissions, acid rain precursor emissions, greenhouse gas emissions intensity, and other pollutants.

The main source of information for this reporting is the National Atmospheric Emissions Inventory (NAEI). This provides air emissions data, calculated from activity data and emission factors, for all relevant sources in the UK as a starting point for generating the air emissions accounts.

The [residence principle](#) is then applied to these datasets, which assigns the emissions to an industrial classification based on the [Standard Industrial Classification: SIC 2007](#).

Quality

More quality and methodology information (QMI) on strengths, limitations, appropriate uses, and how the data were created is available in our [Environmental accounts on air emissions QMI](#).

6 . Related links

[UK Environmental Accounts: 2026](#)

Bulletin | Released 5 June 2026

Measuring the contribution of the environment to the economy, impact of economic activity on the environment, and response to environmental issues.

7 . Cite this statistical bulletin

Office for National Statistics (ONS), released 28 October 2026, ONS website, statistical bulletin, [Greenhouse gas emissions, UK: provisional estimates, 2025](#)