DATA

Cumulative CO_2 emissions by world region GCB

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Cumulative CO_2 emissions by world region

Cumulative carbon dioxide (CO_2) emissions by region from the year 1750 onwards. This measures CO_2 emissions from fossil fuels and industry only – land-use change is not included.

Table Chart

Setting

Data source: – Learn more about this data

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What you should know about this indicator

- This data is based on territorial emissions, which do not account for emissions embedded in traded goods.
- Emissions from international aviation and shipping are not included in any country or region's emissions. They are only included in the global total emissions.

CUMULATIVE CO_2 EMISSIONS BY WORLD REGION
GCB

Total cumulative emissions of carbon dioxide (CO_2), excluding land-use change, since the first year of available data, measured in tonnes.

Source
Global Carbon Budget (2023) – with major processing by Our World in Data

Last updated
June 20, 2024

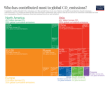
Next expected update
June 2025

Date range
1750–2022

Unit
tonnes

Related research and writing

CO_2 emissions
Hannah Ritchie and Max Roser



Who has contributed most to global CO_2 emissions?
Hannah Ritchie

Explore charts that include this data

Sources and processing

This data is based on the following sources

Global Carbon Project – Global Carbon Budget +

The Global Carbon Budget was founded by the Global Carbon Project (GCP) international science team to track the trends in global carbon emissions and sinks and is a key measure of progress towards the goals of the Paris Agreement. It's widely recognized as the most comprehensive report of its kind.

How we process data at Our World in Data

All data and visualizations on Our World in Data rely on data sourced from one or several original data providers. Preparing this original data involves several processing steps. Depending on the data, this can include standardizing country names and world region definitions, converting units, calculating derived indicators such as per capita measures, as well as adding or adapting metadata such as the name or the description given to an indicator.

At the link below you can find a detailed description of the structure of our data pipeline, including links to all the code used to prepare data across Our World in Data.

Read about our data pipeline →

NOTES ON OUR PROCESSING STEP FOR THIS INDICATOR

- Data on global emissions has been converted from tonnes of carbon to tonnes of carbon dioxide (CO_2) using a conversion factor of 3.664.
- Emissions from the Kuwaiti oil fires in 1991 have been included as part of Kuwait's emissions for that year.

- Country's share of the global population is calculated using our population dataset, based on different sources.
- Each country's share of global CO_2 emissions from flaring has been calculated using global CO_2 emissions from flaring provided in the Global Carbon Budget dataset.

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HOW TO CITE THIS DATA

In-line citation

If you have limited space (e.g. in data visualizations), you can use this abbreviated in-line citation:

> Global Carbon Budget (2023) – with major processing by Our World in Data

Full citation

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