

Global CO₂ emissions stalled for the third year in a row

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The annual assessment of global greenhouse gas (GHG) emissions by the JRC and the Netherlands Environmental Assessment Agency (PBL) confirms that CO₂ emissions have stalled for the third year in a row.

The report provides updated results on the continuous monitoring of the three main greenhouse gases: carbon dioxide (CO₂), methane (CH₄) and [nitrous oxide](#) (N₂O).

Global GHG emissions continue to be dominated by fossil carbon dioxide (CO₂) emissions, which however show a slowdown trend since 2012, and were stalled for the third year in a row in 2016.

Russia, China, the US and Japan further decreased their CO₂ emissions from 2015 to 2016, while the EU's emissions remained stable with respect to the previous year, and India's emissions continued to increase.

-Other greenhouse gases keep creeping up

Information on the other two greenhouse gases, methane (CH₄) and nitrous oxide (N₂O), is only available until 2012, as international statistics on agricultural activities - the main source of these emissions - are not updated as frequently as on energy and industry-related activities.

Uncertainty is also higher for these emissions than for CO₂ emissions.

However, the data until 2012 shows a steady increase in global GHG emissions, with an overall increase of 91% from 1970 to 2012.

CH₄ is mainly generated by agricultural activities, the production of coal and gas, as well as waste treatment and disposal. N₂O is mainly emitted by agricultural soil activities and chemical production.

In the EU, 60% of the CH₄ and N₂O emissions are emitted by the top six emitting countries - Germany, UK, France, Poland, Italy and Spain.

The upward trend in CH₄ and N₂O emissions is also visible in the US, China, Japan and India which all recorded increasing GHG emissions.

Europe's downward trend stalling

Over the past two decades, the EU28 has steadily decreased its CO₂ emissions, which still represent two thirds of the EU's total [greenhouse gas emissions](#).

In 2016, the EU's CO₂ emissions were 20.8% below the levels in 1990 and 17.9% below the levels in 2005. Since 2015, the EU's CO₂ emissions have stabilised, representing 9.6% of [global emissions](#).

-Country profiles

The report is based on the JRC's Emissions Database for Global Atmospheric Research (EDGAR), which is not only unique in its space and time coverage, but also in its completeness and consistency of the emissions compilations for multiple pollutants: the [greenhouse gases](#) (GHG), air pollutants and aerosols.

The new report contains country-specific fact sheets for 216 countries.

The factsheets show the evolution of country-level CO₂ emissions from 1990 to 2016 and the evolution of country-level GHG emissions from 1970 to 2012.

Provided by European Commission Joint Research Centre

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