UEA NEWS RELEASE



EMBARGO:

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Low growth in global carbon emissions continues for third successive year

Global carbon emissions from burning fossil fuels did not grow in 2015 and are projected to rise only slightly in 2016, marking three years of almost no growth, according to researchers at the University of East Anglia (UEA) and the Global Carbon Project.

The projected rise of only 0.2% for 2016 marks a clear break from the rapid emissions growth of 2.3% per year in the decade to 2013, with just 0.7 per cent growth seen in 2014.

The new data is published in the journal *Earth System Science Data*. It shows emissions growth remained below 1 per cent despite GDP growth exceeding 3 per cent.

Decreased use of coal in China is the main reason behind the 3-year slowdown.

Prof Corinne Le Quéré, Director of the Tyndall Centre at UEA who led the data analysis, said: "This third year of almost no growth in emissions is unprecedented at a time of strong economic growth. This is a great help for tackling climate change but it is not enough. Global emissions now need to decrease rapidly, not just stop growing."

China – the biggest emitter of CO_2 at 29 per cent – saw emissions decrease by 0.7 per cent in 2015, compared to growth of more than 5 percent per year the previous decade. A further reduction of 0.5 per cent is projected for 2016, though with large uncertainties.

The USA, the second biggest emitter of CO_2 at 15 per cent, also reduced its coal use while increasing its oil and gas consumption and saw emissions decrease 2.6 per cent last year. USA emissions are projected to decrease by 1.7 per cent in 2016.

The EU's 28 member states are the third largest emitter causing 10 per cent of emissions. The EU's CO_2 emissions went up 1.4 percent in 2015, in contrast with longer term decreases.

India contributed 6.3 per cent of all global CO_2 emissions, with their emissions increasing 5.2 percent, in 2015 continuing a period of strong growth.

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Although the break in emissions rise ties in with the pledges by countries to decrease emissions until 2030, it falls short of the reductions needed to limit climate change well below 2 degrees Celsius.

Prof Le Quéré said: "If climate negotiators in Marrakesh can build momentum for further cuts in emissions, we could be making a serious start to addressing climate change."

The Global Carbon Budget analysis also shows that, in spite of a lack of growth in emissions, the growth in atmospheric CO_2 concentration was a record-high in 2015, and could be a record again in 2016 due to weak carbon sinks.

Prof Le Quéré said: "Part of the CO_2 emissions are absorbed by the ocean and by trees. With temperatures soaring in 2015 and 2016, less CO_2 was absorbed by trees because of the hot and dry conditions related to the El Niño event. Atmospheric CO_2 levels have exceeded 400 parts per million (ppm) and will continue to rise and cause the planet to warm until emissions are cut down to near zero."

The Global Carbon Project's estimation of global CO_2 emissions and their fate in the atmosphere, land and ocean is a major effort by the research community to bring together measurements, statistics on human activities, with analysis of model results.

Prof Le Quéré stressed the need for reporting such as the Global Carbon Budget to inform decisions and actions on how to respond to climate change.

Dr Glen Peters of the Center for International Climate and Environmental Research in Norway, who co-authored the analysis, said: "Emissions growth in the next few years will depend on whether energy and climate policies can lock in the new trends, and importantly, raise the ambition of emission pledges to be more consistent with the temperature goals of the Paris Agreement."

ENDS

Editor's notes

1/ **PRESS CONFERENCE – COP22 MARRAKESH** Monday 14 Nov 10:30 UNFCCC Media Centre, COP22 Marrakesh

On the panel will be Dr Glen Peters, Dr Sabine Fuss, and Dr Joeri Rogelj. It will be chaired by Asher Minns (Future Earth European Centre at the Tyndall Centre for Climate Change Research at UEA).

Due to time constraints the focus of this event will be for media questions – therefore please do familiarise yourself with the paper and press release materials ahead of time. If you wish to attend please email <u>press@uea.ac.uk</u>

COP22 Side-Event Marrakesh

Monday 14 Nov 16:45 Arabian Room The Global Carbon Budget 2016 and its implication for meeting global warming targets.

2/ SUPPORTING MATERIALS

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An online pack of supporting materials, including, infographics and the *Earth System Science Data* paper, figures and key messages, is available from the following dropbox link: <u>https://www.dropbox.com/sh/9j5c5e237lboixt/AADhGuzfseOoOPnnRbTTr9XJa?dl=0</u>

3/ INTERVIEWS AND MORE INFORMATION

To attend the press conference, arrange an interview with Corinne Le Quéré or Glen Peters, or for further information, please contact Lucy Clegg in the UEA press office on +44 (0) 1603 592764 or email press@uea.ac.uk.

4/ **The University of East Anglia (UEA)** is a UK Top 15 university and ranks in the top one per cent of universities in the world. Known for its world-leading research and outstanding student experience, it has achieved a Top 10 rating in the National Student Survey every year since the survey began. UEA is a leading member of the Norwich Research Park - one of Europe's biggest concentrations of researchers in the fields of environment, health and plant science.

5/ **The Tyndall Centre for Climate Change Research** is an active partnership between the Universities of East Anglia (headquarters), Cambridge, Cardiff, Manchester, Newcastle, Oxford, Southampton, and Sussex. It conducts research on how to respond to climate change and is committed to promote informed and effective dialogue across society about the options to manage our response to climate change. www.tyndall.ac.uk

6/ **The Global Carbon Project** was established in 2001 in recognition of the large scientific challenges and critical nature of the carbon cycle for Earth's sustainability. The scientific goal of the project is to develop a complete picture of the global carbon cycle, including both its biophysical and human dimensions together with the interactions and feedbacks between them. It is now a global research project within the Future Earth research initiative on global sustainability. www.futureearth.org The Global Carbon Budget 2016 is the 11th edition of the annual update that started in 2006.

This media release is part of the Global Carbon Budget 2016, the annual update by the Global Carbon Project. It is based on the analyses published here:

 Le Quéré et al. (2016) Global Carbon Budget 2016. Earth System Science Data http://www.earth-syst-sci-data.net/8/605/2016/

Access:

- Data and figures: <u>http://www.globalcarbonproject.org/carbonbudget</u>
- Data interface for exploring data: <u>http://www.globalcarbonatlas.org</u>
- Prior to embargo: ESSD paper and Infographics can be requested for media purposes to press@uea.ac.uk

• After embargo: ESSD paper is open access available at link above Social media:

• Facebook https://www.facebook.com/globalcarbonproject

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- Twitter: <u>@gcarbonproject</u>
- infographic address: <u>http://www.globalcarbonbudget2016.org/</u>

Funding:

- Contributors to the Global Carbon Budget 2016 are funded by research organisations and government departments in multiple countries and supported by their organisations.
- The Global Carbon Atlas that provides easy access to the emissions data is funded by the BNP Paribas Climate Philanthropy
- A full list of funders is provided in Table B1 of the ESSD paper