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lobal carbon emissions set to reach record 36 billion tonnes in 2013 Carbon Budget 2013 published in ESSD

Global emissions of carbon dioxide from burning fossil fuels are set to rise again in 2013, reaching a record high of 36 billion tonnes – according to new figures from the Global Carbon Project, co-led by researchers from the Tyndall Centre for Climate Change Research at the University of East Anglia (UEA).

The 2.1 per cent rise projected for 2013 means global emissions from burning fossil fuel are 61 per cent above 1990 levels, the baseline year for the Kyoto Protocol.

Professor Corinne Le Quéré of the Tyndall Centre for Climate Change Research at the University of East Anglia led the Global Carbon Budget report: "Governments meeting in Warsaw this week need to agree on how to reverse this trend. Emissions must fall substantially and rapidly if we are to limit global climate change to below two degrees. Additional emissions every year cause further warming and climate change."

Alongside the latest Carbon Budget is the launch of the Carbon Atlas – a new online platform showing the world's biggest carbon emitters more clearly than ever before. The Carbon Atlas reveals the biggest carbon emitters of 2012, what is driving the growth in China's emissions, and where the UK is outsourcing its emissions. Users can also compare EU emissions and see which countries are providing the greatest environmental services to the rest of the world by removing carbon from the atmosphere. "We are communicating new science", says Professor Le Quéré: "Everyone can explore their own emissions, and compare them with their neighbouring countries – past, present, and future."

The Global Carbon Project's report each year incorporates data from multiple research institutes around the world on carbon dioxide emissions, carbon increase in the atmosphere, and land and ocean sinks for its annual assessment of the earth's carbon budget. The 2013 report has 49 authors from 10 countries. The Global Carbon Budget 2013 will be released in the professional journal **"Earth System Science Data"** (www.earth-system-science-data.net).

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