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Global emissions rebound to record levels after GFC

Global carbon dioxide emissions increased by a record 5.9 per cent in 2010 following the dampening effect of the 2008-2009 Global Financial Crisis (GFC), according to scientists working with the Global Carbon Project.

The Global Carbon Project (GCP) published its annual analysis today in the journal *Nature Climate Change*, reporting that the impact of the GFC on emissions has been short-lived owing to strong emissions growth in emerging economies and a return to emissions growth in developed economies.

Contributions to global emissions growth in 2010 were largest from China, USA, India, the Russian Federation, and the European Union, with a continuously growing global share from emerging economies. Coal burning was at the heart of the growth in fossil fuel and cement emissions accounting for 52% of the total growth.

“The GFC was an opportunity to move the global economy away from a high emissions trajectory. This opportunity has not been realized but developed countries have moved some way closer to their emission reduction commitments as promised in the Kyoto Protocol and the Copenhagen Accord,” said the GCP’s Executive Director, CSIRO’s Dr Pep Canadell.

The atmospheric concentration of CO_2 in 2010 rose to 389.6 parts per million, the highest recorded in at least the last 800,000 years.

Dr Canadell and a member of the GCP’s Scientific Steering Committee, CSIRO’s Dr Mike Raupach are co-authors of the paper. The GCP produces an annual report card with the latest figures on all major carbon exchanges that result from human activities.

Dr Raupach said the 2010 figures represent the highest annual growth recorded, and the highest annual growth rate since 2003.

The international science team preparing the analysis tracked emissions growth in tandem with significant economic events since 1960. These included the 1970’s oil crisis, the US Savings and Loans Crisis, the collapse of the Federated States of the Soviet Union, the Asian Financial Crisis, and finally the Global Financial Crisis.

“The analysis suggests that in times of crisis, countries maintain economic output by supporting less-energy intensive activities,” Dr Raupach said.

“These burst-like dynamics are related to easing of energy prices, government investment to stimulate economic recovery, and the effect of a decade of high economic growth in the developing world which propagated into a rapid global post-GFC return to high emissions.”

More information: Carbon Budget 2010: http://www.globalcarbonproject.org/

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