New global analysis shows 400 percent increase in carbon dioxide emissions growth

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The global growth in carbon dioxide emissions from fossil fuels was 4 times greater in the period between 2000 to 2005 than in the preceding 10 years, say scientists gathering in Beijing today for an international conference on global environmental change.

Despite efforts to reduce carbon emissions, the global growth rate in CO_2 was 3.2% in the five years to 2005 compared to 0.8% in the period 1990 to 1999, according to data soon to be published by the Global Carbon Project (www.globalcarbonproject.org), a component of the Earth System Science Partnership.

“This is a very worrying sign,” said Dr Mike Raupach, Chair of the Global Carbon Project. “It indicates that recent efforts to reduce emissions have virtually no impact on emissions growth and that effective caps are urgently needed.”

Carbon dioxide emissions over the last five years are close to one of emissions scenarios from the Intergovernmental Panel on Climate Change (IPCC) called “A1B”. This scenario assumes that 50% of energy over the next century will come from fossil fuels, and leads to unacceptably high atmospheric CO_2 concentrations.

“On our current path, we will find it extremely difficult to rein in carbon emissions enough to stabilise the atmospheric CO_2 concentration at 450 ppm and even 550 ppm will be a challenge,” said Dr Josep Canadell, Executive Director of the Global Carbon Project. “At some point in the

near future, we will miss the boat in terms of achieving acceptable levels of carbon dioxide in the atmosphere."

Due to the phenomenon of environmental inertia, even when anthropogenic emissions do begin to decrease, atmospheric CO_2 will continue to rise for up to as much as a century. Global temperatures will continue to increase for two or more centuries locking the world into continuing climate change for this period. Effective management of Earth system inertia depends on early and consistent actions.

The analysis was commissioned by UNESCO and will be presented at the COP12 climate talks in Nairobi this week.

Source: Alfred Wegener Institut fuer Polar und Meeresforschung