Global growth in CO2 emissions plateaus

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After a decade of rapid growth in global CO_2 emissions, which increased at an average annual rate of 4%, much smaller increases were registered in 2012 (0.8%), 2013 (1.5%) and 2014 (0.5%). In 2014, when the emissions growth was almost at a standstill, the world's economy continued to grow by 3%. The trend over the last three years thus sends an encouraging signal on the decoupling of CO_2 emissions from global economic growth. However, it is still too early to confirm a positive global trend. For instance India, with its emerging economy and large population, increased its emissions by 7.8% and became the fourth largest emitter globally.

The EU continues to show leadership on CO2 emission reductions

In 2014, despite an overall increase of 1.4% in the GDP for the European Union, the EU decreased its CO_2 emissions by 5.4% with respect to 2013. This comes after reductions also in the two previous years, although the reductions in 2012 and 2013 were at much lower rates (-0.4% and -1.4 %). The results illustrate the continued decoupling of Europe's economic growth from CO_2 emissions. Total EU CO_2 emissions are now 23% below the 1990 level.

The study suggests three main reasons for this drop: 1) a 4.5% emissions reduction from industrial facilities and power plants that are part of the EU Emissions Trading System, 2) a mild winter which resulted in a 10% lower heating demand and 3) a 0.5% reduction in oil consumption for transport.

Significant reductions in national CO_2 emissions were recorded for Slovakia (10.6%), the United Kingdom (9.0%), Denmark (8.8%), France (8.4%), Italy (7.7%), Finland (6.9%), Greece (6.3%), Austria (6.0%), Germany (5.6%), the Netherlands (5.3%), Portugal (3.6%) and Poland (3.4%). Of the 28 EU Member States, only Bulgaria and Cyprus increased their emissions, by 6.9% and 0.5%, respectively.

For the first time, the EU's share of global CO_2 emissions fell below 10%. Responsible for 9,6% of the global emissions, the EU is still the third largest emitter globally after China (30%) and the United States (15%).

Global emissions stalled in 2014

Apart from the EU, other countries such as Japan (-2.6%) Russia (-1.5%), and Australia (- 2.1%) also reduced their emissions. In total, only a 0.5% increase in global CO_2 emissions was recorded in 2014 with respect to the previous year. The total emissions from fossil fuel combustion and industrial processes amounted to 35.7 billion tonnes CO_2 in 2014, compared to 35.3 billion tonnes in 2013.

China emissions also slowed down

Although it remains the largest emitter world-wide, China has also managed to slow down its emissions growth. After the surge in CO_2 emissions recorded over the past 10 years, China's emissions increased by only 0.9% in 2014, the same rate as the United States. A big part of the overall curbing of global emissions can therefore be attributed to China's structural changes in its economy favouring less energy-intensive services, a high value-added manufacturing industry and investments into more low-carbon energy options.

US per capita emissions among highest

The United States still has very high emissions per head of population, with 16.5 tonnes CO_2 per capita in 2014. This is more than twice as high as those of China (7.5 tonnes CO_2 per capita) and the EU (7.1 tonnes CO_2 per capita).

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