

US China cooperation could make major difference to emissions gap – research

Bonn – 21 October 2014 -- If the US and China were to adopt global best practice in their domestic action on climate, together, the world's largest emitters could close the 2020 emissions gap by 23%, according to new research.

In their latest Climate Action Tracker update, research organisations Climate Analytics, Ecofys and the Pik Potsdam Institute for Climate Impact Research have compared the actions of both China and the US on climate change.

They looked at the actions of both countries in their most energy-intensive sectors: electricity production, industry, buildings and transport, compared them with each other, and also looked at what each country could achieve if it were to adopt global best practice in those areas.

"The US and China produce 35 percent of global emissions and have been making efforts to work with each other on climate change. If they scaled up action to adopt the most ambitious policies from across the world, they would both be on the right pathway to keep warming below 2 degrees C," said Bill Hare of Climate Analytics.

"This needs to include dramatically reducing their use of coal, in order to achieve the deep decarbonisation needed of getting CO₂ emissions from coal back to 1990 levels by 2030."

Dr Niklas Höhne, of Ecofys, said the sectoral comparisons for both countries produced results showing there were lessons to be learned by both.

"We looked at how well both the US and China would do if they each adopted a 'best of the two' practice in electricity production, industry, buildings and transport. We found this, alone, would set them in a better direction," said Höhne. "They could both learn from each other in most sectors."

If they did this, in relative terms, China could reduce emissions from its current policy projections by 1.2% in 2020 and 20% in 2030 - and 3.2% and 16% for the US.

But going for global best practice, together, the two countries would reduce emissions in 2020 by 2.8 GtCO₂e/a below current policy projections and thus close 23% of the emissions gap. In 2030, the reductions would be of 6.7 GtCO₂e/a, or 10% below the Climate Action Tracker global current policy projections.

The sectoral comparisons included these findings:

- The average US citizen currently consumes four times more electricity than an average Chinese citizen. Both governments have managed to reduce their emissions for electricity produced, but they are still both expected to deploy more coal capacity in the future than is compatible with a 2°C warming limit. If they were both to increase their share of renewable generation at 1.3% per year (the average trend since 2005 in Germany or the UK), that would make a difference.
- China has more efficient cement plants than the US, whereas the US has more efficient iron and steel plants. Both can improve significantly to reach currently best available technology.
- Car ownership is ten times as high in the USA compared to China, but the difference is declining. In addition, China has still lower emissions per car. Both countries implement vehicle emissions standards; those of China are slightly stronger. However, if both were to move to global best practice (e.g. emission standard for cars as in the EU, increase of share of electric cars as in Norway) there could be a major difference.

- Floor space per inhabitant is roughly twice in the USA compared to China, with building energy use in the residential sector three times higher in the US than in China. The difference is decreasing as floor space and specific energy consumption is significantly increasing in China. However, again, if both were to move to EU standards, this would produce massive reductions.

Please go to <http://www.climateactiontracker.org> for the full update released today.

The Climate Action Tracker is an independent science-based assessment that tracks the emission commitments and actions of countries. It is a joint project of the following organisations:

Climate Analytics

Climate Analytics is a non-profit organization based in Potsdam, Germany. It has been established to synthesize climate science and policy research that is relevant for international climate policy negotiations. It aims to provide scientific, policy and analytical support for Small Island States (SIDS) and the least developed country group (LDCs) negotiators, as well as non-governmental organisations and other stakeholders in the 'post-2012' negotiations. Furthermore, it assists in building in-house capacity within SIDS and LDCs.

www.climateanalytics.org

Ecofys – Experts in Energy

Established in 1984 with the mission of achieving “sustainable energy for everyone”, Ecofys has become the leading expert in renewable energy, energy & carbon efficiency, energy systems & markets as well as energy & climate policy. The unique synergy between those areas of expertise is the key to its success. Ecofys creates smart, effective, practical and sustainable solutions for and with public and corporate clients all over the world. With offices in Belgium, the Netherlands, Germany, the United Kingdom, China and the US, Ecofys employs over 250 experts dedicated to solving energy and climate challenges.

www.ecofys.com

Potsdam Institute for Climate Impact Research (PIK)

The PIK conducts research into global climate change and issues of sustainable development. Set up in 1992, the Institute is regarded as a pioneer in interdisciplinary research and as one of the world's leading establishments in this field. Scientists, economists and social scientists work together, investigating how the earth is changing as a system, studying the ecological, economic and social consequences of climate change, and assessing which strategies are appropriate for sustainable development.

www.pik-potsdam.de