

Deeper cuts needed by all sooner, especially in energy and industry, to keep to 2°C

Bonn-4 June 2014--All governments will have to significantly increase their action on climate change – both before 2020 and after, reducing total global greenhouse gas emissions to zero between 2060 and 2080, to keep warming to 2°C.

To achieve this, Governments will need to move even faster on CO₂ emissions from the energy and industry sectors, according to new analysis by the Climate Action Tracker.

The Climate Action Tracker, an analysis by research organisations Climate Analytics, Ecofys and the Pik Potsdam Institute, has examined the new scenarios in the IPCC AR5 database and calculated the required cuts to emissions needed at global and regional levels – in 2020, 2025 and 2030 – to keep global warming below 2°C with a high probability (and to return to 1.5°C by 2100).

Recent recarbonisation now means deeper cuts, sooner, needed for energy, industry emissions

For the energy and industry sectors, the deadline for reaching zero CO₂ emissions should be faster, as earlier as 2045 and no later than 2065 (with negative emissions thereafter).

“The world must start preparing for a rapid decarbonisation of the energy and industry sectors within the next decade, reversing the recent recarbonisation of the sector seen since 2000, and going to zero emissions by around 2050,” said Dr Bill Hare of Climate Analytics.

“One of the major challenges for Ministers at the UNFCCC meetings in Bonn is to take concrete steps to arrest and reverse this adverse trend in decarbonisation.”

New US Clean Power Plan rates far from what’s needed for 2°C

In light of this need for decarbonisation of the industry and energy sectors, the CAT has analysed the US Government’s “Clean Power Plan” proposed rule leading to a 30% cut (from 2005 levels) in emissions from power plants.

“While the proposal is welcome, it is insufficient to meet the US’s pledges of 17% reduction of all greenhouse gas emissions by 2020 and is inconsistent with its long-term target of 83% below 2005 level by 2050,” said Dr Niklas Höhne of Ecofys.

Based on the CAT assessment, the US’s 2030 national emissions would be around 5% above 1990 levels - or 10 % below 2005 levels.

“The US’s new plan is far above the levels required for a two degree pathway,” said Dr Hare.

The CAT has calculated from the IPCC AR5 scenarios that reductions for the Annex I countries in 2025 and 2030 should be 25-55% and 35-55% below 1990 levels respectively for an equity scenario based on relative capability to mitigate.

The CAT analysis shows the “Clean Power Plan” is slower than the US’s recent rate of decarbonisation over the last decade. The plan implies an economy-wide decarbonisation rate of about 0.9% per annum, significantly lower than the 1.4% p.a. achieved in the last decade. This is not as fast as required for a 2°C decarbonisation pathway.

Renewable energy: good news for decarbonisation

Just as coal use has recarbonised the energy sector to 2010, there has been a remarkable trend seen in renewable energy, showing the real viability of rapid decarbonisation. In 2012, renewables made up just over half of total net additions to electric generating capacity from all sources in 2012.

“While the effect on global emissions from increased renewables is still levelled out by increased use of coal and rising energy consumption, this could be the start of a new positive trend paving the way to a full decarbonisation of the energy sector,” said Dr Höhne.

Reaching the targets would not be expensive. Under a cost-effective approach, global consumption growth from 2005 to 2030 with adequate climate action will only be a few percentage points less than in a BAU scenario without climate policy.

Carbon intensity will also need to decrease at an accelerating rate in the coming decades. Carbon intensity needs to rapidly decrease, reaching 3% annual reductions by 2030.

Still heading towards 4°C warming unless urgent action taken

The world is still tracking towards a 3.0 to 4.6°C warming by 2100, averaging 3.7°C, based on the CAT analysis of current policy trends – which is consistent with IPCC AR5 calculations.

Closing the emissions gap requires action by everyone

Some have argued that if developed countries were to reduce emissions by 40% by 2020 (the high end of the AR4’s approximate 2°C pathway), this would close the emissions gap in 2020.

But the new CAT analysis shows that this wouldn’t be enough: additional efforts would have to come from the major developing country emitters to close 2020 emissions gap of 8-13 MtCO₂e (as estimated by the CAT).

Beyond 2020 The Climate Action Tracker has calculated various options for country groupings. Under a major equity approach, developed countries, would need to reduce emissions 25-55% below 1990 levels by 2025 and by 35-55% below 1990 levels by 2030. In the same period Non-Annex I, or developing countries, would need to maintain their emissions no higher than present levels and, more likely, significantly below present levels.

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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.

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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