
PricewaterhouseCoopers Sustainability & Climate Change Services

Copenhagen Briefing: Analysis of Key Issues

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Progress on targets

There is now little prospect of agreeing a comprehensive, legally binding protocol at COP15. However the emissions targets announced by the US, China and India have given a real boost to the prospects for an ambitious, political deal. Countries accounting for around 80% of emissions have now tabled pledges at least through to 2020.

Based on our economic modelling, the most optimistic end of these pledges¹ should bring emissions in 2020 back to current levels of about 44 GtCO₂e (after rising initially and then falling). This compares with the global carbon budget for a low-carbon path way of around 40 GtCO₂e in our model. Lord Stern's recent analysis suggests that this shortfall would have to be made up through even greater cuts in emissions over the longer term.

There is room for more ambition at Copenhagen. EU ministers met this week in Brussels to agree their negotiating strategy and the criteria for an increase in the EU target to 30%. The level and conditionality of US, Chinese and Indian targets will be key considerations.

The US target of a 17% reduction on 2005 levels is equivalent to only 4% compared with 1990 (the baseline used by most other countries). This no doubt reflects political realities in Congress, but by itself might not match expectations, especially of less developed countries. The target for 2050 is more ambitious – a 83% reduction, which is equivalent to 80% relative to 1990. The IPCC has estimated that developed countries may need to cut emissions by 25-40% by 2020 and by 80-95% by 2050 relative to 1990 levels.

President Hu promised a "notable" commitment when he addressed world leaders during UN Climate Week in New York, and promising to cut carbon intensity by at least 40% fits that bill. What's particularly notable about the announcement from Beijing is that there are no strings attached - this is a commitment to unilateral action.

India has followed China's lead, promising cuts in carbon intensity by 20-25% by 2020.

How ambitious are the promises from China and India? The table below compares their pledges with recent performance and assesses the impact on aggregate energy-related emissions and emissions per head through to 2020:

Country	Emissions pledge: 2020 vs 2005	1990-2005 Intensity reduction (annual average)	2005-2008 Intensity reduction (annual average)	2008-2020 required annual intensity reduction	2008 aggregate emissions (Mt CO ₂)	2020 aggregate emissions (Mt CO ₂)	2020 per capita emissions (t CO ₂ / capita)
China	Intensity cut: 40-45%	4.2%	2.8%	4.6%	6570	9000 – 9800	6.3 – 6.9
India	Intensity cut: 20-25%	1.0%	2.1%	2.5%	1350	2240 – 2390	1.6 – 1.7
US	Absolute cut: 17%	1.8%	2.6%	4.4%	5980	5100	14.7
EU	Absolute cut: 21% ²	1.0%	3.1%	3.8%	3990	2850 – 3260	5.5 – 6.2

Globally, to get back onto the low-carbon pathway in our model, we now have to decarbonise at the rate of 3.5% per annum through to 2020. This compares with the global rate of carbon intensity reduction achieved this century of only 0.8% per year.

Sceptics challenge integrity of climate data

Climate sceptics have accused scientists from the Climatic Research Unit at the University of East Anglia of manipulating data, following the theft of emails from the

¹ Including move to 30% by the EU

² 20% relative to 1990 levels restated to 2005 base year

university. An independent inquiry into the allegations against the unit has been launched, but is not expected to report until after the New Year. This will inevitably cast a shadow in Copenhagen.

Meanwhile, a team of scientists, including NASA, Potsdam Institute for Climate Impact Research and the University of Colorado, has presented evidence of greater risks from sea-level rises than previously thought. By 2100, they predict that global sea levels are likely to rise by at least twice as much as projected by Working Group 1 of the IPCC in 2007.

Implications for business

Two years ago in Bali, governments agreed that the Copenhagen summit would mark a turning point in international cooperation on climate change. After the final rounds of negotiations in Bangkok and Barcelona, it seemed that this goal might slip away. Progress on the political front, however, has been better than might have been expected. An ambitious, political deal is now within reach and will pave the way to more robust national policies and measures.

New policies, regulation and incentives will need to come into effect rapidly and radically in the next few years, driving opportunities in green technology and in low-carbon infrastructure. Meanwhile technological, regulatory and climate risks will threaten some sectors and geographies more than others. Businesses have a short window to prepare, and those that are ready for the transition will benefit from the opportunities arising from a low-carbon economy.

PwC presence at the COP

Several partners and senior staff from the PwC Sustainability and Climate Change network will be in Copenhagen throughout the COP to support the negotiators and the many side events there.