## Scope

During this side event, the paper "Scientific Perspectives after Copenhagen" will be presented. This paper gives a scientific assessment of the implications of the 2020 emission reduction pledges associated with the Copenhagen Accord (CA) and provides an update of the recent scientific evidence of direct relevance to these. It is intended to provide Parties with information on the implications of these pledges with relevance to a post-2012 agreement.

The CA established a goal to limit global average surface warming to less than 2°C. A review is also envisaged for 2015 to consider a lower temperature limit of 1.5°C. In support of the 2°C limit, national pledges to reduce emissions by 2020 are given in the appendices of the CA. There are, however, many open questions as to how a 2°C limit is to be achieved in light of the current pledges. This paper aims to improve the understanding of the ramifications these mitigation pledges have in respect to the 2°C limit.

## Disclaimer

This Information Reference Document was commissioned by the EU's Climate Change Science Experts on behalf of EU member states. The paper was prepared by scientists throughout Europe and is based on an ongoing project, conducting a more detailed analysis and review of literature in which external experts have also been consulted.

It is an advisory document, which has been written to inform climate change negotiators and policymakers of the most relevant up-todate scientific knowledge on climate change.

This document has been provided with the intent of contributing scientific evidence to inspire and assist in discussions working towards a post-2012 climate agreement. The European Union is looking forward to enlightened discussions and welcomes any exchange of views stimulated by this document.

## Monday 4 October 13:00 - 14:30 Room Yinchuan

# Scientific Perspectives after Copenhagen



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The 2008 EU 2°C Target Paper, based largely upon the IPCC Fourth Assessment Report, (AR4) catalogued a range of evidence as to why an increase of more than 2°C in global average near-surface temperature compared to pre-industrial temperatures is expected to be undesirable on a global scale. Since the AR4, the understanding of climate system components and processes has continued to improve, although considerable uncertainties remain. Recent evidence reinforces the importance of maintaining 2°C as an upper limit to temperature increases.

In this paper we present an assessment of a range of different emission pathways and an evaluation of the technical and economic feasibility of achieving large emission reductions. We then discuss the implications of emission reduction pledges associated with the CA and present actions required for achieving stringent targets. We finish with an update of recent findings regarding changes in the climate system and their impacts in relation to a goal of limiting warming to below 2°C.

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