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The Winding Road to Copenhagen

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Introduction

Scientific knowledge shows that the effects of climate change can only be mitigated if Greenhouse Gas (GHG) emissions are drastically reduced until 2020. This insight as well as the fact that the Kyoto Protocol on the reduction of Greenhouse Gases (GHG) expires in 2012 requires immediate action by the International Community. The upcoming United Nations Climate Change Conference in Copenhagen, December 7th to 18th 2009, provides an opportunity for the world's governments to act on reducing emissions. This Fact Sheet summarizes the most necessary steps that UN member states will have to agree on and presents the various challenges to a comprehensive agreement.

Background

The latest report of the Nobel Peace Prize winning UN Intergovernmental Panel on Climate Change (IPCC) predicts the utmost limit of global temperature increase to be 2° C, if dangerous consequences for the planet want to be prevented. The cause for global warming are GHG emissions, which are to a large extent anthropogenic, meaning they are owed to the action of humans and the development of the industrialized world. If states do not change their pattern of energy consumption, there is a high risk that global warming exceeds the acceptable limit.

GHG emission continue to increase: Scientists expect a rise by at least 25% until 2030¹ if nothing is done to reduce the emission output. Reasons are polluting fossil fuels and a too lavish use of energy by industrialized countries. Further, developing countries, which are significantly growing in population and also in production capacities will naturally demand energy intensive goods and will therefore be responsible for a high increase in GHG emissions.²

Predictable effects of climate change are more flooding and drought, less ice and snow, which results in a higher sea level, and more extreme weather incidents: heat waves, heavy rains and storms threatening the existence of a large part of the world's civilization. Extreme weather particularly affects the agricultural sector,

especially in developing countries, increasing the likelihood of widespread hunger in already problematic regions. Scarceness of essential resources such as water has the potential to cause conflicts and unstable situations with consequences for peace and security.

There is a glimmer of hope, however: climate scientists are optimistic that there is a variety of solutions and technology to combat the growing climate challenges. Increased investments into renewable energy systems, such as wind, solar, water and geothermal power provide options to back away from polluting fossil fuels. Other opportunities, even though some may see them as problematic and risky, are nuclear energy as well as "green coal", which does not emit but captures and stores GHG. Energy consumption can be reduced by more responsible use and improved energy efficiency, especially when it comes to public and residential buildings. Better insulation and energy and resource efficient appliances can cut energy consumption significantly and the use of "smart" grids³ could even advance this further. Infrastructure and transportation system improvements with a broader public transport system, a responsible use of renewable fuels and electric motor driven vehicles provide a chance to reduce GHG emissions. In general, it will be the mix of different energy solutions, which can make its consumption more environmental friendly.⁴ Experts also put much hope into global emissions trading functioning as a cap-and-trade system, where emission rights can be auctioned. Companies are given emission permits up to a certain cap. If polluting companies emit more, they can buy emission permits from greener companies. If the carbon price is high, it will be most cost-effective for companies to reduce their emissions and allow them to use investment capital for a reorientation towards more environmental friendly technology.⁵

¹See:

http://www.wto.org/english/res_e/booksp_e/trade_climate_change_e.pdf

² See: Ibid.

³ Smart grids advance the 20th century grid by the use of digital technology to monitor and save energy efficiently. It is a decentralized network, where energy is routed from different, mostly renewable, power plants to a high number of consumers.

⁴ See:

http://www.unep.org/pdf/A_Global_Green_New_Deal_Policy_Brief.pdf

⁵ See: Baerwaldt, Konstantin et al. (2009): Global Emissions Trading. A Solution to the Climate Challenge?

Commitments Prior to Copenhagen

In 1997, the United Nations Framework Convention on Climate Change set the first benchmarks in GHG emission cuts with the Kyoto Protocol. The goals as negotiated in Kyoto, however, are considered not to reach far enough to tackle climate change and, above all, have not been ratified by all countries. Because the agreement expires in 2012 and more commitments and changes are required by all countries, the UN member states met in Bali in 2007. The result was a road map leading to Copenhagen, where a new climate deal including all parties, finally has to be agreed upon.

More recently, in summer 2009, the world's eight strongest economies (G8) agreed on a 2° C limit concerning the increase of temperature and that emissions should be cut by 40% to 80% by the year 2050. This is certainly a step in the right direction, but these long-term targets are considered as not sufficient. The IPCC criticized the G8 for ignoring the newest scientific findings, which prioritize midterm targets of cutting emissions by 20 to 40% until 2020 in order to achieve that temperature increases do not exceed 2° C.⁶ Curtailing global warming to that limit requires the highest and most ambitious efforts of all member states to implement strategies of cutting GHG so that emissions can peak before 2020.

Copenhagen – a historic opportunity

UN Secretary General Ban Ki-moon appeals to member states not to miss the historic opportunity to “seal the deal” in Copenhagen, since the conference represents the last instant to implement meaningful measures against climate change. The main goal for the Copenhagen Conference is to achieve legally binding commitments by all member states to implement both midterm and long term targets, which make a 2° C global warming limit possible. States signalize more openness towards the negotiation process than previously and its outcome is awaited with high interest.

The major conflicts concerning the negotiation process in Copenhagen are the roles of the considerably high GHG emitters, the USA and China, as well as the roles of developing countries. The US plays a decisive part in making Copenhagen a success and advocates expect much of a shift in environmental policies of the Obama administration. The fact that the US has recognized 2° C as a limit for global temperature increases is already a step forward. Further, in June 2009, the House of Representatives passed a climate bill for the reduction of GHG aiming to reduce emissions by 17% from 2005 until 2020. The bill also puts tariffs on goods imported from countries not committing themselves to the reduction of GHG. However, critics charge that the bill does not reach far enough considering that the US is the world's biggest GHG producer.

One of the key issues in Copenhagen is to find an agreement with emerging economies like the high emission producers India and China, which were not

included in the Kyoto Protocol and are still doubtful about placing a limit on their emissions. China has recently shown more openness and ambition towards a climate deal and plans to achieve that 15% of Chinese energy will come from renewables by 2020.⁷ India, on the other hand, insists that it does not want to make commitments to cutting emissions at the risk of its own economic development. Therefore, a deal has to be reached, which grants countries emissions up to a certain level of development and encourages that green technology are a chance for economic growth, not a barrier.

Most developing countries of the Group of 77 (G77) are highly dependent on a sustainable climate agreement due to the fact that many of them are among the most vulnerable states affected by climate change. They do not want to pay for what the industrialized world has caused. One of the most urgent topics for poor nations is to see commitments from rich countries to provide financial resources, technology transfer and capacity building to enable these countries to adapt to climate challenges ahead and invest in green technologies for the future.

The countries of the European Union are also playing a key role in working towards an international treaty on climate change. The EU already agreed upon cutting up to 30% of the emissions from 1990 until 2020 and Sweden as the current holder of the EU presidency put reaching an agreement in the Danish capital on top of the agenda.

The September 21st to 25th 2009 UN Climate Summit in New York offers a chance for member states to point out their willingness to account for mitigation and adaption to climate change and set the guidelines for Copenhagen.

Challenges Ahead

- There is a risk that countries agree upon a weak document on the basis of the lowest common denominator. The historic moment to reach a comprehensive agreement would be passed.
- The current benchmarks are based on outdated scientific knowledge. In Copenhagen, the gap between science and states' action has to be closed.
- Not only long term but, most importantly, midterm targets have to be defined and turned into a legally binding agreement. In order to mitigate temperatures to 2° C, GHG emissions must be reduced by 20-40% below 1990 levels until 2020. Especially, the high emission producers such as the US and emerging economies will have to show more commitment to implement these targets.
- Funding and transferring resources to emerging economies and developing countries has to be on top of the agenda in order to help states to be able to adapt to the upcoming natural challenges and invest in green technology.

⁶See: <http://en.cop15.dk/news/view+news?newsid=1741>

⁷ See: http://www.nytimes.com/2009/08/06/world/asia/06china.html?_r=1