

Energy Transition: A Multifaceted Challenge for Europe

High-Level Conference What are the European stakes towards COP21 and beyond?

10th November 2015, 9:00 to 13:30, Egmont Palace, Brussels

Main points from the presentation of Dr Stephan Singer (Global Energy Policy Director, WWF International) in **Session 2: What are the stakes of the EU beyond COP21?**

1. The present climate pledges (INDC) by the 150+ nations for 2030 do unfortunately not put us on a trajectory for staying well below 2 degree or even 1.5 degree global warming by end of century. Though they create a significant reduction from the GHG emissions we would see in the absence of the INDC implementation, they might cement a pathway to a 3-degree world, disastrous for particularly vulnerable communities in the South, Small Island Nations and many already fragmented and stressed ecosystems. Furthermore, complying with the INDC will close the carbon budget in a few years after 2030. The carbon budget refers to all cumulative emissions “permitted” since mankind started burning fossil fuels and into the future to stay within reach for the below-2 degree objective. What counts for an equitable and fair deal are not only the present total emissions but also the past ones since up to 40% of CO₂ remains in the atmosphere for 1000 years and longer? The INDC will slow the growth of emissions but not peak or even decline them by 2030.
2. The tabled commitments by the wealthy countries are a far cry from what had been promised by them to support the needy nations with at least \$US 100 billion annually by 2020 for their actions on mitigation and adaptation. And nothing is pledged so far for the important “Loss and Damage” enshrined in the negotiations for those in poor developing countries who already have lost – and will do so in future – property, housing, income etc. resulting from present weather extremes.
3. The Paris treaty happens against the backdrop that despite large upscaling of renewable energy and energy efficiency investments and increasingly in developing countries (India, China, South Africa, Brazil etc.) in last years to about \$US 500 billion in 2014, fossil fuel investments still dwarf those clean energy financing with about \$US 1 trillion annually. Further, 2014 was the warmest year so far since about 150 years and 2015 is projected to hit another record, now with the estimated exceeding of the 1-degree marker.
4. But there is another reality. We have all options in hand to showcase the INDC as too timid and only creating a “floor” for further and accelerated options. For instance, recent large scale targets for renewables triggered for 2015 probably a giant investment growth of up to \$US 100 billion in India and a large amount as well in China. In South Africa, solar and wind (unsubsidised) are now cheaper than coal and gas resulting from recent auctioning of a large government energy supply tender. China, in 2014, harvested the

fruits of its large energy efficiency investments in industry and buildings leading to a record 8% improvement of its energy intensity (energy use/GDP) and contributing to a doubling of that parameter globally in just one year which together with the success of renewables led for the first time of a stalling of global energy-related CO₂ emissions. It has been projected a few days ago that the decline in global coal might be 2% - 4% this year and first time reduce the global emissions this year in a period of economic growth.

5. Renewables and many energy efficient devices are now much cheaper what they were a few years back. If this trend continues, an estimated annual \$US 2 trillion investment for energy efficiency and renewables combined might be possible by 2030. This is still more than the present total energy investments. But if countries also reduce fossil fuel investments – and we have great hope that financial investors might do simply for economic reasons and starting with coal, the dirtiest fuel – the externalities (carbon pollution, air pollution) and subsidies for fossil fuels will fall as well. Externalities and subsidies combined have been estimated by the International Monetary Fund (IMF) to cost the equivalent of about 6% of global GDP – each year. Therefore a clean energy system is overall still much cheaper for the world economy than the present dirty one.
6. If Paris – and despite the overall weak pledges particularly from the rich nations – agrees on two key issues, the rapid scaling up of finance for the poor nations and the early start (prior to 2020) of a new “ambition” mechanism to soundly and transparently review existing climate plans in light of new science, technological developments and costs, the present INDC might be history soon and we see much deeper GHG cuts. The benevolent virus is already in the system of the financial markets. Coal companies are losing share values at record speed, large financial institutions (Norwegian Sovereign Wealth Fund, AXXA, Credit Agricole etc.) started to divest from fossil fuels; in the US a public investigation is under way as to whether and how EXXON and Peabody, two of the largest oil and coal companies, cheated the public etc. Since large scale renewables are now also on the radar screen of several OPEC countries, Saudi Arabia envisages about 33 GW solar and wind by mid-2030 and in Dubai the new unsubsidised solar plant provides cheaper energy than subsidised gas and oil, the train is accelerating – and much more than many governments cautiously are willing to admit. No progressive industry will stop after Paris its ambitious commitment to 100% renewable power supply, Germany will maintain its pathway to Energiewende, India will continue its large solar plan, Mexico and Uruguay do not stall their large renewable plans and Kenya and Uganda will maintain their targets to energy access for the poor with geothermal and solar energy. LED lamps, are now more than 80% cheaper than they had been a few years back. Yes, it is the economy stupid. In essence, the question is not whether but how and how fast we muster the global energy transition. In that respect, Paris is not a “make or break” issue for the global climate – it’s certainly a large opportunity to accelerate the train faster. But it remains just one opportunity within the UN of many other events across the globe now and in the years to come. So, I am not naive – but optimistic.