## The European dimension of the German energy transition process

### Perspectives of German neighbors and co-operative approaches for a European Energy transition

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The second part of the plenary session focused on different perspectives of German neighbours and co-operative approaches for a European energy transition: In the course of three presentations, conflicts of the German Energiewende with neighbouring countries, adequate conflict resolution mechanisms and potentials for cross-border co-operation were discussed from a Polish and from a Nordic perspective. Another issue was the EU Heads of States decision on 2030 EU climate and energy framework and its importance for and impact of a European energy transition.

The first two speakers, Dr. Aleksandra Gawlikowska-Fyk (Head of Energy Project, Polish Institute of International Affairs, Warsaw) and Dr. Guri Bang (Research Director, CICERO Center for International Climate and Environmental Research, Oslo) presented rather different perspectives on the German Energy transition from neighbouring countries:

**Dr. Gawlikowska-Fyk** emphasized that Poland is a transforming economy and pursues several goals simultaneously. There are concerns about energy prices and competitiveness. She pointed out two different levels of conflicts in the German-Polish energy policy relations: a technical and a political level. The technical part of the problem are loop flows - power flows from northern to southern Germany and to Austria that is shipped via Poland. To be able to control the unwanted and uncontrolled flow from Germany to Poland, phase shifters are currently being installed and thus the technical problem will be solved. Nevertheless, Dr. Gawlikowska-Fyk refers to them as problem shifters and calls for better cooperation between TSOs related to operational security (re-dispatching). In the medium term a better market design (adequate bidding zones) and in the long term an enhancement of infrastructure (interconnectors and national grids) is needed. Political conflicts between both countries arise from different approaches and interests with respect to the development of renewables, coal, nuclear and shale gas. In a "Sustainable scenario", Poland will still use coal as a dominant source for energy supply, RES, nuclear and gas will cover 15-20% of the Polish energy demand. In a "Nuclear scenario", nuclear energy will cover 45-60%, coal, gas and oil 10-15% and renewable 15% of the national energy demand. In a "RES + gas scenario", 20% of the energy demand will be covered by renewables and shale gas will play an important role; coal will cover 30%, oil 15-20% and nuclear 10% of the demand. The Polish position on a climate and energy deal includes no commitment before 2015. Poland sees a need for a "flexible approach on targets" (GHG target). The Polish government is concerned about energy prices and competitiveness (offsets) as well as the need for special consideration

for industries (risk of carbon leakage). From the Polish perspective, the bilateral cooperation should be improved with respect to network codes and re-dispach. Even if phase shifters solved the technical problems with loop flows, the political problems remain.

**Dr. Bang** presented a Nordic perspective. Norway is not a member of the EU, but could be an important player for back-up power. There is a dual interest structure in Norway with respect to renewable and fossil energy resources. 97% of Norway's electricity comes from hydropower. The capacity of hydro energy can hardly be extended due to water conservation needs, thus a focus is put on the development of smaller hydro power facilities. The large potential of new renewable sources like wind power and biomass is mostly unused hitherto. And the country has large resources of petroleum. Thus, Norway could serve as Europe´s green battery. However, several steps are to be taken before the green battery idea, based on renewables, can materialize: the grids in Norway have to be strengthened, interconnectors have to be built and, where appropriate, existing water reservoirs need to be converted into pump storage plants. Moreover, the public acceptance of grid extension, pumped storage and potentially changing electricity prices due to market convergence is an important prerequisite. Despite difficult negotiations, in October 2014 two interconnectors for electricity transfer were approved: one between Norway and UK (Kvilldal, Rogaland –Blyth) and one between Norway and Germany (Tonstad, Rogaland – Wilster). But electricity from hydro energy is only one option for back up energy from Norway. As the Norwegian economy is strongly based on petroleum exports, powerful interests shape the policy making in this sector. The actors are interested in selling natural gas from Norway as balancing energy to Germany if the respective economic conditions are suitable. However, from a climate protection point of view this only makes sense if gas replaces coal.

In the final presentation, **Josche Muth** (Senior Consultant Energy and Climate at RE Dialog EU on behalf of Deutsche Gesellschaft für Internationale Zusammenarbeit GIZ) pointed out the importance of the EU decision on the 2030 Climate and Energy Framework for and impact on a European Energy Transition. He highlighted conflicts between the new EU climate targets for 2030 agreed upon in October 2014, the EU carbon market to 2030 (EU-ETS), European renewable energy targets and European energy efficiency ambitions. The European 2030 package implies the risk of declining annual RES expansion within the decade 2020-2030 and of not reaching the energy efficiency targets. The GHG reductions (outside ETS) show loopholes that need to be closed. He proposes an improved European governance structure which includes national energy plans, an EU semester approach, a target sharing through binding pledges, a fair-share benchmark and regional targets as well as enabling EU policies like financial incentives for voluntary higher pledges and European RES projects of common interest. A decision on a Market Stability Reserve (MSR), member state targets in non ETS-sectors (ESD) as well as legislative proposals for the post-2020 period should be next steps for solving energy issues. However,

being a pioneer in climate policy is difficult for the EU in times of financial crisis, competitiveness and very different developments, concerns and energy policies in the member states.