Revised 2030 targets under the EU Renewable Energy Directive - wind of change for cross-border cooperation?

Themenbereich (1) Energie-/Klimapolitik, Versorgungssicherheit

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Motivation and key question

Since the introduction of the Renewable Energy Directive (RED) 2009/28/EC [1], EU Member States have had the opportunity to resort to cooperation as a means to fulfil (part of) their RES targets. To date, the use of the cooperation mechanisms has been limited, but might gain in importance in the light of the current RED revision. This is due to increased overall RES in gross final energy consumption targets (40% or 45%, respectively) and specific Member State level cooperation targets, especially regarding offshore wind. The paper analyses the role of cooperation to achieve the increased 2030 RES targets.

Methodology

The paper uses modelling and scenario analysis to quantify the effects of increasing the 2030 RES target from 32% to 40 and 45% respectively. The first step consists in the calculation of national target values according to the conversion formula given in Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action [2]. Second, focusing on Germany, the sectoral renewable generation split will be determined for a non-cooperation (national) and a cooperation (European) scenario, pointing out possible sub-scenarios contingent on interaction effects with energy efficiency targets and the phase-out of nuclear and fossil fuels. The first scenario reflects the national planning perspective using domestic RES only, while the second one allocates RES investments cost-effectively across borders. Finally, the quantifications are supplemented with a qualitative analysis of the current policy positions and developments with regards to renewable energy cooperation both in Germany but also potential cooperation partner countries, with focus on the North Seas Energy Cooperation (NSEC) members so as to assess the feasibility of cooperation. Current developments with regards to energy and commodity markets as well as their prospective influence on wholesale market prices are taken into account and discussed as well.

Results and conclusions

Using the defined scenarios, the 2030 RES shares feasible per Member State and for the EU as a whole with and without cooperation will be presented, identifying countries with considerable target gaps and surpluses as well as potential country pairings for cooperation. Furthermore, the cost effects of using cross-border rather than national potentials will be analysed. As a result of assessing the analysed scenarios for Germany, more in-depth conclusions will be drawn with regards to the specification of national energy policy and the role of cooperation therein. The working hypotheses are that 1) at Union level, the additional RES uptake required by increasing the EU 2030 renewable targets to 40% or even 45% by 2030 will be difficult to realise without cooperation, and that 2) using cross-border rather than purely national potentials can be more cost-effective. As an outlook, further questions, beyond the scope of this paper, but to be looked at include:

* What are the requirements with regards to scope, form and conditions of cooperation?
* What is the potential role of the EU Financing Mechanism?
* Could the cooperation mechanisms benefit from being updated or extended?
* Which would be the repercussions on national processes and support systems?

Literature

[1] Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC available online at [EUR-Lex - 32009L0028 - EN - EUR-Lex (europa.eu)](https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32009L0028) (last accessed 15 Nov 2022)

[2] Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, available online at [EUR-Lex - 32018R1999 - EN - EUR-Lex (europa.eu)](https://eur-lex.europa.eu/legal-content/EN/TXT/?toc=OJ%3AL%3A2018%3A328%3ATOC&uri=uriserv%3AOJ.L_.2018.328.01.0001.01.ENG) (last accessed 15 Nov 2022)