

Cover letter for the EWEA public consultation response to the ENTSO-E first official 10-year network development plan

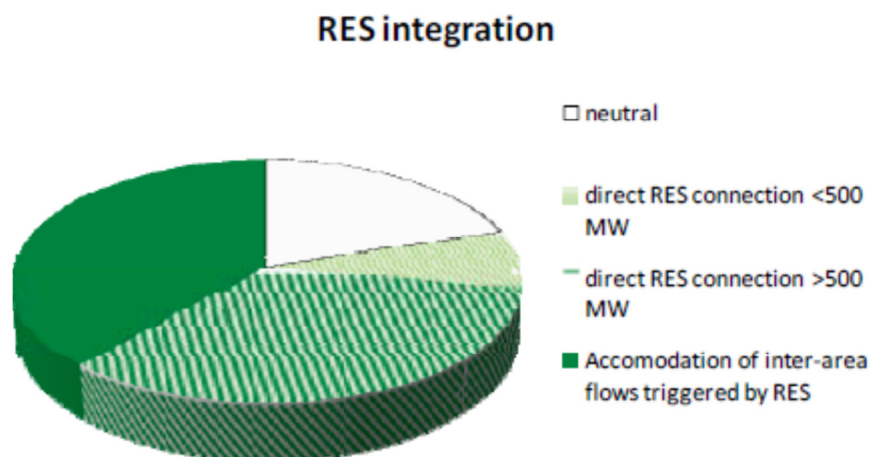
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This document introduces and summarises the response of the European Wind Energy Association (EWEA) to the public consultation on the ENTSO-E first official 10-year network development plan (TYNDP). While this TYNDP contains numerous improvements in comparison with the Pilot TYNDP in 2010, such as a prioritisation of projects of pan-European significance rather than a sheer compilation of regional development plans and the inclusion of the 2020 RES targets in the scenarios, there are still various points which require clarification in this official version of the TYNDP.

1. Clarification and more balanced wording on what is directly related to RES integration and what not

One of the main statements by ENTSO-E accompanying the publication of this TYNDP was that "80% of the identified 100 bottlenecks are related to the direct or indirect integration of renewable energy sources (RES) such as wind and solar power". This statement suggests, contrary to the evidence otherwise presented, to the less informed reader that most of the envisaged grid reinforcements are indeed due to renewables without further contextualisation.

This statement has to be read carefully as it doesn't mean that 80% of all transmission investment needs are directly relatable to RES integration. About 45% of 44,700 km which are mentioned to be accruable to RES integration are actually indirectly related to RES integration, i.e. meeting other EU energy goals and also accommodation of regional power flows triggered by RES, as displayed in this more detailed pie-chart from the TYNDP on page 14:



EWEA therefore urges ENTSO-E to use wording on this in a consistent manner, i.e. not generally accrue 80% of all grid bottlenecks and related projects to RES, but give a more refined picture as displayed in the pie chart. This would help to avoid misconceptions of the relation of the achievement of the EU energy policy goals of RES integration, security of supply and the creation of an internal energy market with regards to the grid reinforcements outlined in the TYNDP.

2. More thorough elaboration on definition of costs and benefits estimates as well as on their determination

The TYNDP makes important statements on cost savings through a better use of the power generation fleet enabled by the outlined grid reinforcements and the corresponding impact on power prices and the total end-users' electricity bill. Unfortunately, there is hardly any usable background information in the TYNDP documents and annexes that would substantiate these important statements. EWEA calls for further clarification and provision of further evidence that would substantiate these crucial conclusions. To this end, more detailed explanations on methodology and modeling approach should be provided in the annexes.

Related to this, it is unclear how the CO₂ emission mitigation criterion differs from the RES integration one, in view of the rather insignificant number of directly new nuclear or non-RES hydro related infrastructure projects. Neither is it clear how this was measured. As the inclusion of such a CO₂ criterion seems arbitrary, it should be either clarified or deleted.

3. Consistency between TYNDP and national grid development plans

There is a risk of inconsistency between the development of the TYNDP and national plans. For example the value of the grid projects within and around the crucial power system of Germany is questionable: the consultation and revision of national network plans of TSOs in Germany is envisaged only in June 2012 and could possibly make some outlined grid reinforcements in the TYNDP for Germany already obsolete by then.

4. Ensure consistency between the various RES development scenarios

EWEA is pleased to see that ENTSO-E has taken into account the RES 2020 scenarios in the scenario outlook and system adequacy report (SOAF) and the grid modelling. However, there seem to be some inconsistencies with the National Renewable Energy



Action Plans (NREAPs) of the EU Member States and the scenario figures outlined in the SOAF.

According to the SOAF, the biggest increase is expected for wind power with an increase of 140 GW to 245 GW in year 2020. This ENTSO-E number of 245 GW wind power capacity is not plausibly documented. Rather, it seems to come from the PRIMES model which gives 247 GW wind power capacity by 2020 in its high RES scenario. If this is the case, it should be clearly referenced. However, the wind power generation capacity in the NREAPs only adds up to 213 GW by 2020.

The same applies to the ENTSO-E number of 51 GW offshore wind power generation capacity by 2020. This figure is not plausibly documented either, the NREAPs only add up to 43.3 GW by 2020. EWEA urges ENTSO-E to clarify and clearly reference these figures in order to provide plausible assumptions in accordance with the NREAPs.

5. Include wind energy's contribution to the guaranteed capacity at peak load

Many TSOs counted RES (wind and solar above all) in the category of so-called “non-usable capacity” in the SOAF. Wrongly, the amount of firm power provided by wind energy has not been taken into account here: An important issue for power system design is how much installed wind power capacity statistically contributes to the guaranteed capacity at peak load, the so-called “capacity credit”.

Due to the variability of wind, its capacity credit is lower than that of other technologies. Nevertheless, there is a certain amount of firm wind capacity, which increases as power systems get better integrated, and which contributes to the adequacy of the power system. Despite the real technical and physical capacity value of wind power, it is not yet regularly used for capacity planning and is not given a value in power markets. One of the barriers is the absence of a standardised accepted method for calculating capacity credit. EWEA therefore calls on ENTSO-E to develop and utilise a harmonised method for wind power capacity credit assessment in European generation adequacy forecast and the TYNDP, in order to properly evaluate the contribution of wind power to system adequacy.

For further information please contact: Paul Wilczek, EWEA: pwi@ewea.org



The European Wind Energy Association (EWEA) is the voice of the wind industry, actively promoting the utilisation of wind power in Europe and worldwide. Over 650 members from nearly 60 countries, including manufacturers, developers, research institutes, associations, electricity providers, finance organisations and consultants, make EWEA the world's largest wind energy network.