

EWEA position paper on 2030 interconnectivity objectives

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The European Wind Energy Association welcomes that the Commission is proposing to increase the EU's power interconnectivity target by 2030 as part of its energy security strategy. EWEA believes, nonetheless, that a headline target of 15% - up from the 10% that was supposed to be reached in 2005 – is insufficient to fully address the EU's interconnectivity challenge.

EWEA key messages

- > A more detailed country and region-specific determination of interconnectivity deficits.
- Promote a more tangible infrastructure objective as opposed to a revised generic interconnectivity level.
- Use of a firm benchmark, such as the full achievement of the next PCI or TYNDP list of electricity infrastructure projects by 2030.

A framework for more tangible 2030 interconnectivity objectives

A framework establishing more meaningful interconnectivity objectives for 2030 is required and to this end, EWEA proposes the following:

A more detailed country and region-specific determination of interconnectivity deficits should be carried out, to also capture prominent bottlenecks that might go beyond interconnectors.

To this end, an analysis taking into account key indicators such as power price differentials, congestion rents, share of variable RES as well as share of flexible conventional generation (such as gas and hydro) in a given power system needs to be considered. The analyses in the ENTSO-E ten year network development plans (TYNDPs) provide a valuable basis for this work.

⇒ With an analysis of infrastructure deficits, the use of firm benchmarks such as finalising a certain share of the PCIs or "projects of Pan-European Significance" as identified in the TYNDPs needs to be considered.

This approach will also, therefore, capture national grid reinforcements needs and weight these on a regional and inter-regional basis according to the severity of the identified bottlenecks.

Such an approach would allow the development of a more meaningful infrastructure target benchmarked against the next PCI list or TYNDP list of electricity infrastructure projects by 2030.

Background and infrastructure deficits in the EU 28 today

At the Council summit in Barcelona in 2002, Member States agreed to an electricity interconnection target of at least 10% of their installed power capacity by 2005. This target has still not been met in numerous Member States. Consequently, severe grid bottlenecks persist, both at country borders and internally.

On average, the interconnectivity level in the EU is, currently, around 8%. The recently agreed European Infrastructure Package and its first compilation of "Projects of Common Interest" (PCIs) aims at ensuring that once all PCIs are built, all Member States will have met the 10% interconnection target and that average EU-



wide interconnectivity increases to 30% to 60%1.

However, beyond EU-wide targets, it is necessary to tackle specific regional bottlenecks.

Iberian Peninsula: Despite the significant share of variable RES, particularly, wind energy in Spain and Portugal, there is only one additional interconnector under consideration between France and Spain². The latter would increase interconnectivity between Spain and France to barely 10% if completed on time. Even more worryingly, there are currently no further interconnection projects under joint consideration of the respective TSOs

Germany: The German power system is a key part of a European grid because of its relatively high share of variable RES, its size and central location in the EU, making it both a major electricity exporting and transit country.

While the overall interconnectivity level on the German borders is relatively high, there are major internal bottlenecks in transmission capacity, particularly North-South. Internal HVDC-lines in Germany, therefore, rightly figure among the PCIs. However a simple increase in the country-to-country interconnectivity target will not address the severe internal bottleneck.

Baltic States: With the planned interconnectors backed with EU funding, the Baltic States should exceed the 10% interconnectivity target. However, these projects do not address the problem that these Member States are dependent on one external operator (the Russian TSO) for the operation and the balancing of their combined grids. Consequently, the technical synchronisation of the power networks of the Baltic States with continental Europe figures among the key PCIs in this region. The headline level of interconnectivity does not capture this aspect correctly.

- ⇒ Ultimately, the success of the European Infrastructure Package and timely roll-out of the PCIs will determine if the 2002 10% interconnectivity targets is finally achieved as well as alleviating the main grid bottlenecks.
- ⇒ New infrastructure objectives for the 2030 period should, therefore, help roll-out the deliverables of the 3rd liberalisation and infrastructure packages.

¹ On 14 October 2013, the European Commission adopted the first PCI list of 248 key energy infrastructure projects as per regulation 347/2013 on guidelines for trans-European energy infrastructure: http://ec.europa.eu/energy/infrastructure/pci/pci_en.htm

² PCI France - Spain interconnection between Aquitaine (FR) and the Basque country (ES), to be operational only after 2020.