

Placing onshore wind at the heart of the European Green Deal: what should Europe do?

Onshore wind is a central solution to delivering the EU recovery. And to put the EU on track towards its 2030 Climate & Energy Targets and the Green Deal: Europe needs at least 750 GW of onshore wind by 2050 up from 174 GW today to become climate neutral. Onshore wind is competitive, scalable and innovative. And its deployment brings numerous benefits to European citizens and businesses.

Onshore wind boosts the economy. Each new onshore wind turbine generates €7mn of value added to the EU economy¹. Onshore wind contributes €29.52bn to the EU GDP (2019) and represents 224,000 jobs mostly in rural, remote or economically disadvantaged areas.

Onshore wind benefits local communities and supports a just energy transition. Wind energy pays €5bn in taxes every year including €1bn in local taxes and other payments benefitting municipalities. And it supports the energy transition of regions with coal-reliant economies. For instance, the biggest wind farm in Poland, in Margonin, generates 25% of the municipal budget that is invested in the development of local infrastructure².

Onshore wind is good for the environment. Wind energy emits no greenhouse gases, no air pollutants, and uses almost no water. It pays back the energy it uses during its life cycle in less than a year. And, already today, 85-90% of a wind turbine can be recycled. Wind farms are planned, sited and managed to have minimal impact on surrounding habitats and species.

Onshore wind drives Europe's technological leadership in renewables. Europe leads the world in onshore wind technology development. And Europe leads in innovation, for instance with technologies for wind farms integration to manage an energy system increasingly based on renewables, or dismantling and recycling methods for responsible management of wind assets at the end of their operational lifetime.

Onshore wind energy makes economic sense. Today onshore wind is the most competitive power generation technology in many countries in Europe, making it a preferred source of energy for businesses, citizens and Governments.

But onshore wind development is not inevitable. Europe's technological leadership, its supply chain, and the economic benefits from onshore wind deployment are at risk. Onshore development faces significant bottlenecks starting with complex permitting and a lack of strategy for the repowering of assets coming to the end of their operational life. Unless policymakers address these, any discussion on delivering Climate Neutrality is moot.

^{1,2} WindEurope 2020, *Wind Energy and Economic Recovery in Europe*, accessible at: <https://windeurope.org/data-and-analysis/product/wind-energy-and-economic-recovery-in-europe/>

We call on:

1. **National Governments to simplify the permitting rules and procedures for new and repowered wind projects.** Europe only installed 12 GW onshore wind in 2019 when it should install 23 GW p.a. to be on track with the Green Deal. And only 6 countries spell out in their 2030 National Energy & Climate Plans concrete steps to tackle permitting issues. All Member States need to implement the provisions of the new Renewable Energy Directive for simplified permitting by June 2021: shorter and binding timelines and a single contact point.
2. **The EU and National Governments to beef up administrative and human resource capacities.** The EU-27 pledged to deploy 268 GW of onshore wind by 2030. This requires strengthened capacities at national, regional, local and EU level to process and monitor the permits for the delivery of these volumes. The European Commission should set out concrete benchmarks against which to assess the progress of Member States in delivering their 2030 National Plans renewable energy commitments.
3. **National Governments to lay out concrete repowering strategies.** Most of today's onshore fleet will need to be repowered by 2050. But only 4 EU countries are in the process of developing concrete strategies for repowering. Member States need to implement regulation that is fast tracking repowering.
4. **National Governments to give investors visibility on auction schedules and design for 2030.** Only 3 countries have good auction visibility for the next decade. And onshore wind is a capital-intensive investment requiring well-designed revenue stabilisation mechanisms to keep the cost of capital of wind affordable and provide revenue stability to investors.
5. **The European Commission to clarify with Member States there are no barriers in EU law that forbid changes in the technology specifications** in the timeframe between permit application and construction of a renewable energy project. Member States should support renewable energy operators in deploying the most efficient technology available for a specific site.
6. **The EU and its Member States to invest in the modernisation and expansion of infrastructure for onshore wind uptake.** This includes an EU-wide integrated and collaborative grid infrastructure planning as well as transport and manufacturing facility upgrades through the EU Recovery Plan. And a harmonised market design adapted to renewables coupled with storage to ensure energy system integration with high shares of variable onshore wind.
7. **Horizon Europe to prioritise R&D spending for onshore wind.** Onshore wind will account for the majority of installations delivering the Green Deal. Horizon Europe, the next European R&I programme, should finance the incremental improvements in onshore wind and focus research in areas such as new materials to improve the recyclability of wind turbines or new component designs.
8. **The EU to work out and align policies for an industrial strategy for renewables** that considers EU Climate & Energy, State aid, industrial and trade policies. This is key for the European wind industry to remain competitive globally while preserving the industrial and economic footprint of onshore wind in Europe.