(5) Repowering

WindEurope estimates that up to 76GW of the EU's onshore and offshore wind energy capacity will come to the end of their operational life between 2020 and 2030 (today's installed capacity is 142GW). Public authorities at EU and national level should therefore plan for the decommissioning of wind assets at the end of their operational lifetime in a timely manner if the EU and Member States are to meet, and exceed, the 2030 renewable energy target.

A pro-active approach to repowering - alongside new projects - will be critical to delivering the EU's objective to meet a share of 50% of electricity generated by renewables by 2030. Ultimately, this will help make the EU an example for successful management of the energy transition and secure its position as world number one in renewables. An enabling framework for repowering should remove unnecessary administrative barriers and give asset owners sufficient flexibility to make repowering decisions based on the site- and project-specific economic case.

RECOMMENDATIONS

- The post-2020 Renewable Energy Directive should require Member States to provide in their 2030 national plans an indication of wind energy capacity that will come to the end of its operational lifetime and outline policy measures, including regulation where appropriate, to unlock repowering potential.
- Member States' 2030 national contributions to the EU-wide renewables target should factor in repowering capacity alongside the development of new projects.
- Member States should ensure that repowering projects are provided with a clear path-to-market and a regulatory framework that puts them on a par with new projects.

RATIONALE

1) Driving further cost reductions in wind energy

Repowering of wind assets in the post-2020 period presents a clear opportunity for modernising the European wind fleet with the newest technology available. The provision of appropriate market arrangements and stable regulatory frameworks for repowering will unlock further cost reductions in wind generation by 2030 and will deliver the EU decarbonisation objectives at the least cost for society.

2) Ensuring better integration of the wind resource in electricity grids

Replacing old turbines with state-of-the-art units, able to provide grid support services, will ensure the better integration of the variable wind resource into electricity grids compared to first or second generation machines. Repowered projects contribute to system stability and flexibility in line with the ongoing EU power market design reform.

3) Improving social acceptance and providing benefits to local communities

Replacing aging assets with fewer modern ones is likely to harness higher amount of power with comparatively less land use. Local communities are already used to the presence of wind farms which means that sometimes repowered projects can be more easily accepted by local communities. In contrast to the full decommissioning of wind farms, repowering preserves local job creation and provides municipalities with continuous revenues in the form of local taxes from operating wind farms.

Annex 1: Amendments to Directive 2009/28/EC

LEGEND:

NEW	new Article proposed by WindEurope
Blue text	new legal text proposed by WindEurope
Black text	existing legal text under Directive 2009/28/EC
[…]	comments by WindEurope

NEW ***Article (...): Repowering***

1. Member States shall include in their 2030 integrated national energy and climate plans an indication of the wind power capacity potentially reaching the end of its operation lifetime.

Member States shall inform the Commission of the expected impact of decommissioning wind power capacity reaching the end of its operation lifetime on the progress towards the national contribution to the EU-level binding renewable energy target of at least [30] % for 2030.

2. Member States may, in view of achieving or exceeding their national contributions to the EU-level binding target of at least [30] % share of renewable energy in final energy consumption in 2030, recur to repowering of wind farms that are reaching the end of their operational lifetime.

For the purposes of this paragraph, the following provisions shall apply:

(a) Member States shall, where applicable, factor in repowering potential when setting up the national contribution to the EU-level binding renewable energy target of at least [30] % for 2030; and
(b) Member States shall, where applicable, inform the Commission of the planned policy measures to implement repowering of wind power capacity reaching the end of its operation lifetime.

Annex 2: WindEurope position paper

- Repowering framing note, June 2016