

EU strategy for offshore renewable energy

The European Commission recently adopted a strategy to develop offshore renewable energies in all of Europe's seas. This could make a major contribution towards the decarbonisation of energy consumption across the EU. The strategy aims to increase offshore wind capacity to 25 times current levels, and facilitate the commercialisation of new offshore renewable technologies, such as tidal, wave and floating solar energy. The Commission will provide a supportive regulatory framework and increase funding for offshore renewable technologies, while looking to maintain Europe's global technological and market leadership in this sector.

European Commission strategy

On 19 November 2020, the Commission published an [EU strategy for offshore renewable energy](#), as part of its much broader [European Green Deal](#) (December 2019) to decarbonise Europe's energy consumption. It was accompanied by a [staff working document](#) to provide regulatory guidance on electricity market arrangements for offshore renewable hybrid projects, which combine generation and interconnection.

Main goals of the strategy

The EU strategy sees potential for a vast increase in the volume of electricity generated from offshore wind. Current offshore capacity in the EU is around 12 gigawatts (GW), and the strategy proposes a 400 % increase to at least 60 GW by 2030. The two subsequent decades would see a further 400 % increase, bringing total capacity to around 300 GW by 2050 (i.e. 25 times current levels). This would be complemented by around 40 GW of ocean energy (tidal and wave) and other emerging offshore technologies (e.g. floating wind and solar, algae for biofuels). These new offshore technologies have huge energy potential but are still some way from being able to supply the energy market on a commercial basis. By contrast, [offshore wind](#) on fixed foundations is a commercially viable technology whose costs continue to fall, making it competitive with other renewables as well as fossil fuels. Europe retains a global technological and market leadership in offshore wind, with the EU accounting for 42 % of global capacity.

Main features of the strategy

The Commission estimates that investment of nearly €800 billion is necessary between now and 2050 to meet its proposed objectives, and most investment will come from the private sector. The Commission will provide a clear and supportive legal framework, involving [revision of the TEN-E Regulation](#) to assist long-term offshore grid planning, and revisions of the State aid guidelines on energy and environmental protection and of the Renewable Energy Directive to support offshore cross-border and hybrid projects. Member States should make full use of mainstream programmes such as the [Connecting Europe Facility](#) (cross-border energy infrastructure) and [Horizon Europe](#) (research and development of new energy technologies) to support offshore renewables, and are especially encouraged to allocate substantial funding for offshore projects under the exceptional €672.5 billion [Recovery and Resilience Facility](#), of which 37 % is being channelled towards the green transition (including clean energy projects under the 'Power Up' area). The Commission also aims to improve maritime spatial planning and regional cooperation between Member States, and will adopt measures to help European industries strengthen their supply chains, enhance their export potential, and retain their market leadership in offshore renewable energies.

European Parliament position

Parliament's Committee on Industry, Research and Energy (ITRE) is reflecting on its response to the offshore renewables strategy and the Committee on Fisheries (PECH) is working on an [own-initiative resolution](#) on the impact on the fisheries sector of offshore wind farms and other renewables. Parliament's [resolution on the European Green Deal](#) welcomes the idea of an EU strategy to promote offshore wind energy.

