

Danish Ministry of Climate, Energy and Utilities

The Danish Government's response to the Commission's consultation on the offshore renewable energy strategy

The Danish Government welcomes the opportunity to comment on the upcoming Offshore Renewable Energy Strategy and has the following comments and input.

The Danish Government highly supports the Commission's commitment to prioritize the offshore renewable energy agenda. The deployment of offshore renewable energy technologies will continue to play a key role in Europe's green transition and the decarbonisation of the European economy by 2050. EU needs according to the Commission's estimate between 240 and 450 GW of offshore wind capacity in order to reach the ambition of climate neutrality by 2050, which makes offshore renewable energy a crucial pillar in the energy mix. The strategy will therefore be extremely relevant for all Member States.

In Denmark, offshore renewable energy is expected to play a significant role in the energy mix towards 2050, in particular offshore wind. The Danish Parliament has recently passed a Climate Act containing a binding target to reduce greenhouse gas emissions by 70 percent by 2030 (compared to 1990-levels). Furthermore, in June 2020, the Danish Parliament adopted a Climate Agreement, in which a range of initiatives on energy and industry, including offshore wind, were set in motion to deliver on the Climate Act. The agreement adds 6 GW offshore wind by 2030 by establishing a 1 GW offshore wind farm as well as the world's first offshore energy hubs – one in the North Sea (3 GW) and one in the Baltic Sea (2 GW). In the North Sea, the capacity can increase to 10 GW in the longer term. The two projects will act as power hubs for offshore wind generation, allowing the connection of several offshore wind farms and distributing the electricity between Member States connected to the respective hubs. By creating the world's first offshore energy hubs, Denmark and the EU will enter a new era of renewable energy production and a paradigm shift in the way offshore wind power is approached.

Danish key priorities

Key priorities for the strategy

- Coordinated planning and development of offshore grids to ensure a cost-efficient build out of infrastructure offshore. This should be mirrored by investments in infrastructure onshore to ensure the flow of green electricity to major consumption centres.
- A coordinated approach to maritime spatial planning that ensures coexistence of different interests offshore without compromising a cost-efficient decarbonisation of the European energy system.
- An enabling market framework for offshore bidding zones.

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Coordinated development of offshore grids

The coordinated development of offshore infrastructure, including energy hubs, has several interesting potentials such as efficient utilisation of transmission infrastructure onshore and offshore, increased flexibility in distributing wind power to consumption centres, where it is most valuable, and decreased need for highways of power pylons onshore. A coordinated approach to infrastructure offshore using power hubs can enable more cost-efficient deployment of offshore wind far from the coast, which could create room for increased offshore deployment and connect Europe through a green grid. This will enhance energy security, lower consumer electricity prices as well as deliver on EU's climate targets.

This type of coordinated approach to offshore grid allows for utilizing the offshore energy hubs, introducing a new era of energy production with modular hubs connecting offshore wind farms with interconnectors across maritime borders. The new approach will play an important role in the further interconnection of Europe's energy systems, accelerating the green transition.

Strengthened regional cooperation

The Danish Government welcomes an integrated and holistic approach with a strong emphasis on cross-border cooperation. None of the Danish or European ambitions can be realised without regional cooperation and the support of the European Commission. Denmark has some of the best areas for offshore wind energy and is committed to ensure the exploitation of this resource in order for the EU to reach climate neutrality by 2050.

Close cooperation between Member States, TSO's and the competent authorities to develop common European or regional solutions will facilitate new developments. Moreover, system operation and issuing of permits should be closely coordinated. Such coordination could be initiated via existing regional fora, e.g. the North Seas Energy Cooperation and the BEMIP framework in the Baltic Sea.

Need for a coordinated approach to maritime spatial planning

Conflicting interests at sea is one of the main factors limiting the potential for offshore energy. If offshore wind is to be expanded to meet climate neutrality by 2050 reservation of much larger areas offshore for wind energy production is necessary in the years to come. This requires a holistic approach to the use and management of the sea to ensure coexistence, which also allows for the utilization of offshore energy resources. The Danish Government welcomes the focus and consideration on this matter in the upcoming Offshore Strategy from the Commission.

The 1979 Birds Directive require Member States to designate special protected areas (SPA) without consideration to other interests, e.g. optimal locations for offshore wind, if the ornithological criteria for the designation as SPA are met. Since



shallower waters are often well suited as both sites for offshore wind and as feeding and resting grounds for sea birds, the presence of wind turbines is expected to have an increasing cumulative effect through mainly displacement, but also through risk of collision and barriers on migratory paths. This dilemma calls for a coordinated effort at the EU level if international targets for biodiversity as well as renewable energy are to be achieved.

The Danish Government recognizes the current effort by the Commission in creating guidelines for planning and assessing the environmental impacts from renewable energy projects, especially large scale offshore wind farms, but also urge the Commission to strongly consider if further action is needed in a situation with climate change and demand for action, where offshore wind energy will play a major role.

Offshore bidding zones

Offshore bidding zones are expected to ensure efficient dispatch based on merit order principles and to consider the actual physical bottlenecks. The Danish Government is supportive of the Commission's positive view on the use of offshore bidding zones. The Danish Government therefore welcomes guidance from the Commission on how to deal with separate offshore bidding zones in order to offset the risk profile between TSOs and developers. However, it should also be ensured that future offshore market arrangements are not negatively affecting existing investments in hybrid offshore projects. Member States will need to maintain a certain degree of flexibility in order to establish the most efficient market setup for both existing as well as future projects.