

BUILD-OUT OF RENEWABLE ENERGY IN THE NORTH SEA

During the last 30 years, offshore wind energy has developed significantly. We are now regarding a large-scale technology providing energy for millions of people across Europe. Several EU Member States are bordering the North Sea, which has vast wind resources and huge potential for building out renewable energy.

The build-out of renewable energy in the North Sea is a key part of reaching climate neutrality in 2050 in the EU. Offshore wind produces renewable electricity, which will help reach climate neutrality and helps Europe become independent of Russian fossil energy and ensure security of supply.

In the EU, the currently installed offshore wind capacity amounts to 16 GW. The European Commission estimates that an objective of at least 60 GW installed offshore wind capacity by 2030 and 300 GW by 2050 is within reach. According to the European Commission, these objectives would help deliver on the green electrification of society, would enable decarbonisation of hard-to-abate sectors with green hydrogen and would contribute to create jobs and growth. To this end, there is a need for ambitious national targets and measures.

In Denmark, 2.3 GW offshore wind capacity has been installed. This corresponds to the electricity consumption of 2.3 million households. Furthermore, 0.35 GW before the end of 2023, and the 1 GW by 2027 at the latest is being realised. In addition, political decisions have been made to add another 15 GW offshore wind, including the installation of 2 GW in the Baltic Sea and 3 GW added capacity by 2030. After 2030, installation of an energy island in the North Sea with a capacity of 3 GW offshore wind by 2033 and 10 GW offshore wind as quickly as possible, aiming for 2040, is planned. The Danish Government has also proposed further 1-4 GW offshore wind capacity before the end of 2030. In addition, Denmark has set a national target of 4-6 GW electrolysis capacity by 2030.

In Germany, 7.7 GW offshore wind capacity has been installed. Furthermore, the national target for offshore wind in 2030 has been increased from 20 to 30 GW, with additional goals of 40 GW by 2035 and 70 GW by 2045. Moreover, Germany has a goal of achieving an electrolysis capacity of 10 GW by 2030 for green hydrogen production.

In the Netherlands, approximately 2.5 GW offshore wind capacity has been installed. The Netherlands has increased its target from 11.5 GW to 21 GW offshore wind capacity around 2030 and expect a minimum need of 38 GW in 2050. Furthermore, the Dutch government has set a national target of 4 GW electrolysis capacity by 2030 to generate green hydrogen.

In Belgium, the ambition is to double the capacity of offshore wind energy within the next 10 years. Furthermore, Belgium is working to reach a target of 8 GW offshore wind capacity by 2040. Belgium is working to establish an energy hub, which is also expected to include the production of hydrogen.

