

BRINGING WIND POWER ASHORE

Amprion is one of four transmission system operators in Germany. Our lines are the lifelines of society. We are paving the way for the energy transition and driving forward grid expansion. As part of this, we will connect several offshore wind farms in the North Sea to our transmission grid. To this end, we are building grid connection systems such as BalWin1 and BalWin2 as well as DolWin4 and BorWin4. They are implemented as cables and transport the wind power from the sea to the consumption centers. We take people, animals and the environment into consideration during construction and operation.

CHANGING ENERGY LANDSCAPE

Germany wants to limit the effects of climate change and is focusing on renewable energies. By 2030, 80 percent of the electricity consumed is to come primarily from wind and solar power plants and other renewable energies. Many powerful wind farms will therefore also be built in the North Sea in the coming years. They need to be connected to the transmission grid so that the electricity can be transported to where it is primarily needed: to the consumption centers in the west and south of Germany.

CONNECTING OFFSHORE-GRIDS

As frontrunners in offshore wind, the four countries of the Esbjerg Declaration, Belgium, Denmark, Germany and the Netherlands, want to jointly connect 65 GW of offshore wind energy by 2030 and 150 GW by 2050 by establishing interconnected energy hubs in the North Sea. In addition, 20 GW of hydrogen production capacity on- and offshore should be developed by 2030.

Achieving these goals requires joint planning – now. As leading TSOs, 50Hertz, Amprion, Elia, Energinet, Gasunie and Tennet propose taking a gradual approach for developing an initial offshore grid in the North Sea. It starts with identifying first projects for an offshore grid consisting of hybrid interconnectors, hydrogen infrastructure and offshore energy hubs by the mid-2030s.