

Climate Capital **Renewable energy**

## North Sea EU countries step up plans to harness wind power

Denmark, Germany, Belgium and the Netherlands to build artificial islands that will ease reliance on Russian energy



Wind turbines stand in the North Sea off the coast of the Heligoland archipelago in Germany © Krisztian Bocsi/Bloomberg

Leslie Hook in London MAY 20 2022



A group of EU countries are planning to turn the North Sea into the “green power plant of Europe” as they look to wind power as a way of weaning themselves off Russian gas.

Denmark, Germany, Belgium and the Netherlands this week stepped up their [pledge](#) to build up to four artificial islands in the North Sea where the energy created by wind turbines could be turned into hydrogen and electricity.

“Energy is today used as a weapon and our families and businesses are the victims,” said Belgian energy minister Tinne Van der Straaten. “With this green acceleration we can replace gas and oil, especially from Russia, faster with wind at sea and green hydrogen.”

They pledged to quadruple offshore wind in the North Sea, formerly a major production site for oil and gas, to 65GW by the end of the decade, which is equivalent to the capacity of 30 nuclear reactors.

One of the artificial islands, which would be built on the Danish side of Dogger Bank, was proposed on Friday by Copenhagen Infrastructure Partners, a fund manager. CIP said the new island called “BrintØ” would collect 10GW of offshore energy and convert it into hydrogen.

“We’re thinking about how we can scale offshore wind to a new level,” said Thomas Dalsgaard, a CIP partner, adding it was critical to move quickly into the “expansion of green energy infrastructure in the North Sea.”

Denmark is already [developing](#) an energy island called VindØ which would produce 3GW of power by 2033. The Danish government is the big shareholder in the project that is also backed by the Danish pension funds PensionDanmark and PFA.

The new “energy islands” would act as hubs for offshore wind power by collecting and converting the energy from the turbines into hydrogen, or sending it in the form of electricity to shore.

One of the most expensive parts of offshore wind is the transmission cables that connect the turbines to the substation and to land. Connecting a large offshore wind farm to an artificial island, where the power is collected and used to generate hydrogen or another fuel, could cut down significantly on the cabling cost.

With many of the best sites close to shore already taken, offshore wind projects in future will be farther and farther away from shore, driving cable costs up higher.

In the North Sea, in addition to the VindØ and BrintØ islands, Belgium and Germany are also studying whether to build energy islands.

Belgium said this week it “will establish the world’s first offshore energy island”, which will combine offshore wind and an international interconnector. The tender for the project is expected to be awarded by the end of the year.

In Germany, an energy island feasibility [study](#) is being conducted by Allianz Investment Management and by CIP.

The four countries said they would co-ordinate their development of energy islands in the North Sea, and develop energy-sharing deals.

“We will begin planning for multiple energy hubs and islands by undertaking a screening of the potential for offshore wind, and where relevant green hydrogen production, in our entire North Sea territory,” said the joint statement.

At a time of higher energy prices, and concerns over energy security, the offshore wind potential of the North Sea is seen in Europe as an attractive alternative to Russian energy.

However it will take almost a decade before the new wind farms and artificial islands are complete. The EU has previously said that, in the very near term, coal consumption may [increase](#) to replace Russian gas supplies.

## Climate Capital



Where climate change meets business, markets and politics. [Explore the FT's coverage here.](#)

Are you curious about the FT's environmental sustainability commitments? [Find out more about our science-based targets here](#)

---

[Copyright](#) The Financial Times Limited 2022. All rights reserved.

---

