

Belgium joins the race to offshore solar power

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Floating solar panels off the coast of Ostend

On 19 July 2023 it was announced that Belgian companies are testing floating solar panels off the coast of Ostend. They are thereby joining the race of developing new offshore photovoltaic projects.

A pilot project consisting of a floating platform with photovoltaic cells will be installed off the coast of Ostend in August 2023. The test installation will primarily collect data on the impact of waves, rain and salt spray on the installation's eight solar panels. The test results will facilitate the choice of materials for the further development of the platform. Besides testing the technical aspects at sea, the installation will also consider a range of ecological aspects. If the installation can withstand the harsh North Sea conditions, it will be set up between the wind turbines in the offshore wind farms off the Belgian coast.

Belgian engineering firm Tractebel and dredging companies Jan De Nul and DEME are involved in the project. Under the Seavolt consortium, they intend to install an entire fleet of these platforms, amidst wind farms. The federal government is providing €2 million for the project. Preparatory research was supported by the Blue Cluster. While photovoltaic cells are less efficient and cost-effective than offshore wind turbines, they can help boost the potential of offshore renewable

energy. As a source of energy, they are complementary to offshore wind turbines: windless periods tend to have more sunshine hours and vice versa. The first platforms with solar panels are expected to be installed offshore in 2025-2026.

Previously launched projects

The Seavolt project is the third of its kind in the North Sea. The previously launched project of the Dutch company Oceans of Energy and CrossWinds for the future offshore wind farm Hollandse Kust Noord was the first. As part of this grid-connected offshore solar-wind hybrid project, floating modules with solar panels of 0.5 MW will be installed between the turbines of the offshore wind farm run by CrossWind, a joint venture between Shell and energy supplier Eneco. The wind farm will be completed by the end of 2023, the solar farm will be installed in 2025.

Dutch SolarDuck teamed up with energy company RWE to work on Merganser, a pilot for a 500-kilowatt-peak floating solar power plant at the North Sea Farmers offshore test site, 12 km off the coast of The Hague. Both partners are planning to build an offshore solar farm with a capacity of 5 MW. This plant should float amidst the wind turbines of wind farm Hollandse Kust West VII from 2026.

Source image: copyright consortium Seavolt

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