

World's largest offshore wind farm Walney Extension swings into action for energy

8 September 2018, by Nancy Owano



Walney Extension Offshore Wind Farm. Credit: Walney Extension

The world's largest offshore windfarm has officially opened. The project commanding the Numero Uno status is the Walney Extension. An official inauguration was marked as September 6, and it now means that the Walney Extension overtakes the London Array as the world's largest offshore wind farm.

How large? Stats say the farm, located in the Irish Sea off the Walney Island coast in Cumbria, covers an area of around 145 sq km (55 square miles). Project watchers are talking electricity for nearly 600,000 UK homes. It's especially being touted as having been built on time and on budget.

It's also being described as a "659-megawatt [project](#)." The Danish company Orsted, PKA and PFA are the names behind this project.

According to Reuters, "Walney Extension is a shared-ownership project between Orsted (50 percent) and two Danish pension funds - PFA and PKA (25 percent each)."

Reports referred to the installation of 87 wind

turbines from two different manufacturers. *The Engineer* walked readers through those behind the 87 turbines —40 MHI Vestas 8MW [turbines](#) and 47 Siemens Gamesa 7MW turbines, with blades manufactured in Hull and the Isle of Wight.

Large and powerful turbines are project highlights. *The Guardian* said "The project is a sign of how dramatically wind [technology](#) has progressed in the past five years since the previous biggest, the London Array, was finished. The new windfarm uses less than half the number of turbines but is more powerful."

Adam Vaughan in *The Guardian* quoted Matthew Wright, the UK managing director of Danish energy firm Ørsted, who said, "– bigger turbines, with fewer positions and a bit further out – is really the shape of projects going forward."

[Life](#) span? *Power Technology* said the wind farm will have a life span of approximately 25 years.

The Walney Extension promotional video cited the UK as "the global leader in offshore wind." A Reuters report similarly stated that "Britain is the world's largest offshore wind market, hosting 36 percent of globally installed offshore wind capacity, data from the Global Wind Energy Council showed."

Actually, global offshore rankings looked like this, from The Global Wind Energy Council, which is the international trade association for the wind power industry:

"At the end of 2017, nearly 84% (15,780MW) of all offshore installations were located in the waters off the coast of eleven European countries. The remaining 16% is located largely in China, followed by Vietnam, Japan, South Korea, the United States and Taiwan.

"The UK is the world's largest offshore wind market

and accounts for just over 36% of installed [capacity](#), followed by Germany in the second spot with 28.5%. China comes third in the global offshore rankings with just under 15%. Denmark now accounts for 6.8%, the Netherlands 5.9%, Belgium 4.7% and Sweden 1.1%. Other markets including Vietnam, Finland, Japan, South Korea, the US, Ireland, Taiwan, Spain, Norway and France make up the balance of the market."

Talking to Reuters in an interview, Matthew Wright, Orsted UK managing director, offered his reasons for why the UK is prominent for offshore success. He said it was a combination "of strong wind [speeds](#) and shallow waters in the North Sea and Irish Sea as well as continued support from the government."

This marks Orsted's 11th offshore [wind](#) farm in the UK.

More information: walneyextension.co.uk/en

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