



Newcastle Offshore Wind

Newcastle Offshore Wind Energy Project Australia

August 2023



Newcastle Offshore Wind

Acknowledgement

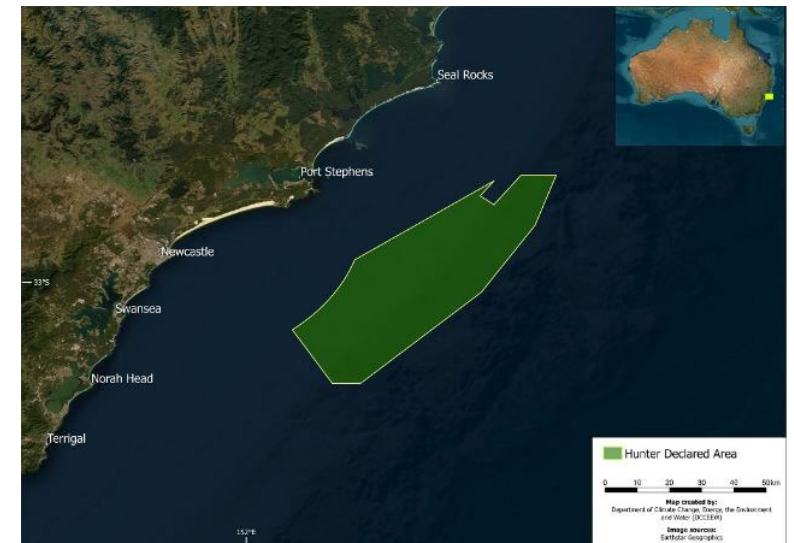
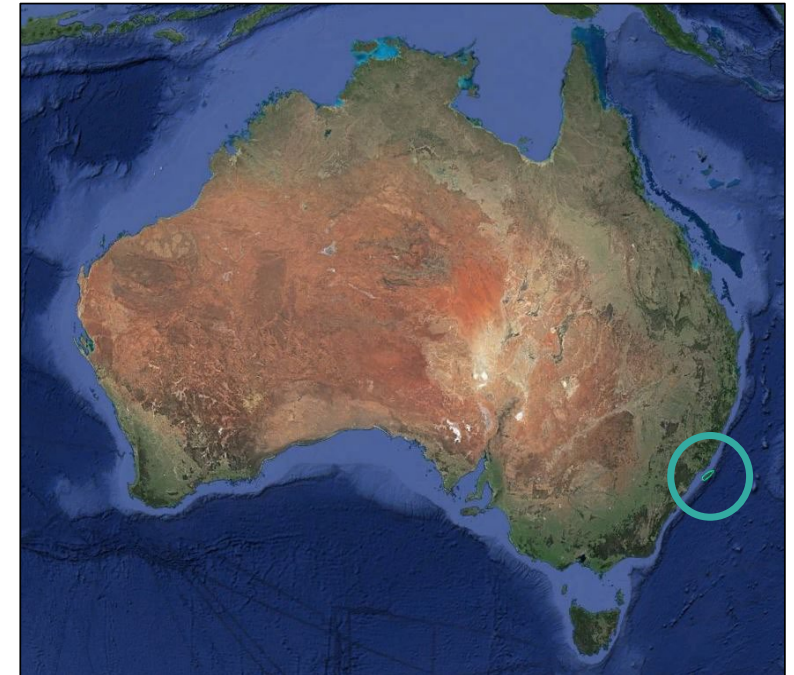
In the spirit of reconciliation, EDF Renewables Australia acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community.

We pay our respect to their Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander people here today.



Project Overview

- The Newcastle Offshore Wind Farm (NOW) is a multi-GW offshore wind project in development, located 25-30km+ from the coast of Newcastle as part of the Hunter REZ and Declared Offshore Renewable Energy Area
- Concept developed by Newcastle Offshore Wind Energy from 2010 – a team of local project developers based in and around the Newcastle area
- Acquired by EDF Renewables Australia in 2023
- Beginning as a nearshore project (20m depth) and evolving to 20km+ offshore
- Floating turbine technology opportunity in water depths of 100-150m
- Designed to align with coal fired power station closures and maturation of the global green hydrogen market, and with national scale existing grid infrastructure recycling opportunity
- Supporting the foundation of the nascent offshore wind and clean energy industries in the Hunter Region and beyond



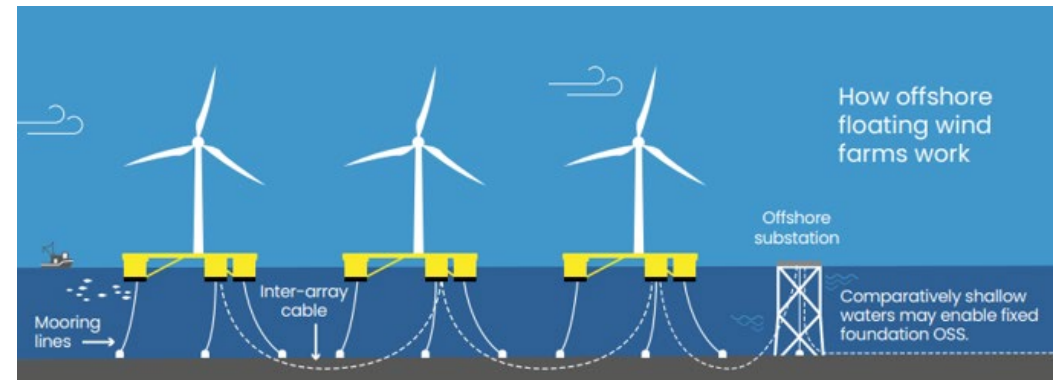
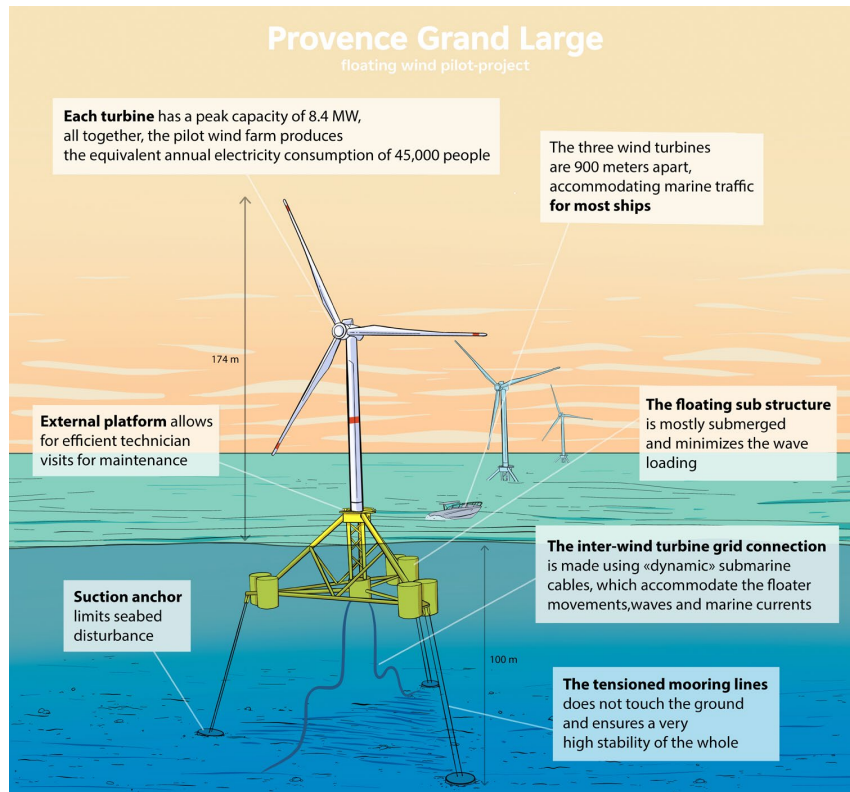
Project Area – 25km view towards Newcastle

Newcastle City



Floating Wind Turbine Technology

- EDF Renewables own and operate the Provence Grande Large Offshore Wind Farm – a 25MW floating wind turbine pilot project (three turbines) in water depths of 90-100m located 17km from offshore from the coastal town of Port-Saint-Louis-du-Rhône (near Marseille)



EDF Renewables

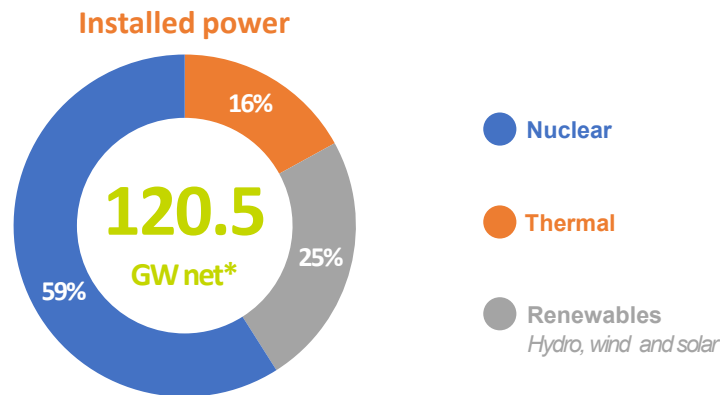
EDF Renewables is a wholly owned subsidiary of the EDF (Electricite de France) Group. EDF Group is one of the world's largest electricity producers, and one of the largest renewable energy producers in Europe.

EDF Renewables has a global capacity target of 60 GW by 2030, building on a current net installed capacity of 34.8GW

-  **120 GWe** of installed capacity
-  **€69 billion** of sales
-  **165,200** employees
-  **37.9 million** customers worldwide
-  **€685 million** of R&D budget
-  **83.7%** owned by the French State

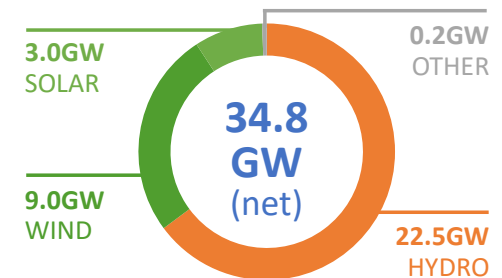
LEADER IN LOW-CARBON

- 90%** carbon-free generation
- 51g** of CO₂ emissions per kWh (275 g/kWh average for other European electricity companies)

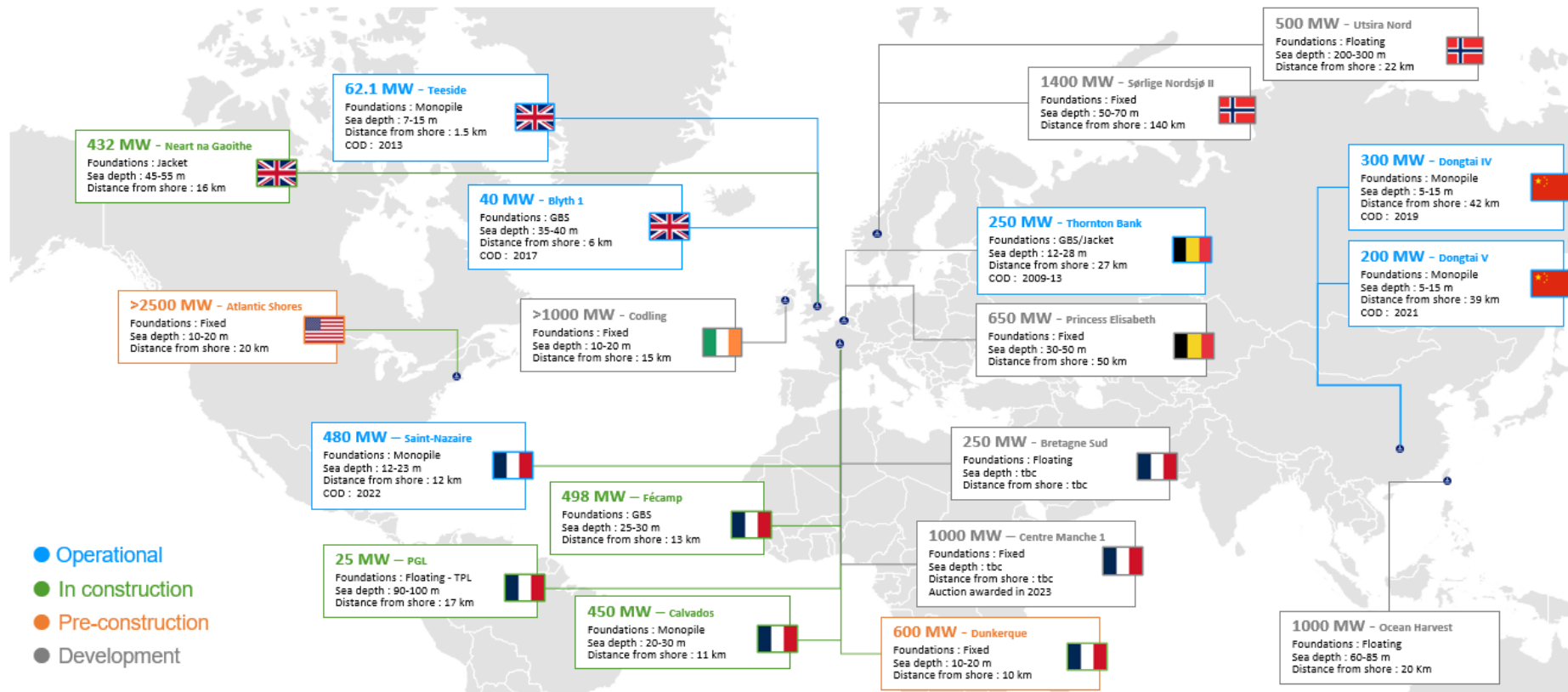


N°1 for renewables in the European Union

N°5 for renewables worldwide



EDF Renewables – Significant Offshore Wind Experience

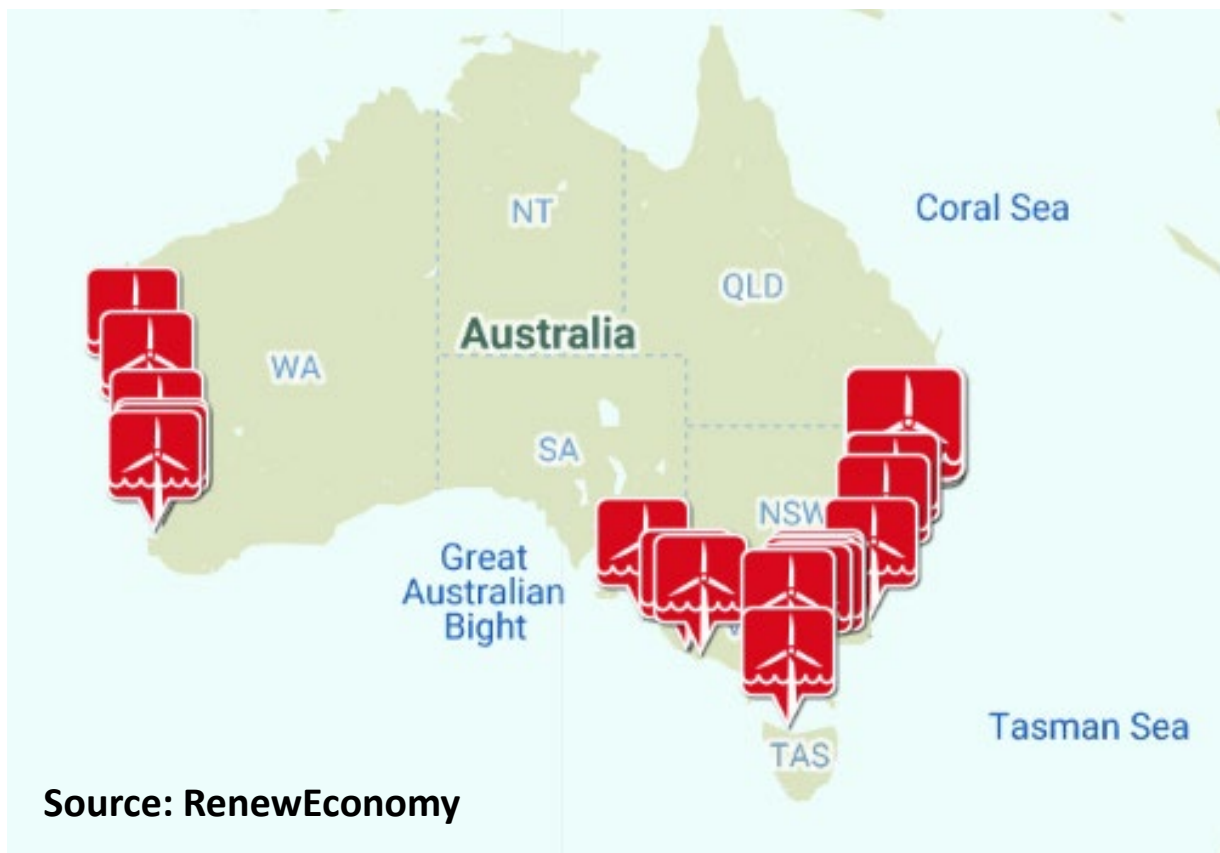


Hunter Offshore Renewable Energy Approvals Process



- The *Offshore Electricity Infrastructure Act 2021* (OEI Act) covers offshore renewable energy and infrastructure, and offshore electricity transmission infrastructure and is overseen by the Minister for Energy supported by the Department of Climate Change, Energy, the Environment and Water
- The licencing, assessment and environmental approval process includes, among other requirements:
 - Application for a Feasibility Licence
 - Assessment under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).
 - Assessment under the Environmental Planning and Assessment Act 1979 (EP&A Act).
- All these requirements contain an element of consultation and stakeholder engagement.

Australian Offshore Wind Projects



The **Gippsland area** in Victoria was declared suitable for offshore wind energy in December 2022.

The **Hunter area** was declared suitable for offshore wind energy on 12 July 2023.

Priority areas for future assessment

The following regions, in no particular order, have been identified as priority areas for assessment for area declaration:

- The Pacific Ocean region off the Illawarra in NSW – currently open for consultation
- The Southern Ocean region off Portland in Victoria
- The Bass Strait region off Northern Tasmania
- The Indian Ocean region off Perth/Bunbury, WA.

Why NOW?



8.5GW of NSW coal fired generation scheduled to close by 2035



NOW proposes to connect to the coal fired power station substations as the generators retire utilising existing transmission lines to connect to NSW major load centres



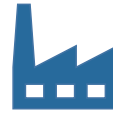
The offshore mean daily wind profile shows strong generation in the afternoon, evening, night and morning filling the gap currently provided by coal fired generation



The NOW energy generation profile complements the NSW onshore solar and wind generation profile



Confidential



Newcastle is home to large industrial loads and an exceptionally strong and highly skilled workforce



Port of Newcastle is strategically located to support the development and operation of NOW and the international export of hydrogen



Economic benefits - underpinning the development of NSW's offshore wind supply chain and the establishment of a globally competitive green hydrogen export facility at the Port of Newcastle



GHG Displacement:

- 3.6M tonnes pa per GW capacity

Equivalent Households Powered:

- 550000 pa per GW capacity

Equivalent Cars Removed:

- 1.7 Million pa

What's Worrying People?

So far, our conversations with the community have identified the following as key concerns for us to focus on. Please reach out to us to discuss any of the issues listed below, or a concern we haven't yet captured.



Proximity/distance to shore and visual impacts

Environmental impacts including:



- Whale migration
- Animals including dolphins, crabs, birds
- Sea floor and marine ecosystems



Fishing impacts, including:

- Concerns regarding access restrictions
- Impacts on professional and recreational fishing



Transmission lines, including:

- Connection points



Confidential



Construction impacts, including:

- Vibration & noise
- Impacts on environment



Potential impacts on:

- Shipping industry
- Defence
- Newcastle Airport



The Process:

- Reason for the area being chosen
- Environmental assessment process



Local Opportunities

- Employment and supply chain opportunities



renewables Newcastle Offshore Wind



Thank you

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