



## AUSTRALIA WIND ENERGY 2023

Co-located with:



Melbourne Convention and Exhibition Centre  
25-26 July, 2023 | MCEC, Melbourne, Australia

# Latest Offshore Wind Projects in Australia 2022

BROUGHT TO YOU BY:



Australia's ambition to leverage offshore wind as a key energy transition vector by 2030 have made rapid progress over the past months, driven mainly by accelerated regulatory will and collaboration from global counterparts. As of the end of November 2022, around 40 offshore wind projects with a total capacity of 77.58GW are proposed in Australia – this includes 1 development zone stage project, 38 early planning stage projects, and 1 dormant project.

Victoria is the first region to set targets for offshore wind. Along with an interim goal of 2GW of offshore wind generation by 2032, it envisions a further 4GW of offshore installation by 2035 and 9GW of capacity by 2040. As such, Victoria has received the highest amount of offshore wind application, with a total of 16 projects of more than 30GW of combined capacity, far exceeding the government's target.

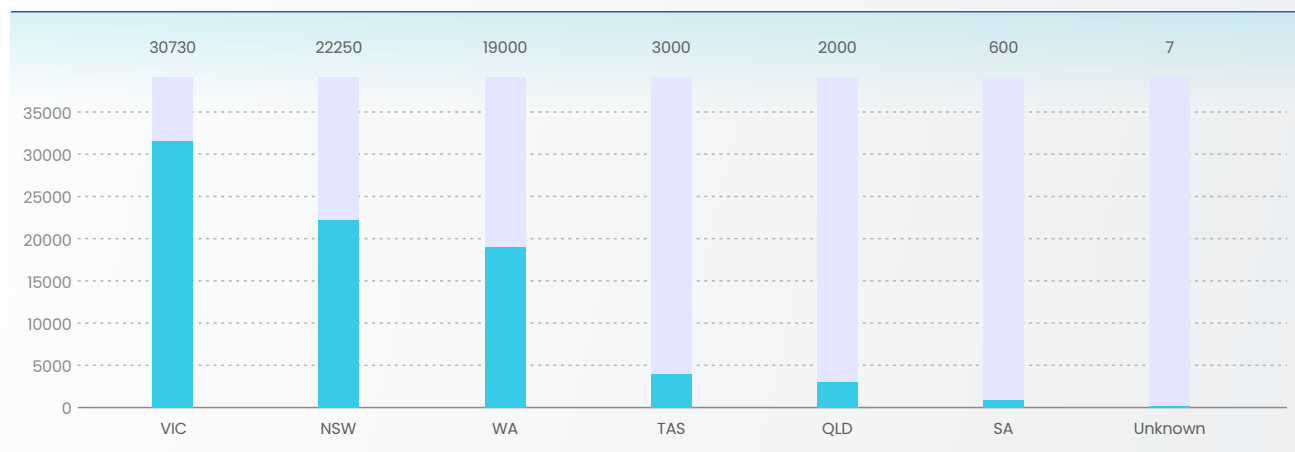
Runner-ups are the state of New South Wales and Western Australia. Despite having set specific targets, the two states are being seen as the most promising offshore wind zones with 22.25GW and 19GW of development potential respectively and 10 and 8 project applications in quantity matter.

Offshore wind in the rest of the region is less attractive to investors, with three projects in Tasmania totaling 3GW of capacity. The Queensland and South Australia regions have only one project, 2GW, and 600MW respectively. It is also clear from Figure 3 why these offshore wind projects are clustered in Victoria, South West Wales, and Western Australia.



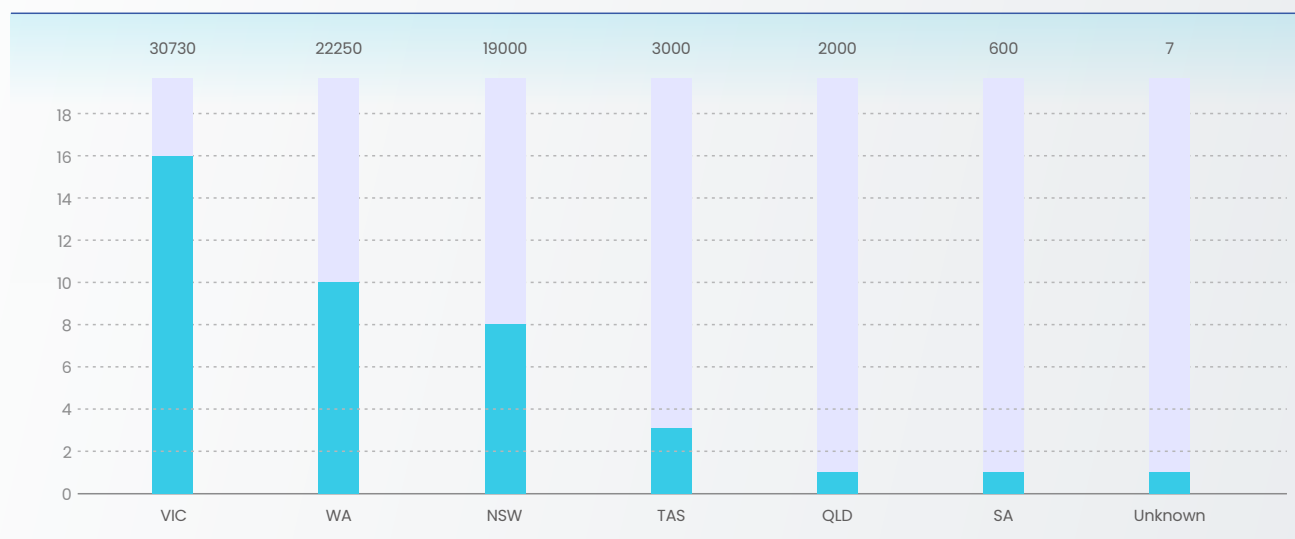
**Figure 1: Offshore Wind Capacity in Different States of Australia (Unit: MW)**

Source: 4C offshore/ Leader Associates



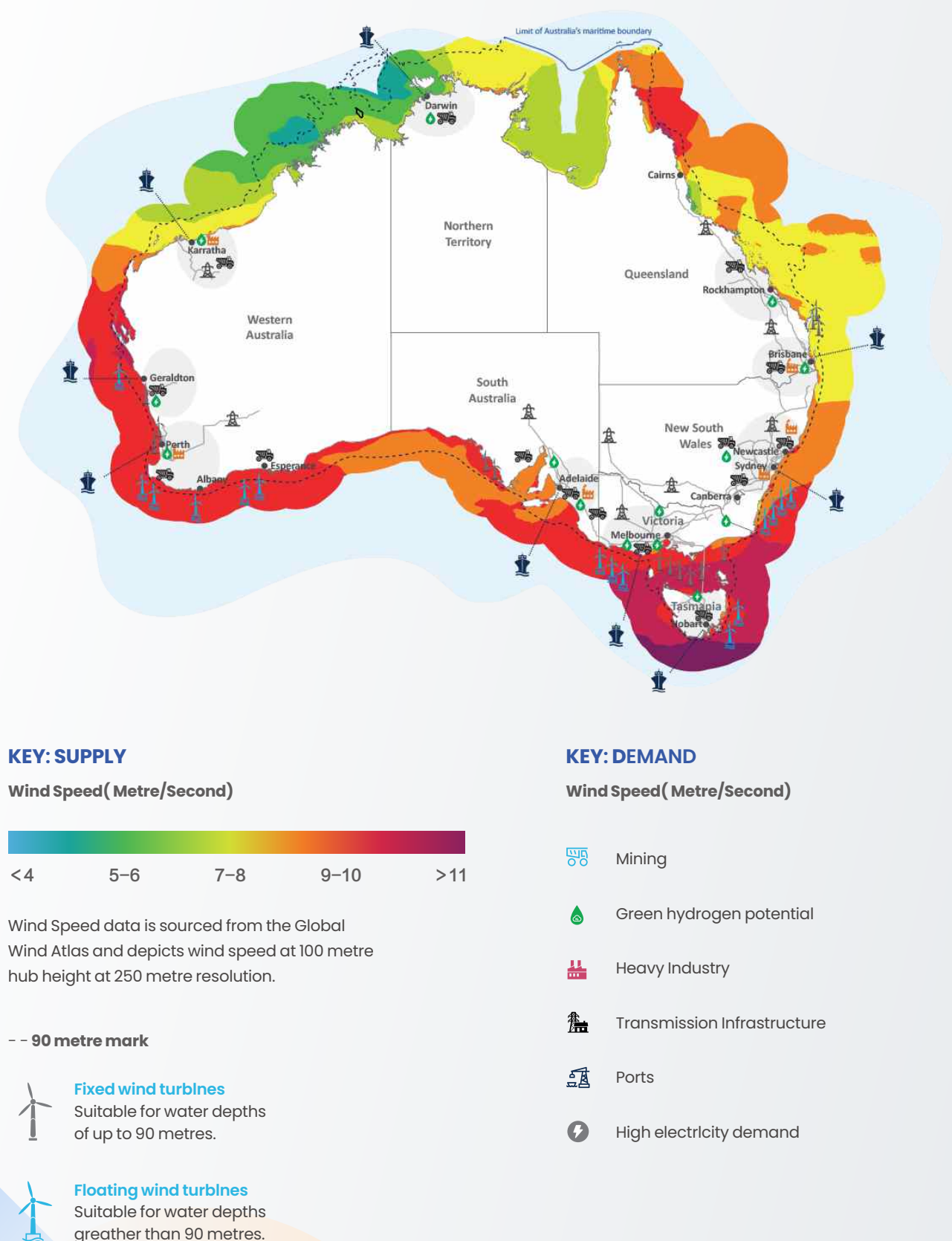
**Figure 2: Number of offshore wind projects in different regions of Australia**

Source: 4C offshore/ Leader Associates



**Figure 3: Australia's offshore wind resources and demand and supply of offshore wind power**

Source: Green Energy Partners



From the perspective of the foundation type of these offshore wind power projects, grounded accounts for the highest proportion, reaching about 50GW, accounting for 64% of the total project capacity. The remaining 22.25GW of projects will be in the form of floating, and the 5.36GW project has not yet specified which method of foundation will be used.

**Figure 4: Foundation types for offshore wind projects in Australia (Unit: MW)**

Source: 4C offshore/ Leader Associates

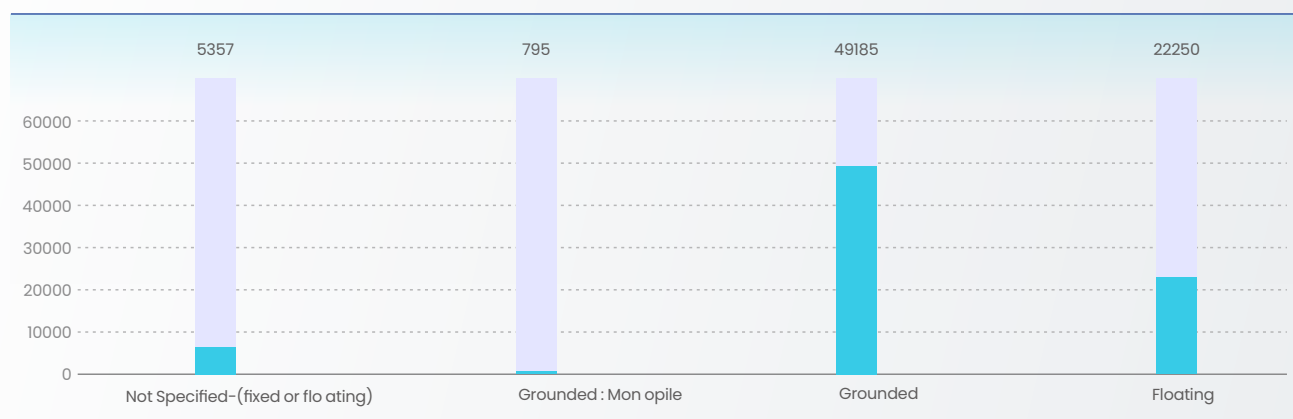
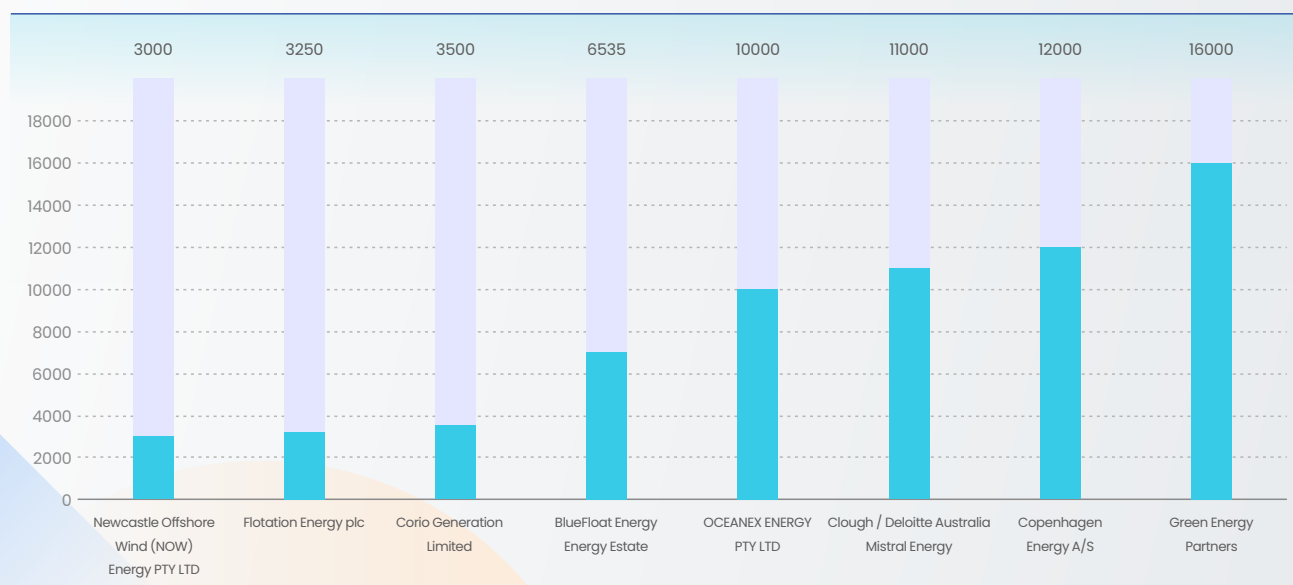


Figure 5 depicts the owners/developers holding more than 3GW of Australian offshore wind projects, a total of 8 companies or organizations. Among them, Green Energy Partners has the largest project capacity, with five projects with a total capacity of 16GW. In second place is Copenhagen Energy A/S, with a total of four 3GW projects. In third place are three projects jointly held by Clough, Deloitte Australia, and Mistral Energy, with a total capacity of 11 GW. Next up is Oceanex Energy Pty Ltd, which holds five 2GW offshore wind projects. It is not difficult to see that the characteristics of offshore wind power projects are one word - big, there are only seven projects less than 1GW, of which 21 projects are greater than or equal to 2GW. In addition, there are four projects greater than or equal to 4GW, the largest of which has a capacity of 8GW.

**Figure 5: Owner/developer holding a total of more than 3GW of offshore wind power projects in Australia (Unit: MW)**

Source: 4C offshore/ Leader Associates





The most noteworthy project is Australia's largest offshore wind power project, the Port Kembla offshore wind farm, located in the Tasman Sea in New South Wales, with a total capacity of 8GW. The project will be developed and owned by Green Energy Partners. Green Energy Partners was founded in 2020 by Niels Baden Rørholm, John Stephens, and Dan Kofoed Hansen to accelerate the growth of Australia's offshore wind industry.

In addition to the largest projects, three other offshore wind projects have received the first round of funding from the Energy Innovation Fund which deserves our attention. The first project with the highest grant funding was Star of the South, which received a grant of A\$19.5 million. The project is Australia's first offshore wind farm, located off the southern coast of Gippsland, Victoria. The project, which will be jointly developed and owned by Offshore Energy Pty Ltd and Copenhagen Infrastructure Partners, will have an installed capacity of 2,200MW. In March 2019, the federal government granted the project an exploration license, allowing for site surveys in the project area. Commercial operations are expected by January 1, 2030.

The second project is the Great Southern Offshore wind farm, developed by Corio Generation, a branch of Macquarie's Green Investment Group. This project received a grant of A\$16.1 million. The project, located off the coast of Bass in Gippsland, Victoria, will have an installed capacity of 1.5 GW.

The third project is the Seadragon offshore wind farm developed by Flotation Energy. The subsidy for this project is much lower than the previous two projects, only A\$2.3 million. The project, located off the coast of Bass in Gippsland, Victoria, will have an installed capacity of 1.5 GW. The project is to help replace aging coal-fired power stations and is expected to start construction in 2028 and be operational in 2030.

**Table 1: Energy Innovation Fund (EIF) round 1 funding allocations**

Source: Clayton UTZ

Proponent	Grant Funding (A\$M)	Location	Size (MW)
Macquarie Group	16.1	Bass Coast, Victoria	1,500
Star of the South	19.5	Gippsland, Victoria	2,200
Flotation Energy	2.3	Gippsland, Victoria	1,500
Total	37.9		5,200



## Table 2: Offshore wind projects in Australia

Table 2 details Australian offshore wind project information

No.	Project Name	Region	Development Status	Capacity (MW)	Developer/Owner	Foundation Type	Full Commissioning
1	Port Kembla (Green Energy Partners)	NSW	Concept/EP	8000	Green Energy Partners	Grounded	
2	Bass Strait (Green Energy Partners)	VIC	Concept/EP	4000	Green Energy Partners	Grounded	
3	Bass Strait 1 - Mistral	VIC	Concept/EP	4000	Clough/ Deloitte Australia/ Mistral Energy	Floating	
4	Bass Strait 2 - Mistral	VIC	Concept/EP	4000	Clough/ Deloitte Australia/ Mistral Energy	Floating	
5	Newcastle (Newcastle Offshore Wind)	NSW	Concept/EP	3000	Newcastle Offshore Wind (NOW) Energy PTY LTD	Grounded	
6	Leeuwin	WA	Concept/EP	3000	Copenhagen Energy A/S	Grounded	
7	Bass Strait 3 - Mistral	VIC	Concept/EP	3000	Clough/ Deloitte Australia/ Mistral Energy	Floating	
8	Velella Offshore Wind Farm	WA	Concept/EP	3000	Copenhagen Energy A/S	Not Specified-(fixed or floating)	
9	Samphire Offshore Wind	WA	Concept/EP	3000	Copenhagen Energy A/S	Grounded	
10	Midwest Offshore Wind	WA	Concept/EP	3000	Copenhagen Energy A/S	Grounded	
11	Great Eastern Offshore Wind	VIC	Concept/EP	2500	Corio Generation Limited	Grounded	
12	Star of the South	VIC	Concept/EP	2200	Offshore Energy Pty Ltd/ Copenhagen Infrastructure Partners	Grounded	2030
13	Greater Gippsland	VIC	Concept/EP	2085	BlueFloat Energy/ Energy Estate	Grounded	
14	Oceanex - Novocastrian	NSW	Concept/EP	2000	OCEANEX ENERGY PTY LTD	Floating	2031
15	Oceanex - Illawarra	NSW	Concept/EP	2000	OCEANEX ENERGY PTY LTD	Floating	2031
16	Oceanex - Eden	NSW	Concept/EP	2000	OCEANEX ENERGY PTY LTD	Floating	2034
17	Oceanex - Ulladulla	NSW	Concept/EP	2000	OCEANEX ENERGY PTY LTD	Floating	2035
18	Oceanex - Bunbury	WA	Concept/EP	2000	OCEANEX ENERGY PTY LTD	Grounded	2036
19	Southern Queensland (Green Energy Partners)	QLD	Concept/EP	2000	Green Energy Partners	Grounded	
20	Bass - 2	TAS	Concept/EP	2000	Nexsphere	Grounded	
21	Blue Marlin	VIC	Concept/EP	2000	Vena Energy Holdings Ltd	Grounded	
22	Hunter Coast	NSW	Concept/EP	1650	BlueFloat Energy/ Energy Estate	Floating	
23	Wollongong	NSW	Concept/EP	1600	BlueFloat Energy/ Energy Estate	Floating	
24	The Myalup Offshore Extension	WA	Concept/EP	1600	Skyborn Renewables GmbH (formerly wpd)/Australis Energy Ltd	Not Specified-(fixed or floating)	
25	Seadragon	VIC	Concept/EP	1500	Flotation Energy plc	Grounded	2030
26	Great Southern Offshore Wind Farm	VIC	Concept/EP	1500	Corio Generation Limited	Grounded	
27	Southern Winds	VIC	Concept/EP	1200	Energy Estate/ BlueFloat Energy	Grounded	

## Table 2: Offshore wind projects in Australia

Table 2 details Australian offshore wind project information

No.	Project Name	Region	Development Status	Capacity (MW)	Developer/Owner	Foundation Type	Full Commissioning
26	Great Southern Offshore Wind Farm	VIC	Concept/EP	1500	Corio Generation Limited	Grounded	
27	Southern Winds	VIC	Concept/EP	1200	Energy Estate/ BlueFloat Energy	Grounded	
28	Mid-West Offshore Wind Farm	WA	Concept/EP	1100	Cliff Head Wind and Solar Project Joint Venture/ Triangle Energy/ Pilot Energy Ltd.	Grounded	
29	Western Victoria (Green Energy Partners)	VIC	Concept/EP	1000	Green Energy Partners	Grounded	
30	Western Australia (Green Energy Partners)	WA	Concept/EP	1000	Green Energy Partners	Grounded	
31	Spinifex	VIC	Concept/EP	1000	Alinta Energy	Grounded	2027
32	Perth Array	WA	Concept/EP	1000	Flotation Energy plc	Grounded	
33	Portland Floating Wind Farm	VIC	Concept/EP	750	Flotation Energy plc	Not Specified- (fixed or floating)	
34	Australis SA	SA	Concept/EP	600	SA Offshore Windfarm Pty Ltd/ Australis Energy Ltd	Grounded	
35	Bass – 1A	TAS	Concept/EP	500	Brookvale Energy	Grounded	2026
36	Bass – 1B	TAS	Concept/EP	500	Brookvale Energy	Grounded	2026
37	Australis VIC	VIC	Concept/EP	495	VIC Offshore Windfarm Pty Ltd/ Australis Energy Ltd	Grounded: Monopile	2027
38	Australis WA	WA	Concept/EP	300	WA Offshore Windfarm Pty Ltd/ Australis Energy Ltd	Grounded: Monopile	2027
39	Global Renewable Solutions – Power Platform	Unknown	Dormant	7	Global Renewable Solutions (formerly Marine Power Technologies Pty Ltd)	Unknown	
40	Gippsland Proposed Area	VIC	Development Zone		Unknown	Not Specified- (fixed or floating)	

Note: EP = Early Planning

Source: 4C offshore





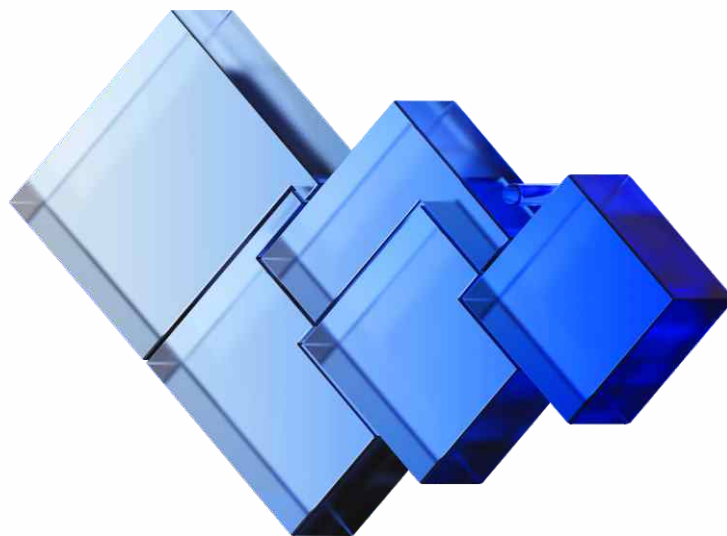
With all being said, faced with the boom in Australia's offshore wind power market, the world's energy giants do not want to miss this opportunity. Among others, Norwegian oil and gas company Equinor announced in September 2022 a partnership with Australian offshore wind developer Oceanex on three offshore wind projects totaling 2GW of development capacity.

Ørsted, the world's largest offshore wind developer, announced in October 2022 that it had confirmed an investment in an offshore wind project in Australia, the first offshore wind area in Gippsland, Victoria, which could soon be officially announced.

European oil major Shell made its first wind energy investment in Australia in March 2022, when it bought a 49% stake in developer WestWind Energy Development Pty Ltd. as it sought to tap into Australia's offshore wind market.

In addition, Spanish energy giant Iberdrola announced its interest in the Australian offshore wind power market in July 2022, and it will participate in the first auction of offshore wind power in Victoria. Moreover, the company quickly completed the friendly acquisition of Australian renewable energy company Infigen Energy in 2020, investing a total of nearly 3 billion euros in Australia's wind power and photovoltaic markets to help it complete the transition to green energy.





**AUSTRALIA  
WIND ENERGY  
2023**

Co-located with:



**Offshore Wind  
TECH**

## **Ruby Liu** **Marketing & Partnerships**

email : [ruby@leader-associates.com](mailto:ruby@leader-associates.com)  
phone : +86 156 5524 1328  
webs : [leader-associates.com](http://leader-associates.com)

Conference, Exhibition  
[www.windenergyaustralia.com](http://www.windenergyaustralia.com)

BROUGHT TO YOU BY:

