Q2 2025 MARKET UPDATE

Global Offshore Wind

Sustainability is our business

Contents

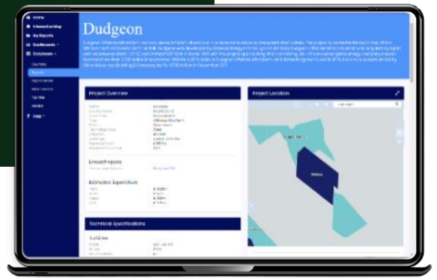
ERM’s Global Renewables Infrastructure Project Database

At the heart of ERM’s market intelligence is our Global Renewable Infrastructure Project (GRIP) digital data hub. GRIP is the source of key project data presented in this report.

GRIP: The authoritative source for essential offshore wind industry information.

Our team utilise GRIP to successfully produce data extracts, analysis, and forecasts for a wide range of clients, from project developers, investors, manufacturers, supply chain players, and NGOs.

GRIP stores publicly available information relating to existing and planned offshore wind projects, with worldwide coverage.



Project Data
Over 2,200 active projects tracked

Market Frameworks
Up-to-date information on targets, route to market regimes, leasing activities

Supply Chain
Global supply chain database of supplier information, market shares, order books

Forecasts
Commissioning forecasts from a global to project level

1 Executive Summary

Abbreviations

AMER – Americas

APAC – Asia-Pacific

BOEM – Bureau of Ocean Energy Management

CEF – Connection Europe Facility

CfD – Contract for Difference

CIP – Copenhagen Infrastructure Partners

CTG – China Three Gorges

CWP – Century Wind Power

DAP – Development Action Plan

DEA – Danish Energy Agency

DEIS – Draft Environmental Impact Statement

EA – Environmental Assessment

EBL – Electric Business Licence

EEZ – Exclusive Economic Zone

EIA – Environmental Impact Assessment

EDA – Environmental Difference Analysis

EMEA – Europe, the Middle East, Africa

EVN - Electricity Vietnam

FEED – Front-End Engineering Design

FIT – Feed-in Tariff

GIG – Green Investment Group

GOWA – Global Offshore Wind Alliance

GWEC – Global Wind Energy Council

HoT – Head of Terms (Agreement)

IBAMA – Brazilian Institute for the Environment and Natural Resources

ICE – Costa Rican Electricity Institute

INTOG – Innovation and Targeted Oil and Gas

IRA – Inflation Reduction Act of 2022

JV – Joint Venture

LCoE – Levelised Cost of Energy

LEFGL – Les Eoliennes Flottantes du Golfe du Lion

VERT – State Energy Regulatory Council of Lithuania

MAC – Maritime Area Consent

METI – Ministry of Economy, Trade and Industry

MNRE – Ministry of New and Renewable Energy

MOEA – Ministry of Economic Affairs

MOIT – Ministry of Industry and Trade

MOTIE – Ministry of Trade, Industry and Energy

MoU – Memorandum of Understanding

MSP – Marine/Maritime Spatial Plan

NERC – The National Energy Regulatory Council

NSEC – North Seas Energy Cooperation

NSW – New South Wales

OEM – Original Equipment Manufacturer

OSS – Offshore Substation

OSW – Offshore Wind

OWF – Offshore Wind Farm

OLL – Offshore Location License

PF – Power financing

PPA – Power Purchase Agreement

PSA – Preferred Supplier Agreement

PWOP – Public Waters Occupation/Use Permit

REC – Renewable Energy Certificate

REZ – Renewable Energy Zone

RFI – Request for Interest

RMS – Route to Market Secured

RPS – Renewable Portfolio Standard

RVO – Netherlands Enterprise Agency

SGRE – Siemens Gamesa Renewable Energy

SPR – ScottishPower Renewables

TSO – Transmission System Operator

WTG – Wind Turbine Generator

Executive Summary

Global

The total Global (excl. China) capacity of operational offshore wind projects reached almost 42 GW by the end of Q2 2025. The offshore wind portfolio with a secured route to market increased to 63 GW and the Global (excl. China) total portfolio now stands at near 1,380 GW. The UK, USA and Germany are largely accountable for the world's most developed projects; those that are operational or have secured a route-to-market.

EMEA

In Q2, offshore wind in EMEA experienced both setbacks and progress. In the Netherlands, the government revised its Amendment Plan, reducing its offshore wind target from 50 GW to 21 GW until the next North Sea Programme and removing the Lagerland area from future development. Belgium also reported delays, with the Council of Ministers deciding to postpone the Nordhinder Nord tender until 2026 due to several risks. In May, Ørsted announced the cancellation of the 2.4 GW Hornsea 4, citing adverse macroeconomic developments and continued supply chain challenges.

Despite these challenges, a number of positive updates were recorded across the region. In France, the country's first floating offshore wind project, the 25 MW Provence Grand Large, became operational. The UK awarded 3 GW of floating capacity split between two projects in the Celtic Sea Leasing Round, while Germany awarded the 1 GW N-9.4 site at a final price of EUR 180 million. Denmark announced that future tenders will be backed by a contract-for-differences (CfD) scheme, with the next round for the Nordsøen Midt and Nordsøen Syd areas scheduled for spring 2026. Similarly, the Netherlands is considering the introduction of financial support measures starting from its 2027 tender.

Further progress was seen elsewhere in the region. Norway launched a competition for three Utsira Nord areas with a 1.5 GW combined floating capacity while Lithuania relaunched its previously suspended tender for a second 700 MW offshore wind farm. Ireland is expected to auction the 900 MW Maritime Area A under ORESS 2.1 in Q3 2025 and Poland confirmed plans to launch a 4 GW offshore wind auction by the end of 2025.

Americas

In the US, the offshore wind industry has faced significant headwinds. The election of Donald J. Trump as the 47th President of the United States had a significant impact on the offshore wind industry. On the first day of his term, Trump signed an Executive Order that ordered a pause on federal actions for wind projects and the comprehensive review of federal wind leases and permitting practices. Since then, numerous orders and legislative actions have further introduced significant challenges for the industry in the US.

Still, approximately 5 GW of offshore wind are progressing through construction. Dominion Energy completed the first installation season of the Coastal Virginia Offshore Wind project and remains on schedule. Vineyard Wind finished foundation installations but is replacing blades due to a failure. Revolution Wind is advancing with most foundations installed, while Sunrise Wind began onshore construction in Q3 2024 but now faces delays and cost increases, pushing commissioning to late 2027. Empire Wind experienced a temporary stop-work order from the Trump Administration in Q2 2025, which was later lifted, allowing construction to proceed.

The Province of Nova Scotia and the Government of Canada jointly designated four Wind Energy Areas. The country's first auction is expected in late 2025 or early 2026.

In Colombia, the Ministry of Mines and Energy launched the country's first offshore wind bidding round, offering 15-year contracts under a CfD scheme to ensure price stability and investor confidence. Colombia aims to develop 3 GW of offshore wind by 2035.

Expectations are for the Brazilian government to hold the first offshore wind auctions in the second half of 2025 or in 2026.

APAC

Auction activity across APAC offshore wind markets accelerated in Q2 2025, with several governments advancing competitive procurement processes. In Australia, the State of Victoria is preparing to launch its offshore wind CfD auction in September 2025, offering up to 2 GW of capacity. The contract award is targeted for October 2026, and it is expected that most feasibility license holders in the Gippsland Declared Area will participate.

The Philippines has initiated the process for its first offshore wind offtake auction, focused exclusively on fixed-bottom technology. The government aims to award up to 3.3 GW of capacity, with delivery anticipated between 2028 and 2030. South Korea also announced a competitive bidding round for fixed-bottom offshore wind in the first half of the year, with up to 1.25 GW of capacity expected to be awarded. The government has set a ceiling price of approximately USD 128.34 per MWh, same as the last round.

India, meanwhile, officially cancelled its offshore wind tenders for Gujarat and Tamil Nadu, likely due to limited developer interest. Both tenders had experienced multiple deadline extensions since their launch in mid-2024. In Japan, the government is considering designating two sites in Hokkaido as promotion zones for inclusion in the upcoming Round 4 auction. Additionally, revisions to auction rules are under review, including a potential shift from the FiT to a FiP mechanism and relief measures for developers impacted in earlier rounds.

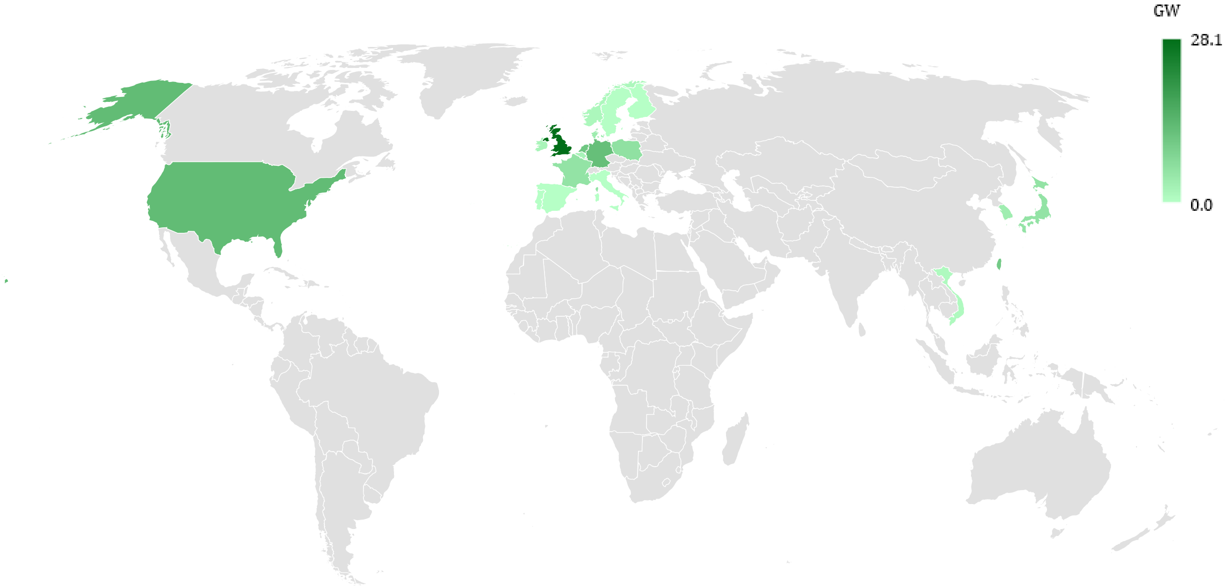
Taiwan is also reviewing its auction framework for the upcoming Round 3-3, following several project cancellations in previous rounds. In Vietnam, the government approved zonal-based offshore wind pricing with Tariffs range from USD 0.12 to 0.15 per kWh across the Northern, South-Central, and Southern regions.

2 Status of the Market

Global Overview

Globally (excl. China) there is 105.8 GW of operational and secured offshore wind capacity. This is predominantly driven by the UK (26.5%), USA (12.3%), and Germany (11.7%) with the rest of world (combined) contributing less than 50%.

Key markets, operational and route to market capacities, GW



41.9 GW
Operational

63.9 GW
Secured

1,274 GW
In Development

1,380 GW
Total Portfolio

Operational includes projects where all components of the project have been commissioned and the project is supplying power at its full capability. **Secured (or Route to Market Secured)** means project has secured an offtake contract for power purchase, the mechanism differs by country (CFD, PPAs, ORECs, FIT/FIP, etc.), but has not completed commissioning. **In Development** considers all projects which have not secured an offtake contract, including those in the early stages of development through to those in planning or consented.

Top 15 countries in terms of offshore wind capacity that is operational or route-to-market secured, MW

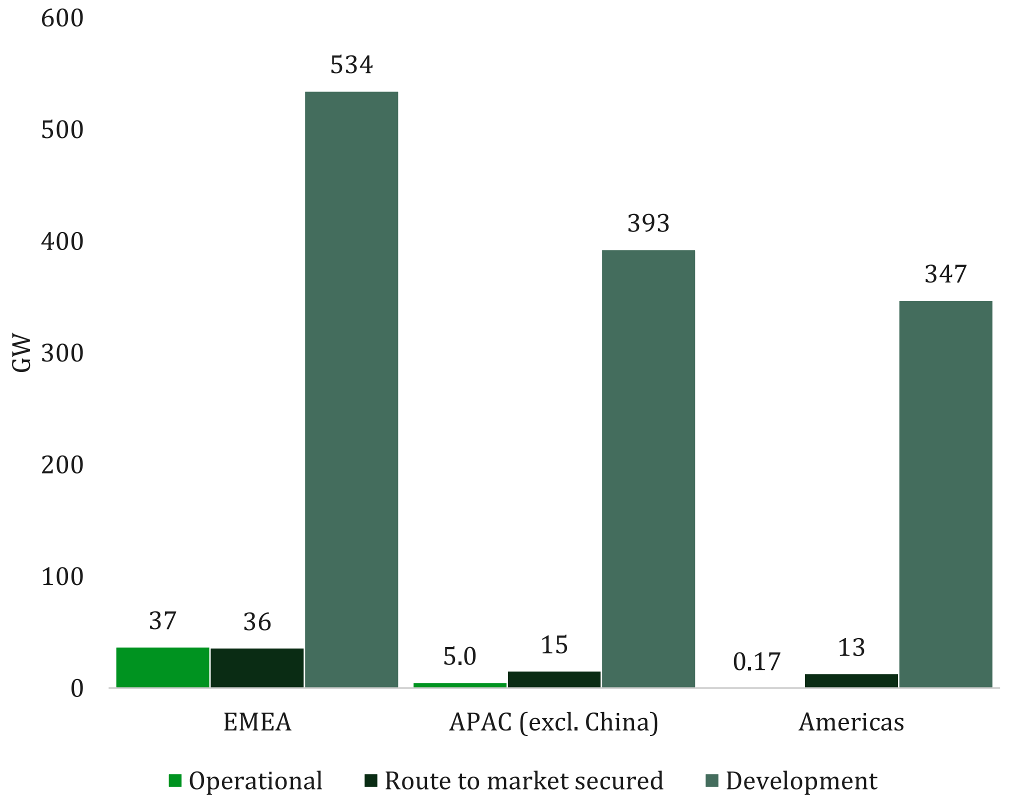
#	Country	Operational	Secured	Development	Rank Change
1	**United Kingdom**	15,684	12,437	93,693	-
2	**USA**	174	12,875	127,606	-
3	**Germany**	8,980	3,444	65,090	-
4	**The Netherlands**	5,285	5,652	13,400	-
5	**Taiwan**	3,579	6,666	35,262	-
6	**Poland**	-	5,873	10,871	-
7	**Japan**	311	5,102	44,937	-
8	**France**	1,500	3,903	20,503	-
9	**Denmark**	2650	1,000	12,657	-
10	**South Korea**	307	3,176	68,521	-
11	**Belgium**	2,261	-	3,500	▲
12	**Ireland**	25	2,030	7,685	▼
13	**Norway**	93	1,500	22,176	-
14	**Vietnam**	777	312	66,349	-
15	**Sweden**	191	-	101,895	-

Ranking based on operational capacity plus capacity with a route to market secured. Development capacity includes early-stage development projects, some of which have overlapping areas, leading to an over-inflated portfolio.

Global Update

Recent auction designs across EMEA have undergone significant changes. Denmark has announced that a new tender process will include a CfD, while the Netherlands is considering implementing this scheme starting in 2027.

Key regions



Updates

In EMEA, over 1 GW of projects are under construction in France, where the country's first floating wind farm has also been commissioned. Germany selected TotalEnergies as the winner for 1GW N-9.4 site while in the UK, the Crown Estate announced the winners of two of the PDA's in the Celtic Sea. Estonia granted its first offshore wind farm building permit. Denmark will support future offshore wind tenders through two-sided Contracts for Difference and The Netherlands is preparing an action plan to boost offshore wind investment, potentially offering CfD-based support from 2027. Norway opened competitive bidding for 1.5 GW of Utsira Nord floating projects and Lithuania relaunched its second offshore wind tender following a suspension. Poland and Ireland are both planning auctions at the end of 2025, while the Portuguese Government announced that offshore wind capacity in the country will be allocated through a sequential centralized model.

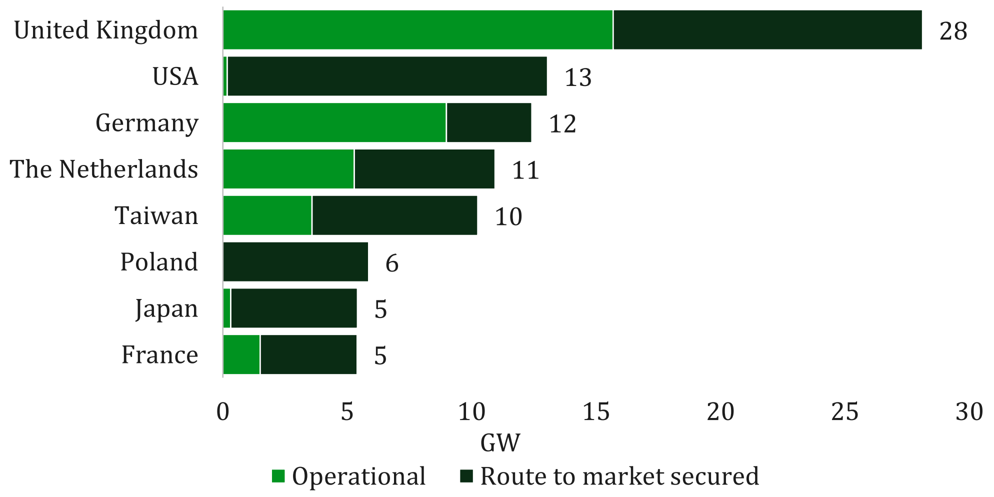
In APAC, despite the challenges faced for Round 3 projects in Taiwan, three projects awarded under R3-2 have signed administrative contracts; Hailong and Greater Changhua 2b&4 have successfully delivered their first power. In South Korea, seven projects totalling 2.7 GW were approved electricity business licences (EBLs) application, and it is expected that 1.25 GW in total will be awarded in Q3 under the offtake auction launched in May.

In the U.S., Q2 saw continued construction activity on several U.S. projects. Dominion Energy continued schedule throughout the quarter and is preparing to begin WTG installation. Revolution and Vineyard Wind also continue forward with construction. In Q2, the Trump administration temporarily placed a stop-work order on Empire Wind before changing course and allowing construction to commence. However, the outlook for OSW development is increasingly negative due to the second Trump Administration. Elsewhere in the Americas, Colombia's first OSW auction progressed with bids due in August 2025 and awards expected in November 2025. Brazil and Canada continue to move towards their first OSW auctions in late 2025 or early 2026.

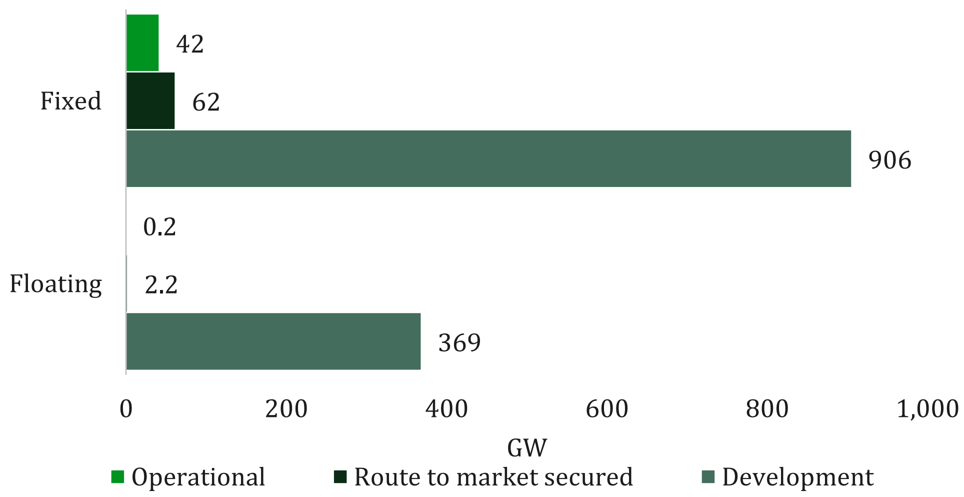
Global Status

Global fixed offshore wind operational capacity (excl. China) increased throughout Q2, reaching 42 GW. The 820 MW Moray West offshore wind farm became operational in the UK.

Key markets, total operational and secured capacity



Technologies



In May, Ørsted announced the cancellation of the 2.4 GW Hornsea 4, citing adverse macroeconomic developments and continued supply chain challenges. Hornsea 4 secured a CfD in Round 4. The project provides another unfortunate example of projects failing to progress and questions whether CfD's in their current form are enough to make projects viable.

In the Netherlands, the IJmuiden Ver Gamma-A and Gamma-B offshore wind sites, originally slated for the 2025 tender round, have been postponed due to challenging market conditions, including insufficient large-scale electricity demand. Instead, the Dutch government plans to tender only the Nederwiek I-A site in this round, with the process scheduled to open in October 2025.

Throughout Q2, global fixed-bottom operational capacity (excluding China) reached 42 GW, following the commissioning of several projects during the quarter: 882 MW Moray West in the UK and 96 MW Jeonnam 1 in South Korea.

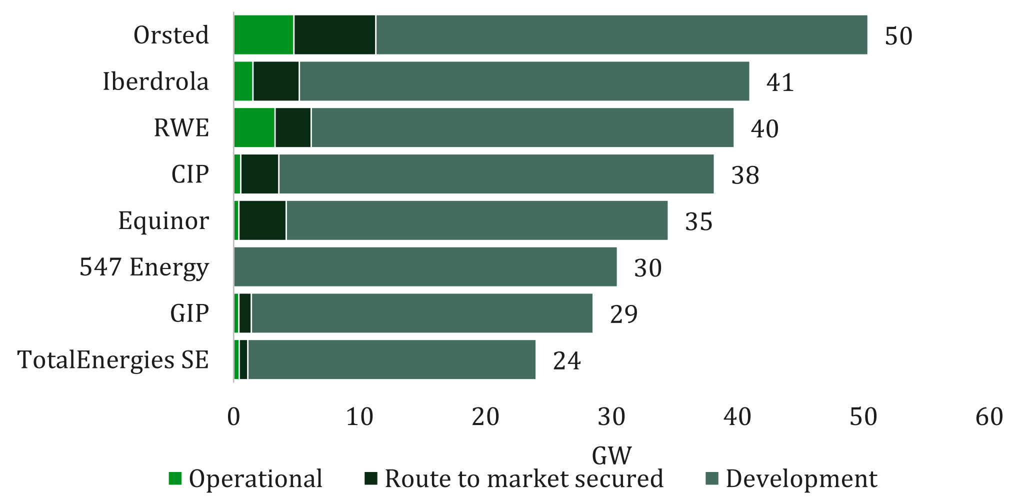
Excluding China, global floating operational and route to market secured capacity remained at near 2.5 GW. The only project to reach operations was the 25 MW Provence Grand Large, becoming the first floating offshore wind farm in France and the wider Mediterranean.

In June 2025, the Crown Estate announced the winners of two of the PDA's in the Celtic Sea. EDF Renewables and ESB secured PDA 1 through their joint project Gwynt Glas while Equinor secured full ownership of PDA 3.

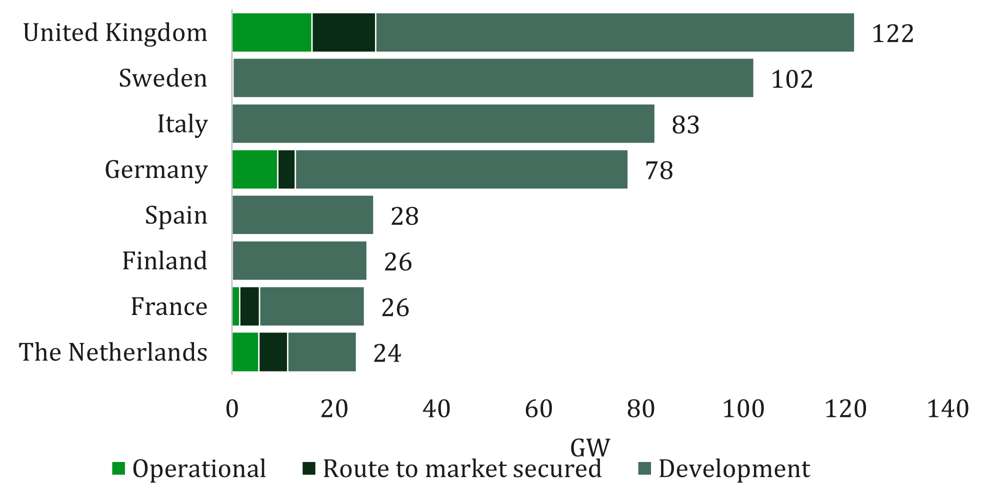
Global Status

Ørsted remained the global key owner, despite the cancelation of Hornsea 4 offshore wind farm in the UK. The total operational and secured offshore wind capacity in the EMEA region is largely driven by the UK, Germany and the Netherlands.

Key Owners



EMEA



In April, RWE announced it had halted all offshore wind development activities in the United States, including its 3 GW Community Offshore Wind project with National Grid. While this is not a formal cancellation, it reflects broader challenges facing developers in the U.S. offshore wind market.

Equinor has secured the rights to develop up to 1.5 GW of floating offshore wind capacity in the Celtic Sea, awarded through The Crown Estate's fifth offshore wind leasing round.

Ørsted remains the owner of the largest total portfolio, despite the reduction in route to market secured capacity as a result of cancelling Hornsea 4. Over 39 GW of Ørsted’s portfolio remains in the development phase. The cancellation of Hornsea 4 raises concerns regarding Ørsted's ability to advance projects to COD.

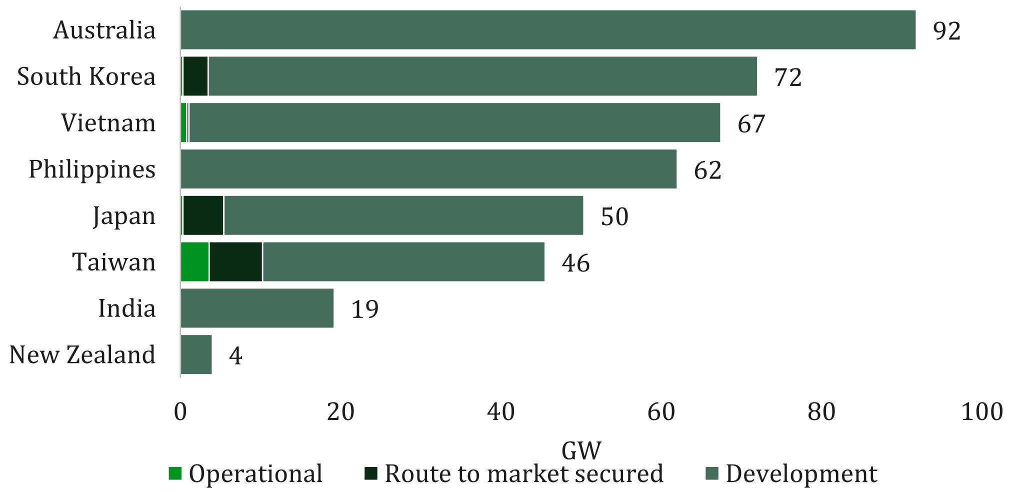
Sweden and Italy remain high on the ranking in terms of total capacity. However, a large proportion of this capacity is in the very early stages of development, likely with overlapping boundaries. Both countries currently lack a formal leasing process for offshore wind projects. Sweden has 191 MW in its operational portfolio, while Italy has 30 MW.

The Dutch government has removed the Lagerland zone from its future offshore wind plans, citing its significant ecological and economic value for fisheries. This decision is part of a broader revision to the North Sea Programme, which reduced offshore wind targets from 50 GW by 2040 to 21 GW by 2032.

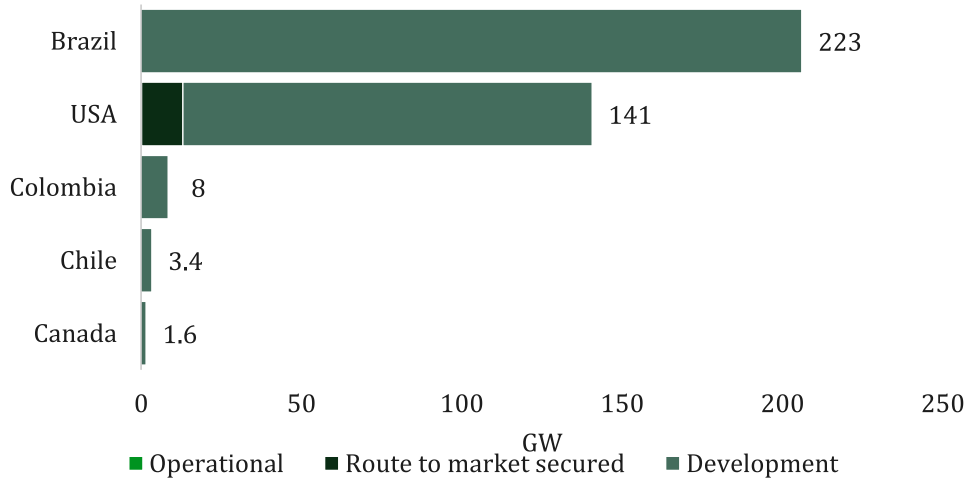
Global Status

Taiwan and Japan remain the markets with the most later-stage developed capacity in APAC. The US remains the only market in the Americas with operational capacity.

APAC (excl. China)



Americas



The development portfolio in Australia consists of developer-led projects; 28 GW of which have secured feasibility licences and are progressing to the next stage to secure a construction licence. In June 2025, a preliminary feasibility licence was granted for the 1.5 GW Bunbury OWP North.

South Korea development capacity increased by over 2 GW capacity as the government has approved and awarded Electricity Business Licenses (EBLs) to seven projects.

Japan is looking into declaring two sites in Hokkaido as promotion zones, in anticipation of the upcoming Round 4.

India's cancellation of its first two offshore wind tenders might have significant delay in its development pipeline and 2030 targets.

In Brazil, all projects are in early stages, though recent legislation advancements in Brazil provide additional promise for the industry. The Brazilian government plans to hold the first auctions in the second half of 2025 or in 2026. In June 2025, the country's first preliminary license for an offshore wind project was given to a 24.5 MW pilot project.

In Canada, the regulatory structure has been developed, and the Nova Scotia Government has identified four Wind Energy Areas. The first auction is expected in late 2025 or early 2026. Nova Scotia plans to offer leases for 5 GW of offshore wind energy by 2030.

Colombia's current offshore wind portfolio consists of developer-led projects in early stages of development. The ongoing auction in Colombia will allocate permits to the first offshore wind projects in the country (1-3 GW), and results are expected in November 2025.

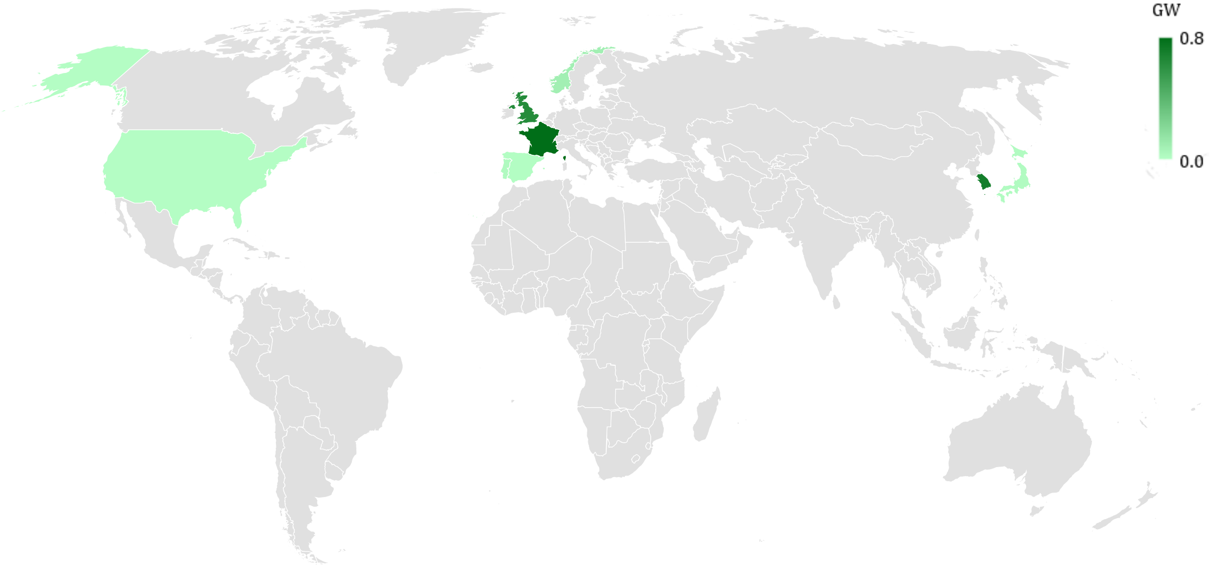
Floating Overview

GLOBAL | EMEA | AMERICAS | ASIA PACIFIC

GRIP

Globally (excl. China) there is currently around 2.4 GW of operational and secured floating offshore wind capacity. This is predominantly driven by France (35%), the South Korea (30%) and the UK (27%), with the rest of world contributing less than 7 %.

Key regions



0.23 GW	2.2 GW	368.5 GW	370.3 GW
Operational	Secured	In Development	Total Portfolio

Operational includes projects where all components of the project have been commissioned, and the project is supplying power at its full capability. **Secured (or Route to Market Secured)** means project has secured an offtake contract for power purchase, the mechanism differs by country (CFD, PPAs, ORECs, FIT/FIP, etc.), but has not completed commissioning. **In Development** considers all projects which have not secured an offtake contract, including those in the early stages of development through to those in planning or consented.

Top 15 countries in terms of floating offshore wind capacity that is operational or route-to-market secured, MW

#	Country	Operational	Secured	Development	Rank Change
1	**France**	27	816	6,703	-
2	**South Korea**	0.75	750	17,582	-
3	**United Kingdom**	77	594	55,062	-
4	**Norway**	93	-	15,636	-
5	**Portugal**	25	2	12,905	-
6	**Japan**	5	16	4,359	-
7	**Spain**	2	11	27,172	-
8	**USA**	-	11	62,266	-
9	**Italy**	-	-	81,025	-
10	**Australia**	-	-	22,150	-
11	**Sweden**	-	-	18,090	-
12	**Taiwan**	-	-	15,587	-
13	**Philippines**	-	-	15,153	-
14	**Brazil**	-	-	4,539	-
15	**Chile**	-	-	2,460	-

Ranking based on operational capacity in addition to capacity with a route to market secured. Development capacity includes early-stage development projects, some of which have overlapping areas, leading to an over-inflated portfolio.

3 Market Activity

Construction Activity

The Provence Grand Large floating offshore wind farm commenced operations in France, as well as Moray West in the UK and Jeonnam 1 in Taiwan.

Overview

In Europe, the 882 MW Moray West offshore wind farm in the UK reached full power in April 2025. Neart na Gaoithe completed turbine installation and is now complete. Offshore construction commenced at the 1.4 GW East Anglia Three project, with the first monopile installed. At Dogger Bank, all foundations and transition pieces were completed at phase B, and foundation installation has started at phase C.

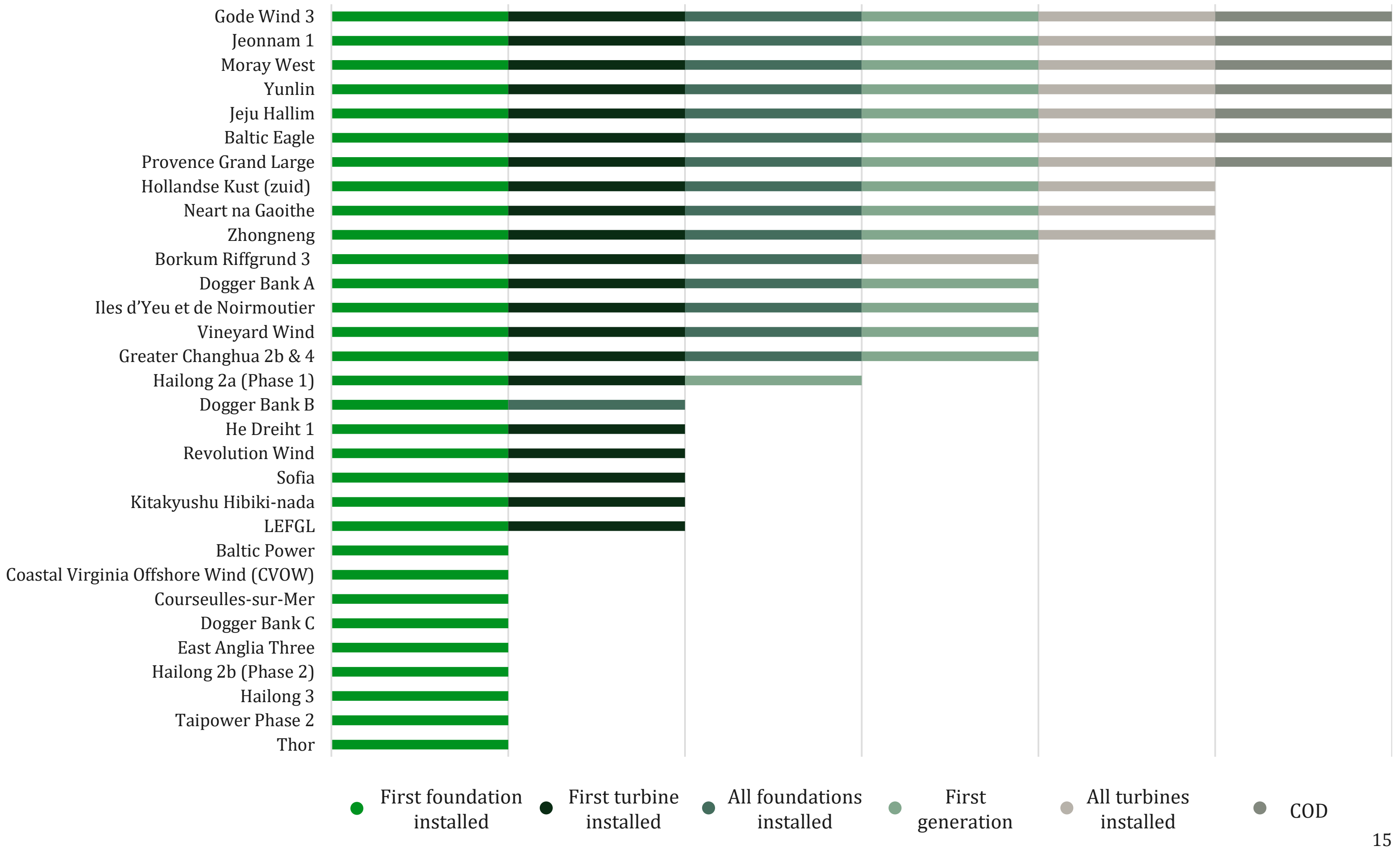
In Germany, the first Vestas V236-15.0 MW turbine was installed at EnBW's He Dreiht, marking its first offshore deployment. In Denmark, the first of 72 monopiles was installed at RWE's 1.1 GW Thor offshore wind farm.

In France, Provence Grand Large has commenced delivering full power to the French grid. The 488 MW Îles d'Yeu et de Noirmoutier (EMYN) completed monopile installation and started delivering electricity to the grid.

In APAC, the first turbines were installed at the Hai Long 2A and Greater Changhua 2b & 4 offshore wind farms in Taiwan, with Hai Long delivering first power to the grid. In South Korea, Jeonnam 1 officially reached COD, becoming the largest privately developed offshore wind farm in the country.

In the US, Equinor resumed construction on the Empire Wind project after the U.S. Bureau of Ocean Energy Management lifted the stop-work order on 19 May.

Construction Progress (excl. China)

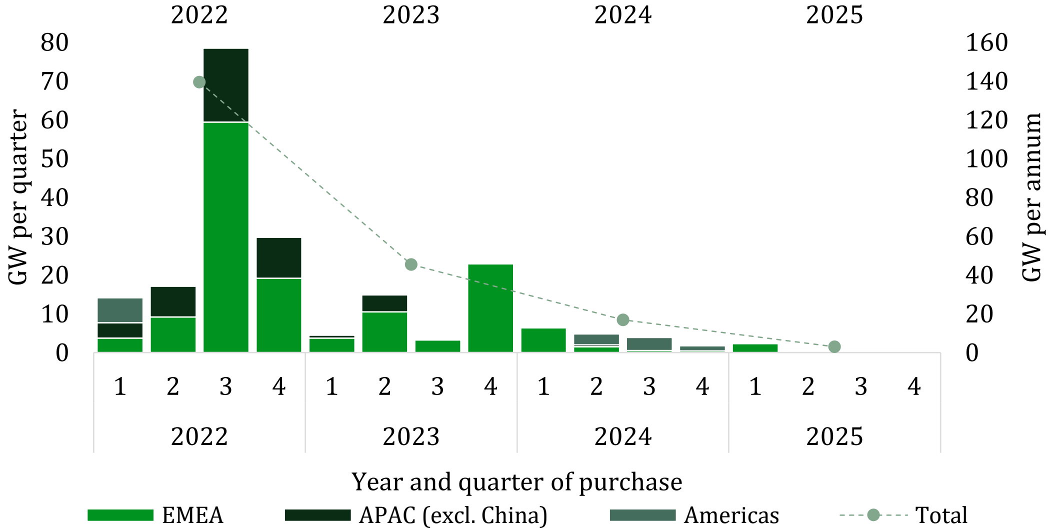


Acquisition & Sell Down Activity

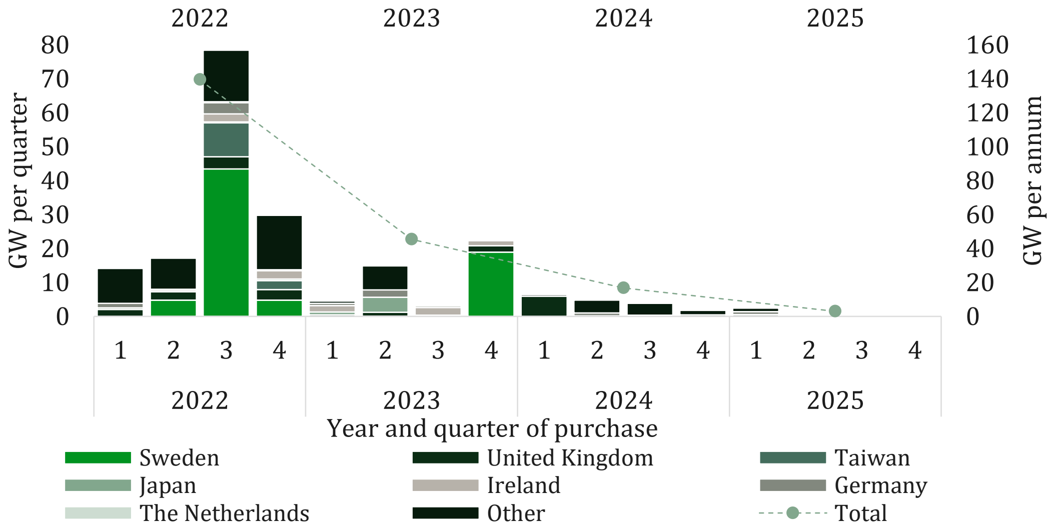
GRIP

The offshore wind sector experienced low acquisition activity in Q2 2025, reflecting challenging market conditions and reduced investor appetite.

Project acquisition activity by region



Project acquisition activity by country



Near 327 MW of offshore wind capacity was bought and sold in EMEA in Q2 of 2025. This capacity was split between a number of projects in Germany and the UK.

Only one acquisition took place in APAC, where Copenhagen Infrastructure Partners, through Growth Markets Fund II, signed an agreement with ACEN to sell a 25% minority stake in the 1 GW San Miguel Bay offshore wind project off the coast of Philippines.

The Americas did not see any acquisition or sell down activity throughout Q2.

Acquisition activity in the offshore wind market was limited throughout the quarter. Furthermore, Macquarie has decided to halt the sale of its offshore wind subsidiary, Corio Generation, due to a lack of buyer interest.

Iberdrola has closed a strategic agreement with Kansai to co-invest in the 315 MW Windanker offshore wind farm off the coast of Germany, located in the Baltic Sea. After obtaining all the necessary regulatory approvals, Kansai will own a minority stake of 49% in the assets.

In the UK, Octopus Energy has acquired a 10 per cent stake in the 714 MW East Anglia One offshore wind farm, which was fully commissioned in 2020.

Additionally, Ørsted has divested a 24.5 per cent stake in the 389 MW West of Duddon Sands offshore wind farm to funds managed by Schroders Greencoat. The value of the transaction is GBP 456.1 million (approximately EUR 534 million) on a debt-free basis.

4 Upcoming Tenders

Upcoming Auctions Timeline

Lease Auctions

	2025 H1	2025 H2	2026 H1	2026 H2	2027
EMEA	*Estonia* *Saare 1, Saare 7* ***1.45 GW***	Germany N-10.1 and N-10.2* ***2.5 GW*** Nederwiek I-A ***1 GW*** Lithuania ***0.7 GW*** Portugal* ***2 GW*** Utsira Nord ***1.5 GW (floating)***	Germany N-13.1 and N-13.2* ***1.5 GW***	Nederwiek I-B, II and III ***5 GW***	Germany N-6.8 ***2 GW***
AMER		Colombia ***~ 3 GW*** Canada ***~ 2.5 GW***		Brazil* ***Unknown***	
APAC	Indian Ocean ***11.4 GW*** Bass Strait ***20 GW***	~~India – Tamil Nadu~~ ~~***4 GW***~~ **Cancelled by the Indian Government due to lack of interest.**		India – Tamil Nadu* ***3 GW***	India – Tamil Nadu* ***3.5 GW***

*Expected. Date to be confirmed.

Timelines and capacities are based on current expectations and are subject to change. The timeline reflects the auction submission deadline, not the time of the award.

GRIP

Upcoming Auctions Timeline

		2025 H1	2025 H2	2026 H1	2026 H2	2027
Lease & Offtake	EMEA	Germany N-9.4 ***1 GW*** France AO7 & AO8 ***2.5 GW***	France AO9 ***2.5 GW***	Germany N-12.4 and N-12.5* ***2 GW*** Noordhinder Nord* ***0.7 GW*** Spain* ***TBA***	France AO10 ***8.4 – 9.2 GW*** Noordhinder Sud* ***1.4 GW*** Fairy Bank* ***1.4 GW***	
	APAC	Japan Round 4* ***TBA***	~~India Gujarat~~ ~~***0.5 GW***~~ **Cancelled by the Indian Government due to lack of interest.**	Taiwan Round 3-3* ***3 GW (TBA)*** Japan Round 5* ***TBA*** India – Tamil Nadu* ***0.5 GW***		
Offtake Only	EMEA		AR7 ***TBA*** Poland ***4 GW*** ORESS 2.1* ***0.9 GW***	Italy ***TBA***	AR8* ***TBA***	AR9* ***TBA*** Utsira Nord ***0.5 GW (floating)*** Poland ***4 GW***
	AMER					
	APAC	South Korea – fixed bottom ***0.5 GW (public-led);*** ***0.75 GW (general)***	South Korea ***0.75 – 1.25 GW (fixed);*** ***0.5 – 1 GW (floating)*** Philippines* ***3.3 GW (fixed)*** Australia – Victoria ***2 GW***	South Korea ***1 – 1.5 GW (fixed);*** ***1 – 1.5 GW (floating)***		

*Expected. Date to be confirmed.
Timelines and capacities are based on current expectations and are subject to change.
The timeline reflects the auction submission deadline, not the time of the award.

Offshore Wind Auction Criteria

As countries around the world launch offshore wind tenders to meet their national decarbonisation goals and as offshore wind markets mature, price is becoming just one of the selection criteria that developers need to compete on to win projects.

- Price is still observed as the most important criterion in tender evaluation. However, qualitative aspects are gaining traction such as local supply chain support, system integration, ecology and circularity. The European Commission guidelines published in May 2024 urged EU member states to use non-price criteria such as cyber-security, contribution to resilience, environmental sustainability or innovation.
- Local content is being included in auction criteria in many markets. Emerging markets are building on learnings from established ones, as they are trying to find a balance between developing local supply chains and the potential cost implications.
- Environmental concerns are also gaining more consideration, as society is embracing circular economy solutions. Therefore, the impact of the wind farm on ecology or the carbon footprint of the components are aspects that have started being considered in the evaluation of proposals, with the Netherlands spearheading these efforts.
- In addition to the criteria reflected in the table, factors such as feasibility of project plan, proposed commercial operation date and past experience of offshore wind / other infrastructure projects are key components of auction evaluations in some of the global offshore wind markets.

Region	Country	Circularity	Ecology	System Integration	Local Content	Price
AMER	US		✓	✓	✓	✓
APAC	India					✓
APAC	Japan				✓	✓
APAC	Philippines					✓
APAC	South Korea			✓	✓	✓
APAC	Taiwan		✓	✓	✓	✓
EMEA	Belgium					✓
EMEA	Denmark					✓
EMEA	Estonia		✓		✓	✓
EMEA	Finland		✓			✓
EMEA	France	✓				✓
EMEA	Germany		✓			✓
EMEA	Ireland					✓
EMEA	Lithuania					✓
EMEA	Netherlands	✓	✓	✓		✓
EMEA	Norway		✓		✓	✓
EMEA	Poland		✓		✓	✓
EMEA	Portugal*		✓	✓	✓	✓
EMEA	Spain*	✓	✓	✓	✓	✓
EMEA	UK (Round 5)		✓			✓
EMEA	UK (AR7)					✓

*Expected auction criteria, not yet announced.

5 Regional Updates

REGIONAL UPDATES AND ANALYSIS

EMEA

ERM REGIONAL MARKET INTELLIGENCE LEADS

EMEA market experts

Nazar Kaminskyi
Nazar.Kaminskyi@erm.com
European Market Expert

Selected experience:

- Nordics, Baltics, The Netherlands, Poland

Roberta Donkin
Roberta.Donkin@erm.com
Western European Market Expert

Selected experience:

- UK, Ireland, Belgium

Yiting Lu
Yiting.Lu@erm.com
Northern European Market Expert

Selected experience:

- Germany, France

Jan Galceran
Jan.Galceran@erm.com
Southern European Market Expert

Selected experience:

- Spain, Portugal, Greece, Italy

Sustainability is our business

United Kingdom

3 GW of capacity was awarded in the Celtic Sea Leasing Round in Q2. The upcoming AR7 is set to open in August 2025.

Celtic Sea Leasing Round

The Round 5 lease auction offers 4.5 GW of floating capacity through three Project Development Areas (PDA's) of 1.5 GW each. The pre-qualification window for Round 5 opened in February 2024 and bidders were notified of the pre-qualification outcome in July 2024. The second phase of the Round 5 leasing process (Invitation to Tender Stage 1) opened in August 2024. In April 2025, eligible bidders were invited to progress to the final stages of the tender (Invitation to Tender Stage 2).

In June 2025, the Crown Estate announced the winners of two of the PDA's in the Celtic Sea. EDF Renewables and ESB secured PDA 1 through their joint project Gwynt Glas while Equinor secured full ownership of PDA 3.

No winners were announced for PDA 2. According to the Crown Estate, the PDA will be 'progressed through delivery arrangements which will be detailed shortly'.

PDA	Preferred Bidder	Capacity (MW)	Option Fees (£/MW/Annum excl. VAT)
1	Gwynt Glas – a joint venture between EDF Renewables UK and ESB	1,500	350
2	-	1,500	
3	Equinor	1,500	350

AR7

The application window for AR7 is set to open in August. Depending on the outcome of the qualification assessment, the sealed bid window will open on 1st October at the earliest and 3rd December at the latest.

The amendments to AR7 have relaxed criteria, allowing fixed unconsented projects to be eligible as long as the consent has been submitted (Scotland) or accepted for examination (England/Wales) 12-months prior to the CfD application deadline. Over 20 GW of fixed capacity is expected to be eligible for AR7.

Delivery years for offshore wind were announced as 2028/29, 2029/30 and 2030/31.

Potential fixed eligible projects are summarised below:

Project	Competitor	Project	Competitor
Dogger Bank South East	RWE, Masdar	North Falls	RWE, SSE
Dogger Bank South West	RWE, Masdar	East Anglia 1 North	ScottishPower Renewables
Norfolk Vanguard East	RWE	Caledonia	Ocean Winds
Norfolk Vanguard West	RWE	Dudgeon Extension	Masdar, Equinor, China Resources
Norfolk Boreas	RWE	Berwick Bank	SSE
Five Estuaries	RWE, Siemens, Macquarie, Sumitomo, ESB	Outer Dowsing	TotalEnergies, OTPP, Gulf Energy Development, Corio Generation
Rampion 2	RWE, Enbridge, USS, OTPP, Macquarie, Corio Generation	Seagreen 1A	TotalEnergies, SSE
West of Orkney	OTTP, TotalEnergies RIDG, Corio Generation	Morecambe	Copenhagen Infrastructure Partners
Awel Y Mor	RWE, Stadtwerke München SWM, Siemens	Mona	BP & EnBW
Sheringham Shoal Ext.	Equinor, Equitix Ltd, Macquarie, TRIG	Morgan	BP & EnBW

Germany

Germany awarded 1 GW to TotalEnergies in the N-9.4 site tender in June 2025.

N-9.4 Tender Results

After German Federal Network Agency (BNetzA) launched a tender for the centrally-investigated N-9.4 (1 GW) in the North Sea in February 2025 with the maximum bidding value set at 6.2 €/kWh, the government received two bids – both offered a zero subsidy and thus initiated a dynamic bidding round. This was also the first tender to introduce the "overplanting" rule, which allows the installed capacity to exceed the associated grid connection capacity by up to 20%.

In June 2025, TotalEnergies, through its subsidiary Offshore Wind One GmbH, was selected as the winner of the tender for N-9.4 offshore wind site. The final price was EUR 180 million. As the N-9.4 site is located in very close proximity to the N-9.1 & N-9.2 sites, jointly owned by RWE and TotalEnergies, TotalEnergies intends to prioritise the development of this cluster and leverage synergies to optimise construction and operating costs.

The offshore wind farm will connect to the NOR-9-4 (BalWin5) offshore grid, which will be built by TenneT and is expected to go into operation in 2032.

Sites N-10.1 (2 GW) and N-10.2 (0.5 GW), which rely on negative bidding and don't offer any revenue support, were put out to tender in August 2025. The auction proved unsuccessful with no-bids receieved by the deadline. Further details will be provided in the Q3 report.

Project Updates

Vestas secured a firm order for 68 WTGs for Vattenfall's Nordlicht 1 (980 MW).

Iberdrola has completed the planning approval process for the Windanker offshore wind farm (315 MW) and received the positive decision from the BSH in April. In the same month, Iberdrola closed a strategic agreement with Japan's Kansai Electric Power Co., Inc. (Kansai) to co-invest in Windanker – Iberdrola has a majority stake of 51% in the assets, while Kansai holds 49%.

The first of 64 wind turbines has been installed at EnBW's He Dreiht (960 MW) project site in April. All inter-array cables were installed in June as well. EnBW and DHL Group signed a PPA for 20 MW of generation capacity from the 960 MW He Dreiht offshore wind farm.

Van Oord kicked off offshore construction in May for the first phase of Nordseecluster offshore wind projects (1.6 GW in total) . RWE awarded two long-term agreements with Clarkson Port Services (CPS) to support O&M activities at its Nordseecluster offshore wind project.

Alpha Ventus consortium (EWE, RWE and Vattenfall) decided to decommission Alpha Ventus (60 MW) and is currently developing a concept for an environmentally friendly dismantling of the 15-year-old wind farm with relevant authorities such as the Federal Maritime and Hydrographic Agency (BSH).

France and The Netherlands

Several developers expressed their interests in the upcoming AO9 tender and the first floating offshore wind farm in France entered operations. The Dutch government is preparing an action plan to support offshore wind and improve the investment climate, with possible financial support measures from 2027, such as a Contract for Difference.

France

In May, Qair and Eni Plenitude announced they have formed a joint venture to participate in the AO9 tender off the coast of southern Brittany. Valorem also joined the Astenn Avel consortium, originally formed by Elicio and Q ENERGY, to jointly bid for AO9. The project aims to add 500MW of capacity adjacent to the Pennavel (AO5) site near Groix and Belle-Île-en-Mer, with commissioning expected between 2032 and 2033.

Project Updates

Provence Grand Large (25 MW), the first floating offshore wind farm in France and the wider Mediterranean, was fully commissioned in June 2025. The first floater and 10 MW floating wind turbine for the Les Eoliennes Flottantes du Golfe du Lion (EFGL) floating offshore wind farm was launched and assembled.

The first of 61 turbines was installed at the Îles d'Yeu and Noirmoutier offshore wind farm (488 MW) in May. The project generated its first power completed installation of ll monopile foundations and inter-array cables in June.

Navantia Seanergies delivered the substation jacket for Ocean Winds' Dieppe le Tréport offshore wind farm (496 MW).

The French government and three offshore wind farms under AO1 – Fécamp (500 MW), Saint-Nazaire (480 MW), and Saint-Brieuc (496 MW) – signed amendments to their PPAs in May, allowing them to halt production during periods of negative electricity prices.

The Netherlands

The Dutch government revised its offshore wind plans, scaling back its target from 50 GW to 21 GW until the next North Sea Programme, expected in 2028. According to the amended plan, the Lagerland area, located west of Texel and Vlieland, has been removed from future offshore wind plans due to its great value for fishing. As a result, this area is no longer designated as a wind energy area.

Future tenders

The deteriorating market conditions require a Government that actively supports the market during this critical phase. The Government is therefore working on an action plan to improve the investment climate for both offshore wind and the electrification needs of its customers. For the period from 2027 onwards, financial support instruments will also be considered, such as a minimum and maximum price guarantee (CfD).

Ijmuiden Ver Gamma sites

Sites IJmuiden Ver Gamma-A and Gamma-B were planned for the 2025 tender round. Though due to deteriorating market conditions for offshore wind energy projects, partly due to lack of large-scale demand for electricity, IJV Gamma-A and -B will be tendered later.

Nederwiek I-A

A tender for the Nederwiek I-A site is planned to open in October 2025 and will be the only site tendered during this round. The Government has simplified the ranking criteria used to assess the wind farm developer's bid. These criteria encourage parties to innovate in areas such as ecology or circularity. Streamlining the criteria is expected to lower costs for wind farm developers seeking to implement these innovations. Moreover, the voluntary financial offer is now to be paid from operation of the wind farm, rather than from when the permit is granted.

Denmark

Denmark will be providing support through two-sided Contracts for Difference in future offshore wind tender rounds.

Market Updates

Upcoming tender

The Danish Energy Agency (DEA) announced the new tender will cover three areas, two in the Danish North Sea, Nordsøen Midt and Nordsøen Syd, and the Hesselø area between Denmark and Sweden. The bid deadline for Nordsøen Midt and Hesselø is scheduled for spring 2026, with Nordsøen Syd expected in autumn 2027. Denmark will be providing support through two-sided CfD.

At the end of May, DEA has invited potential bidders in Denmark's relaunch of the 3 GW offshore wind tender to participate in the market dialogue on procurement procedures.

Potential bidders

TotalEnergies and European Energy have signed a joint declaration to pursue opportunities within offshore wind in Denmark and explore further cooperation on onshore renewables and low-carbon molecule projects. The declaration outlines the parties' shared ambition to participate in the new upcoming Danish offshore wind tender.

Market Updates

Project updates

Norges Bank Investment Management (NBIM) acquired a 49% equity stake in RWE's Thor offshore wind farm, Denmark's largest to date at 1,080 MW, for a total transaction value of around €1.4 billion. The project is currently under construction, with monopile installation commencing this spring, and full commissioning expected in 2027. Energinet has already completed the construction work related to the connection of the project to the national grid.

The Danish Energy Agency (DEA) has extended the electricity production permit for the 23 MW Samsø offshore wind farm by 10 years, the first such extension for an older offshore wind farm in Denmark. The electricity production permit for the Samsø offshore wind farm, built in 2002, was limited to 25 years. However, the owner, Wind Estate, applied for an extension and has now been granted approval to continue operating the wind farm until 2037.

According to the DEA, as of June 2025, the government is processing applications for the extension of the electricity permit for the 40 MW Middelgrunden, the 17.2 MW Rønland, the 161 MW Nysted, and the 160 MW Horns Rev 1 offshore wind farms.

Norway

Norway has launched a competitive bidding process for 1.5 GW Utsira Nord floating offshore wind projects.

Market Updates

Utsira Nord

The Ministry of Energy announced a competition for three project areas for floating offshore wind at Utsira Nord. The project aims to facilitate increased renewable power production, technological development, and new growth opportunities for the supplier industry. The application deadline is September 15.

The allocation of project areas and state aid will take place in two stages, with a two-year maturation phase in between. In the first stage, three project areas will be awarded to the applicants who score highest in a competition based on objective and non-discriminatory criteria. The second stage, the competition for the state aid, will be conducted after the maturation phase.

The qualitative criteria include:

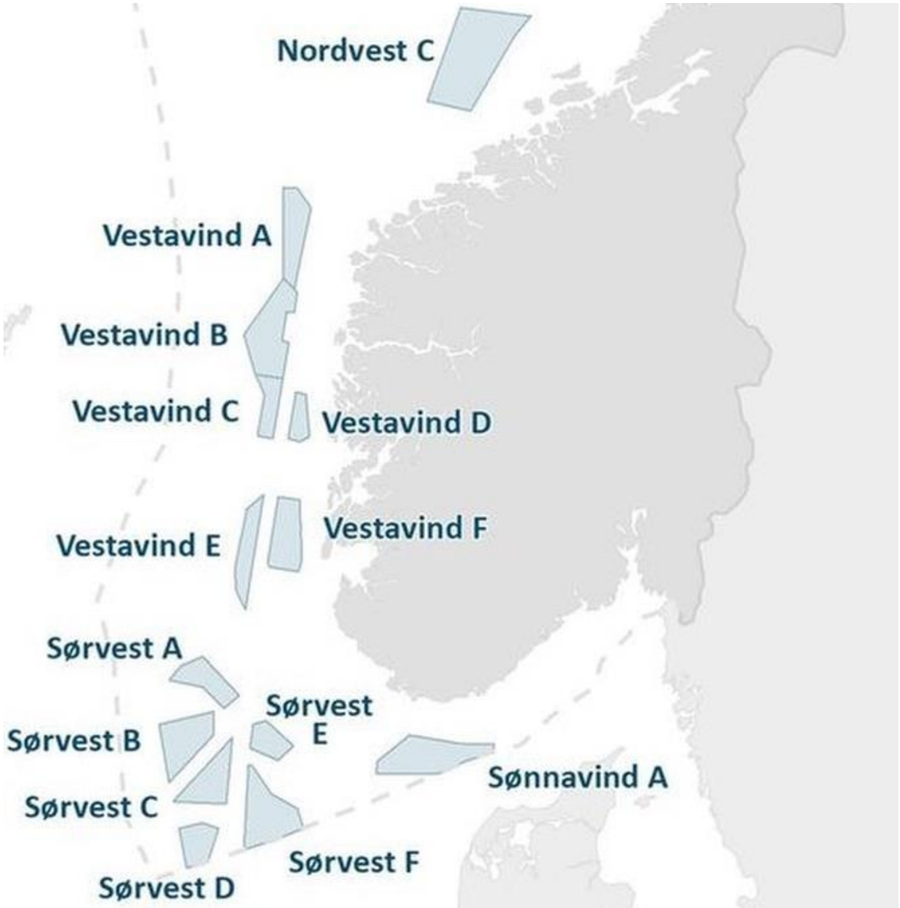
- Cost levels, realism, and maturity
- Innovation and technological development
- Execution capability
- Sustainability
- Positive ripple effects

The Government intends to cap the state support for the first Norwegian floating offshore wind project to NOK 35 billion (approx. EUR 3 billion). The cap will apply to a reference project of about 500 MW and will be subject to correction for inflation.

New development areas

The Norwegian Water Resources and Energy Directorate (NVE) identified four more areas as suitable for future offshore wind development, and the government is now conducting consultations on the findings before deciding on which area to move forward. These are Vestavind C, located off Midthordland, Sørvest B, Sørvest C and Sørvest D, all located in the very south of the North Sea.

Map: New Development Areas



Source: Norwegian Water Resources and Energy Directorate (NVE)

Ireland

Ireland’s second offshore wind auction (ORESS 2.1) is expected to be launched in Q3 2025.

Projects and Auctions

Phase One Projects

In April 2025, Corio Generation announced they are halting the development of the 450 MW Sceirde Rocks project citing challenging site conditions. All other Phase One projects have submitted planning applications.

DMAP

The South Coast Designated Maritime Area Plan (SC-DMAP) for Offshore Renewable Energy (ORE), published in Q2 2025, identified four offshore wind development sites: Tonn Nua, Lí Ban, Manannán and Danu.

In Q2 2025, Ireland’s Minister for Climate, Environment and Energy announced commencement of work on a National DMAP for ORE. The national DMAP is expected to be completed by the end of 2027, with the aim of designating sites around Ireland's entire maritime area to facilitate the delivery of 15 GW of offshore wind by 2040.

ORESS 2.1

The 900 MW Maritime Area A (Tonn Nua) was identified as the first offshore wind development site within the SC-DMAP and will be auctioned through ORESS 2.1.

The terms and conditions for ORESS 2.1 were published in October 2024 and updated in May 2025. The qualification phase of the Tonn Nua Auction is anticipated to open in Q3 2025, with the bidding phase in Q4 2025.

Market and Industry

Eirgrid

In Q3 2024, it was announced that the Irish government will invest EUR 750m into transmission system operator EirGrid to help it deliver grid connections for Phase One offshore wind farms. Phase One projects refer to the over 3 GW of capacity that secured a route to market in 2023. EirGrid is also tasked with building the two 450 MW offshore substations for Tonn Nua along with all onshore and offshore grid infrastructure.

Later, in April 2025, EirGrid unveiled a procurement programme of more than EUR 1.0 billion for work on the delivery of an offshore electricity grid.

Implementation Progress Report

Launched in April 2025, the Implementation Progress Report provided status updates on Powering Prosperity actions to support Ireland in becoming a global leader in offshore renewable energy. One action is delivering long-term funding options to support the scaling of Irish offshore wind supply chain companies. Notably, two significant projects received funding packages of over EUR 1 million and EUR 2 million, respectively.

Belgium and Sweden

In Q2, the Belgian Council of Ministers postponed the tender for Nordhinder Nord until 2026 citing several risks. No major announcements took place in Q2 in Sweden, development of previously announced projects is progressing.

Belgium

Launch of tender

In Q4 2024, the tender for the 700 MW Nordhinder Nord, the first offshore wind project within the Princess Elisabeth Zone, was launched. The deadline, followed by evaluation, was set to take place between July and August 2025, with the results announced in December 2025.

Citizen participation was included as mandatory auction criteria, alongside cybersecurity.

Delay of tender

In July 2025, the Belgian Council of Ministers decided to postpone the tender until 2026 citing several risks: major legal uncertainties, an unrealistic calendar, and a vague financial framework. A new tender is planned to be launched by the end of the first quarter of 2026.

The timeline of the two remaining sites in the Princess Elisabeth Zone were expected to run between 2026 and 2028, with commissioning of the first wind turbines expected in 2030. No changes have been announced to these timelines to date.

Energy Island

Construction of the artificial energy island, which will be built some 45 kilometres off the Belgian coast, is already underway. In April 2025, the first two of 23 caissons were submerged at their final location.

Sweden

At the moment, no specific offshore wind leasing process is in place and projects must obtain licenses to develop offshore wind, such as an Operations Permit, a Building Permit and a number of others.

Project Updates

The County Administrative Board of Uppsala recommended that the Swedish government approve the 2.8 GW **Fyrskeppet** offshore wind farm, which is being developed by Skyborn Renewables. The project area for the offshore wind farm is approximately 488 square kilometres and is located about 50 kilometres north of Örskär in Uppsala County. Skyborn Renewables is planning to install up to 187 wind turbines with a maximum total height of 350 metres.

EnBW has initiated public consultation for its 2 GW **Mimer** offshore wind farm, which is being developed in Sweden and could feature up to 114 turbines. The Mimer offshore wind farm is proposed to be built in the Bothnian Sea approximately 56 kilometres east of Hornslandet, with a distance of about 87 kilometres to Hudiksvall and 91 kilometers to Söderhamn.

Poland

Poland announced an offtake auction for offshore wind scheduled for the end of 2025. Developers will compete for contracts for up to 4 GW worth of capacity.

Auction Updates

Poland announced an offtake auction to support the development of offshore wind farms scheduled for December 17, 2025. Investors will compete for contracts that will support the development of up to 4 GW of project capacity.

The President of the Energy Regulatory Office announced the details of the AMFW/1/2025 auction, which will take place electronically between 8:00 a.m. and 6:00 p.m. The main purpose of the auction is to select offshore wind farm projects that will receive 25-year CfD.

To be admitted to the auction, entities must obtain a certificate from the President of the Energy Regulatory Office. This requires meeting the following criteria:

- conditions for connection to the grid,
- a detailed financial schedule for construction,
- a supply chain plan for materials and services,
- and, most importantly, a valid environmental decision for the implementation of the investment.

The winners will be those who offer the lowest price for electricity from future projects. This price, indicated in the offer, cannot be higher than the maximum price specified in the egulation of the Minister of Climate and Environment. Depending on the location of the project, the maximum price will range from PLN 485.71 to PLN 512.32/MWh. As in the case of auctions for other renewable energy sources, this support mechanism will be financed from the RES fee collected by the transmission system operator.

Auction winners will have seven years from the end of the auction to start producing electricity from their projects.

Auction Updates

The requirement of a valid environmental decision raises the most concerns amongst industry. For the auction to take place and be decided, at least three entities must be admitted to participate and submit three valid bids. So far, only Polenergia and Equinor have valid environmental permits for the 1,560 MW Bałtyk-1 farm. Other key players, such as PGE (Baltica-1, 0.9 GW) and Orlen (Baltic East, ~ 1 GW), are still awaiting these decisions. There is a real risk that the auction will not be able to take place if no new environmental decisions are received.

In response to these challenges, the Ministry of Climate and Environment is working intensively on an amendment to the so-called offshore act (draft UD162). The draft, published in January, provides for the introduction of a conditional pre-qualification mechanism. Thanks to this, investors who are only waiting for an environmental decision could obtain a preliminary certificate of admission to the auction, valid for 12 months. However, a valid decision will have to be provided before the auction itself. The amendment also opens the way for producers developing projects under phase I support to participate in phase II auctions, which was previously impossible.

In the event that the auction scheduled for 2025 cannot take place or be resolved due to an insufficient number of eligible entities, the possibility of holding an "intervention auction" in 2026 has been provided for.

First Application

Equinor and Polenergia have submitted an application to the Energy Regulatory Office (ERO) for prequalification of the Bałtyk 1 offshore wind farm project to participate in the first offshore auction in Poland planned for the end of 2025. This is the first such application submitted to the ERO.

Estonia

The government of Estonia granted the first building permit for the construction of an offshore wind farm. The tender for Saare 7 area was unsuccessful after 0 bids were submitted for the area.

Market Updates

Auctions

The Consumer Protection and Technical Regulatory Authority (CPTRA) announced an auction for the development of an offshore wind farm in the Saare 7 area west of Saaremaa. The auction took place between 10 June 2025 and 12 June 2025. The starting price for Saare 7 area is €2,383,500 and the minimum bid increment is €50,000. Based on the applications for superficies licence of the companies qualified for the auction, the capacity of the planned offshore wind farm is 552 MW. In July, it was announced that the tender was unsuccessful after 0 bids were submitted for the area. This outcome is largely attributable to significant uncertainties in the current market and regulatory landscape, as well as the lack of financial mechanisms, such as CfD. According to the local authorities, it is currently unknown whether there will be a new auction for Saare 7, as it is contingent upon the interest of the developers.

Project updates

The Estonian government approved a draft bill granting the first building permit for the construction of an offshore wind farm in the country. The permit will be granted to Saare Wind Energy OÜ, which plans to build a wind farm on the west coast of Saaremaa. The company seeks to build the project featuring up to 100 turbines with a maximum capacity of up to 1.4 GW. The project could start producing renewable energy in the early 2030s.

The building permit is valid for 50 years and gives the developer the right to build an offshore wind farm along with the necessary infrastructure. It also allows Saare Wind Energy to apply for a building permit from the CPTRA and an environmental permit for special water use from the Environmental Board.

Market Updates

Tuul Energy

Sunly, Deep Wind Offshore, and VALOREM Group signed a partnership agreement to develop offshore wind in Estonia. Following the agreement, VALOREM Group and Sunly will enter Deep Wind Offshores project, which includes an area of 250 sq. km. off Saaremaa Island under exclusive development. This partnership on the Tuul Energy project, which may exceed 1 GW, combines international offshore wind expertise with local competence and experience to execute an ambitious project in a promising market.

Saare 1

CPTRA officially initiated superficies licence proceedings and an environmental impact assessment for the Saare 1 offshore wind farm. This development follows Oxan Energy’s successful bid in the Saare 1 sea area auction held in January. The proposed Saare 1 wind farm, located approximately 60 km west of Saaremaa island, is slated to feature up to 60 wind turbines with a total capacity of up to 900 MW, alongside as many as three offshore substations.

Lithuania and Italy

The second offshore wind tender was relaunched after its suspension in Lithuania. In Q2, an Italian 1.1 GW project receieved environmental approval, becoming the largest project in the Mediterranean Sea to reach this milestone.

Lithuania

Following the suspension of the auction, the government of Lithuania approved the proposed changes to the terms of the tender:

I. Amendments to the Law on Renewable Energy Resources propose changing the procedure for indexing the transaction price won in the tender for 8 years from the date of confirmation of the winner of the tender, and not for 23 years, as in the previous tender terms. It is estimated that this will help reduce the need for support by about EUR 500 million.

II. The tender will be considered successful if at least one participant takes part. Until now, there was a requirement for at least two developers to participate in the auction.

III. The registration period will be longer – 120 calendar days instead of the previously planned 90. The possibility to extend the registration period by 30 calendar days has also been removed.

On 9 June 2025, NERC relaunched the updated tender for the development of the second 700 MW offshore wind farm in the country. Applications can be submitted until 8th September.

Italy

In April 2025, it was announced that the Italian Government had finalized the text of the decree known as the “Offshore Wind Ministerial Decree”, which identifies maritime areas and ports that will serve as key logistical hubs for the deployment of offshore wind energy in the country. Ports of Augusta, Taranto, Brindisi, and Civitavecchia were identified as key areas for the development of offshore projects.

In May 2025, Galileo and HOPE’s Barium Bay received approval of compatibility with the environment by the Ministry of Environment and Energy Security. With a capacity of 1.11 GW, it is the largest project to reach this milestone in Italy and the Mediterranean Sea.

Portugal and Spain

Portugal established that offshore wind capacity will be awarded through a sequential centralized model, while in Spain the industry shows certain level of frustration with how slow the market is moving.

Portugal

On 21 April 2025, the Portuguese Government published on the gazette Order No. 4752/2025, which establishes the tender model through which offshore wind capacity will be allocated in the country. The order states that Portugal will follow a sequential centralized model.

The document also declares that within a period of 60 days, the following would be released:

- Stages and timelines of the first tender process
- Areas eligible for the first tender process
- Identification of the legal framework for the operationalization of the tender process.
- Establishment of a pre-qualification phase and the criteria to be considered.
- Identification of relevant additional works to be conducted.

Spain

In Q2 2025, Puertos del Estado, the public agency that coordinates the Spanish ports system, identified three strategic ports for the deployment of offshore wind in the country: Port of A Coruña on the northwest, Port of Castellón on the east, and Port of Las Palmas in Canary Islands. Other ports that plan to invest to improve the suitability of offshore wind development are Port of Almería, Port of Bilbao, Port of Cádiz, Port of Menorca, Port of Ferrol, Port of Gigón, Port of Tarragona, and Port of Tenerife.

In mid-June, the offshore wind sector gathered in Mindtech’s metal congress showed certain level of frustration with how slow the market is moving. The last important milestone took place back in September 2024, when the government approved the Royal Decree that acts as the national offshore wind regulatory framework, but no further announcements have been made since then.

Greece and Malta

There were no major announcements in Greec and Malta, where offshore wind is not expected to play a key role before 2030.

Greece

According to the Greek Energy Portal Energy Press, Greece's offshore wind power plan, targeting 1.9 GW by 2030, is significantly delayed. The first key milestone, which is the approval of the National Development Program, remains stalled.

This holdup means tenders for the first "wave" of offshore projects will likely be pushed back to 2028, at best, missing the original 2026 goal set by the energy ministry's previous leadership. That timeline was critical to ensuring the 2030 target remained viable.

Malta

In June 2025, the Climate Action Authority submitted Malta's progress report on the updated National Energy and Climate Plan (NECP). By 2030, emissions from power generation are expected to fall by 77% compared to 2005, with the share of renewable energy rising to nearly 25% of total energy use. Offshore wind, expected to come online in the country beyond 2030, will further support long-term decarbonization.

REGIONAL UPDATES AND ANALYSIS

APAC

ERM REGIONAL MARKET INTELLIGENCE LEADS

APAC market experts

Raimond Dasalla
Raimond.Dasalla@erm.com
APAC Market Expert

Selected experience:

- APAC Lead
- Philippines, Vietnam, and India

Sean Peedle
Sean.Peedle@erm.com
APAC Market Expert

Selected experience:

- Japan

Yiting Lu
Yiting.Lu@erm.com
APAC Market Expert

Selected experience:

- Taiwan and South Korea

Akene Koyamada
Akane.Kovamada@erm.com
APAC Market Expert

Selected experience:

- Japan

Sustainability is our business

Australia and India

The Victorian government plans to award a CfD to 2 GW of offshore wind capacity by October 2026. Meanwhile in India, the government cancelled both Gujarat and Tamil Nadu tenders due to lack of interest from developers.

Australia

Victoria CfD

The Victorian government will launch a CfD auction for offshore wind in September 2025, offering 2 GW of capacity. The Victorian government plans to award the contract by October 2026.

Australia Forecast

Victoria's offshore wind auction is expected to support the commissioning of 2 GW of capacity from around 2031 onwards. ERM forecasts an annual commissioning capacity of around 1 GW from 2032 onwards, made up of additional projects that have secured a feasibility licence. Timely commissioning of these projects is likely reliant on further route to market frameworks, supporting policies, and an established supply chain, including skilled workers.

Declared Offshore Wind Zones

Zone	Potential Capacity (GW)	Awarded Capacity (GW)
Gippsland, VIC	25	25
Hunter, NSW	5.2	2
Southern Ocean, VIC	2.9	1
Indian Ocean, Bunbury, WA	11.4	1.5* (Preliminary)
Illawarra, NSW	2.9	tbc
Bass Strait, NT	20	tbc

*Two projects, Bunbury OWP South and Westward Wind, have also been shortlisted due to overlapping boundaries. If the overlap can be resolved, they may be able to secure feasibility licences.

India

The Solar Energy Corporation of India (SECI) has officially cancelled both the Gujarat and Tamil Nadu offshore wind tenders, which together accounted for a total capacity of 4.5 GW. ERM Market Intelligence previously highlighted that these tenders had faced multiple rescheduling attempts since their initial announcements – Tamil Nadu's seabed lease tender in February 2024 and the Gujarat project in September 2024.

According to local media reports, the cancellations were driven by a lack of interest from both domestic and international developers. This development could pose a significant setback to India's offshore wind ambitions, particularly its target of achieving 37 GW of installed capacity by 2030. The announcement raises concerns that future offshore wind tenders may face delays or require substantial revisions.

Industry analysts attribute the tepid response to insufficient incentives that fail to justify the risks developers must undertake. Although the government introduced viability gap funding for the first 1 GW of offshore wind projects in June 2024, it has proven inadequate. Developers continue to seek stronger financial and regulatory support to mitigate the high costs and risks associated with offshore wind development, especially in new markets.

In light of these challenges, it is expected that the Indian Government will reconsider its auction framework to better align with the realities of early-stage offshore wind development. However, no clear timeline has been provided for the relaunch of these tenders or for the continuation of subsequent planned auctions.

Japan

Two sites in Hokkaido will be designated as promotion zones, and auction rules have been revised for the upcoming Round 4, including relief measures for developers from previous rounds. At the same time, Japan is taking major steps to promote floating offshore wind power.

Preparation for Round 4

On June 25, 2025, the government unveiled draft designations for Promotion Zones along the Hiyama and Matsumae coasts in Hokkaido, anticipated to be part of Round 4. The Matsumae area (~260–310 MW) and the Hiyama area (~910–1,140 MW) achieved consensus for designation through council meetings held in 2024 and early 2025. Notably, the Hiyama coast marks a milestone as the first site in Japan to adopt a centralized survey methodology. In Matsumae, construction activities will be paused during the squid breeding season (February to May), while additional mitigation measures will be implemented during the tuna fishing season (July to January) to minimize disruption. Developers will be required to deploy advanced noise and vibration reduction technologies, such as the Double Big Bubble Curtain (DBBC). In Hiyama, construction during the salmon fishing season (September to October) will be subject to thorough consultation and transparent engagement with local fisheries stakeholders. Official designation of both areas as Promotion Zones is expected by August 2025. If confirmed, they will represent the first such zones established in Hokkaido, marking a significant step forward in Japan's offshore wind development.

The government is preparing a revised draft of the Guidelines for Public Tender of Exclusive Occupancy and Use for R4, indicating a policy to allow the conversion from the Feed-in Tariff (FIT) scheme to the Feed-in Premium (FIP) scheme for projects awarded in R1. In R1, Mitsubishi Corporation secured all three offshore wind zones in Akita and Chiba Prefectures under the FIT scheme. However, Mitsubishi announced it would reassess the viability of these projects due to the deteriorating business environment caused by inflation. In response, the government proposed an amendment that permits a transition to the FIP scheme for R1 projects. The revised R4 draft also places greater emphasis on risk management in project evaluations. During the public comment period and developer hearings, some stakeholders raised concerns about legal stability and fairness, suggesting the change could be seen as preferential treatment. However, a June expert panel concluded that the transition was legally sound and reasonable change.

Other Market Updates

The government enacted an amendment to existing legislation allowing the installation of offshore wind power facilities within its Exclusive Economic Zone (EEZ). Due to the limited availability of shallow waters suitable for fixed-bottom turbines, the previous legal framework restricted the installation of offshore wind power facilities to territorial waters. Japan possesses one of the world's largest areas when its EEZ is combined with its territorial waters, nearly ten times the size of its territorial waters alone. The legal revision has broadened the scope of permissible installation areas, fueling expectations for a substantial expansion in floating offshore wind power deployment. The government will designate areas with favorable conditions, such as wind patterns and seabed geology, as feasible zones. Within these zones, developers will be allowed to freely define their own project areas and submit applications. This new system is modeled after the two-stage approach used in the UK. Developers must conduct consultations with stakeholders and carry out detailed marine surveys. Once coordination is complete, they submit their final plans to the government. If the plans meet the criteria upon review, the developers will be granted official permission to install the facilities.

In June 2025, five new areas in the Izu Islands of Tokyo, off the coasts of Ōshima Town, Niijima Village, Kōzushima Village, Miyake Village, and Hachijō Town, were designated as Preparatory Zones, with floating wind turbines being considered for all five areas. The Izu Islands are a chain of islands located approximately 100 to 350 kilometers south of central Tokyo. At COP29 last year, Tokyo announced its goal to introduce gigawatt-scale floating offshore wind off the coast of the islands. At the same time, the Ministry of Economy, Trade and Industry (METI) and the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) selected two of the five areas, the Niijima Village coast and Kozushima Village coast, as survey target zones under the central method. Additionally, joint surveys by project developers have already begun for the Oshima Town coast. The Izu Islands are volcanic islands that belong to the Fuji Volcanic Belt. These islands were formed by submarine volcanoes that grew and emerged above the sea surface. Because the seabed drops off steeply from the land, the local governments are planning to install floating offshore wind turbines rather than fixed-bottom types.

Philippines and Vietnam

The Philippine offshore wind market is gearing up for the upcoming offtake auctions scheduled by Q3 2025. Meanwhile in Vietnam, the government approved the much-anticipated offshore wind pricing.

Philippines

Market updates

The Department of Energy (DOE) launched the process for the Round 5 of the Green Energy Auction Program (GEA) which will be specifically for offshore wind by Q3 2025. GEA is the main route-to-market program in the Philippines in which contracts are valid for 20 years and the winning tariffs fixed throughout. DOE will award 3.3 GW of fixed-bottom capacity for this round with an expected delivery year between 2028 to 2030. The decision to defer the auction of floating projects is due to DOE's view that the technology is still "in the early stages of development."

DOE and the Southeast Asia Energy Transition Partnership (ETP) have released the "*Guidebook to Permitting and Consenting for Offshore Wind Energy in the Philippines*," a detailed resource to help developers navigate the permitting process for offshore wind projects. It outlines over 80 requirements from more than 25 government agencies, covering every stage – from early site assessments and feasibility studies to construction, operations, and decommissioning. DOE Secretary Sharon Garin said the steps in the guidebook will soon be added to the country's online Energy Virtual One-Stop Shop System to to ensure compliance by all permitting agencies.

Project & supply chain updates

ACEN Corp. bought a 25% stake in CIP's 1 GW Camarines Offshore Wind project as the project geared up its participation to the upcoming GEA Round 5. ACEN's minority stake in the CIP-led project is in addition to the development of its own offshore wind sites across the country.

Atlantic, Gulf & Pacific Co. (AG&P), a vertically-integrated downstream LNG infrastructure provider, expressed its openness to support the development of the country's offshore wind industry through providing essential support services for offshore wind deployment including port infrastructure, logistics, fabrication, and workforce development.

Vietnam

Offshore Wind Pricing

The Ministry of Industry and Trade (MOIT) approved the offshore wind pricing for Vietnam as set by Electricity Vietnam (EVN), setting zonal-based ceiling tariffs:

- Northern Region: 3,975.1 VND/kWh ($0.15)
- South-Central Region: 3,078.9 VND/kWh ($0.12)
- Southern Region: 3,868.5 VND/kWh ($0.15)

According to EVN, the pricing reflects the estimated investment costs of around 93.6 billion VND ($3.6 billion) per installed MW, with adjustments based on the regional capacity factors – with the North having 38.4%; South-Central 49.6%; and South 39.5%.

Project update

Vietnam, Singapore, and Malaysia have signed a new agreement to jointly explore offshore wind energy exports. Announced during the 46th ASEAN Summit in May 2025, the initiative builds on a 2023 partnership between Vietnam's PTSC and Singapore's Sembcorp to develop an offshore wind farm in Vietnam. Under the new arrangement, Malaysia's MY Energy (comprising of Tenaga Nasional Berhad and Petronas) will construct a subsea cable linking the wind farm to northeastern Malaysia. From there, electricity will be transmitted to Singapore via Malaysia's national grid. This collaboration supports the broader ASEAN Power Grid initiative, aiming to harness and distribute the region's offshore wind potential, particularly from Vietnam and the Philippines.

South Korea

GRIP

Public-led bidding was added in the offshore wind competitive bidding in May 2025. The offtake bidding is expected to award 1.25 GW fixed-bottom in total.

2025 H1 offtake bidding announcement

In May, the Korea Energy Agency (KEA)'s New and Renewable Energy Centre announced the competitive bidding for a fixed-price contract for wind power in 2025 H1. This time, only fixed-bottom projects are considered, and the bid was separated into two categories: public-led 500 MW and general 750 MW. Bidders can only participate in either category per EBL. The auction was open until 8th July 2025.

The government's proposed upper limit price for offshore wind in this round is the same as the one last year, at 176,565 KRW/MWh (around 128.34 USD/MWh).

Through the establishment of a public-led bidding market, preferential prices will be provided when using government-approved equipment and the introduction of security indicators. A preferential upper limit price (3,660 KRW/MWh; around 2.66 USD/MWh) is expected for public-led projects participating in this round. This is interpreted as a government measure to expand the role of public institutions in the offshore wind market. In addition, if government R&D demonstration products are utilised, an additional preferential price (27,840 KRW/MWh; around 20.24 USD/MWh) will be granted.

Standards of participation equity for public institutions under public-led are listed below:

Category	JV	Sole investment
Basic Requirements	>50%	34% or more
Use of Government R&D Demo Equipment	34% or more	20% or more
Use of equipment for SMEs	20% or more	10% or more

Projects participating in this round's auction included:

- General – Haesong 3 (CIP, 504 MW) and Yeonggwang Hanbit (B Grimm Power, 340 MW)
- Public-led – Southwest Offshore Wind Phase 2 (KEPCO Korea + Korea Offshore Wind Power, 400 MW), Handong-Pyeongdae (Jeju Energy Corporation + EWP Consortium, 100 MW), Dadaepo (Corio, 99 MW), and Aphae (CGO + Hyundai E&C + Korea Power Technology, 80 MW)

Bidding rule changes

Security is the new indicator under non-price criteria. This indicator mainly looks into three aspects: (1) securing a supply chain of key resources for stable energy supply and power plant security; (2) comprehensive evaluation of plans for the use of vessels and manpower; and (3) power plant cybersecurity and physical security plans.

Category	Indicators	Point – public led	Point – general
Price Indicators	Bid price	**50**	**50**
Non-price Indicators	Resident Acceptance	**4**	**4**
	Industrial & Economic Effects (including security and public roles)	**20**	**22***
	Base and O&M Ports	**8**	**8**
	Security	**8**	**6**
	Project Progress	**2**	**2**
	Grid Connection Performance	**8**	**8**

* Additional 2 points is for the evaluation of the proportion of public equity to accelerate the RE supply.

Electricity Business Licences (EBLs) status & project updates

The Ministry of Trade, Industry and Energy (MOTIE)'s Electricity Committee approved seven west coast projects with a total capacity of 2.7 GW on 27th June. Projects that received EBLs include Kredo Offshore's Sinan Blue Jaeun, Sinan Blue Imja, Sinan Blue Shin'ui, and Sinan Blue Bigeum 1&2 (400MW per project); KCH's K-Wind Power (323 MW); and Deep Wind Offshore (DWO)'s Admiral Lee 1 (345 MW).

Jeonnam 1 (96 MW) entered commercial operation in May 2025.

Taiwan

Rules on the upcoming Round 3-3 is still being finalised by the government. Hailong and Greater Changhua 2B & 4 have reached their first power generation.

Market updates

Regarding the R3-1 awarded projects, CIP has signed CPPAs with Far EasTone Telecommunications, United Microelectronics Corporation (UMC), Sino-American Silicon Products, MediaTek, and Google its Fengmiao 1 (495MW) offshore wind project. Vestas also signed a firm order and a long-term service agreement to supply 33 WTGs, and SK Oceanplant started producing jacket foundations. CIP also entered into an agreement to divest 10% stake to Mitsui O.S.K. Lines (MOL). SRE awarded a contract to Century Wind Power (CWP) to supply foundations for Formosa 4 (495 MW).

All R3-2 awarded projects have signed the administrative contract (AC). However, the Ministry of Economic Affairs (MoEA) cancelled the development rights of Corio & TotalEnergies' Haiding 1 (360 MW) and Infravest's Meisen (240 MW) as the projects did not pass the review. Moreover, Corio might likely end its offshore wind business in Taiwan due to its global reorganisation.

For Round 2 projects, Haixia 1 (300MW), invested by Lealea Group, has been revoked of its AC due to MoEA's refusal in extension of its planned COD. For Hailong offshore wind project (1,022 MW), all pin piles were installed, and the project reached first power generation in June and announced that it signed a CPPA with TSMC for Hailong 2b&3 (728 MW), Ørsted's Greater Changhua 2b&4 has finished installation of all suction bucket jacket (SBJ) foundations in May and generated its first power in mid-July. As of June, over a third of the WTGs has been in place.

SRE decided to acquire an additional 26% stake in Formosa 2 offshore wind farm (376 MW), raising its ownership from 25% to a controlling 51% majority stake.

Ongoing discussions on R3-3 rules

In light of the cancelled projects from previous rounds, R3-3 could potentially bid for a total capacity of 3.9 GW, which includes both the originally planned capacity (3 GW) and the capacity from the cancelled projects (0.9 GW in total) in earlier auctions. However, the total capacity available for bidding is still subject to ongoing discussions.

In addition to relaxation of Industrial Relevance Plan (IRP), key changes under discussion are:

- NO cap on the capacity of a single offshore wind farm or the total development capacity, and
- To introduce a **"floor price"** mechanism to encourage early grid connection. Once the grid connection timeline is set, developers that connect to the grid ahead of schedule can secure a higher floor price.

REGIONAL UPDATE AND ANALYSIS

Americas

ERM REGIONAL MARKET INTELLIGENCE LEAD

ANDREW SIROTA – ANDREW.SIROTA@ERM.COM

UNITED STATES, CANADA, LATIN AMERICA

Sustainability is our business

US Market Updates

GRIP

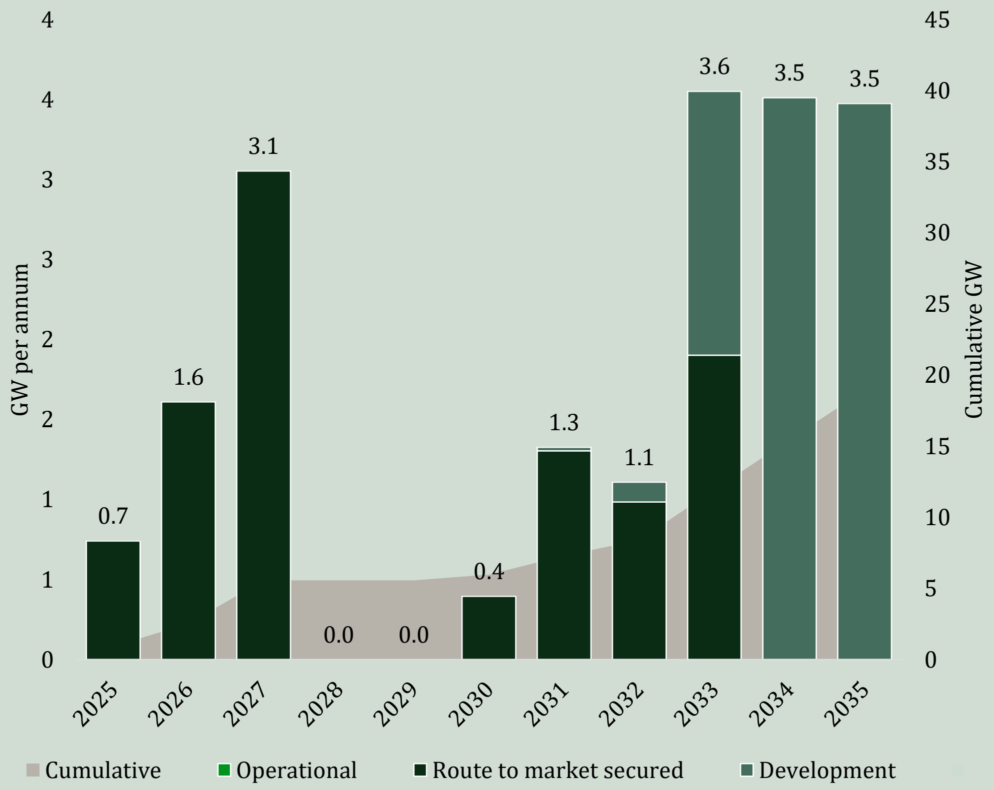
Construction continues on several East Coast projects totaling more than 5 GW, however, the results of the 2024 election and resulting policy changes have significantly stunted offshore wind forecasts in the United States.

Market Summary

ERM notes that the results of the November 2024 Presidential Election have significantly impacted the offshore wind forecast for the 2020s. Although the exact impacts are still playing out, project development and permitting have become increasingly difficult. Projects that have not already received their Record of Decision (ROD) will likely face delays and delays to projects with RODs are possible. The five projects are in construction and will likely reach COD in the 2020s, although some uncertainty still exists in downside scenarios. Other projects will likely have to wait for a new permitting environment to proceed. Additional projects are forecast to reach COD in the mid-2030s after restarting development work in 2029/2030. The forecast is highly uncertain.

The U.S. in Q2 saw continued construction activity on several U.S. projects. Dominion Energy announced that it completed the first installation season of the Coastal Virginia Offshore Wind (CVOW) project in 2024 and is on schedule in the second installation season. Vineyard Wind, which has been slowed by a blade failure, has completed the installation of all foundations and is now replacing blades. Construction of Revolution Wind continues with most foundations installed. Sunrise Wind began construction in Q3 2024 with initial activity at an onshore facility. Ørsted announced significant delays and cost increases for Sunrise Wind, pushing the expected commissioning to the second half of 2027. In Q2 2025, the Trump Administration temporarily placed a stop-work order on Empire Wind before changing course and allowing construction to commence.

U.S. Market Forecast



US Market Updates

Actions taken by the Trump Administration introduce significant headwinds and policy uncertainty, affecting current and future offshore wind projects across the country.

Trump Administration Actions

Since President Trump's inauguration in January 2025, his Administration has taken many actions targeting offshore wind development. On July 30, 2025, the Bureau of Ocean Energy Management (BOEM) officially rescinded designated Wind Energy Areas (WEAs) on the U.S. Outer Continental Shelf (OCS). This decision aligns with the Presidential Memorandum of January 20, 2025, which temporarily withdrew all offshore wind leasing and initiated a review of federal leasing and permitting.

On July 17, 2025, the Department of the Interior announced it is ending "preferential treatment for unreliable, subsidy-dependent wind and solar energy projects", including offshore wind, as part of a broader shift under Executive Order 14315 (see below) and the One Big Beautiful Bill Act. All Department-related decisions and actions concerning wind and solar energy facilities will undergo elevated review by the Office of the Secretary, including leases, rights-of-way, construction and operation plans, grants, consultations and biological opinions. This enhanced oversight will ensure all evaluations are thorough and deliberative.

On July 7, 2025, President Donald J. Trump signed Executive Order 14315, eliminating federal subsidies and preferential treatment for wind and solar energy projects, including offshore wind. This action, part of the broader "One Big Beautiful Bill Act," directs the Treasury to terminate clean electricity production and investment tax credits and imposes stricter restrictions on foreign-controlled energy supply chains. This Executive Order states that "unreliable wind and solar energy sources displace affordable, dispatchable energy, compromise America's electric grid, and denigrate the beauty of our Nation's natural landscape."

On July 4, 2025, President Trump signed the so-called "One Big Beautiful Bill Act", which significantly altered clean energy incentives making it significantly more difficult for wind projects to qualify for tax credits

Empire Wind Temporary Stop Work Order

Empire Wind

On April 16, 2025, the BOEM issued a stop work order for the Empire Wind 1 project, citing concerns over insufficient interagency consultation and environmental analysis. The halt threatened to derail the project, with Equinor warning it could face termination due to losses of approximately $50 million per week.

Following intense discussions involving federal, state, and city officials, including Governor Kathy Hochul, Mayor Eric Adams, and other stakeholders, the stop work order was lifted on May 20, 2025, allowing construction to resume. The decision was reportedly influenced by New York's commitment to collaborate on energy infrastructure, including natural gas pipeline development in the State. Equinor, the project developer, confirmed that Empire Wind is over 30% complete and announced that marine construction activities resumed in Spring 2025, targeting commercial operation by 2027.

Canada

Nova Scotia has identified four Wind Energy Areas as the Province moves closer to holding the first Canadian offshore wind call for bids in late 2025 or early 2026.

Nova Scotia

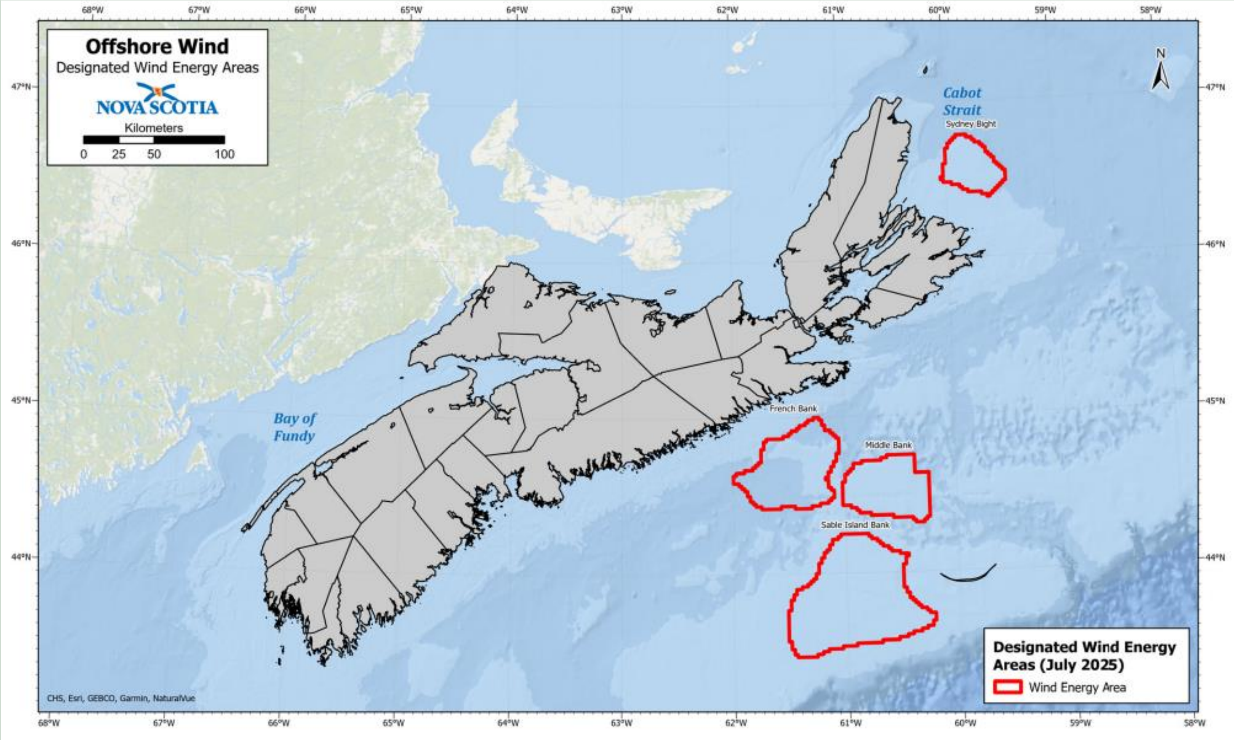
The regional assessment for Nova Scotia identified eight potential wind energy areas. Subsequently, in March 2025, the Provincial Government shortlisted five areas to proceed as Wind Energy Areas. In July 2025, the Province of Nova Scotia and the Government of Canada jointly designated four Wind Energy Areas.

The Final Report of the Regional Assessment of Offshore Wind Development in Nova Scotia included an approximate timeline for offshore wind development in Nova Scotia. The timeline is summarised below. The Governments continue to target late 2025 or early 2026 for the first call for bids.

- 2024-2025: Regulation and Reporting
- 2025: Wind Energy Area Selection
- 2025-2026: Calls for Bids and Licensing
- 2025-2031: Assessments and Authorisations
- 2031: Financing
- 2031-2032: Construction
- 2033-2035: Operations Initiate

In response to the federal halt on new offshore wind development under the Trump administration, Massachusetts officials have entered discussions with Canadian counterparts to explore joint development of new energy sources, particularly offshore wind. Massachusetts officials are exploring this possibility to meet clean energy goals and address energy affordability by increasing electricity supply.

Designated Wind Energy Areas



Source: Natural Resources Canada

Canada

The Final Regional Assessment for offshore wind in Newfoundland and Labrador, released in Q1 2025, identified recommended areas for future offshore wind licensing.

Newfoundland and Labrador

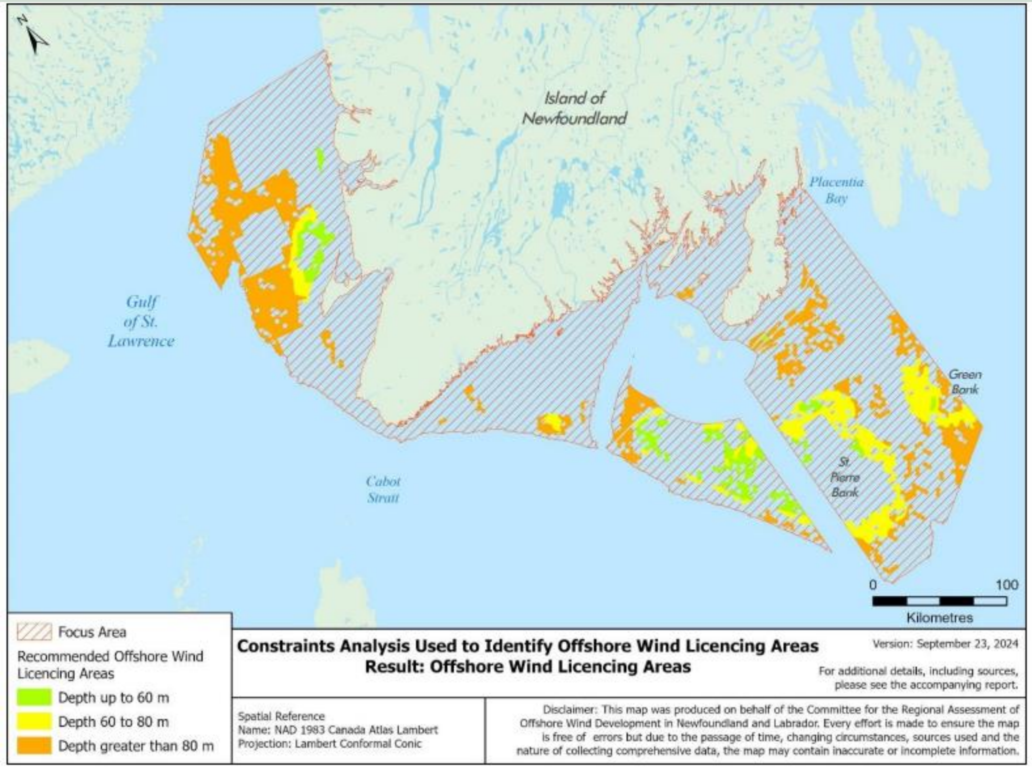
In June 2025, Newfoundland and Labrador officially enacted legislation enabling the development of offshore renewable energy, following the federal passage of Bill C-49 in October 2024 and the province's own Bill 90 in March 2025. These laws modernize the regulatory framework and expand the mandate of the former Offshore Petroleum Board, now renamed the Canada–Newfoundland and Labrador Offshore Energy Regulator (C-NLOER), to oversee renewable energy projects.

The final regional assessments for offshore wind in Newfoundland and Labrador was released in January 2025 and submitted to Federal and Provincial Ministers to determine next steps. This assessment will enable various stakeholders, including Indigenous communities and members of the public, to share their expertise and feedback, ensuring that the development process is informed and inclusive.

The map on the right illustrates the initial offshore wind energy licensing areas for consideration, which resulted from the removal of various social, physical, and environmental constraints. The map additionally depicts which of these areas may be suitable for technologies designed for depths up to 60 m, 60-80 m, and 80 m+. The final recommended offshore wind licensing areas were selected for depth suitable for fixed bottom technologies. This is represented by the green areas on the map to the right (up to 60m).

No specific development timeline has been published for Newfoundland and Labrador. As stated in the report, The governments of Canada and Newfoundland and Labrador have no immediate plans to identify offshore wind licensing areas or hold a call for bids in the Offshore Area. To date, there are no offshore wind projects in Canada. The Government of Newfoundland and Labrador has not issued a development goal or timeline.

Initial Offshore Wind Energy Licensing Areas for Consideration



Source: Natural Resources Canada

Colombia

Colombia continues to progress on schedule and recently announced that the country's first offshore wind solicitation will offer 15-year contracts. Colombia aims to develop 3 GW of offshore wind by 2035.

Market Updates

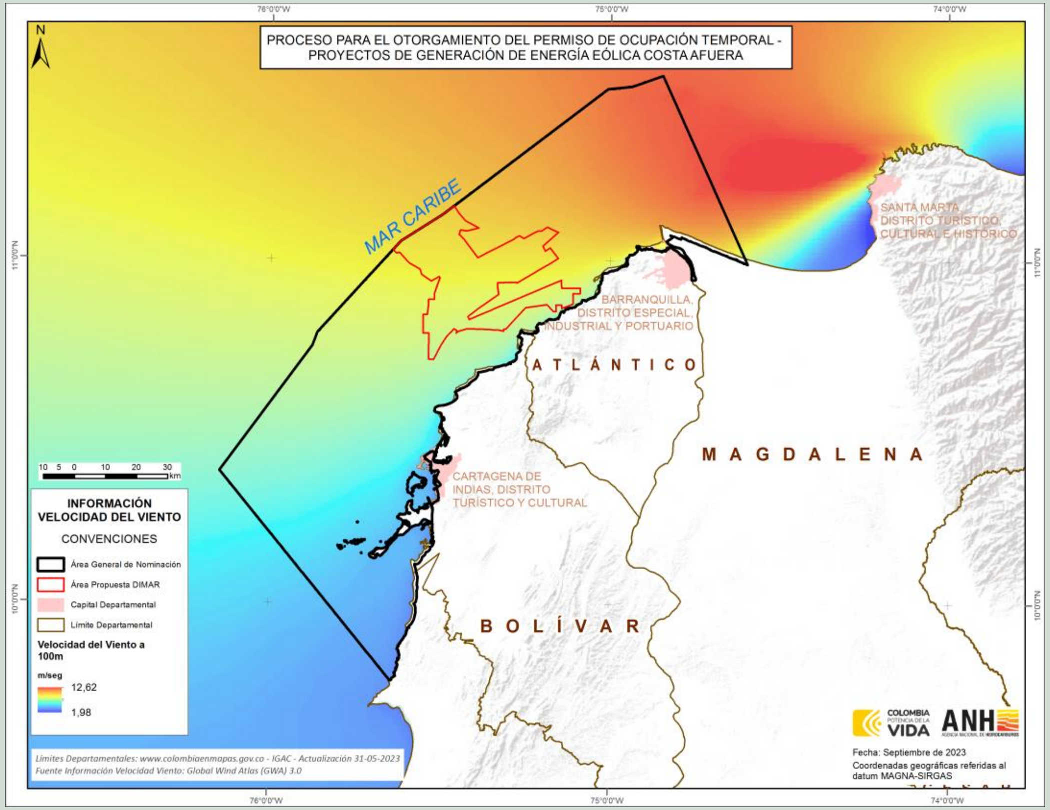
In August 2025, the Ministry of Mines and Energy launched the country's first offshore wind bidding round, offering 15-year contracts under a CfD scheme to ensure price stability and investor confidence.

In December 2024, the National Hydrocarbons Agency announced that eight companies have been authorized to participate in the upcoming offshore wind bidding process. The qualified companies were required to submit area nominations by January 31, 2025, and the Colombian government received 69 nominated areas. The Colombian government will now work to evaluate the suitability of the areas and begin the validation process. Once the suitability of the sites is verified, the qualified developers will be able to make offers on areas of interest.

The full list of companies is listed below:

- Parque Eólico Offshore Vientos Alisios S.A.S. E.S.P
- CI GMF II Coöperatief U.A.
- Jan De Nul N.V.
- Ecopetrol S.A.
- PowerChina International Group Limited
- CTG Colombia Holding S.A.S.
- Promesa de sociedad futura OSW Colombia S.A.S. (Dyna Energy Latin America Limited, Seynekun ESG Solutions S.A.S., and Enterprize Energy (UK) Limited)
- Promesa de sociedad futura Deme Celsia Offshore Wind S.A.S (Celsia Colombia S.A E.S.P and Deme Concessions Wind N.V.)

Available Area



Nominated Areas will be announced by the end of April 2025

Source: Agencia Nacional de Hidrocarburos

Brazil

Legislation signed in Q1 2025 established the framework for offshore wind leasing and development to capture Brazil’s extensive technical resource potential, and the first license for an offshore wind project was issued in June 2025.

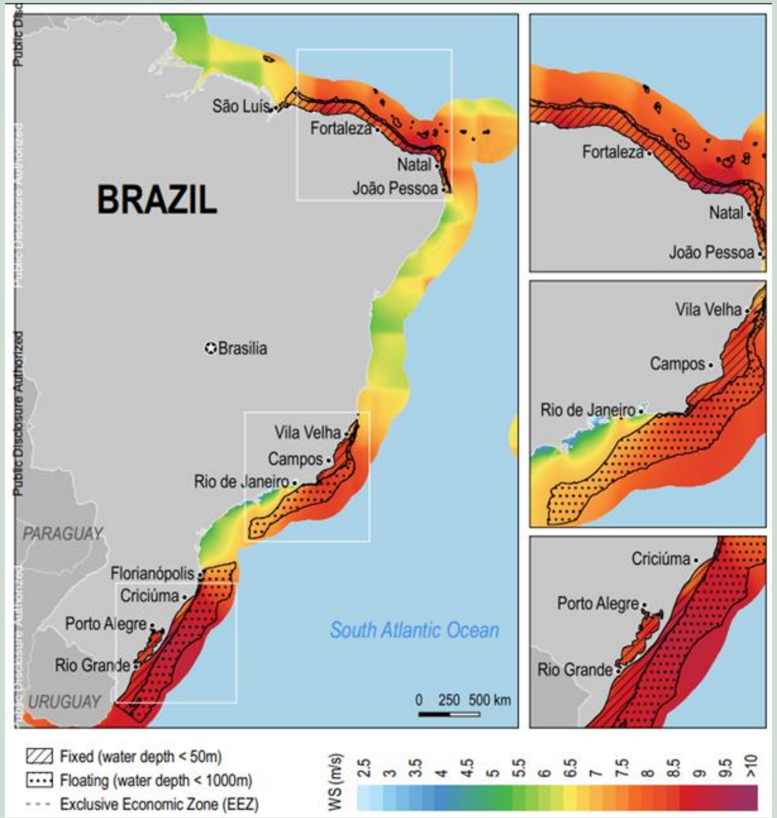
Market Updates

On June 24, 2025, Brazil’s environmental agency IBAMA granted the country’s first preliminary license for an offshore wind project. The 24.5 MW pilot, led by SENAI-RN and the SENAI Institute for Innovation in Renewable Energy (ISI-ER), will feature two turbines off the coast of Areia Branca. A public call for partners will launch in August 2025.

On January 10, 2025, Brazilian President Luiz Inacio “Lula” da Silva signed Law No. 15.097 into law. Expectations are for the Brazilian government to hold the first offshore wind auctions in the second half of 2025 or in 2026. In December 2024, the Brazilian Senate passed Law No. 15.097 which regulates Brazil's offshore energy potential for electricity generation. It establishes the framework for granting approval for offshore energy projects through authorizations or concessions based on expressed interest from developers. The law underscores sustainable development, job creation, and regional growth while mandating compliance with environmental protection standards and local community engagement.

Historically, Brazil’s high potential as a future offshore wind market has been weighed down by the slow development of federal rules and incentives to support offshore wind. There is expected to be over 1,000 GW of technical potential for fixed and floating offshore wind off the coast of Brazil. The main opportunities for floating offshore wind are in the north, nearby Fortaleza, the central coast, and Rio de Janeiro, and to the south near the Rio Grande.

Resource Potential

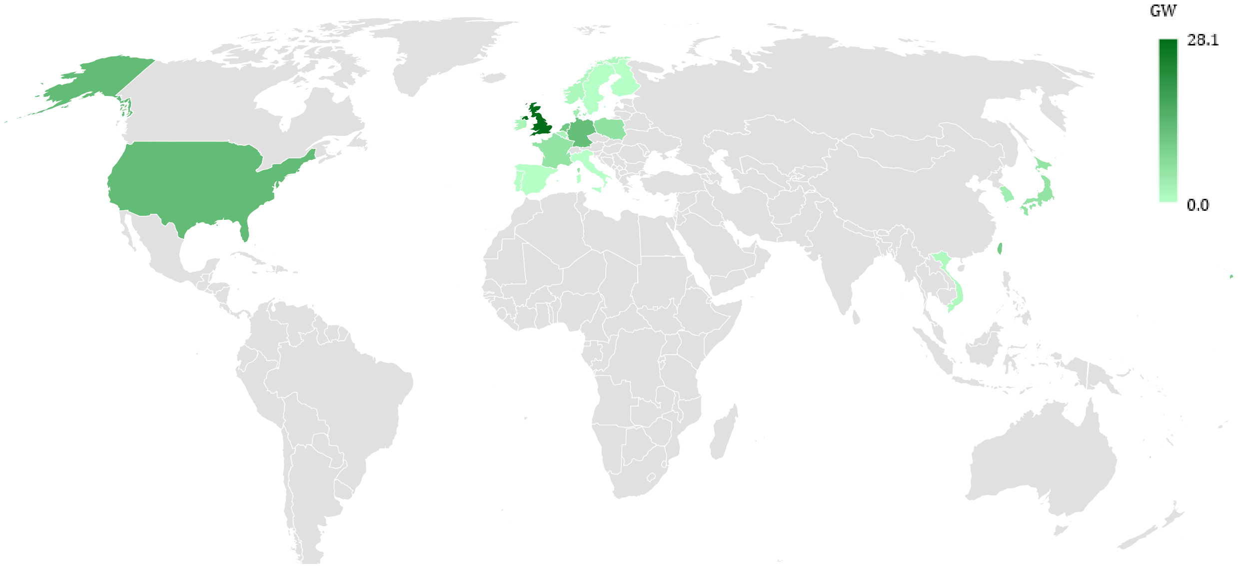


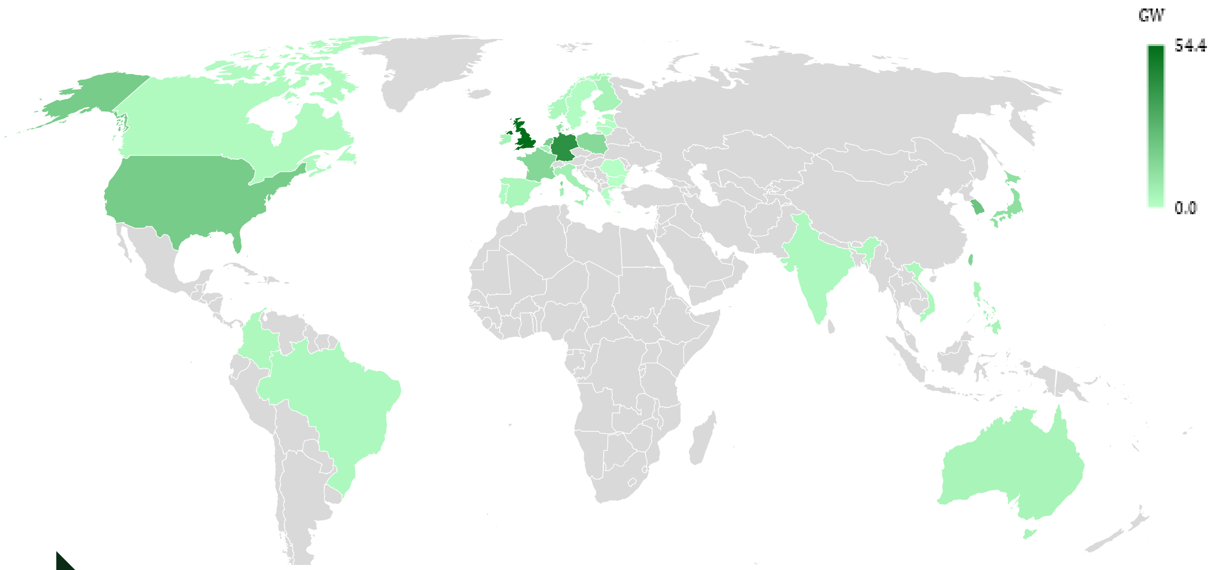
Source: ESMAP

6 Forecast

Global Commissioning Forecast 2035

Near 280 GW of offshore wind capacity could be operational globally (excl. China) by 2035. Over 230 GW of this capacity is set to come online in the next 10 years.





238.1 GW

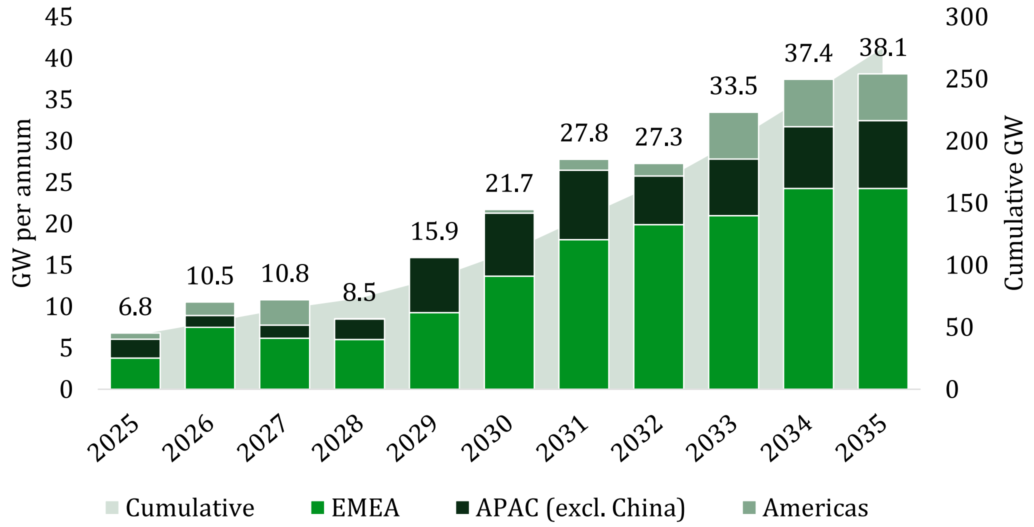
Q2 2025
41.9 GW
Operational

2035
280 GW
Operational

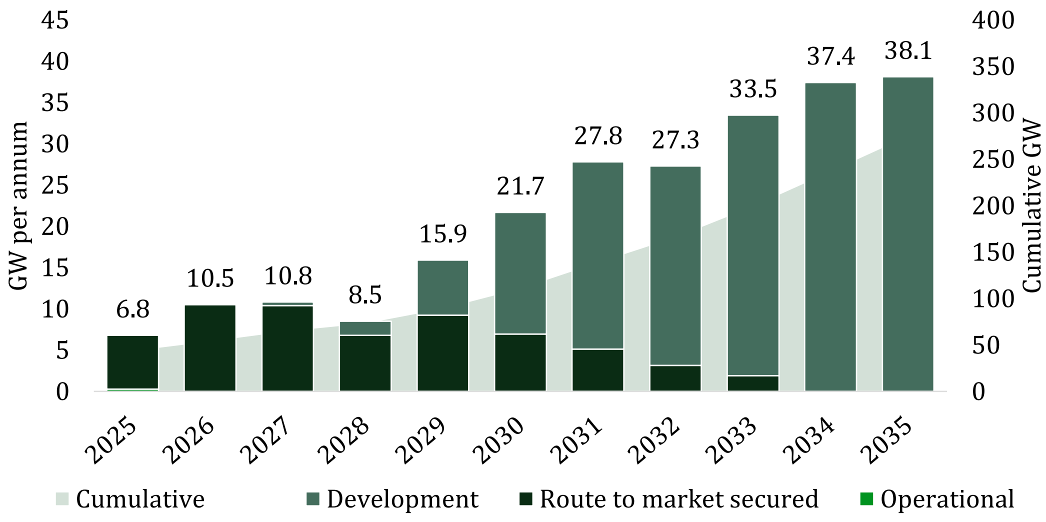
Global Commissioning Forecast

Most of the capacity currently forecast to be commissioned globally (excl. China) over the next decade is expected to come from the EMEA region.

Forecast by region (excl. China)



Forecast by status (excl. China)



Over 275 GW of offshore wind capacity is forecast to be operational globally (excl. China) by 2035. Projects in EMEA account for 190 GW of this capacity, with continued increases in annual commissioning activity from 2029 onwards as commercial-scale projects allocated from after 2020 begin to enter construction. Further leasing rounds and tenders support a sustained build-out in the region throughout the forecast period.

Installed capacity in APAC (excl. China) is expected to ramp up from 2028 onwards from developments enabled by leasing and route-to-market allocation activity since 2021. By 2035, over 60 GW of capacity could be installed in APAC (excl. China).

No offshore wind installations are expected in the Americas between 2028 and 2031, following a withdrawal of all areas of the Outer Continental Shelf (OCS) from consideration for new or renewed offshore wind leasing.

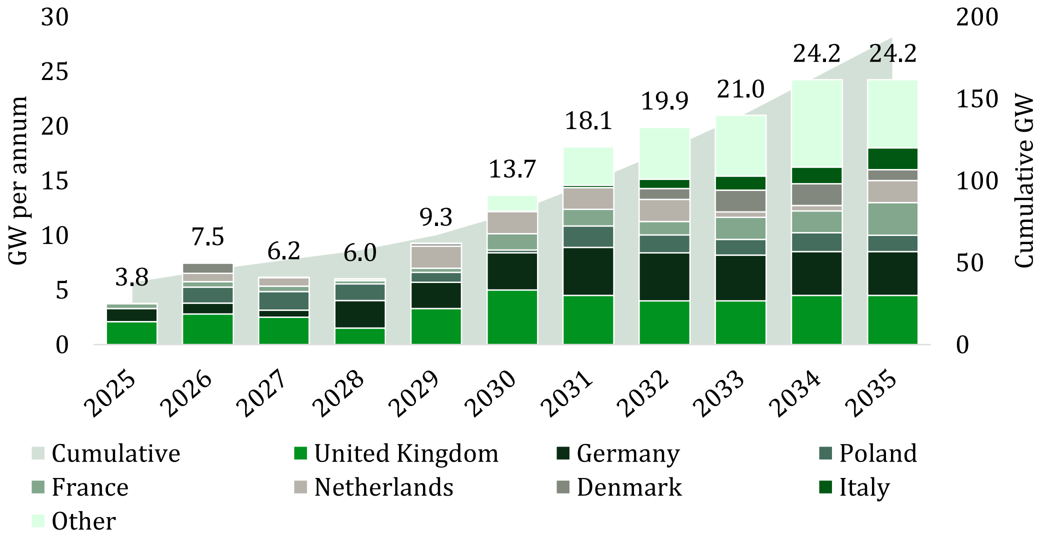
Almost 7 GW is expected to come online throughout 2025. Some of the capacity with a route to market secured status entering operation in 2025 refers to projects generating power but are yet to fully commission the site.

Capacity with a secured route to market is attributed to over 10 markets across EMEA and APAC, as well as the US. The UK and the US contribute largely to the secured capacity. Capacity which secured a route to market in Ireland through ORESS 1 in 2023 makes up a large proportion of the secured capacity due to come online in 2030s. Likewise, expected commissioned capacity increases significantly in France post-2030 as this is when projects secured through the AO4, AO5 and AO6 tenders are expected to be fully commissioned.

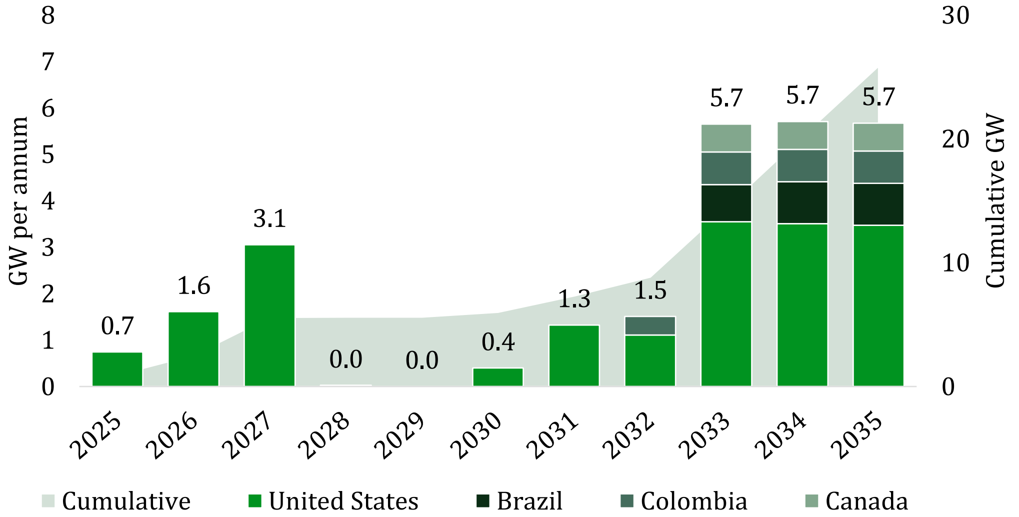
Regional Commissioning Forecast

Nearly 200 GW of capacity could reach operations in the EMEA region by 2035. Capacity in the Americas could exceed 25 GW, as the results of the 2024 US Presidential Election have significantly impacted the offshore wind forecast for the 2020s and early 2030s.

Forecast by country, EMEA



Forecast by country, Americas



Almost 200 GW of offshore wind capacity could be operational in EMEA in 2035. Around 120 GW of this capacity is forecast to be installed between 2030 and 2035. Large-scale commissioning in Europe will be led by countries with long-term leasing and development frameworks, such as the UK, Germany, the Netherlands, and France.

2030s large-scale installations in the Nordics have been severely impacted by the unsuccessful 3 GW tender in Denmark, which was followed by the cancellation of a subsequent tender and the cancellation of the tender for the extension of SN II in Norway.

As projects announced in newer markets begin to mature, the share of commissioning activity in other countries (e.g., Poland) is expected to increase significantly from 2026 onwards. However, the majority of new projects announced in newer markets would be commissioned beyond the forecast period.

The US remains the only country in the Americas region with operational capacity (South Fork Wind). Five other projects totalling over 5 GW are actively in construction and will likely reach commercial operations prior to 2028.

More than 20 GW of capacity could be operational across the Americas by the end of 2035. ERM notes that the results of the November 2024 Presidential Election have led to a lower near to medium term forecast; however, significant uncertainty exists.

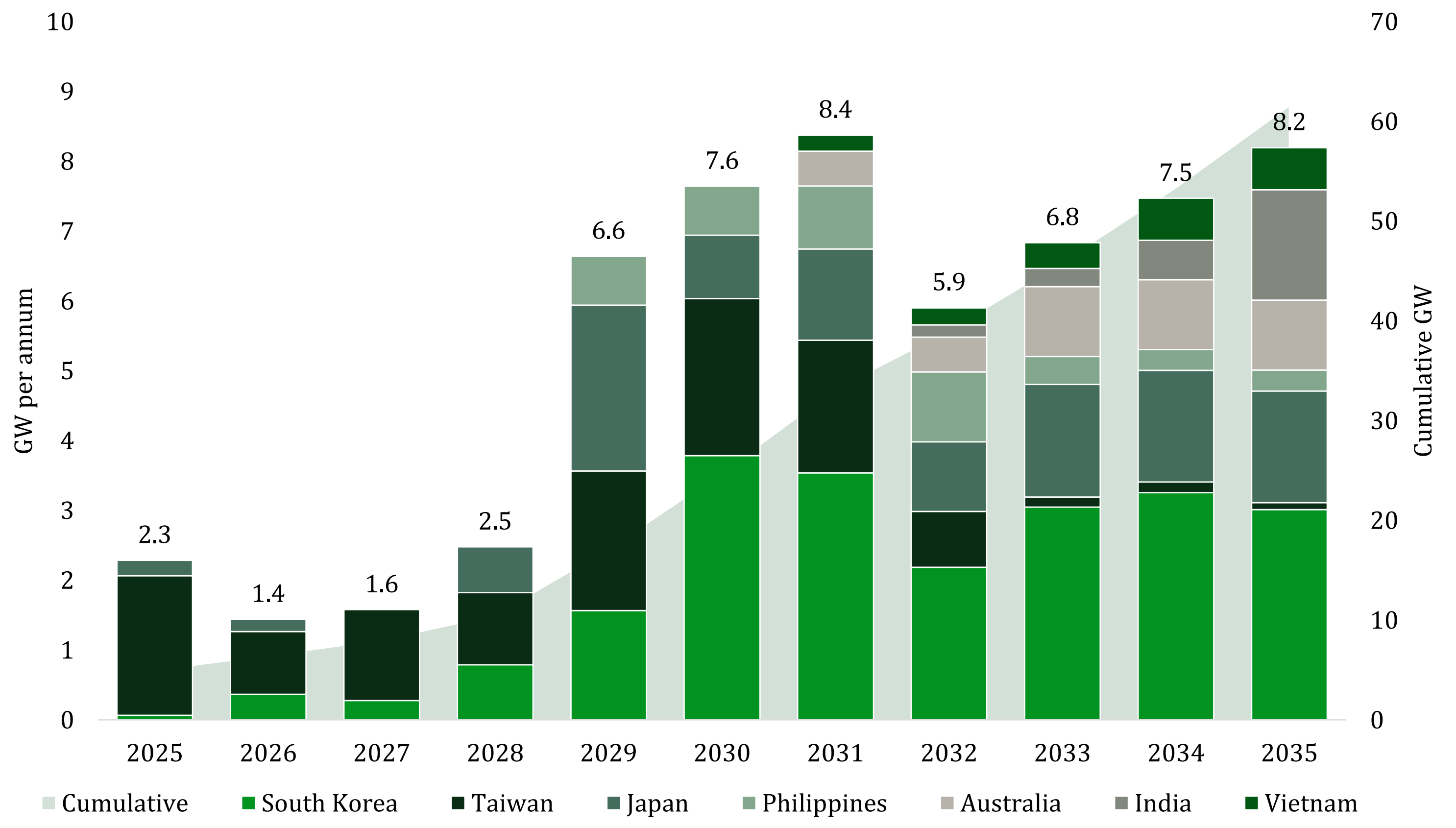
Towards the end of the forecast period, capacity is expected to be commissioned in Brazil, Colombia, and Canada. Colombia's first offshore wind auction is occurring in 2025. Brazil and Canada are moving towards holding their first auctions in late 2025 or in 2026.

GRIP

Regional Commissioning Forecast

Japan, South Korea, and Taiwan are expected to lead the region's operational capacity up to 2035.

Forecast by country, APAC (excl. China)



Forecast

Offshore wind remains a key part of APAC's energy mix in the next 10 years. Through to 2027, a significant portion of the commissioned capacity is expected to be situated in Taiwan. From 2028, the build-out of offshore wind projects begins to step up across the region as large-scale projects start to come online in South Korea and Japan (Round 1-3 sites).

From 2029, capacity in newer markets begins to come online, diversifying the portfolio mix. The Philippines will see its first offshore wind capacity coming in by 2029, coinciding with the target delivery years of 2028 to 2030 mandated by its offtake auctions. Capacity in Australia and Vietnam is expected to be commissioned from 2031 onwards, while India is expected to see its first offshore wind capacity from 2032 due to auction delays.

Supply chain constraints will be one of the main issues for APAC markets in the next decade. This could potentially hinder some markets in achieving their targets. To stay on track with their targets, governments may need to remain flexible and open to a wider range of suppliers. In the Philippines, some frontrunner developers (both foreign and local) will use Chinese WTG technology for the first projects, aiming to meet the targeted delivery timelines between 2028 and 2030.

The GRIP Team

Leadership team

James Taylor

Markets and Feasibility Lead

Selected experience:

- GRIP
- Technical expert, site feasibility
- Market intelligence

Tugce Sahin

Global market and supply chain expert

Selected experience:

- GRIP
- Market intelligence

EMEA market experts

Nazar Kaminskyi

European Market Expert

Selected experience:

- Nordics, Baltics, The Netherlands, Poland

Roberta Donkin

Western European Market Expert

Selected experience:

- UK, Ireland, Belgium

Yiting Lu

Northern European Market Expert

Selected experience:

- Germany, France

Jan Galceran

Southern European Market Expert

Selected experience:

- Spain, Portugal, Greece, Italy

APAC market experts

Raimond Dasalla

APAC Market Expert

Selected experience:

- APAC Lead
- Philippines, Vietnam, and India

Sean Peedle

APAC Market Expert

Selected experience:

- Japan

Yiting Lu

APAC Market Expert

Selected experience:

- Taiwan and South Korea

Akane Koyamada

APAC Market Expert

Selected experience:

- Japan

AMER market expert

Andrew Sirota

Americas Market Expert

Selected experience:

- American Lead; USA, Brazil, Canada, Colombia

Forecast Notes and Methodology

ERM's methodology for forecasting the market is based on ERM's in-house tool the GRIP database, which tracks all offshore wind projects and their key details. Projects are updated on a regular basis to reflect their development stages and estimated likely COD year based on a range of measurable project development milestones, such as site leases secured, permitting consents and power contract auction wins.

Power contracts vary by type, procurement mechanism, and other particulars based on each country's market regulations. When a project wins a power contract, it is designated as ***Route to Market Secured (RTMS)****, e.g.* For UK projects this means securing CfD contracts, in the US it means PPAs or ORECs.

ERM's forecasts blend a mix of projects with power contracts (RTMS) and projects in advanced development, but without power contracts. The RTMS projects are highly likely to be built, while the projects in advanced development have a higher level of uncertainty and some will not be successfully developed and built.

ERM, naturally, cannot estimate which projects months and years from now are those that succeed to eventual construction or are ones that are delayed or abandoned altogether. Therefore, ERM's forecasts tend to skew to the higher end of the MW/GW capacity. The most likely capacity level built years from now will land somewhere between the lower RTMS capacity and the overall higher forecast data that includes all development.

The China market also has forecast data limitations. China is the only market where the ERM forecast tends to skew lower that what will likely be built in the medium- and longer-term years (5-10) because the market is tied heavily to each successive government "Five-Year-Plan" (FYP) phase, and there is little visibility beyond the current FYP.

China's forecast showing a drastic drop after 2026 is partly projects are tied heavily to each successive "Five-Year-Plan" (FYP) phase, and there is little visibility of specific projects beyond the current FYP. In actuality, China is expected to continue building offshore wind at a world-leading annual rate through the full decade. Commissioning will pick up again in 2024 and 2025 to achieve the 14th Five-Year-Plan targets of additional 50 GW installed capacity. China is drafting its new 15th FYP policy, which will increase the current forecast capacity from 2026 onwards.