

Offshore wind targets underpin acceleration to 2030 and beyond

With 27 national targets now in place, offshore wind is on track to triple capacity by 2030 — laying the foundation for the next decade of growth.

Published date: 30 October 2025

Lead author: Dave Jones; Edited by: Amisha Patel

Peer reviewed by: Feng Zhao, Simon Benmarraze, Dan Kyle Spearman

About

At the request of the Global Offshore Wind Alliance (GOWA), Ember has developed an authoritative and up-to-date overview of offshore wind targets worldwide, encompassing national, regional and provincial commitments. This analysis provides a comprehensive picture of current ambitions and progress toward deployment, serving as a key input ahead of COP30. By tracking targets and assessing implementation trends, the report aims to encourage governments to set or strengthen their offshore wind ambitions and accelerate action to stay on track with global energy and climate goals.

Summary

Clear and ambitious offshore wind targets are the cornerstone of progress — providing the market visibility, investor confidence and policy certainty needed to accelerate deployment at scale. Targets are more than political statements; they are powerful economic instruments that signal long-term commitment and unlock investment.

This report provides a comprehensive overview of offshore wind targets worldwide, covering national, subnational and regional commitments, and showing that governments remain broadly committed to offshore wind, despite recent challenges.

Key findings:

- **A total of 27 countries have set national targets for offshore wind.** In addition, there are 27 subnational targets, including 3 in countries that do not yet have a national target. There are also three regional targets. Among the 27 countries with national targets, 22 have a national target for 2030, 18 have a post-2030 target and 7 include specific floating offshore wind targets.
- **Offshore wind deployment is about to surge, even though many countries are likely to fall short of 2030 targets.** The Global Wind Energy Council (GWEC) projects that offshore wind capacity will almost triple between 2024 and 2030, increasing from 83 GW to 238 GW. Despite this rapid growth, many countries are expected to miss their 2030 targets, with some shifting timelines into the early 2030s. These shortfalls reflect the

challenge of meeting ambitious targets that initially helped to drive investment and market growth. Over the past year, momentum has slowed, with GWEC reducing its 2030 global outlook by 25% compared with last year.

- **A further 88 countries have offshore wind potential, with 11 actively developing plans.** In 2019, the World Bank assessed the offshore wind potential of 115 countries, of which 27 now have national targets. Amongst the remaining 88 countries, 9 are members of the Global Offshore Wind Alliance (GOWA) – Australia, Brazil, Canada, Chile, Malta, Panama, Papua New Guinea, Saint Lucia, Trinidad and Tobago.

In 2025, the US government sought to halt offshore wind development by issuing stop-orders against Equinor's Empire Wind and Orsted's Revolution Wind projects, both under offshore construction. The orders were later reversed, allowing both projects to resume. Around 5.8 GW of offshore wind is still expected to be built in the US between 2025 to 2029, based on the five projects currently under construction. The impact of US actions on the rest of the world has so far been limited, with Canada most recently advancing its first offshore wind auction in Nova Scotia.

In The People's Republic of China, provincial governments are in the process of setting their 2030 targets. Several other countries are now looking beyond 2030 as they announce their 2035 Nationally Determined Contributions (NDCs).

At a time when the industry is facing cost inflation, supply chain pressures and permitting delays, credible targets offer stability and direction. They anchor offshore wind within national energy strategies, guide infrastructure and workforce planning and demonstrate that governments remain committed to delivery despite short-term challenges. Without clear targets, investment slows, supply chains lose momentum and countries risk falling behind in the global race towards clean, secure and affordable energy.

Aligning targets with timely policy reform and collective action across government and industry will be critical to translating ambition into delivery – ensuring offshore wind fulfils its promise as a pillar of energy security, industrial growth and national resilience.

As the world moves rapidly towards an electrified future, now is the moment for governments to reaffirm and raise their offshore wind ambitions.

“Offshore wind already delivers 83 GW of energy capacity across the world, enough to power 73 million homes. Government targets have been fundamental to help drive the scale-up of the offshore wind industry this decade. To countries thinking about agreeing new targets or extending existing targets, the message is clear: now is the time to act, to help spur the next wave of growth.”

Dave Jones

Chief Analyst, Ember

“Offshore wind targets have proven to be powerful drivers in accelerating deployment, giving governments, investors, and industry the pipeline visibility needed to plan and invest with confidence. Pipelines deliver projects, and projects deliver progress on energy and climate goals. Despite recent obstacles facing the sector, the fundamentals of offshore wind energy have not changed. We are now seeing positive momentum building and concrete steps being taken worldwide to advance offshore wind – a technology with decades of proven success at scale. With Brazil joining GOWA at COP28 in Dubai and now holding the COP30 Presidency, we call on the Presidency to truly make this a COP of implementation and encourage governments to recognise offshore wind as a cornerstone of the clean energy transition.”

Amisha Patel

Head of Secretariat, Global Offshore Wind Alliance (GOWA)

Current offshore wind targets

This section analyses the current global landscape of offshore wind targets.



There are currently 27 countries with national offshore wind targets. In addition, there are 27 subnational targets, including 3 in countries without national targets. Three regional targets also exist in Europe: the North Sea, the Baltic Sea and the EU-level target. Details of all national, subnational and regional targets are provided in the appendix.

27 countries currently have offshore wind targets

Of the 27 countries, 22 have 2030 national targets. Some are legally binding; whilst most are not, but governments are implementing roadmaps and plans to enable market development. The combined 2030 targets add up to 263 GW, excluding China, which does not yet have a national target.

- European Union: 15 countries with targets, totaling 99 GW. Germany (30 GW) and the Netherlands (21 GW) account for over half of this capacity.
- United Kingdom: Country with the largest national target, ranging from 43 GW to 50 GW.
- India: 30–37 GW.
- United States: 30 GW.
- Other Asian countries: South Korea, Taiwan, Japan and Viet Nam together account for the remaining 41 GW.

27 countries have national offshore wind targets

Capacity (GW)

Country	2030 target	2030 notes	Post-2030 target	Floating target
Belgium	5.8		8 [2040]	
Colombia			7 [2040], 13 [2050]	
Denmark	12.9			
Estonia	1			
Finland	1		5 [2040], 12 [2050]	
France			18 [2035], 45 [2050]	3.75 [2035]
Germany	30		40 [2035], 70 [2045]	
Greece	2		4.9 [2032], 12 [2035-40]	
India	37	30-37		
Ireland	7	5+2	20 [2040], 37 [2050]	
Italy				
Japan	5.7	10 auctioned	30-45 [2040 auction]	15 [2040]
Lithuania				
Netherlands	21	21 [2032]	50 [2040], 70 [2050]	
Norway			30 [2040]	'Majority' of 2040
Poland	5.9		+12 [auction 2025-31]	
Philippines				
Portugal	2			2
Romania			3 [2035]	
South Korea	14.3		20-25 [2038]	2-3 [2030]
Spain	3		17 [2050]	
Sweden	3	2-3		
Taiwan	10.9		40-55 [2050]	
Türkiye			5 [2035]	
UK	50	43-50		5 [2030]
USA	30		110 [2050]	15 [2035]
Viet Nam			17 [2035]	

Source: Ember research • More details on each target in the appendix. USA and South Korea also have some state targets. China, Canada, Australia not listed because they don't have a national target, although they have state targets.

EMBER

18 countries have post-2030 targets. These targets are generally less formal than 2030 targets. Countries with legally backed post-2030 targets include Germany (2035, 2045), France (2035), Greece (2032), Türkiye (2035). Beyond these 18 countries, many countries have roadmap documents beyond 2030, which are not defined here as targets.

Seven countries have floating offshore wind targets: Floating wind is at an earlier pre-commercial stage compared to fixed-bottom, yet holds significant potential.

- 2030 targets: UK (5 GW) and Portugal (2 GW).
- Post-2030 targets: France, Norway, Korea and the United States. Japan recently set a goal of developing 15 GW by 2040.
- Many countries with total offshore targets have most of their potential in floating wind, meaning a large portion of their future offshore capacity is likely to be floating. Examples include Finland, Greece, Ireland, Italy and Spain.

Subnational/provincial targets exist in 27 states/provinces across five countries:

- Two countries have subnational targets, in addition to national targets:
 - US: 11 states have targets, totaling 84 GW.
 - South Korea: 3 provinces have targets.
- Three countries have subnational targets, without national targets:
 - China: 11 coastal provinces have targets for 2025, totaling 64 GW.
 - Australia (Victoria): 2 GW by 2032, 4 GW by 2035, 9 GW by 2040.
 - Canada (Nova Scotia): Licensed capacity of 5 GW by 2030.

China does not currently have a national target. It has 11 coastal provinces targets for 2025, totalling 64 GW set under the 14th Five Year Plan (FYP). The 15th FYP will likely set 2030 provincial targets, and potentially include a national 2030 target. President Xi recently announced a 2035 wind and solar target providing guidance for overall wind growth of 100 GW per year between 2026 and 2035. Provincial targets for 2025 are in the appendix. On 20th October, the Beijing Declaration 2.0 was signed, which stated annual installed wind power capacity shall be no less than 120 GW, including no less than 15 GW offshore wind capacity,

during the “15th Five-Year Plan” period (2026–2030). 15 GW is almost double the 8 GW average achieved during 2021–2025.

Other countries are now looking beyond 2030 as they announce their 2035 NDCs. Already eight countries have offshore wind in their NDCs (or NDC reference documents): Azerbaijan (1.5 GW, no date), Barbados (150 MW for 2035), Brazil (“develop a roadmap for offshore wind”), EU (60 GW for 2030), Japan (10 GW for 2030), Türkiye (5 GW for 2035), Vietnam (“complete policies and the national maritime spatial plan”) and United Kingdom (50 GW for 2030).

Offshore wind capacity is likely to triple by 2030

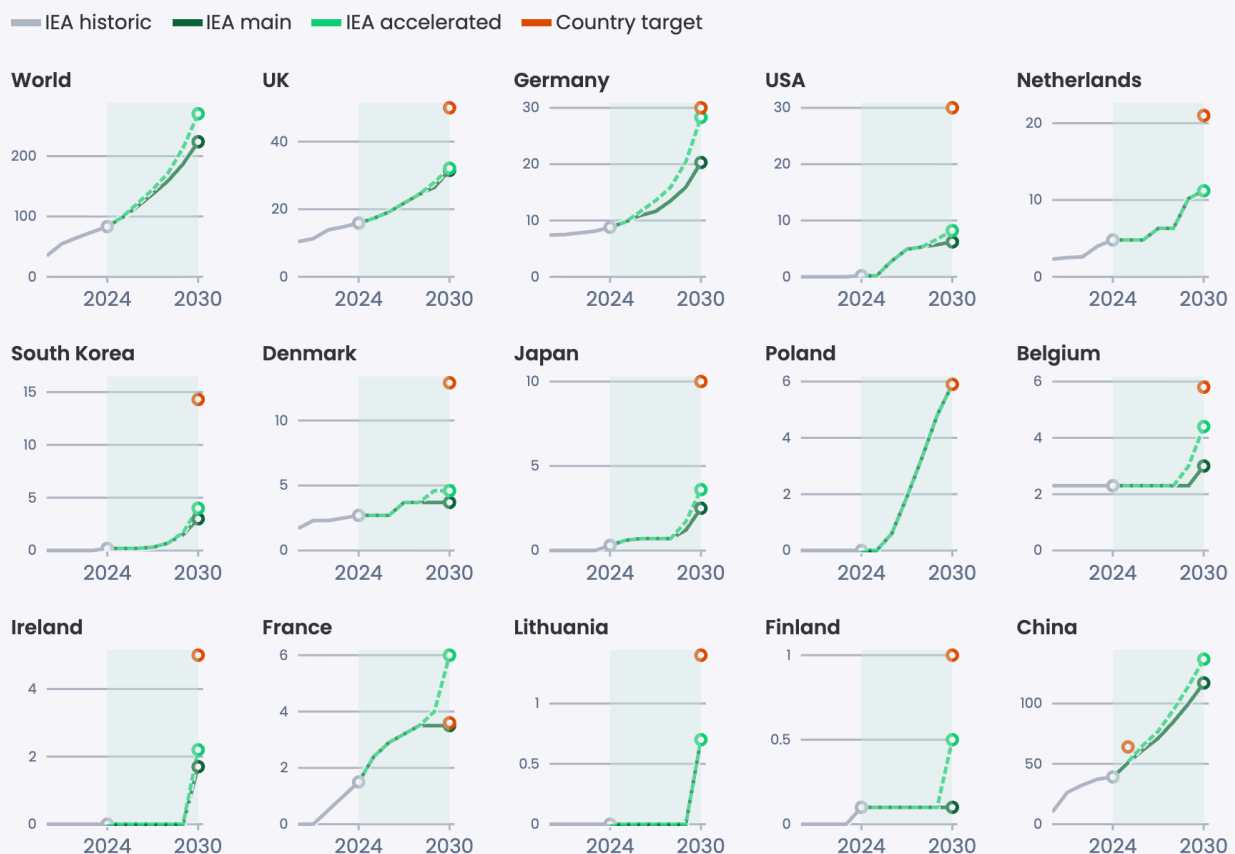
The Global Wind Energy Council’s [Global Offshore Wind Report 2025](#), forecasts offshore wind capacity will almost triple in just six years – from 83 GW in 2024 to 238 GW by 2030. This is consistent with the latest [IEA Renewables flagship report](#) (October 2025), which forecasts the range in 2030 from 224 GW (main case) to 270 GW (accelerated case). To achieve this, annual installations also need to triple, from 8 GW in 2024 to 26 GW in 2025 to 2030.

Much of this growth is underpinned by ambitious offshore wind targets. According to the IEA, 12 countries are expected to have offshore wind capacity by 2030, all with explicit targets. However, none are projected to fully meet their 2030 targets. Many countries signal they may reach their 2030 target a year or two later, but are not abandoning the targets. Most 2030 targets were deliberately set at ambitious levels to stimulate market growth, and in that sense, they have largely succeeded.

While none of the 12 countries are projected to fully meet their 2030 offshore wind targets, European countries are expected to perform better than elsewhere, with much smaller shortfalls. In contrast, the US is forecast by the IEA to have the greatest shortfall, while Japan and Korea are expected to reach only around a third of their 2030 target.

Global offshore wind power is likely to triple in the next six years - even though many countries will miss their national targets

Offshore wind capacity (GW)



Source: IEA Renewables 2025 • Targets from Ember analysis. Countries selected are those where IEA makes a forecast for offshore wind.

EMBER

This year, GWEC downgraded its global outlook to 2030 by 25%. Similarly, the IEA's latest forecast projects 27% less offshore wind capacity added between 2025 and 2030 compared to its October 2024 outlook — a significant downward revision that reflects the sector's current headwinds. Much of this reduction stems from the removal of most planned US offshore wind capacity. While the official US target remains unchanged, recent policy reversals and market uncertainty have significantly undermined prospects of meeting it. The IEA has also adjusted its outlook for China, though the country is still expected to account for around 61% of global operational offshore wind capacity by 2030.

The targets themselves are broadly aligned with the global commitment to triple renewable capacity. A report launched by [IRENA](#) ahead of COP30, which tracks the UAE consensus, has found that offshore wind must reach 413 GW by 2030. The national 2030 targets compiled in this paper amount to around 258 GW, and when combined with China's IEA forecast, reach approximately 395 GW — not far from IRENA's global projection of 413 GW.

However, as previously expressed, the problem is to meet these targets. It means to scale up annual installations by a factor of six in the period of 2025–2030 to keep on track with the 1.5°C Scenario, when the current GWEC and IEA forecasts are only to triple additions.

This highlights the need for urgent actions on policy support, infrastructure and supply chains to address the key challenges, and implement solutions that will pave the way for achieving the scale required to meet the overall renewables tripling goal.

Expectations for beyond 2030 are substantial. IRENA's [World Energy Transitions Outlook 2024: 1.5°C Pathway report](#) projects a further tripling to 1 578 GW by 2040.

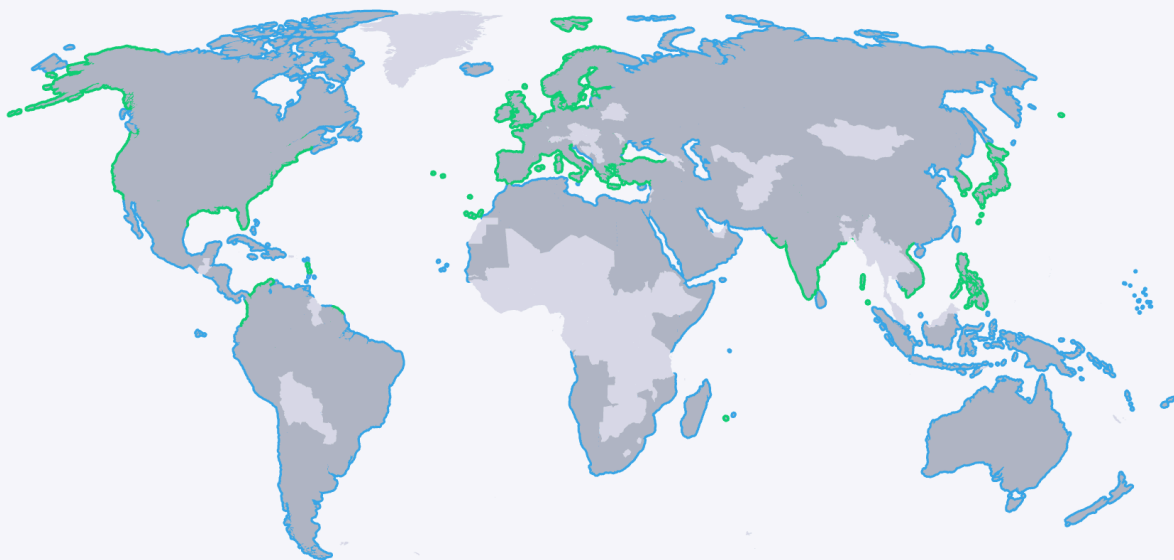
What other countries have offshore wind potential?

This section looks at the countries that the World Bank assessed to have good offshore wind potential, but have yet to set targets.

In 2019, the [World Bank](#) assessed the offshore wind potential of 115 countries. Of these, 27 countries already have national targets, leaving 88 countries with untapped potential.

88 countries have potential for offshore wind, but have not yet set national targets

Potential Target Not assessed



Source: World Bank's "Global Offshore Wind Technical Potential", targets from Ember research. • This map is for illustrative purposes only and does not imply any official position by Ember on the legal status of any country or territory, or on the delimitation of frontiers or boundaries

EMBER

A further 88 countries have offshore wind potential, with 11 actively developing plans. In 2019, the World Bank assessed the offshore wind potential of 115 countries, of which 27 now have national targets. Among the remaining 88 countries, 9 are members of the Global Offshore Wind Alliance (GOWA) – Australia, Brazil, Canada, Chile, Malta, Panama, Papua New Guinea, Saint Lucia, Trinidad and Tobago.

Who may be next to set targets?

There are 9 countries that are GOWA members, but have not yet set national targets: Australia, Brazil, Canada, Chile, Malta, Panama, Papua New Guinea, Saint Lucia, and Trinidad and Tobago. See Appendix for the full list of GOWA government members.

In addition, all five EU countries with offshore wind potential are actively exploring development: Latvia and Bulgaria are developing targets, while Malta, Cyprus and Croatia are preparing plans.

Latin America is emerging as a promising region in 2025. Colombia already has a target and Brazil could be next. Having established a marine leasing framework, Brazil's offshore industry, strong supply chain and grid capacity make it the most advanced market in Latin America. The first offshore auction is expected in 2026, with the first projects likely to be connected in the early 2030s.

Chile and Mexico are also both progressing offshore wind development, whilst Saint Lucia, Panama and Trinidad and Tobago have all joined as GOWA members.

Beyond Latin America, other countries that are also interested in developing offshore wind include Morocco, New Zealand and Azerbaijan.

Morocco will commence building Africa's first offshore wind farm in 2029, with an installed capacity of 1 GW, near Essaouira. The country combines excellent Atlantic wind resources with a mature renewables policy framework, strong European ties and power-export ambitions through green-hydrogen and interconnectors to Spain and Portugal. Interest in a Mediterranean renewable energy alliance, particularly offshore wind, is also gaining momentum.

New Zealand is finalising a new offshore renewable energy framework, expected to open permitting in 2025. The first projects are likely to be commissioned in the early 2030s.

In Azerbaijan, offshore wind in the Caspian Sea is now a strategic pillar of clean-energy diversification beyond oil and gas, with strong appetite from international investors. The first 240 MW pilot zone near Baku is under preparation, with development tenders expected by 2026.

Offshore wind is a proven clean energy solution at utility-scale, as demonstrated by the early market adopters. There is an opportunity to capitalise on the success of existing markets to enable wider global markets to embrace and benefit from the technology.

APPENDIX: List of offshore wind targets

This section presents a comprehensive list of all the countries with targets for offshore wind (up to 9 October 2025).

National targets

Country	2030 target	Post-2030	Floating target	Commentary
Belgium	5.8GW	8GW 2040		In 2019, Belgium first envisioned 5.8 GW, which later became the target. The Princess Elisabeth Zonal hub is being developed to help achieve the 8 GW 2040 goal.
Colombia		7GW by 2040, 13GW by 2050		The first auction is already underway, with results expected in December 2025. 7 GW by 2040 and 13 GW by 2050 is laid out under the “Just Energy Transition Roadmap.”
Denmark	12.9GW			In June 2023, the Danish offshore wind target for 2030 was increased from 7.7 GW to 12.9 GW. Although the auction failed in Dec 2024, the government is ready to relaunch the auction in late 2025. Lots of planning for post-2030 is happening, but no other targets have yet been set.
Estonia	1GW			Estonia’s National Energy and Climate Plan (NECP 2030) – last updated in 2024 – sets an indicative target of 1 GW of offshore wind capacity by 2030. There’s currently no goals past 2030.
Finland	1GW	5 GW (2040), 12 GW (2050)		Updated NECP sets non-binding 1 GW (2030), 5 GW (2040), 12 GW (2050); first large project scheduled for 2030s. However, Finland’s “Vision 2045” in 2024 envisioned even higher levels of 7 GW by 2035, 16 GW by 2040, 24 GW by 2045.
France	3.6GW	18GW 2035, 45GW 2050	3.75GW floating by 2035	The 3.6 GW target was originally set out in 2019, and reiterated in the Ministry of Energy “Offshore wind acceleration”. Projects already awarded and under construction for the full 3.6 GW. PPE3 sets an 18 GW connection target by 2035 to contract for the 18 GW target by 2035, aiming for 45 GW by 2050.
Germany	30GW	40GW in 2035, 70GW in 2045 set		In 2022, Germany introduced legally mandated goals for offshore wind of 30 GW in 2030, 40 GW in 2035, 70 GW in 2045.

		in law.		
Greece	2GW	4.9GW 2032, 12.4GW in 2035–2040		Greece’s Offshore Wind Law, agreed in 2022, targets to build at least 2 GW of offshore wind by 2030;. It says 1.9 GW in their NECP. Given the characteristics of Greek waters, much of it will be floating offshore wind farms. Plans to meet 4.9 GW by 2032 are being developed, with an overall view of 12.4 GW by 2035–2040.
India	30–37GW			India has a government-declared target of 30 GW offshore wind by 2030. The Ministry of New & Renewable Energy (MNRE) lays out a 37 GW bidding trajectory by 2030. No post-2030 targets have yet been proposed.
Ireland	5+2GW	20 GW in 2040; 37 GW in 2050		5 GW for electricity generation + 2 GW for green hydrogen production by 2030; the 2 GW seems aspirational. This was first announced in the 2021 Climate Action Plan, and reaffirmed in the 2023 Climate Action Plan update. The government has also set ambitious goals for 2040 and 2050.
Italy	2.1GW			Italy has submitted a 2.1 GW offshore target for 2030 in their NECP in 2024. The bulk of future capacity is expected to be floating. The Italian wind industry group has suggested 10 GW by 2040, but no post-2030 targets have yet been set.
Japan	5.7GW (10GW auctioned)	30–45GW auctioned by 2040	15 GW floating by 2040	Japan’s government formally targets auctioning 10 GW of offshore wind capacity by 2030, of which 5.7 GW is expected to be operational. Given Japan’s deep coastal waters, floating offshore wind is a strategic focus. The 6th Strategic Energy Plan said 30 to 45 GW of auctioned offshore wind capacity by 2040.
Lithuania	1.4GW			0.7 GW has been contracted in 2023, and another 0.7 GW is currently underway, although failed at the first attempt.
Netherlands	21GW (by 2032)	50GW in 2040, 70GW in 2050.		Roadmap 2030–31 originally aimed for 21 GW by 2030; in 2024 TenneT and EZK delayed full completion to 2032 due to HVDC and grid bottlenecks. Long-term ambition goals, used in planning, have been set at 50 GW by 2040, 70 GW by 2050, although these are perhaps not explicitly targets.
Norway		30GW in 2040	“Majority” of 2040 target	Norway hasn’t set a 2030 target; the “30 GW by 2040” is a policy ambition, of which the “majority” is floating. It is accelerating auctions and developing domestic supply chains, leveraging decades of offshore oil expertise.
The Philippines	3.3GW			The Philippines launched its first 3.3 GW offshore wind auction in June 2025 under the Green Energy Auction Program, to be delivered in 2028–2030, and backed by a new marine spatial plan.
Poland	5.9GW	A further 12GW auctioned 2025–2031		In 2021, Poland set a 2030 target of 5.9 GW. Phase I CfDs cover 5.9 GW for 2030. Phase II adds another ~12 GW.

Portugal	2GW		2GW	In 2023, 2 GW was set as a target. Auctions have kicked off for the 2 GW.
Romania		3GW by 2035		The Ministry of Energy's implementation plan and offshore-zoning study both refer to around 3 GW by 2035 as Romania's first development phase.
South Korea	14.3GW	20–25GW by 2038	Implicitly 2–3 GW by 2030	<p>The Ministry of Trade, Industry and Energy (MOTIE) has set an ambitious target of 14.3 GW of offshore wind by 2030. New admin signalling 20 GW offshore by 2030 but not yet adopted in law. The 11th Power Plan shows 40.7 GW total wind, of which 20–25 GW offshore, by 2038.</p> <p>There are also state-level targets: Boryeong (West Coast): 1.0 GW offshore wind planned for before 2030, Taean, Incheon, and Jeonbuk also host large-scale project proposals totaling over 8.28 GW; 5–6 GW is expected before 2030; Shinhan (Shinan): 8.2 GW project in development intended to serve Seoul and Incheon, of which 4 GW is targeted for operation by 2030.</p>
Spain	3GW	17GW by 2050		Offshore Wind Roadmap & NECP set 1–3 GW by 2030 (floating focus); first auctions due 2025–26. The roadmap also includes a “long-term vision” that identifies potential for 17 GW by 2050.
Sweden	2–3GW expected			No binding 2030 target; planning assumes ~2–3 GW operating by 2030, ~8 GW by 2035; state-funded offshore grid model in design.
Taiwan	10.9GW	40–55GW by 2050		The Ministry of Economic Affairs (MOEA) first made a formal articulation of the 10.9 GW target in 2022, when it split its delivery plan into two phases: ~5.7 GW by 2025 and an additional ~5.2 GW by 2030 under Round 3, bringing the total to 10.9 GW by 2030. The government's long-term Net Zero Roadmap visions is for 40–55 GW by 2050
Türkiye		5GW by 2035		Türkiye released its Offshore Wind Roadmap in October 2024, and aims to reach 5 GW of installed offshore wind capacity by 2035; it is developing policy frameworks for future auctions, possibly around 2026–27.
UK	43–50 GW		5GW floating by 2030	Government ambition is 43–50 GW by 2030 (including up to 5 GW floating); delivery hinges on AR6–AR7 CfDs and grid reforms.
USA	30GW	110GW by 2050	15GW floating by 2035	The US targets still stand in theory – although an aggressive attack to disband the US offshore wind industry has effectively nullified their 2030 target. Federal goal set by White House/DOI in March 2021 to install 30 GW by 2030; separate 15 GW floating by 2035. In its “Advancing Offshore Wind Energy” strategy, the DOE lays out a pathway to 110 GW or more by 2050. There are also many state-level targets, although many are for after 2030 – see more below in Sub-national Targets.

Viet Nam		17GW by 2035		In May 2023, the Vietnamese government officially approved PDP8, which laid out a goal of ~17 GW by 2035. Initially it proposed 6 GW by 2030, which now seems to have been retracted.
----------	--	--------------	--	---

China provinces

Province	2025 target (GW)	Notes	2030 discussions (GW)	Notes
Jiangsu	15 GW	Still China's leading offshore-wind base (>10 GW operating by 2023).	20 – 25 GW	National leader; aims to retain ~¼ of China's offshore base. "Jiangsu 15th FYP Energy Plan" (draft 2024) proposes 5–10 GW more offshore by 2030.
Guangdong	18 GW	Raised from 14 GW to 18 GW in 2023; long-term goal ≈ 66 GW by 2030.	≈ 66 GW (long-term)	Province's <i>Offshore Wind Development Plan 2023–2030</i> sets 18 GW by 2025, 40 GW by 2027, and ~66 GW by 2030.
Shandong	5.5 GW	"Shandong Offshore Wind 14FYP" (2022) sets 5.5 GW grid-connected by 2025.	12 – 15 GW	Offshore Wind Development Plan (2023) targets 15 GW total by 2030, including far-offshore "Deep Sea No. 1" areas.
Zhejiang	6.5 GW	Upgraded from 4.5 GW (2021 plan) to ~6.5 GW including deep-sea pilots.	≈ 15 GW	2024 draft provincial energy plan doubles current target by 2030; mix of near-shore and 100 m-plus deepwater sites.
Fujian	5 GW	Reconfirmed 2023 provincial energy plan. Typhoon exposure slows build.	10 – 12 GW	2023 update proposes doubling capacity by 2030 as typhoon-resistant designs mature; includes floating pilots off Pingtan.
Shanghai	1.5 GW	Focus on demonstration and deep-water pilots.	3 – 5 GW	Municipal target of 1.5 GW (2025) + 3 GW new deep-water demonstration by 2030.
Hainan	5 GW	Added to 14FYP in 2023; part of > 15 GW long-term green-hydrogen hub.	≈ 15 GW	<i>Hainan Clean Energy Island Strategy</i> foresees 15 GW offshore to feed hydrogen/ammonia exports by 2030.
Guangxi	3 GW	NEA approved 7.5 GW plan; ≈ 3 GW targeted by 2025.	7 – 8 GW	NEA-approved plan totals 7.5 GW; 2030 ambition to fully exploit Beibu Gulf resources.
Hebei	1 GW	Bohai Bay pilot projects (Longyuan, CNOOC).	2 – 3 GW	Bohai Bay demos expanding in 15th FYP plans.
Liaoning	2 GW	Bohai Sea development (Yingkou & Dalian zones).	4 – 5 GW	"Liaoning Coastal Wind Plan 2024–2030" targets ≈ 5 GW (ice-resistant turbines).

Tianjin	1 GW	Bohai Bay pilot area.	2 GW	Bohai Bay pilot area—City Development Plan (2024) outlines ~2 GW total by 2030.
---------	------	-----------------------	------	---

United States states

11 states have combined offshore wind targets of 84 GW

State	Target	Comment
New York	9 GW by 2035	Established under the state's Climate Leadership and Community Protection Act. As of recent data, approximately 4.3 GW is already under development.
New Jersey	11 GW by 2040	The 11 GW target is embedded in the state's Energy Master Plan and offshore wind development plans.
Massachusetts	5.6 GW by 2027	The early target of 1.6 GW by 2027 has been surpassed; multiple projects are now underway or awarded.
Rhode Island	1.43 GW by 2030	One of the earliest adopters, aligning its clean energy plans with offshore deployment.
Connecticut	2 GW by 2030	Embedded in the state's clean energy procurement strategy
Maryland	8.5 GW by 2031	Set by the 2023 "Promoting Offshore Wind Energy Resources Act."
Virginia	5.2 GW by 2034	Aligns with the state's clean energy buildup across sectors.
Maine	3 GW by 2040	
California	25GW by 2045	Set by the California Energy Commission under AB 525. 5 GW goal by 2030; 25 GW by 2045; floating technology dominant.
North Carolina	2.8GW by 2030, 8GW by 2040	Executive Order No. 218 (2021). Targets 8 GW by 2040; two lease areas (Kitty Hawk & Wilmington East).
Louisiana	5GW by 2035	Climate Action Plan (2023); Gulf of Mexico leases planned.

Regional targets

Country	2030 target (GW)	Comment
North Sea	65	Esbjerg Declaration (May 2022): Denmark, Germany, Belgium, and the Netherlands committed to 65 GW by 2030 and 150 GW by 2050. Ostend Summit (April 2023): Expanded to nine countries (including UK, France, Ireland, Norway, Luxembourg).

Baltic Sea	19.6	Baltic Energy Security Summit (August 2022): Eight countries (Germany, Poland, Lithuania, Latvia, Estonia, Finland, Denmark, Sweden) agreed to 19.6 GW by 2030 (a near seven-fold increase over 2022).
EU-wide target	111GW in 2030, 317GW in 2050	

GOWA Member Countries

Australia	Germany	Panama
Brazil	Ireland	Papua New Guinea
Belgium	Japan	Portugal
California	Malta	Spain
Canada	Newfoundland and Labrador	St Lucia
Chile	Netherlands	Trinidad and Tobago
Colombia	New York	Romania
Denmark	Norway	United Kingdom
European Union	Nova Scotia	State of Victoria

Supporting information

About Global Offshore Wind Alliance

The Global Offshore Wind Alliance (GOWA), co-founded by Denmark, IRENA, and GWEC and co-chaired by Colombia, has made strong progress in establishing itself as the world's leading diplomatic platform for driving offshore wind ambition and cooperation. GOWA works to create a global driving force for the uptake of offshore wind through political mobilisation and the creation of a global community of practice. The aim of GOWA is to contribute to achieving a total global offshore wind capacity of a minimum of 380 GW by 2030, and 2000GW by 2050.

GOWA members sign up to a Call to Action whereby they are requested to demonstrate ambition towards this shared goal. Since its launch at COP27 where nine governments joined the Global Call to Action, GOWA has grown to 27 government members (as of October 2025) with some demonstrating targets whilst others setting an intent and /or signalling plans and momentum to do so.

About Ember

Ember is an independent, not-for-profit energy think tank that aims to shift the world to clean electricity using data. It gathers, curates and analyses data on the global power sector and its impact on the climate, using cutting edge technologies and making data and research as open as possible. It uses data-driven insights to shift the conversation towards high impact policies and empower other advocates to do the same. Founded in 2008 as Sandbag, it formerly focused on analysing, monitoring and reforming the EU carbon market, before rebranding as Ember in 2020. Its team of electricity analysts and other support staff are based around the world in the EU, UK, Türkiye, India, China and Indonesia.

Acknowledgements

Lead author: Dave Jones ; Edited by: Amisha Patel (GOWA)

Peer reviewed by: Feng Zhao (Global Wind Energy Council), Simon Benmarraze (International Renewable Energy Agency), Dan Kyle Spearman (GOWA/Magenta)

Contributors: Chelsea Bruce-Lockhart, Rashmi Mishra, Rini Sucahyo, Katye Altieri, Kostantsa Rangelova and Eli Terry.