
GLOBAL WIND MARKET OUTLOOK

Update Q3 2025

December 2025



PREFACE

This report is the Q3 2025 update of GWEC's Market Outlook for new installed capacity for the global wind energy industry. GWEC Market Intelligence bases the outlook on available project information, government targets as well as the input from industry associations and experts. GWEC Market Intelligence uses the feedback and inputs from its members to create this industry perspective for this year and the next five years on the global onshore and offshore wind market.

GWEC's Market Outlook report provides new installations projection for the onshore and offshore wind market based on countries and regions. Regions covered are North America (Canada, USA), Latin America (including South and Central America and Mexico), Africa and the Middle East, Europe (including geographic Europe including Norway, Russia, Switzerland, Turkey, Ukraine), Asia and the Pacific region (including Australia, New Zealand and the Pacific Islands).

The detailed data for the Market Outlook is available for download in GWEC Market Intelligence's Members Area [here](#).

GWEC Market Intelligence provides a series of insights and data-based analysis on the development of the global wind energy market and global wind supply chain. The services include a market outlook, country profiles and policy updates, deep-dives on the offshore wind market, wind energy supply chain, and other insights.

GWEC Market Intelligence services are built on top of the existing GWEC reports and statistics as well as selected reports and databases from FTI Consulting's Clean Energy Intelligence unit, which have now been transferred to GWEC under a signed agreement to form the foundation for the new service.

GWEC Market Intelligence will release its next Q1 2026 Global Wind Market Outlook in April 2026 together with the Global Wind Report 2026.

Acknowledgements

GWEC would like to thank those who provided the data and insights to support this publication.

Editorial of this report closed on 05 December 2025

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Front cover
Image courtesy of Vestas

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EXECUTIVE SUMMARY

- 2024 was the wind industry's best year, with 117 GW of new installations added worldwide, bringing total global capacity to 1,136 GW— an 11% increase from the previous year.
- Despite ongoing macroeconomic headwinds, increasing policy instability, energy and supply chain security concerns and constraint in grid transmission, GWEC Market Intelligence has raised its global wind installation forecast for 2025 by 8.8% (13.3 GW) compared with the Q1 2025 Outlook. Thanks to the strong growth in the APAC region, GWEC Market Intelligence estimates that new wind power installations will exceed 150 GW this year, marking 2025 a record year in history. China, the US, India, Germany, and the UK are expected to be the top-five contributors for the projected growth in 2025.
- Looking further ahead, GWEC Market Intelligence predicts that 1,060 GW of wind power capacity will be added globally in 2025-2030, 7.3% (78 GW) greater than our Q1 2025 Outlook, although the outlook for the US over the forecast period was downgraded by 17 GW. The revision is primarily due to the significant upgrade made in China (77 GW) and India (6.5 GW). With an average annual growth rate of 177 GW, the total global wind power installations is expected to reach 2,196 GW by the end of 2030.
- GWEC celebrated the 1 TW milestone in the summer of 2023. Provided the expected growth materializes, we anticipate that the second TW milestone will likely be passed before the end of this decade, However, even this pace is not enough to achieve the tripling wind power by 2030 target, which is required to meet the Paris climate targets. Permitting, supply chain, financing, and grid development will remain critical to realizing the forecast growth and accelerating further progress to meet the global net zero target by mid-century.

EXECUTIVE SUMMARY

Onshore wind

We have revised our 2025–2030 global onshore wind forecast upward by 9% (+81 GW) compared with the Q1 2025 outlook. This upgrade is mainly driven by stronger expectations in APAC (+93 GW), Europe (+2 GW), and Africa & the Middle East (+2 GW), although the outlook for the US has been downgraded by 16 GW over the same period. The most significant upward adjustments are for China (+77 GW), reflecting the country's new NDC commitments to lift the share of non-fossil energy to over 30% of consumption and expand combined wind and solar capacity to around 3,600 GW by 2035, alongside new regulations supporting these goals. India also saw a notable upgrade (+7 GW), underpinned by a reinforced project pipeline driven by 10 GW of annual auctions between 2023–2027 and strengthened policy measures, including the Wind RPO trajectory and state-level incentives. By contrast, the US outlook was downgraded by 16 GW because the rollback of the Inflation Reduction Act (IRA) through the One Big Beautiful Bill Act (OBBA) has reshaped America's energy landscape by accelerating the phase-out of tax credits for wind and other clean technologies and the continued ambiguity surrounding permits and tariffs as well as the upcoming guidance on Foreign Entity of Concern (FEOC) rules created the uncertainty for the industry. Additionally, a moderate downgrade was made for Brazil and Australia due to transmission associated constraints (see details on country-level slides for more information).

Offshore wind

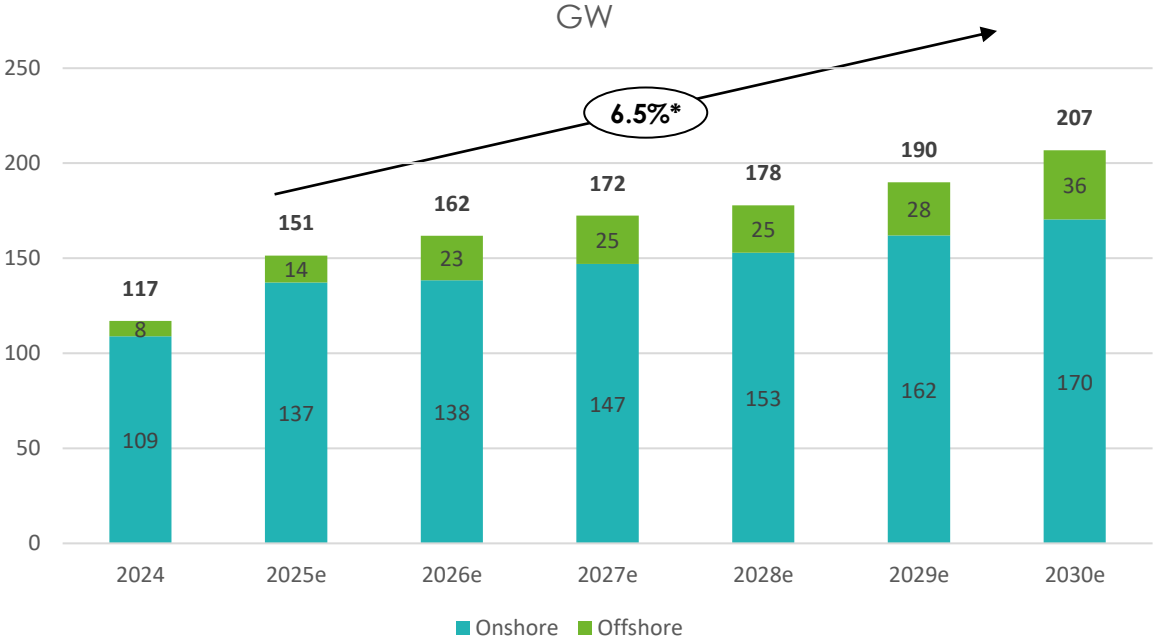
Challenges such as inflation, higher capital costs, supply chain constraints, and delay in grid connection have led us to slightly downgrade the 2025–2030 outlook by 2.1% (3.3 GW) compared with our Q1 2025 projection. The fundamentals of offshore wind, however, have not changed and the market outlook for this year and the next five remains strong with a GAGR of 20.5%. The 152 GW additional offshore wind capacity will mainly come from APAC (99.3 GW) and Europe (47.3 GW), followed by North America (5.8 GW) and LATAM where the demonstration project is likely to be built in Brazil before the end of this decade. Although reduction was made for 2025 due to the delayed transition from nearshore to deepwater development as well as complex maritime approvals and coordination, China will continue to dominate the offshore wind installation this year and the next five years (83 GW), followed by the UK (18.8 GW), Germany (10.7 GW), Taiwan China (8.3 GW), Poland (6.1 GW) and the Netherlands (5.5 GW).

Q3 2025 GLOBAL WIND MARKET OUTLOOK

Overall, the global wind market outlook from 2025 – 2030 remains positive, with a Compound Annual Growth Rate (CAGR) of 6.5%. The average annual wind installation during this period is likely to reach 176.7 GW.

For onshore wind, a stable growth, an average of 151 GW per annum, is expected for 2025 - 2030, with a CAGR of 4.4%. For offshore wind, the new installations is likely to bounce back in 2025, with 152 GW of new capacity expected to be added in 2025-2030, an average of 25 GW per annum.

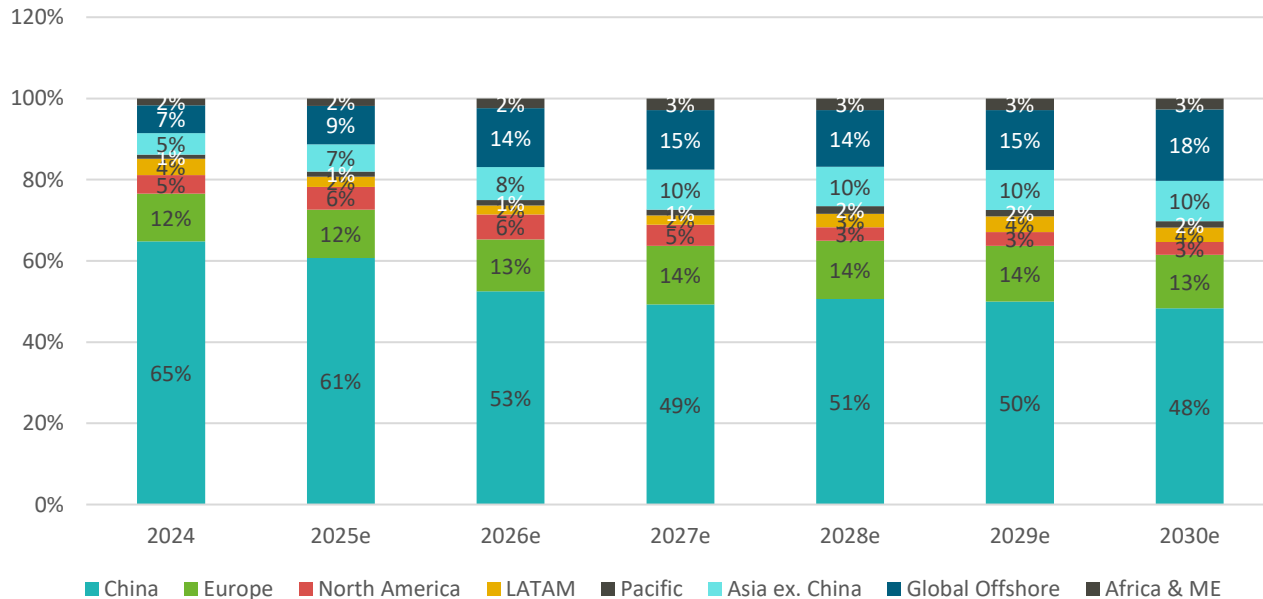
New wind energy capacity outlook



*Compound Annual Growth Rate
Source: GWEC Market Intelligence

Q3 2025 GLOBAL WIND MARKET OUTLOOK

New wind energy capacity outlook by region
(%)



Source: GWEC Market Intelligence

- China will remain the super power in global onshore wind power development over 2025–2030, accounting for 52% of total new onshore wind additions worldwide. Europe will also play an important role in driving global onshore wind growth, representing approximately 13% of new installations on average during the forecast period, followed by North America with an estimated 4% global market share on average. Meanwhile, emerging markets across APAC (excluding China and India), Africa, and the Middle East are expected to deliver consistent growth throughout forecast period. Across the global market, offshore wind is expected to grow in significance, with its market share in new installations rising from 7% in 2024 to 18% by 2030.
- Overall, we estimate that an additional 1,060 GW of wind capacity will be installed between 2025 and 2030, bringing global cumulative capacity to around 2,196 GW by the end of this decade. However, this trajectory remains insufficient to meet the tripling renewable target in 2030 required to stay on the 1.5° C pathway. To close the gap, global annual wind installations would need to accelerate sharply to at least 320 GW per year, enabling total wind capacity to reach at least 2.7 TW by 2030.

CHANGES FROM Q1 2025 TO Q3 2025 OUTLOOK UPDATE

GWEC Market Intelligence has increased the Q3 2025 global wind market outlook for 2025 to 2030 around 78GW compared to Q1 2025 outlook, expecting 1060 GW of wind power capacity to be added in 2025 - 2030:

Onshore

On a country level, major upgrades were made for the world's two largest onshore wind markets: China and India. A 77 GW upward revision was made for China reflecting the strengthened targets under the updated NDC as well as the 3,600 GW by 2035 wind and solar installation target. A 7 GW upgrade was made for India, driven by the positive project pipeline under the 10 GW annual auctions from 2023-2027 as well as strong policy measures including the Wind RPO trajectory and state-level incentives. Upgrades were also made in Germany (2.4GW), driven by a strong project pipeline, oversubscribed onshore wind tenders and a streamlined permitting process (15.5 GW approved in just nine months).

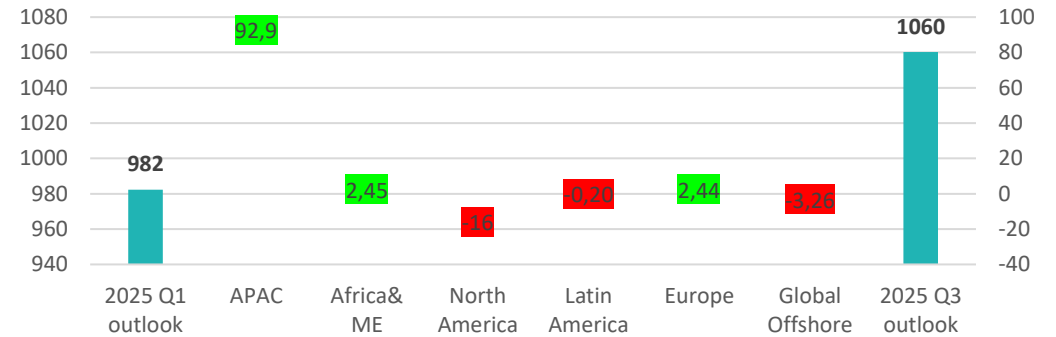
However, the projection for US onshore wind was downgraded by 14 GW considering the rollback of the IRA through the OBBB, which reshaped America's energy landscape by accelerating the phase-out of tax credits for wind energy, ongoing permitting issue, FEOC concern, and supply chain and grid constraints.

On a regional level, we increased our onshore wind forecast for APAC (93 GW), Europe (2 GW) and Africa & ME (2 GW), but downgrades were made for North America (-16 GW) compared with our Q1 2025 Outlook.

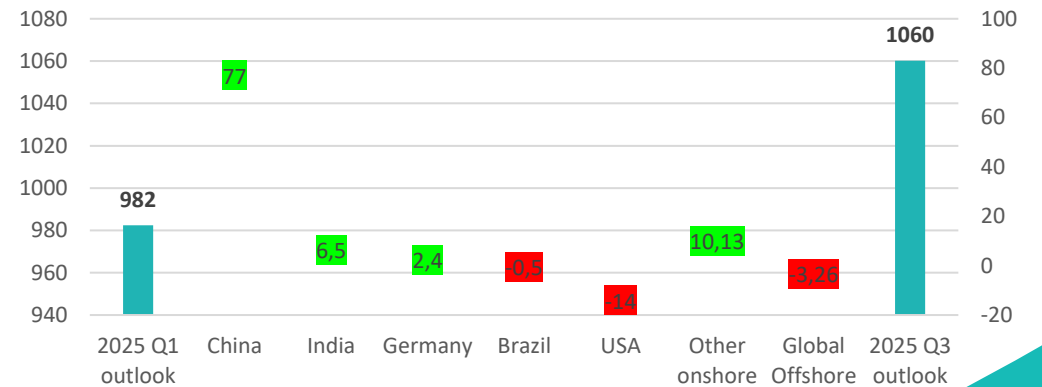
Offshore

Compared with Q1 2025 Outlook, GWEC has downgraded its 2025–2030 near-term offshore wind outlook by 2.1% (3.3 GW). However, the market remains strong, with 152 GW expected to be added worldwide in this period. Growth will be led by APAC—especially China—and Europe, followed by North America and LATAM.

Changes by region
GW, total new installations 2025e to 2030e



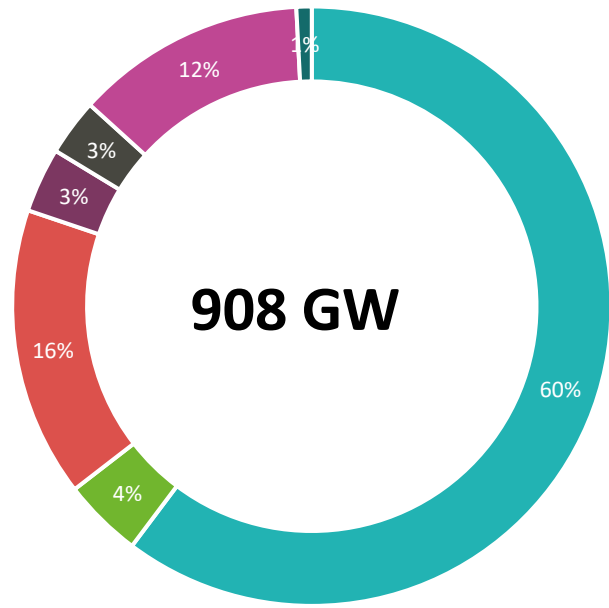
Changes by key markets
GW, total new installations 2025e to 2030e



Source: GWEC Market Intelligence

UPDATED GLOBAL ONSHORE WIND OUTLOOK 2025-2030

Total onshore wind installations 2025e to 2030e



■ China ■ USA ■ Europe ■ LATAM ■ Africa & Middle East ■ APAC (excluding China) ■ North America (excluding USA)

Source: GWEC Market Intelligence

2024 was a record year in annual onshore wind installations. With 109 GW of new onshore wind capacity commissioned last year, global total onshore wind installations surpassed the 1,000 GW milestone for the first time, representing a YoY growth of 11%. The global onshore wind market growth this year and the next five years is likely to stay at the level of 151 GW.

Looking to 2025–2030, global onshore wind growth remains highly concentrated. China is expected to contribute 52% (or 547 GW) of new global additions, followed by Europe (16% or 142 GW), APAC excluding China (12% or 113 GW), the US with (4% or 39 GW), LATAM (3% or 31.5 GW), Africa–Middle East (3% or 27.7 GW) and North America excluding the US (1% or 7.5GW).

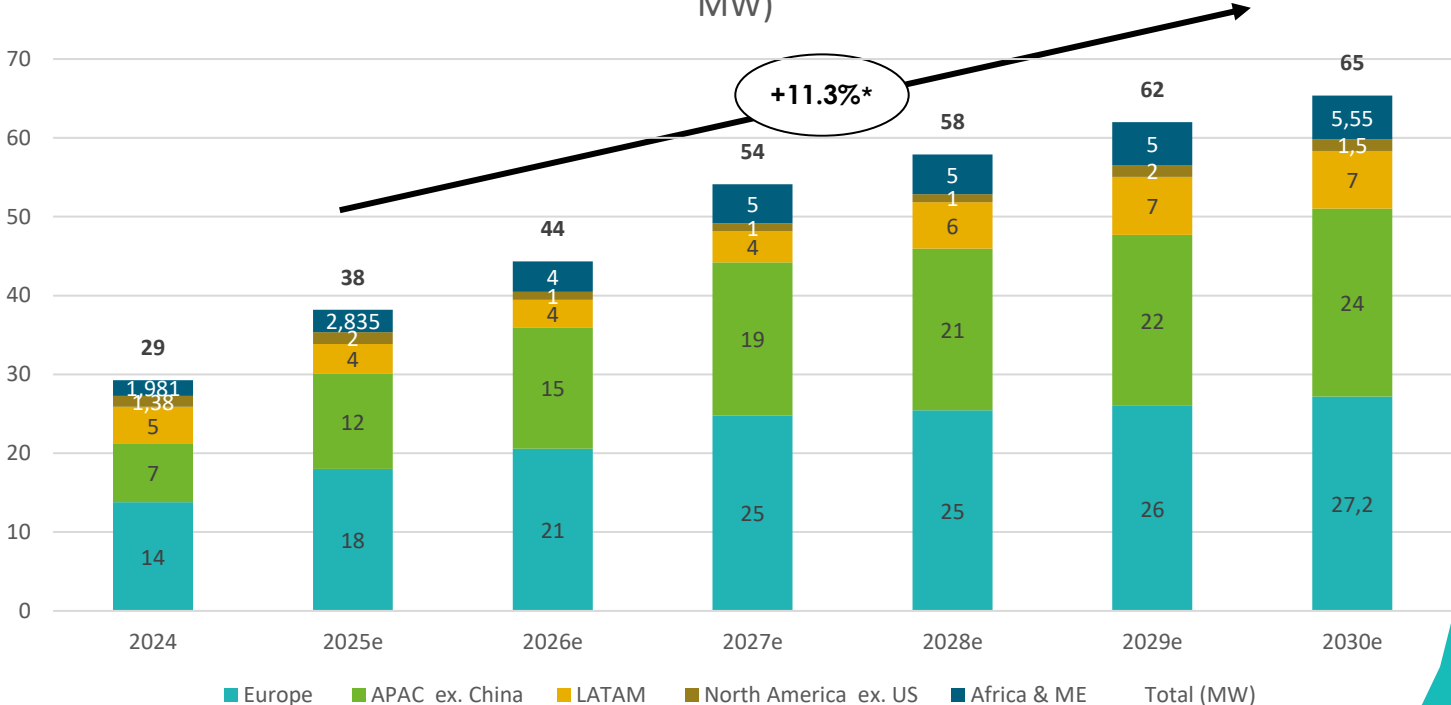
At a country level, the top five markets for new onshore wind installations from 2025–2030 are China with 547 GW expected to be added (51.6%), India with 47.2 GW (4.5%), Germany with 40.1 GW (3.8%), the US with 39 GW (3.7%), and Vietnam with 21.3 GW (2.0%). These five countries together account for over 65% of expected global onshore wind additions during the forecast period.

ONSHORE WIND GROWTH OUTSIDE THE WORLD'S TWO LARGEST WIND MARKETS

Excluding the world's two largest wind markets - China and USA -the CAGR for the global onshore wind market is likely to be double-digits (+11.3%), representing an average 53.6 GW of new installations per year between 2025 to 2030.

Europe is the key growth driver for onshore wind growth outside of China and the US, followed by the growth in Asia Pacific ex. China, Latin America and Africa & ME. The combined annual installations in these three regions (APAC, LATAM and Africa &ME) are expected to grow from 14 GW in 2024 to 37 GW in 2030.

Total new installations 2025e to 2030e excluding China and US (onshore only, MW)

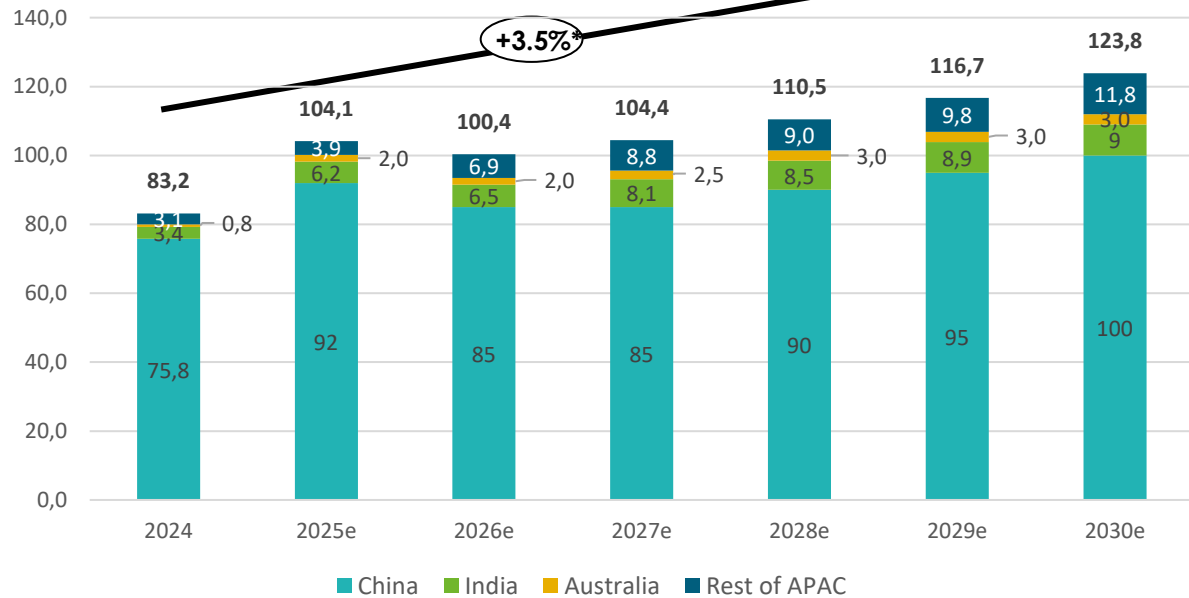


*Compound Annual Growth Rate
Source: GWEC Market Intelligence

REGIONAL ONSHORE WIND GROWTH

Installations in Asia Pacific 2024-2030e

New capacity, GW onshore



*Compound Annual Growth Rate
Source: GWEC Market Intelligence

Asia Pacific

Around 660 GW of new onshore wind capacity is expected to be commissioned in the APAC region between 2025 and 2030, with a CAGR of 3.5%, making it the world's largest regional onshore wind market. China alone is expected to account for roughly 547 GW, or 83% of the APAC total, while India contributes around 47 GW, representing 7%. Our Q3 2025 projection for the region is 92.5 GW higher than the Q1 2025 outlook, primarily driven by the large upward revision for China and India.

The rest of the APAC markets collectively contribute to the remaining (10%) expected additions, of which Vietnam and Australia are the most important onshore wind markets, together contributing around 5% of the region's total new capacity between 2025 and 2030. Vietnam is projected to add 21 GW over the period, while Australia contributes roughly 15.5 GW. Our Q3 forecast for Vietnam is unchanged from Q1, but the total addition for Australia in 2025-2030 was downgraded by 1 GW compared with Q1 Outlook due to transmission constraint.

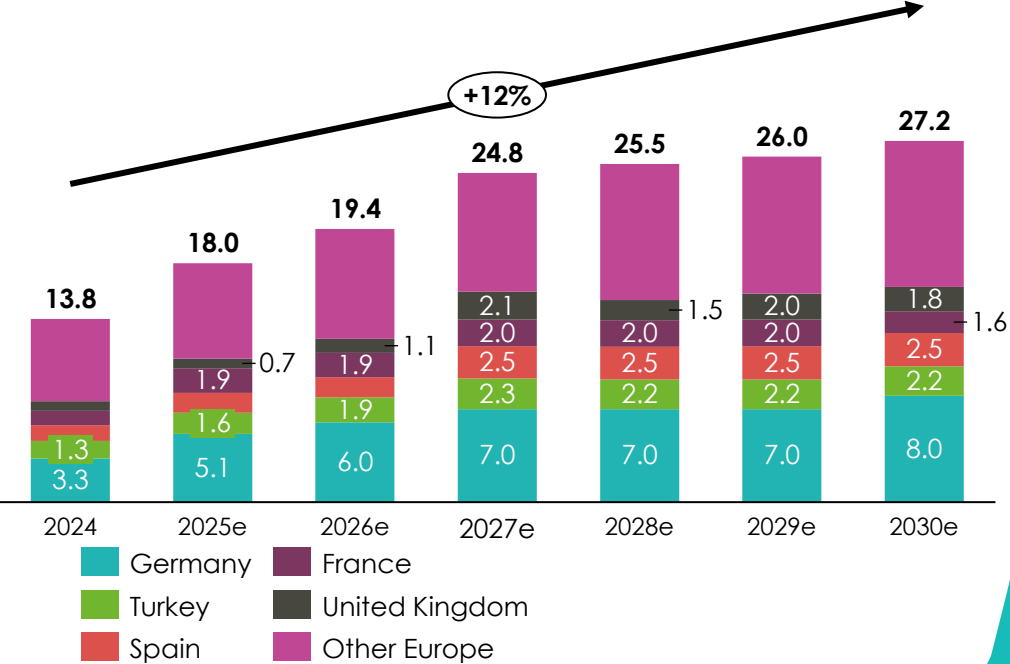
REGIONAL ONSHORE WIND GROWTH

Europe

Onshore wind market growth in Europe is primarily driven by auctions, followed by an expanding bilateral and corporate PPAs market. With a CAGR of 12%, 142 GW of new onshore wind capacity is likely to be added this year and the next five years, of which 60% is expected to be installed by the top five markets: Germany (40.1 GW), Spain (12.9 GW), Turkey (12.5 GW), France (11.3 GW), and the United Kingdom (9.2 GW)

Grid bottlenecks, continued permitting issues, and challenging financial conditions remain barriers to onshore wind expansion in this region. However, compared with GWEC Market Intelligence’s Q1 2025 Outlook, Europe’s total onshore wind capacity addition for 2025-2030 has been slightly upgraded by 2.4 GW (or 1.7%), considering a strong onshore wind project pipeline, oversubscribed onshore wind tenders, faster permitting process (15.5 GW approved in nine months in 2025) in Germany. On average, 23.6 GW of new onshore wind is expected to be connected in Europe per annum during the forecast period.

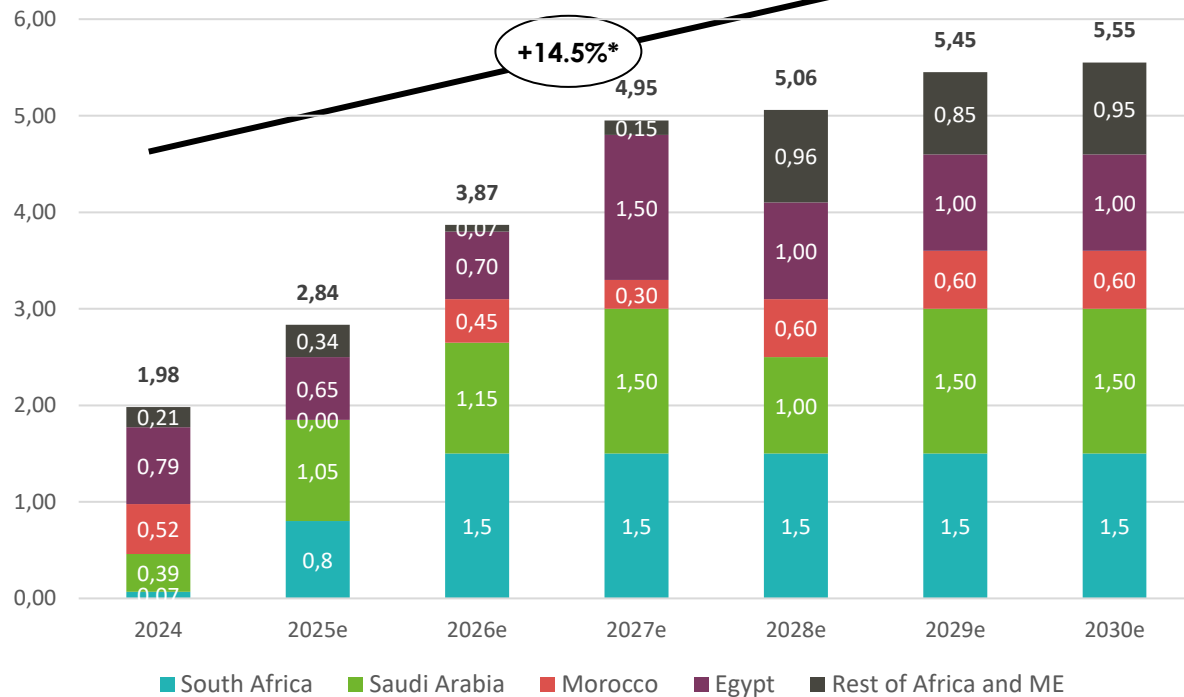
Installations in Europe 2024-2030e
New capacity, GW onshore



*Compound Annual Growth Rate
Source: GWEC Market Intelligence

REGIONAL ONSHORE WIND GROWTH

Installations in Africa and the Middle East 2024-2030e
New capacity, GW onshore



+14.5%*

*Compound Annual Growth Rate
Source: GWEC Market Intelligence

The Middle East and Africa

Onshore wind growth in the Middle East and Africa is set to accelerate gradually through the second half of the decade, underpinned by state-led procurement programs and an expanding role for private offtake and green hydrogen-linked demand. In total, 27.7 GW of new wind power capacity is expected to be added in 2025 and 2030, of which the majority, 77%, is likely to be contributed by Saudi Arabia, South Africa and Egypt.

Across the region, onshore wind growth is being shaped by three parallel procurement pathways: In markets such as Saudi Arabia and Egypt, state-backed tenders and bilateral BOO agreements continue to anchor multi-GW utility-scale development, while South Africa demonstrates how private procurement can sustain growth even where grid constraints limit auction delivery. Moreover, corporate PPA activity is emerging in Egypt and Morocco, although it remains in the early stages of development. Hydrogen and ammonia export strategies are beginning to drive large-area land allocation and long-term offtake planning in markets like Namibia and Oman.

Across the MEA region, most of firm wind orders over the past five years were awarded to Chinese turbine OEMs, this trend is expected to continue during the forecast period. Our projection is supported by the local nacelle assembly and component manufacturing recently invested and announced by the Chinese manufacturers in Saudi Arabia, Morocco and Oman.

REGIONAL ONSHORE WIND GROWTH

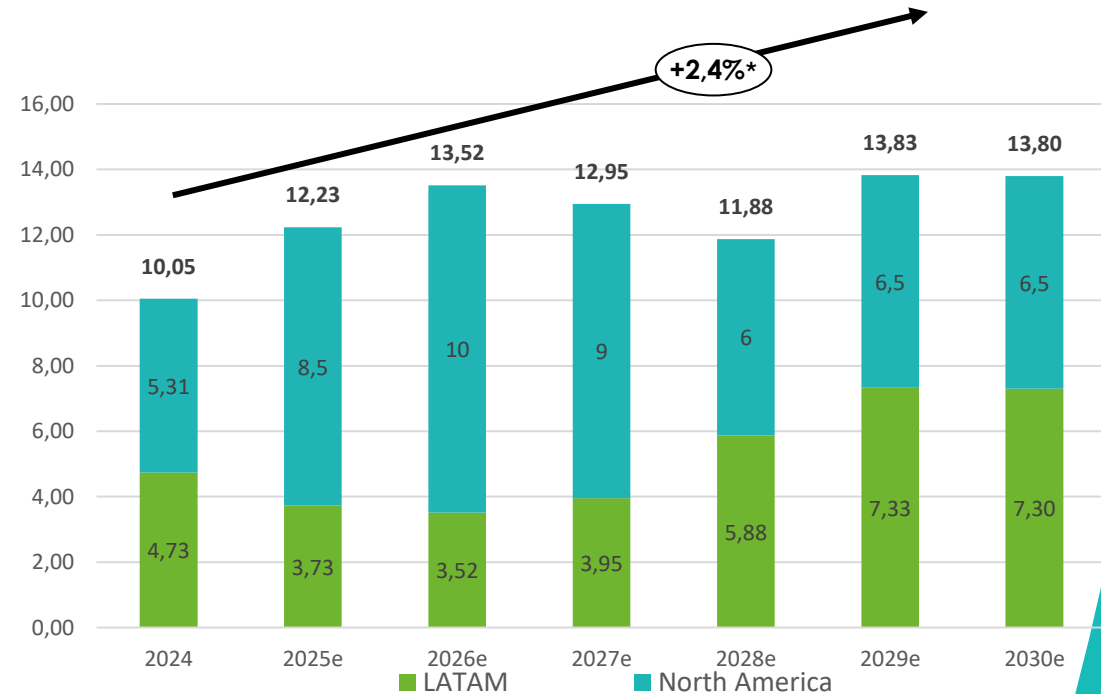
The Americas

GWEC Market Intelligence predicts that around 78 GW of new onshore wind capacity will be commissioned in the Americas in 2025-2030, 15.8% lower than our Q1 2025 Outlook. Of the total predicted addition, 46.5 GW (59%) will be installed in North America and 31.7 GW (41%) in LATAM.

The US remains the main growth driver in North America, despite that its 2025-2030 outlook has been downgraded by 25% (16 GW) compare with Q1 Outlook. The recently enacted OBBB Act tightens eligibility rules, accelerating the phase-out of tax credits, and raises compliance costs for projects relying on imported components. FEOC, permitting, grid and supply chain uncertainties are also slowing project execution and prompting more cautious medium- to long-term planning.

In LATAM, after a record year of installations in 2023, growth has slowed down as the local wind industry is currently challenged by grid transmission constraints, lower-than-expected electricity demand, permitting issues, and a poor energy policy environment. A further downgrade was made to Brazil compared with Q1 Outlook mainly due to grid curtailment in the Northeast and delays in key corridor expansions. However, this market is expected to recover from 2028, with Brazil, Chile, Mexico, Colombia, and Argentina being the region's top five growth markets, accounting for 94 of the region's new capacity expected to be added in 2025-2030.

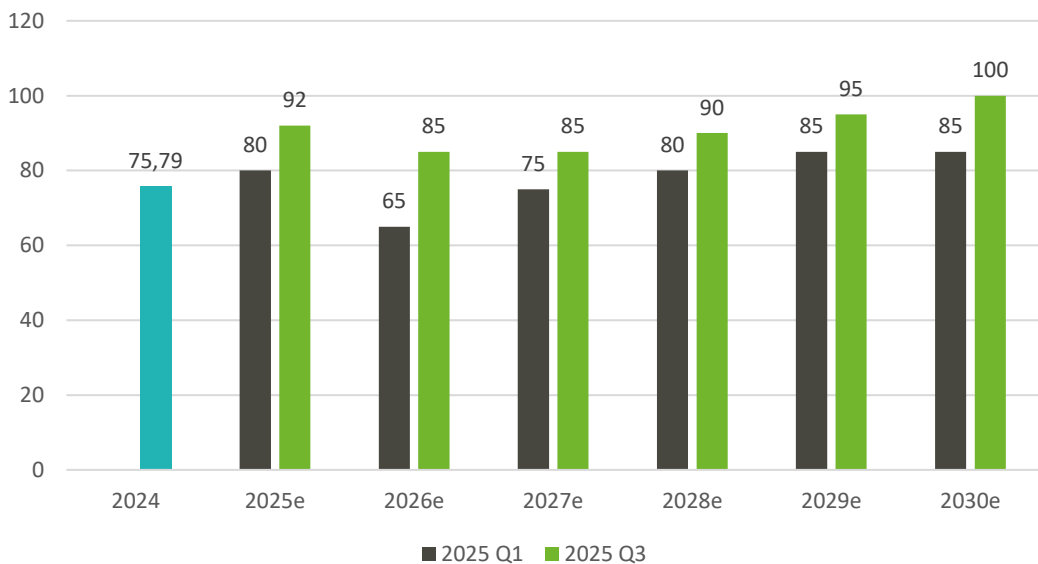
Installations in Americas 2024-2030e
New capacity, GW onshore



*Compound Annual Growth Rate
Source: GWEC Market Intelligence

ONSHORE WIND MARKET UPDATES

China Onshore Wind
New installations, GW



Source: GWEC Market Intelligence

Rational for update

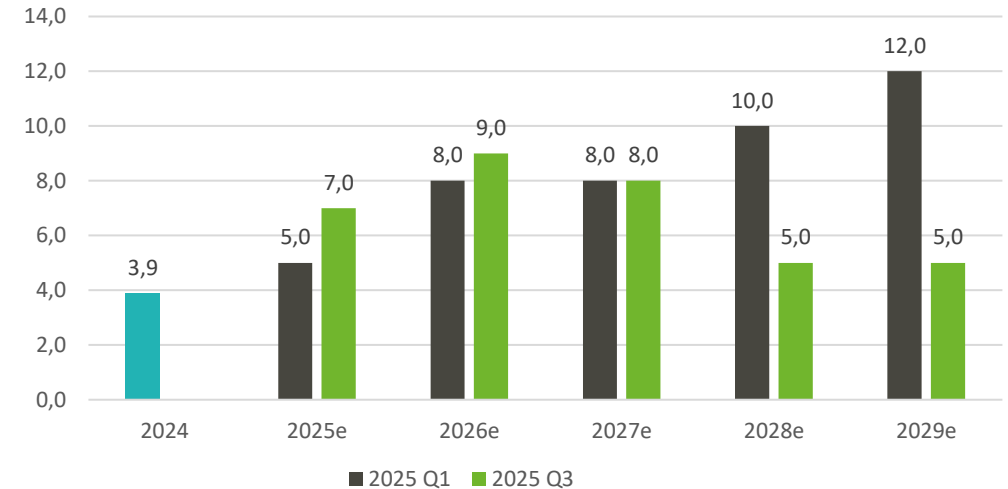
- According to the National Energy Administration (NEA), China added 57.59 GW of onshore wind in the first three quarters of 2025, representing a YoY growth of 47%. Meanwhile, the total awarded onshore wind capacity in the first three quarters of 2025 stood at 127 GW, a YoY growth of 16% .
- In September, President Xi Jinping announced China's new round of Nationally Determined Contributions (NDCs) and set a target to reach 3,600 GW of combined wind and solar capacity by 2035. Wind power has become a key driver in achieving these national targets and helping China to achieve its '30-60' goal of peak emissions by 2030 and carbon neutrality by 2060. Moreover, the Beijing Declaration 2.0 outlines that annual installed wind power capacity shall be no less than 120 GW (including at least 15 GW offshore wind) during the "15th Five-Year Plan" period, ensuring that China's cumulative wind power capacity reaches 1,300 GW by 2030, 2 TW by 2035 and 5 TW by 2060.
- Looking ahead to 2030, China's wind power development will continue to be supported by large-scale northern wind base projects, a mature supply chain, and the repowering of aging onshore turbines. The "Three North" regions (North, Northeast, and Northwest China) have more than 7,500 GW of economically and technically exploitable onshore wind potential, while central and southeastern areas offer an additional 2,500 GW of growth potential.
- Compared with Q1 2025 Outlook, GWEC Market Intelligence has upgraded its onshore wind forecast for China by 77 GW. In total, 547 GW of new onshore wind capacity is expected to be connected to the grid from 2025 to 2030. On average, this is 91 GW per annum.

ONSHORE WIND MARKET UPDATES

Rationale for update

- American Clean Power's latest quarterly report shows that 2.33 GW of new onshore wind capacity was added during the first half of 2025, representing a YoY growth of 12%. At the end of Q2 2025, the land-based wind pipeline stood at 28 GW. For comparison, 16 GW of onshore wind was under construction, and 9.3 GW was in advanced development across 79 projects as of Q4 2024.
- Recent policy changes under the new Administration have hit the wind industry very hard. The rollback of IRA incentives through the One Big Beautiful Bill Act (OBBB) has accelerated the phase-out of tax credits for wind and other clean technologies. Projects that begin construction prior to July 4th, 2026 can receive full tax credits if they meet the safe harbour rules, while projects that start construction after that date must be placed in service by the end of 2027 to remain eligible for the tax credits. Although the final guidance on the safe harbour window is positive and provides the runway for project execution through nearly the end of 2030, transmission congestion and ongoing uncertainty around permitting, tariffs and upcoming FEOC rules continue to weigh on investor confidence and project timelines.
- As a result, GWEC Market Intelligence has downgraded its U.S. onshore wind outlook for 2025–2030 by 16 GW (or 30%) compared with the Q1 2025 Outlook. In total, 39 GW of new onshore wind capacity to be added over this year and the next five years.

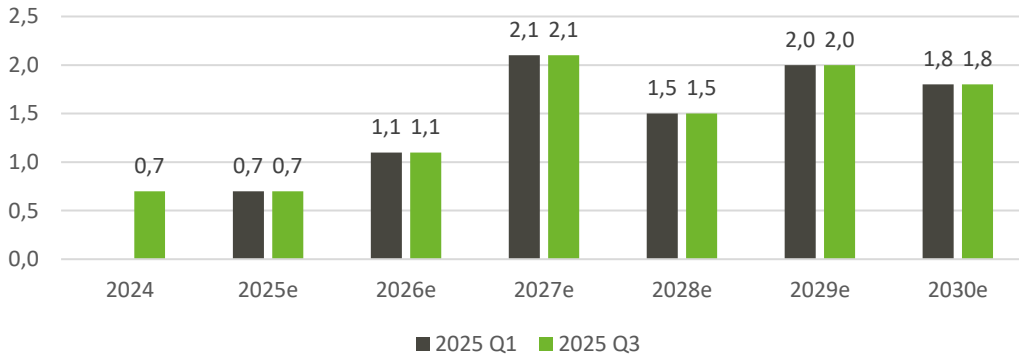
US Onshore Wind
New installations, GW



Source: GWEC Market Intelligence

ONSHORE WIND MARKET UPDATES

UK Onshore Wind
New installations, GW



Source: GWEC Market Intelligence

Rational for update

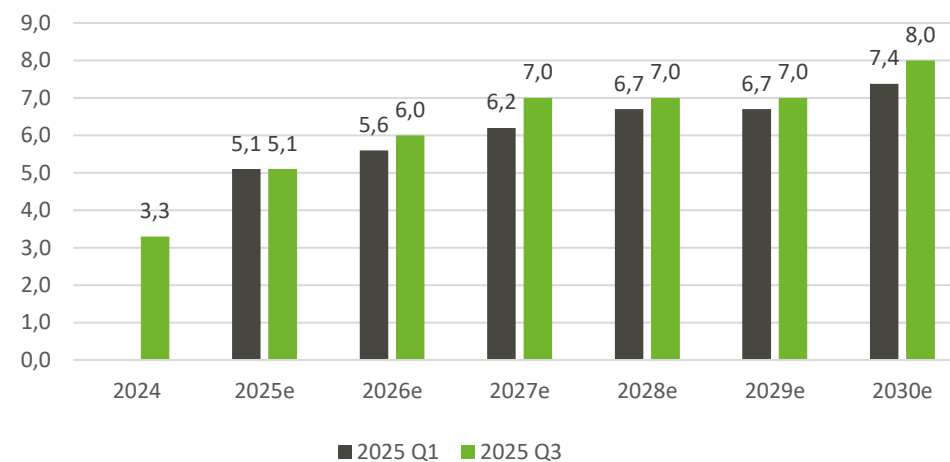
- The new government came into power in July 2024 and introduced several policies and initiatives, uplifting a de facto ban on new onshore wind farms in England to accelerate progress toward its goal of deploying around 30 GW of onshore wind by 2030. This target forms a key part of the Prime Minister's broader 'Clean Energy Mission,' which aims to deliver at least 95% low-carbon power and further strengthen the UK's track record in power sector decarbonisation.
- According to the UK Department for Energy Security & Net Zero, total onshore wind installed capacity stands at 15.8 GW by the end of 1H 2025, with 115 MW of capacity added in the first two quarters of this year. Additionally, 819 MW of permitted capacity was added in 1H 2025, representing a YoY growth of 33%.
- The next AR7 CfD auction was announced in August 2025. The strike price ceiling for onshore wind and remote island wind has been increased from £89 to £92/MWh. Earlier, the UK Government approved the final CfD reforms, including the extension of CfD contract lengths from 15 to 20 years for onshore wind projects. This change is expected to lower strike prices by spreading guaranteed returns over a longer period.
- By the end of September, the UK had a 47.1 GW onshore wind project in pipeline. Based on the projects under construction, already permitted and awarded under the CfD AR4, AR5 and AR6 auctions, GWEC forecasts that the UK will add approximately 9.2 GW of new onshore wind capacity between 2025 and 2030 — on average 1.5 GW per annum, same as our Q1 Outlook.

ONSHORE WIND MARKET UPDATES

Rational for update

- Germany aims for an increased share of renewables in electricity generation from 65% to 80% by 2030 to reduce reliance on Russian fossil-fuel imports. This would require an estimated onshore wind installation of 115 GW by 2030. Its onshore wind energy market is experiencing unprecedented momentum. Legislation improvements under the former government, including the designation of wind energy as being of “overriding public interest”, have enabled faster permitting decisions, reduced administrative obstacles and prioritised renewable projects in land-use planning.
- During the first three quarters in 2025, 3.35 GW of new onshore wind capacity were connected to the grid, which is 57% greater than the new capacity added at the same time in 2024 (2.13 GW).
- Additionally, three onshore tenders launched in the first three quarters in 2025 were oversubscribed with 11 GW awarded in the end. This is driven by the increased tariff caps as well as improved and streamlined permitting. The last onshore tender of the year is expected to be awarded in Q4 2025.
- Considering the strong onshore wind project pipeline awarded in 2023, 2024 and 2025 through auctions as well as improved permitting process, GWEC Market Intelligence has upgraded the Germany onshore wind market outlook and believes 40 GW of onshore wind capacity could be added between 2025–2030, which will further consolidate Germany's leadership in Europe.

Germany Onshore Wind New installations, GW



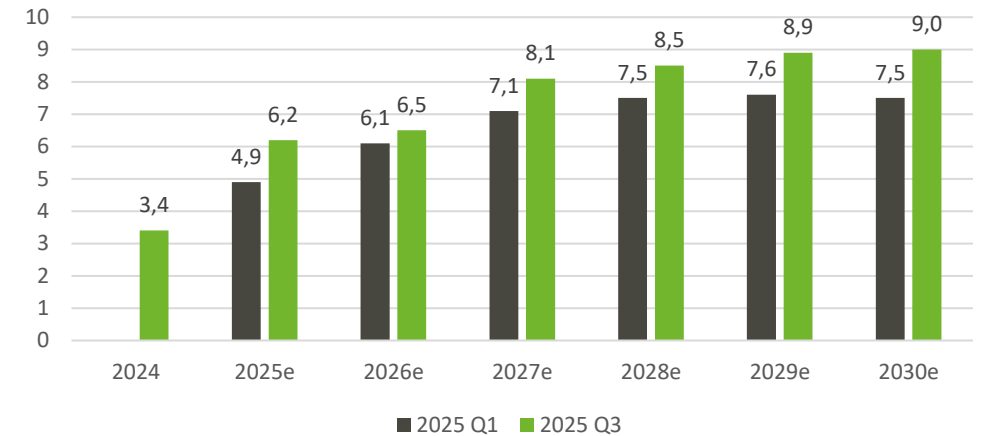
Source: GWEC Market Intelligence

ONSHORE WIND MARKET UPDATES

Rational for update

- The India onshore wind market continues to recovery and installed 4.96 GW onshore wind power in the first three quarters in 2025, making it the highest since 2017. Looking ahead to 2030, India aims to scale its non-fossil fuel capacity to 500 GW and Central Electricity Authority recommends that 100 GW of this should come from wind for a balanced energy mix and making power affordable for consumers.
- GWEC Market Intelligence has upgraded the onshore wind outlook for 2025–2030 by 6.5 GW (or 16%) compared with the Q1 2025 Outlook. Enablers for accelerating onshore wind installations in this market include: 1) 10 GW annual onshore wind auctions target from 2023-2027; 2) wind specific RPOs from 2023 to 2030 and high demand from C&I segment; 3) transmission planning to integrate 48GW onshore wind capacity by 2030; 4) several policy incentives for wind power procurement; 5.) an established local onshore wind energy supply chain; 6.) harnessing wind potential is important for India to serve round-the-clock and peak demands and ensure grid stability; 7.) as per National Electricity Plan for the period of 2022-32, installed onshore wind capacity in period of 2026/27 and 2031/32 is estimated at range of 73GW -122GW; 8.) Additionally, India has a net zero by 2070 target.

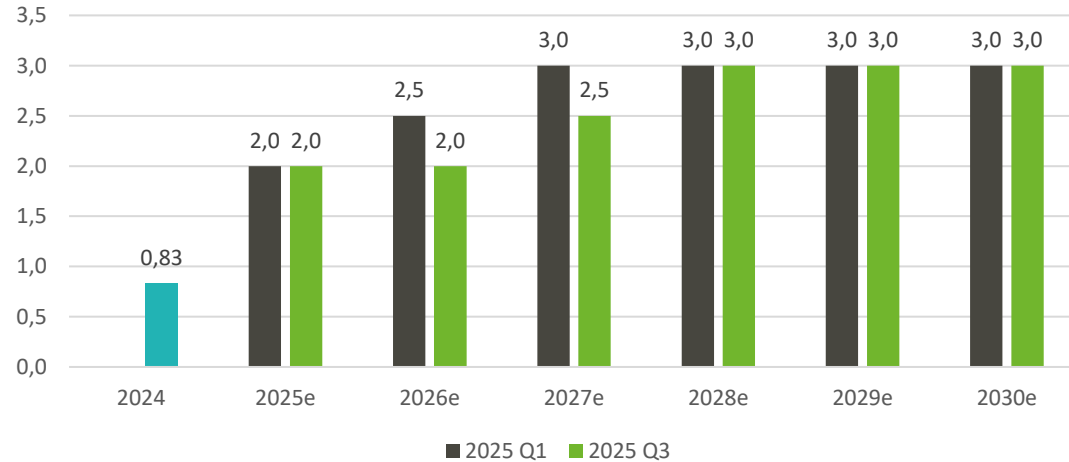
India Onshore Wind
New installations, GW



Source: GWEC Market Intelligence

ONSHORE WIND MARKET UPDATES

Australia Onshore Wind
New installations, GW



Source: GWEC Market Intelligence

Rational for update

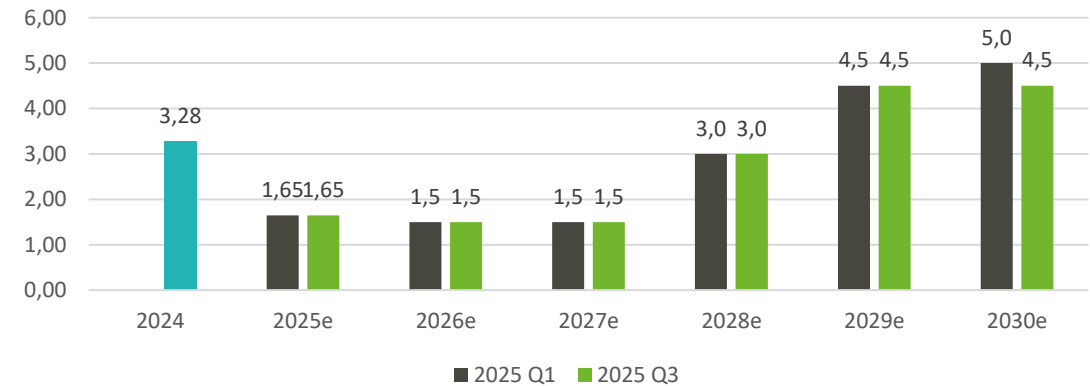
- To meet the federal government's 43% emissions reduction by 2030 target as well as the 82% RE in national energy mix by 2030 targets, the Australian government has worked to streamline assessment processes and reduce commercial risks for clean energy investment through the expanded Capacity Investment Scheme. This competitive tendering programme will provide revenue underwriting for 23 GW of new large-scale generation and 9 GW of dispatchable capacity by 2030. As of now, around 13 GW of projects have been awarded, signalling growing investor confidence.
- Despite the strong policy support and the fact that onshore wind bounced back in 2024 with a total of 2,218 MW reached financial commitment, no onshore wind projects were financed in the first half of 2025 due to permitting, grid and social licensing issues.
- According to the Clean Energy Council's quarterly investment report, 19 onshore wind projects worth 5.8 GW were either under construction or committed at the end of 2024. GWEC now forecasts around 15.5 GW of new onshore wind from 2025–2030, averaging roughly 2.6 GW per year. The total new installation forecast is slightly lower than our Q1 projection. Because the ongoing transmission delays have pushed part of the expected build-out in 2026–2027 into the later years.

ONSHORE WIND MARKET UPDATES

Rational for update

- After a decade of rapid expansion driven by strong policies, competitive PPAs, and a well-developed local supply chain, annual installations slowed in 2024 and are expected to remain subdued in the early years of the outlook. Weak electricity demand growth, reduced auction activity, and persistent grid curtailment—particularly in the wind-rich Northeast—continue to limit new project development. At the same time, low wholesale power prices and high interest rates have weakened developer returns, discouraging new investment.
- Despite these headwinds, the medium-term outlook remains fundamentally positive. The PDE 2034 projects a gradual recovery supported by improved grid integration, modernization of transmission corridors, and increasing adoption of larger, more efficient turbines as Brazil aligns with global technology trends. Regulatory reforms aimed at streamlining permitting, revising auction design, and incentivizing local manufacturing are expected to strengthen market foundations. A rebound in installations is anticipated around 2028, driven by improved policy clarity, easing financing conditions, and renewed corporate demand for PPAs as electrification accelerates.
- In line with this trajectory, GWEC Market Intelligence forecasts that Brazil will add approximately 16.7 GW of new onshore wind capacity between 2025 and 2030, bringing its total onshore wind installation capacity to surpass the 50GW milestone by end of this decade.

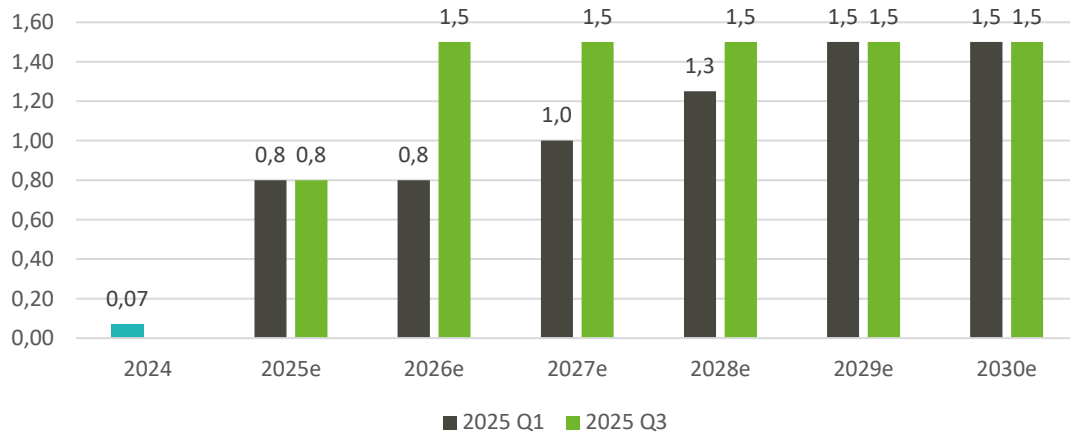
Brazil Onshore Wind New installations, GW



Source: GWEC Market Intelligence

ONSHORE WIND MARKET UPDATES

South Africa Onshore Wind
New installations, GW



Source: GWEC Market Intelligence

Rational for update

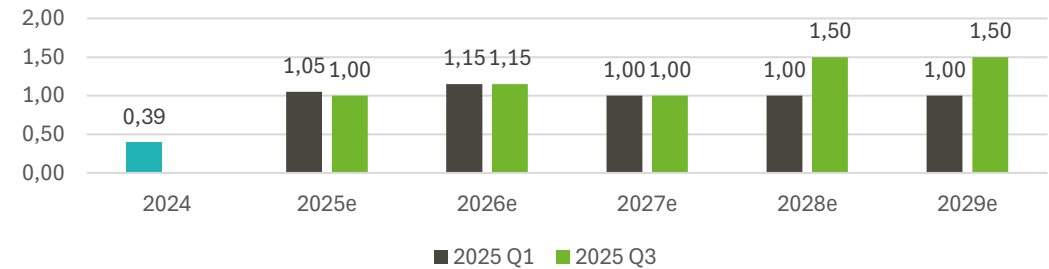
- South Africa, having its energy mix heavily reliant on coal, has been pursuing renewable energy through auctions under the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) auctions. The government awarded two out of three planned new renewable energy auction rounds, totalling 6.8 GW under REIPPPP before 2025. The first auction BW5 awarded around 1.7 GW onshore wind capacity, which is expected to be commissioned by 2024/2025. No wind capacity was allocated through the second auction round BW6 in December 2022 due to unavailability of grid capacity in Eastern and Western Cape. Bid Window 7, launched in December 2023 — awarded no new wind projects due to the unavailability of grid capacity in western part of the country. As of now, it remains unclear when (or whether) Bid Window 8 will be launched, and whether a dedicated wind quota will be reinstated.
- Despite the uncertainty around the centralized auctions, private offtaker market is stimulating the wind sector. Significant reforms introduced in 2022 under the Electricity Regulation Amendment (ERA) Act established an independent transmission operator, removed the 100 MW distributed generation limit and granted trading licenses to aggregators and traders, creating a liberalised energy market. Since then, at least 15 private offtake projects totalling 1,943 MW have been announced and are either under construction or will begin later this year.
- The recently approved IRP 2025 sets higher renewable targets and recognises the growing role of private generation and the gradual retirement of coal assets. Additionally, recent progress under the Independent Transmission Projects Programme (ITP) could enable future wind project procurement once transmission capacity becomes available, supporting more geographically distributed and grid-accessible wind development. Thus, GWEC Market Intelligence upgrades the forecast for South Africa by 20% compared with Q1 2025 Outlook and expects 8.3 GW onshore wind to be added between 2025-2030.

ONSHORE WIND MARKET UPDATES

Rational for update

- Saudi Arabia remains the world's second-largest oil producer, with renewables accounting for less than 1% of its energy mix. Under Saudi Vision 2030, the National Renewable Energy Program (NREP) and the King Salman Renewable Energy Initiative continue to form the backbone of the country's long-term decarbonization roadmap.
- From 2025, onshore wind development in Saudi Arabia is expected to grow steadily, led by the progression of awarded wind IPPs under NREP Round 7, including the 1.3 GW Balgha, 0.9 GW Shaqra, and the 700 MW Yanbu wind project, which secured its PPA in 2025, as well as the 1.67 GW wind turbine contract awarded to Chinese Envision Energy for the NEOM Green Hydrogen Project.
- At the FII9 Summit in Riyadh, ACWA Power signed USD 10 billion in clean energy agreements across the Middle East, Africa, and Central Asia, with Chinese OEMs such as Goldwind, Envision, and Mingyang actively involved. Moreover, Goldwind recently secured a 3 GW contract to supply turbines for the landmark Saudi 'PIF5' wind projects — including tailored 10 MW turbine designed for harsh desert conditions. This development significantly enhances procurement flexibility and reduces delivery and execution risk for large-scale wind installations.
- Looking ahead to 2030, installation activity is expected to increase, as Round 7 wind IPPs move into construction and as industrial and hydrogen-linked demand centers mature. Additionally, the planned 4 GW Envision-PIF turbine manufacturing facility, expected to become operational around 2030. GWEC Market Intelligence has therefore upgraded its projection and predicts 7.7GW of onshore wind capacity to be added in 2025-2030, making it the largest wind market in the Middle East.

Saudi Arabia Onshore Wind
New installations, GW



Source: GWEC Market Intelligence

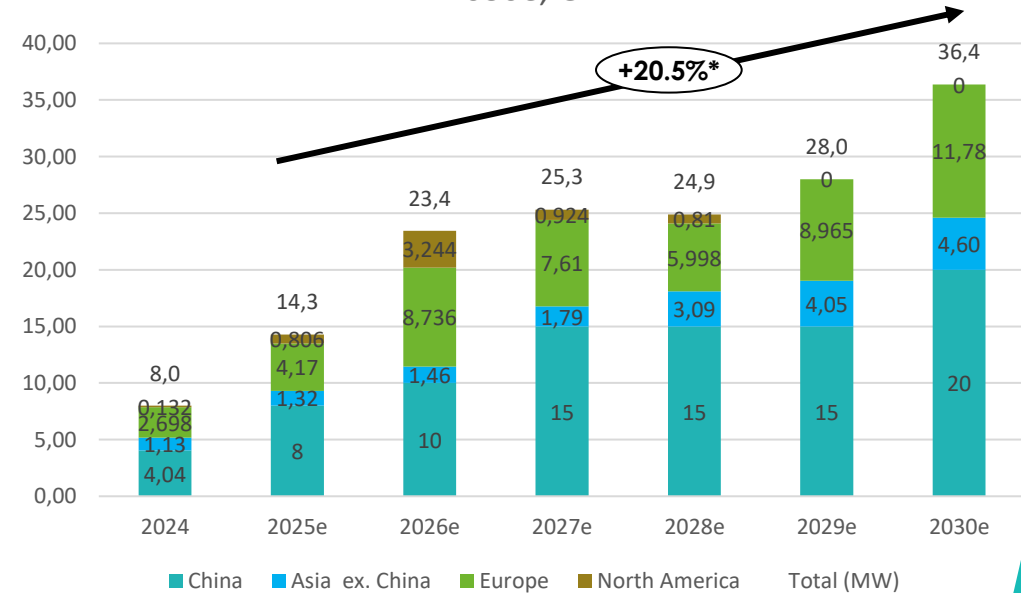
UPDATED GLOBAL OFFSHORE WIND OUTLOOK 2025-2030

- Challenges such as inflation, increased capital cost and supply chain constraints and availability of grid, ports and vessels have created uncertainty, forcing developers to negotiate project contracts and in some cases even to terminate their offtake contracts and stop project development due for construction in 2025–2030. Considering those challenges together with policy uncertainty under the current US government, GWEC Market Intelligence has already downgraded its global offshore wind outlook for 2025–2030 included in the Global Offshore Wind Report (GOWR) 2025 by 24.5% compared with the outlook included in GOWR2024 (see slide 25). In this Q3 2025 Outlook, we downgraded our 2025-2030 global offshore wind outlook by 2.1 % (3.3 GW) compared with our Q1 2025 released in April.
- Nevertheless, the global offshore wind market outlook in the near term remains promising with 152 GW offshore wind capacity expected to be added (with a CAGR of 20.5%) in the forecast period 2025-2030. The expected growth will majorly come from the APAC region, particularly China, and Europe, followed by North America. LATAM is likely to see the demonstration project to be built in Brazil before the end of this decade, but installations are not expected in Africa and the Middle East region.
- For China, GWEC downgraded its new offshore wind installation forecast for 2025 due to a slower-than-expected transition from nearshore to deep-water offshore wind development, as well as complex maritime approvals and coordination. After explosive growth in 2021 driven by the cut-off of the feed-in tariff, annual offshore wind installations in China dropped dramatically, but the market did not collapse. Connecting 5 GW new offshore wind capacity in 2022, 6.3 GW in 2023 and 4 GW in 2024 without financial support from the central government demonstrated the resilience of the domestic offshore wind industry and showed its capability to maintain stable growth in the new era of 'grid parity', whereby the electricity generated from wind will also receive the same remuneration as that from coal-fired power plants. Considering the transition from nearshore to deep-water installations will be included in China's 15th 'Five-Years Plan' and the fact that China has the world's largest and most mature wind supply chain – GWEC Market Intelligence increased the projection for 2030 to 20GW and predicts that 83 GW of offshore wind capacity will be added during the forecast period, further strengthening China's leading position in the offshore wind sector.

UPDATED GLOBAL OFFSHORE WIND OUTLOOK 2025-2030

- In the APAC region, GWEC Market Intelligence also downgraded its forecast for Japan in 2025–2030 by 1.6 GW (or 32 %) compared with the first quarter of 2025. Due to inflation, exchange rates, and rising interest rates and tight supply chain, the Mitsubishi-led consortium withdrew from three offshore wind power projects in the Chiba and Akita prefectures, which were awarded under the country’s first offshore wind auction in December 2021. Although the government is reconsidering relaunching the tender in 2026, those three projects are excluded from our Q3 2025 Outlook.
- For Europe, we downgraded the five-year forecast by 4.1 GW (or 8%) primarily due to the discontinuation of the Hornsea 4 project in the UK (because of higher interest rates, supply chain costs and increasing risks in construction and operation) as well as the grid-connection associated delay in Germany.
- Our near-term offshore wind market outlook (2025–2030), built using a bottom-up approach, is based on GWEC Market Intelligence’s global offshore wind project database, which covers projects currently under construction, global auction results and announced offshore wind tenders worldwide. To learn more about the long-term market outlook for offshore wind and other market developments, please download [GWEC's Global Offshore Wind Report 2025](#).

Total new global offshore wind installations 2025e to 2030e, GW



*Compound Annual Growth Rate
Source: GWEC Market Intelligence

Macroeconomic headwinds, failed auctions, supply chain constraints, and increasing policy instability have contributed to a 24.5% downgrade in GWEC's 2025–2030 outlook from GWOR 2024 to GWOR 2025

Region	Additions 2025-2030 (GWOR2024)	Additions 2025-2030 (GWOR2025)	YoY growth	Rationale
Europe	73375 MW	47529 MW	-35%	Entire auction round suffering no-shows in the UK and Denmark due to projects' poor commercial viability GW-scale project dropped in the UK due to insufficient returns Grid transmission delays in Germany, Belgium and the Netherlands
North America	14285 MW	5,784 MW	-59.5%	Policy uncertainty including revocation hangs over already permitted projects Tariffs imposed or threatened on imports of goods from both allies and adversaries
China	92000 MW	85,000 MW	-7.6 %	Slower-than-expected transition from nearshore to deep-water development Transition from fixed-price to market-led pricing
APAC excluding China	25986.8 MW	17170 MW	-33.9 %	Adjustment made based on projects awarded via latest auctions in South Korea. The COD deadline guideline has impact on installations beyond our near-term forecast (2025-2029) Commissioning delay for Round 2 projects and cancellation of a Round 3.1 project in Taiwan (China) Vietnam's revised PDP 8 pushing the 6 GW capacity targets beyond 2030 Delay to development plans in India and the cancellation of Round 1 projects in Japan.
Total	205646.48	155213 MW	-24.5 %	

Source: GWEC Market Intelligence

About GWEC Market Intelligence

GWEC Market Intelligence provides a series of insights and data-based analysis on the development of the wind industry. This includes a market outlook, country profiles and policy updates, deep-dives on the offshore market among other insights.

GWEC Market Intelligence derives its insights from its own comprehensive databases, local knowledge and leading industry experts.

The intelligence team in GWEC consists of several strong experts with long-standing industry experience.

GWEC Market Intelligence collaborates with its regional and country member wind association as well as with its corporate members.

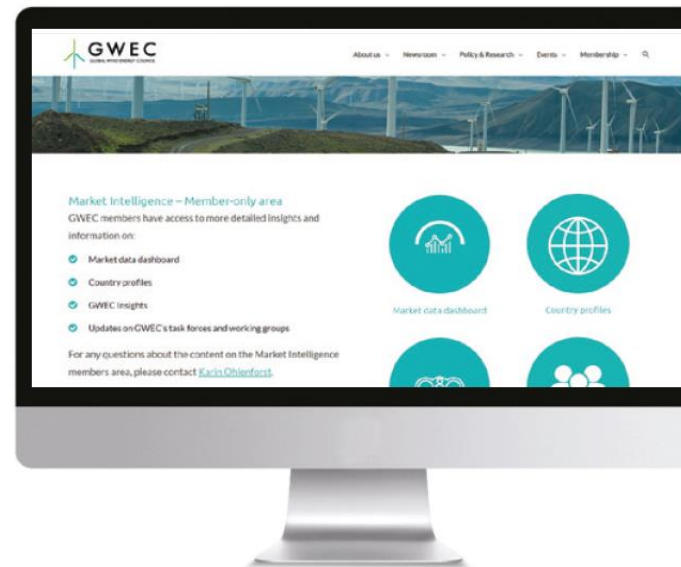
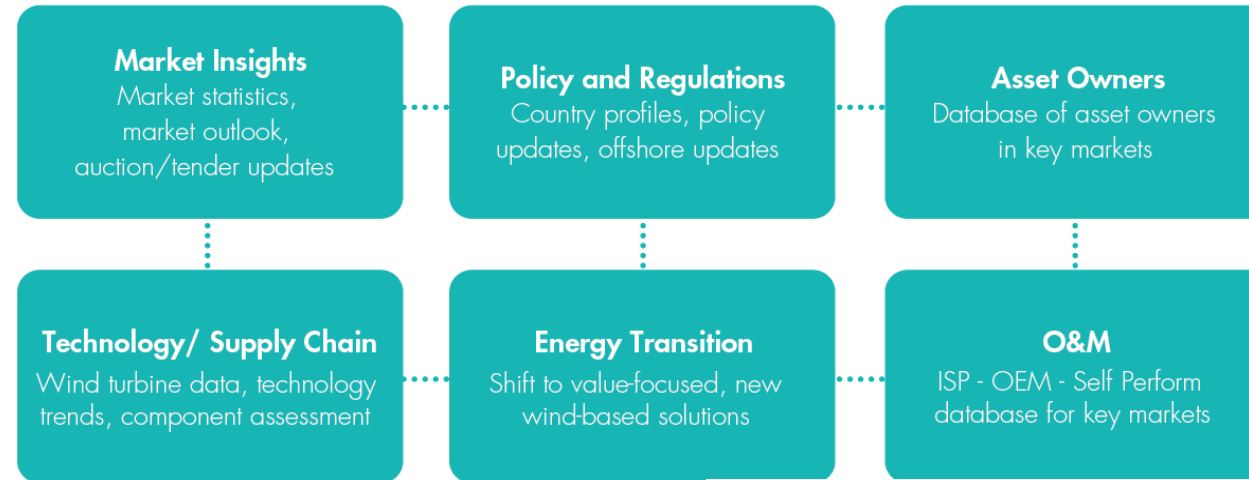
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Subscription

Contact Feng Zhao feng.zhao@gwec.net

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GWEC Market Intelligence created a Member only area to provide more in-depth market intelligence to GWEC's members and their employees.

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