GWEC I GLOBAL WIND MARKET DEVELOPMENT

SUPPLY SIDE DATA 2024

GWEC
GLOBAL WIND ENERGY COUNCIL

Preface

This is the seventh edition of the annual *Global Wind Market Development - Supply Side Data* published by Global Wind Energy Council, a member-based organisation that represents the entire wind sector. This report is part of GWEC's Market Intelligence service that provides a series of insights and data-based analysis on the development of the wind industry. The services include a market outlook, country profiles and policy updates, and deep-dives on the offshore market among 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 were transferred to GWEC in March 2019 under a signed agreement to help form foundation for the new service. The *Global Wind Market Development - Supply Side Data report* is based on FTI Consulting's *Global Wind Market Update – Supply Side Analysis* to which FTI granted GWEC the Intellectual Property Rights. The *Global Wind Market Development - Supply Side Data 2023* is the update of *Global Wind Market Development - Supply Side Data 2022* released in April 2023.

The *Global Wind Market Development - Supply Side Data 2024* represents a detailed account of wind turbines mechanically installed globally from all active suppliers over the past year (without considering whether the turbines are grid-connected). The final report includes more than 30 tables and figures charting the evolution of global wind power markets on the supply side is the sister report of GWEC's *Global Wind Report 2025* that covers the global wind market status (based on annual grid-connected capacity) and outlook from the demand side. Combing the two reports provides a powerful tool for our members and subscribers to understand the global wind market development from both demand and supply sides.

Acknowledgements

GWEC would like to thank those who provided the data and insights to support this publication. A special thank you to all the wind turbine manufacturers who shared their detailed installation statistics with us as well as to CWEA for their support in compiling data for the Chinese wind market. Without their valued support and trust, supply side insight would be difficult to obtain, particularly regarding data collection for provision of product segmentation, global market share by turbine technology and wind turbine manufacturer ranking by technology.

Editorial of this report closed on 25 April 2025

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Front cover: Goldwind GW165/6000 wind turbine at the 500 MW Gulf of Suez II in Egypt.
Cover photo copyright @ Goldwind

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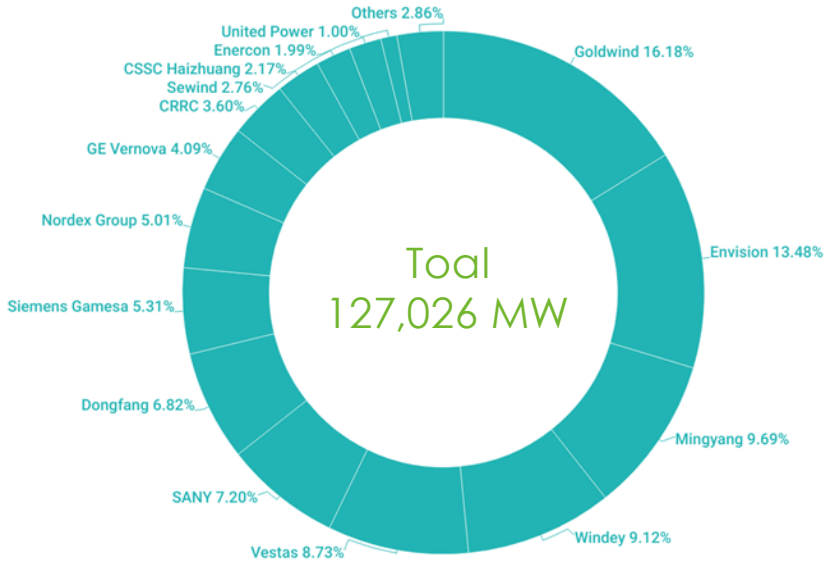
Overview of Key Findings – Supply Side

Summary of global wind market development in 2024 – Supply Side

Number of suppliers and number of wind turbines they installed in 2024	29 wind turbine suppliers (of which 18 are from Asia Pacific, 8 from Europe, 2 from America and 1 from Middle East) 23,098 units (Asia Pacific – 73%, Europe – 14%, North America – 6%, Latin America – 5%, Africa & Middle East – 2%)

Top 15 wind turbine suppliers by deliveries in 2024



Top five wind turbine suppliers in each of five world regions in 2024

Europe	Asia Pacific	North America	Latin America	Africa & Middle East
1 Vestas (29.38%)	1 Goldwind (20.02%)	1 GE Vernova (49.52%)	1 Vestas (47.64%)	1 Envision (43.41%)
2 Nordex Group (28.09%)	2 Envision (16.75%)	2 Vestas (34.69%)	2 Nordex Group (18.96%)	2 Goldwind (19.79%)
3 Siemens Gamesa (23.05%)	3 Mingyang (12.74%)	3 Siemens Gamesa (9.66%)	3 Goldwind (9.32%)	3 Vestas (15.34%)
4 Enercon (10.66%)	4 Windey (11.99%)	4 Nordex Group (5.60%)	4 WEG (8.40%)	4 Siemens Gamesa (12.21%)
5 GE Vernova (7.10%)	5 SANY (9.47%)	5 Enercon (0.5%)	5 Enercon (8.27%)	5 GE Vernova (8.79%)

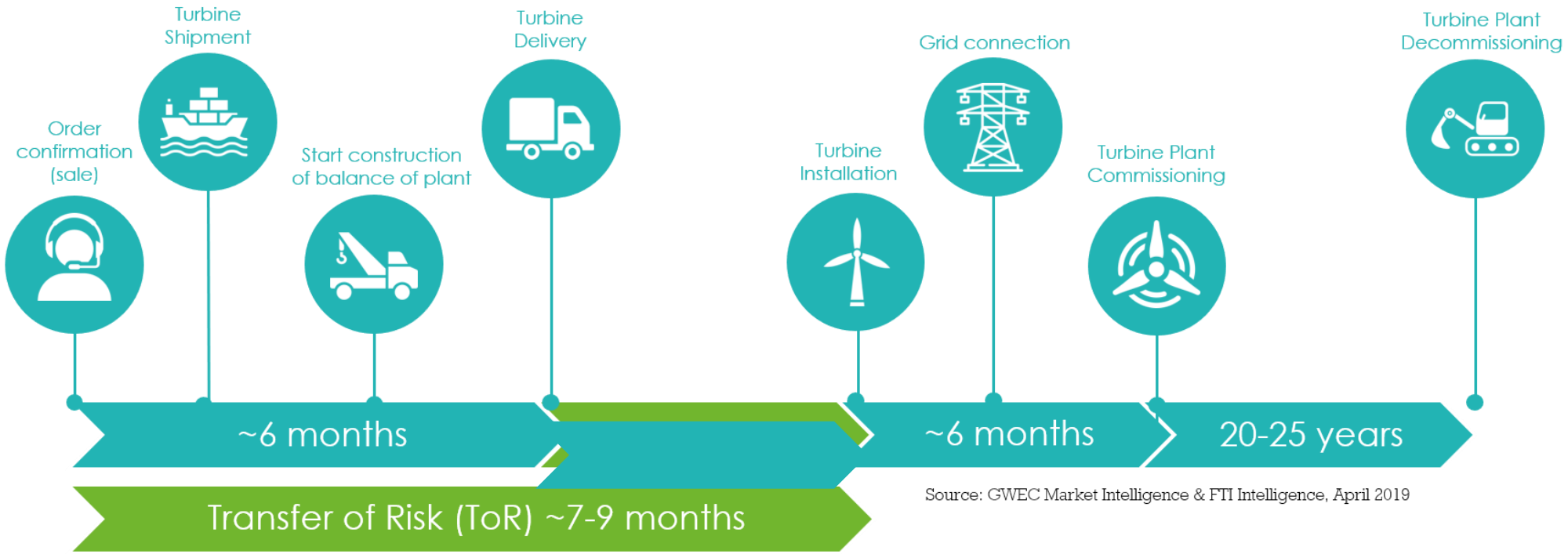
Source: GWEC Market Intelligence, April 2025

Overview of Key Findings – Supply Side (continued)

Summary of global wind market development in 2024 – Supply Side		
Top ten onshore wind turbine suppliers in 2024	1 Goldwind (16.68%) 2 Envision (14.55%) 3 Windey (9.81%) 4 Mingyang (9.05%) 5 Vestas (8.83%)	6 SANY (7.85%) 7 Dongfang (6.60%) 8 Nordex Group (5.46%) 9 GE Vernova (4.19%) 10 CRRC (3.72%)
Top ten offshore wind turbine suppliers in 2024	1 Siemens Gamesa (32.51%) 2 Mingyang (16.80%) 3 Goldwind (10.55%) 4 Dongfang (9.28%) 5 Sewind (8.13%)	6 Vestas (7.55%) 7 CSSC Haizhuang (5.88%) 8 GE Vernova (2,98%) 9 CRRC (2.20%) 10 Envision (1.65%)
Top ten wind turbine models by number delivered in 2024	1 Goldwind GW191-5000H (883 units) 2 Vestas V150-4.5 (836 units) 3 Envision EN-200/6.25 (462 units) 4 Mingyang MySE5.0-193 (441 units) 5 Vestas V162-6.x EnVentus (404 units)	6 Windey WD200-6250 (391 units) 7 Envision EN-156/3.3 (384 units) 8 Goldwind GW204-5600H (371 units) 9 GE Vernova 2.8-127 (369 units) 10 Envision EN-200/5.0 (340 units)

Source: GWEC Market Intelligence, April 2025

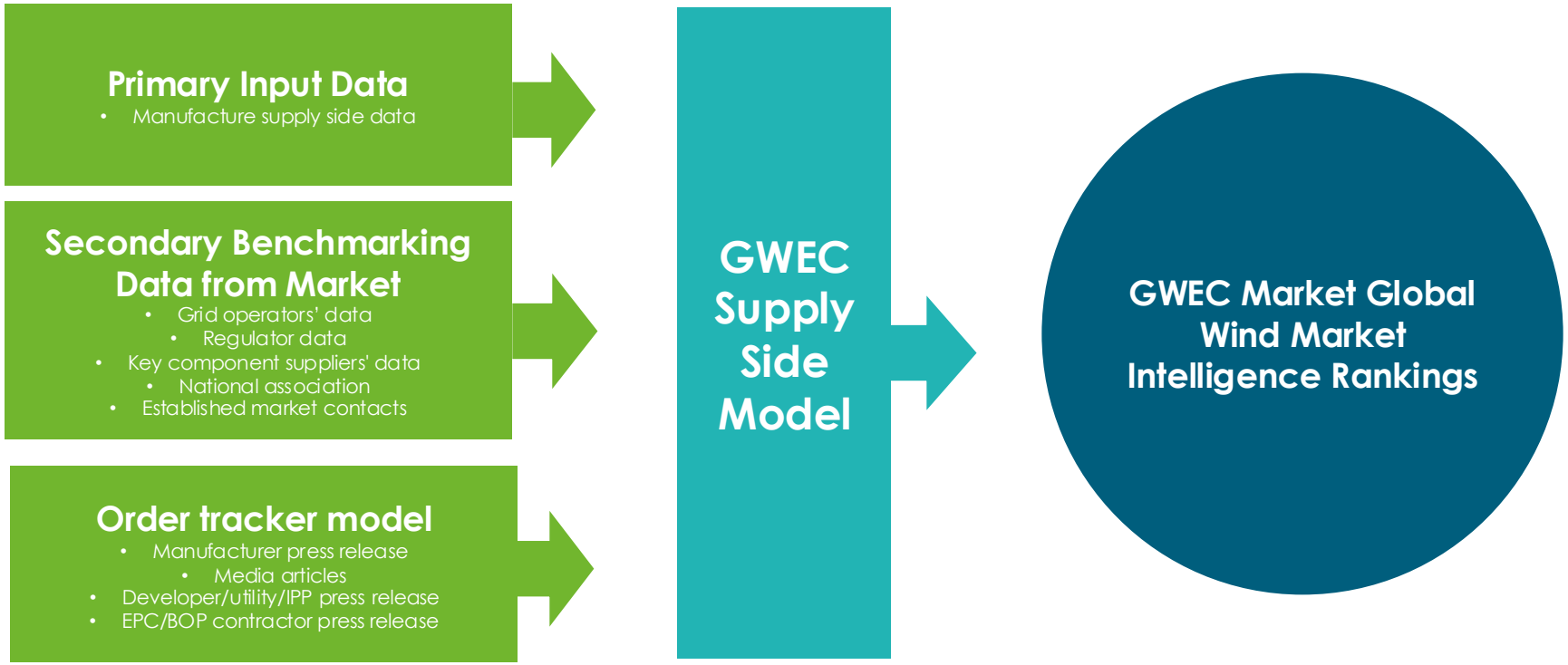
Figure 1-1: Estimated wind turbine project development timeline (onshore)



Source: GWEC Market Intelligence & FTI Intelligence, April 2019

Note: Timescales are influenced by a number of factors including: developer, contract type, country, topology, turbine, site complexity, etc.
Various wind industry analysts employ different reporting methodologies, which causes a lack of transparency and market confusion on what constitutes supply side reporting. A typical project development cycle for land-based wind turbines, illustrated in Figure 1-1 fundamentally contains seven potential reporting stages. The reporting approach varies between manufacturers and sometimes between jurisdictions. Robust benchmarking is highly dependent on application of the right quality processes to provide a fair market ranking of manufacturers. No methodology is perfect, but our turbine installation focused approach is widely accepted across the industry and well reflects the flow of turbine manufacturing from the supply side on the annual base.

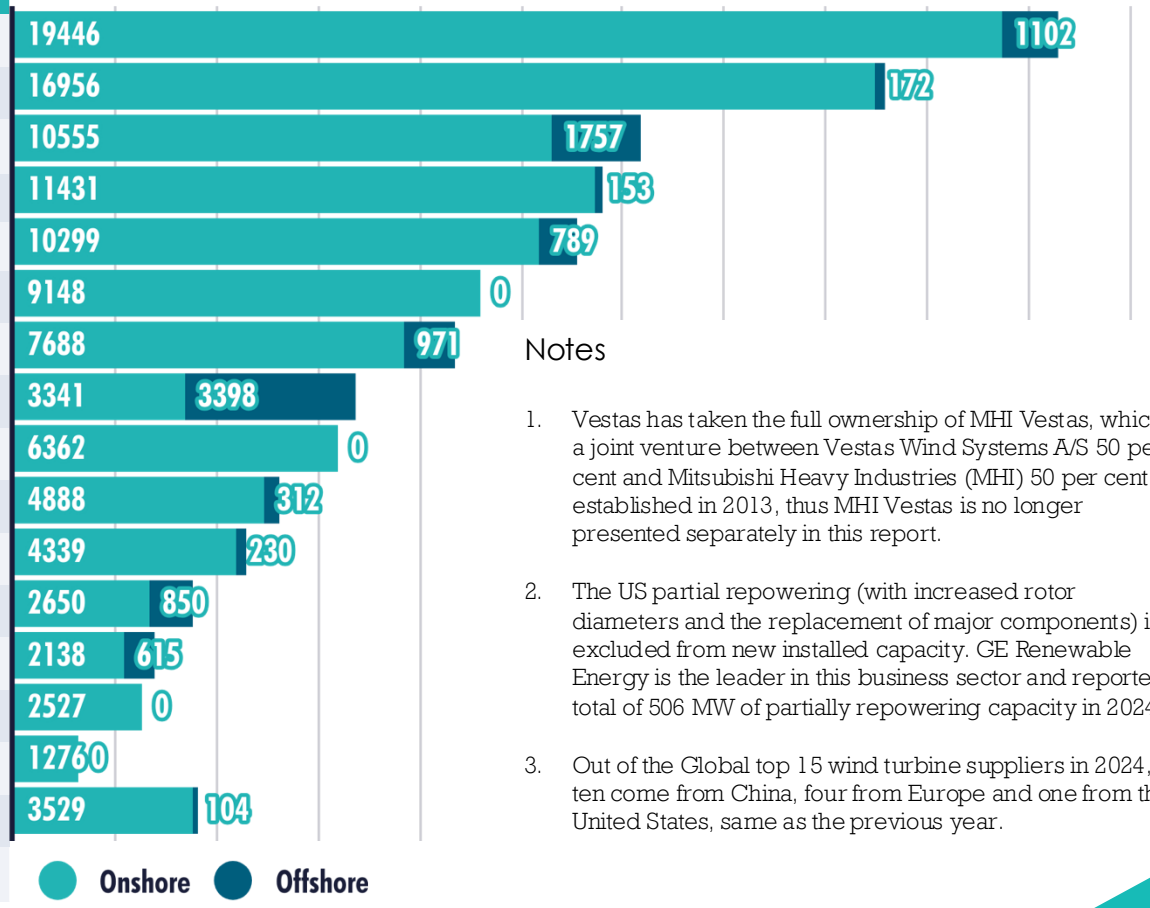
Figure 1-2: High-level review of GWEC Market Intelligence's supply side model inputs



Source: GWEC Market Intelligence & FTI Intelligence

Table 1-1: Top 15 wind turbine suppliers ranking in new installations in 2024

Rank	Supplier	Supplied MW 2024	Annual share 2024
1	Goldwind	20,549	16.2%
2	Envision	17,128	13.5%
3	Mingyang	12,312	9.7%
4	Windey	11,584	9.1%
5	Vestas	11,088	8.7%
6	SANY	9,148	7.2%
7	Dongfang	8,659	6.8%
8	Siemens Gamesa	6,739	5.3%
9	Nordex Acciona	6,362	5.0%
10	GE Vernova	5,200	4.1%
11	CRRC	4,568	3.6%
12	Sewind	3,500	2.8%
13	CSSC Haizhuang	2,753	2.2%
14	Enercon	2,527	2.0%
15	United Power	1,276	1.0%
	Others	3,633	2.9%
Global totals		127,026	100%



Notes

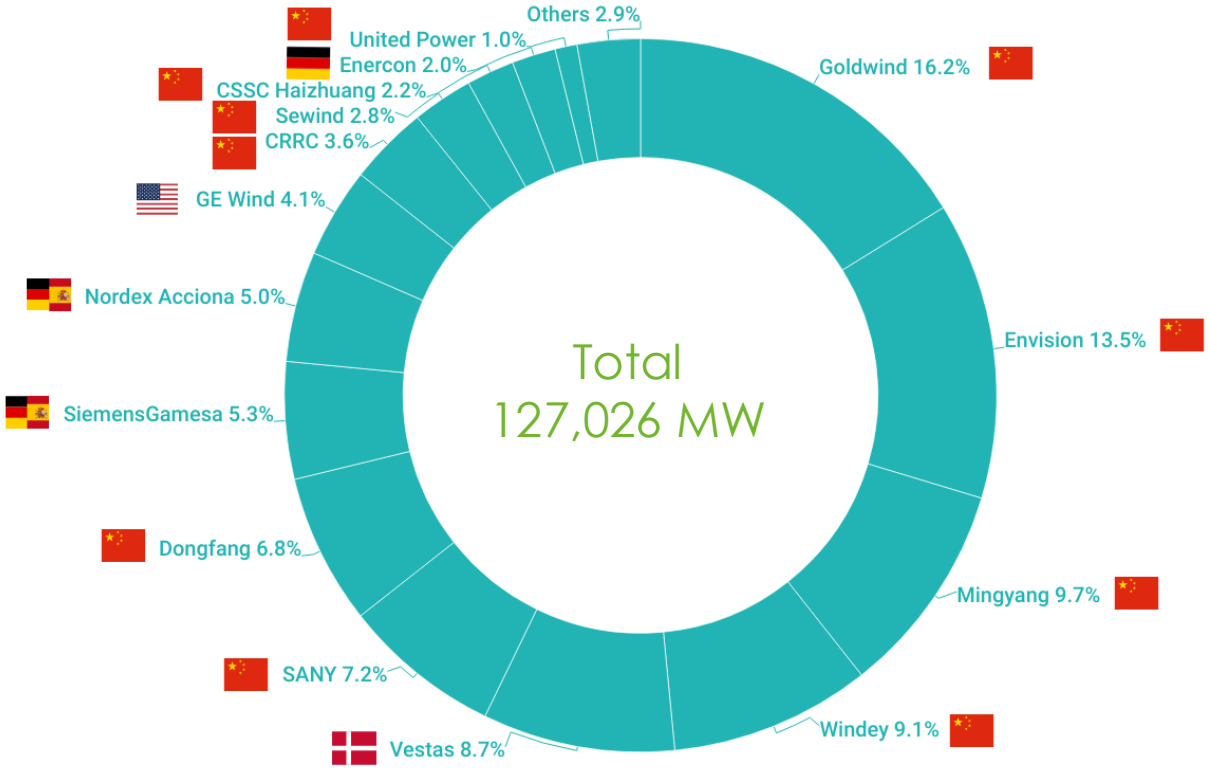
1. Vestas has taken the full ownership of MHI Vestas, which is a joint venture between Vestas Wind Systems A/S 50 per cent and Mitsubishi Heavy Industries (MHI) 50 per cent established in 2013, thus MHI Vestas is no longer presented separately in this report.

2. The US partial repowering (with increased rotor diameters and the replacement of major components) is excluded from new installed capacity. GE Renewable Energy is the leader in this business sector and reported a total of 506 MW of partially repowering capacity in 2024.

3. Out of the Global top 15 wind turbine suppliers in 2024, ten come from China, four from Europe and one from the United States, same as the previous year.

Source: GWEC Market Intelligence, April 2025

Figure 1-3: Top 15 wind turbine suppliers in annual global market in 2024

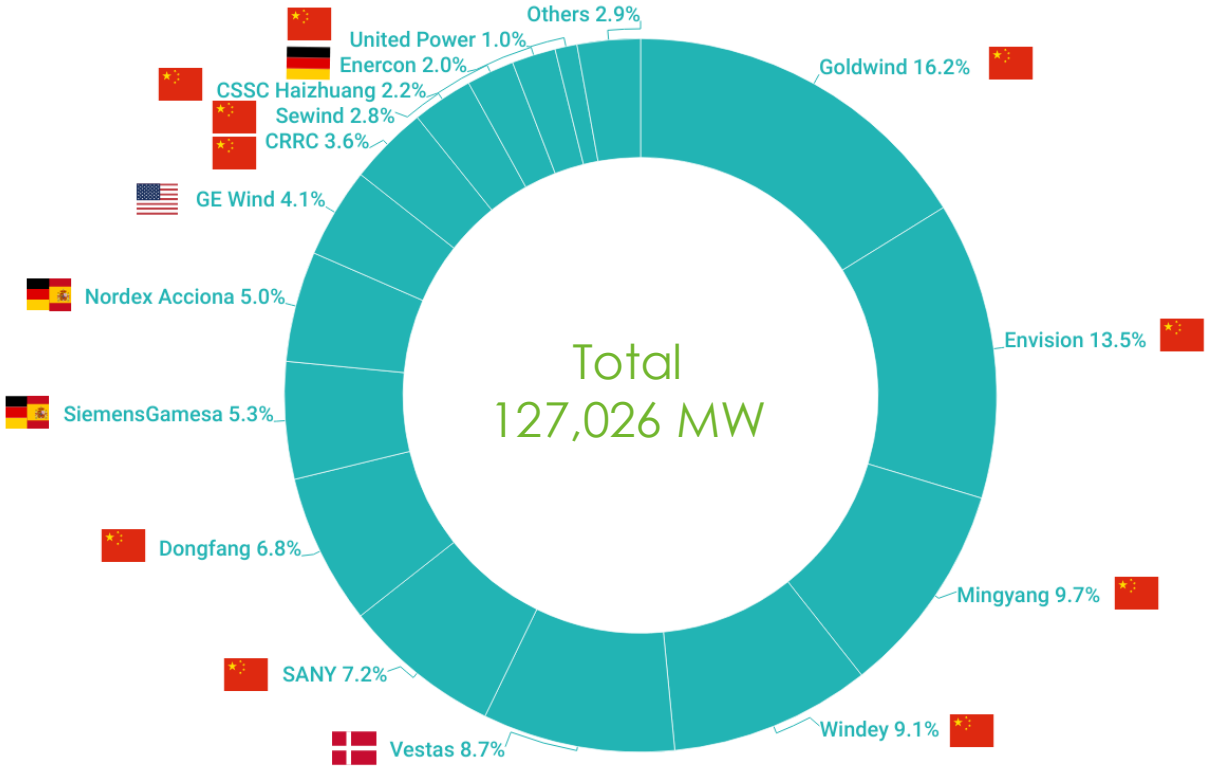


Source: GWEC Market Intelligence, April 2025

Supplier details (part 1 of 2)

- According to supply side reports, **23,098 wind turbines** were installed globally in 2024, with a combined capacity of **120,685 MW**, which is five per cent higher than the previous year. The 23,098 wind turbines recorded in 2024 were manufactured by **29** wind turbine manufacturers.
- **Goldwind** continues to hold the top spot in 2024. As China's largest wind turbine supplier, Goldwind installed more than 20 GW worldwide last year, of which 91 per cent was in its home market and the rest is from 13 overseas markets.
- **Envision** retains the number two position. Although the Chinese OEM's new installed capacity at its home market declined by eight per cent last year compared with 2023, they installed 3.5 GW new wind capacity across eight overseas markets last year, the highest a Chinese OEM ever did.
- **Mingyang** moves up two positions to third place from 2023. The Chinese supplier had a record year in new installations last year, of which 99.8 per cent is from its home market and the rest is in Vietnam. The Chinese company installed 1,757 MW of offshore wind in 2024, making it the largest offshore wind turbine supplier in China and the 2nd -largest worldwide.
- **Windey** also had a record year in new installations in 2024, but the Chinese supplier holds the same position as 2023. Out of its 11.6 GW of new installations, 99.4 per cent is from its home market and the rest is in Kazakhstan and Vietnam.
- **Vestas** fells two position to fifth place from 2023. Although the Danish OEM installed wind turbines in 34 countries last year, the highest among all turbine OEMs, their new wind installations in 2024 dropped by 13 per cent compared with the previous year.

Figure 1-3: Top 15 wind turbine suppliers in annual global market in 2024

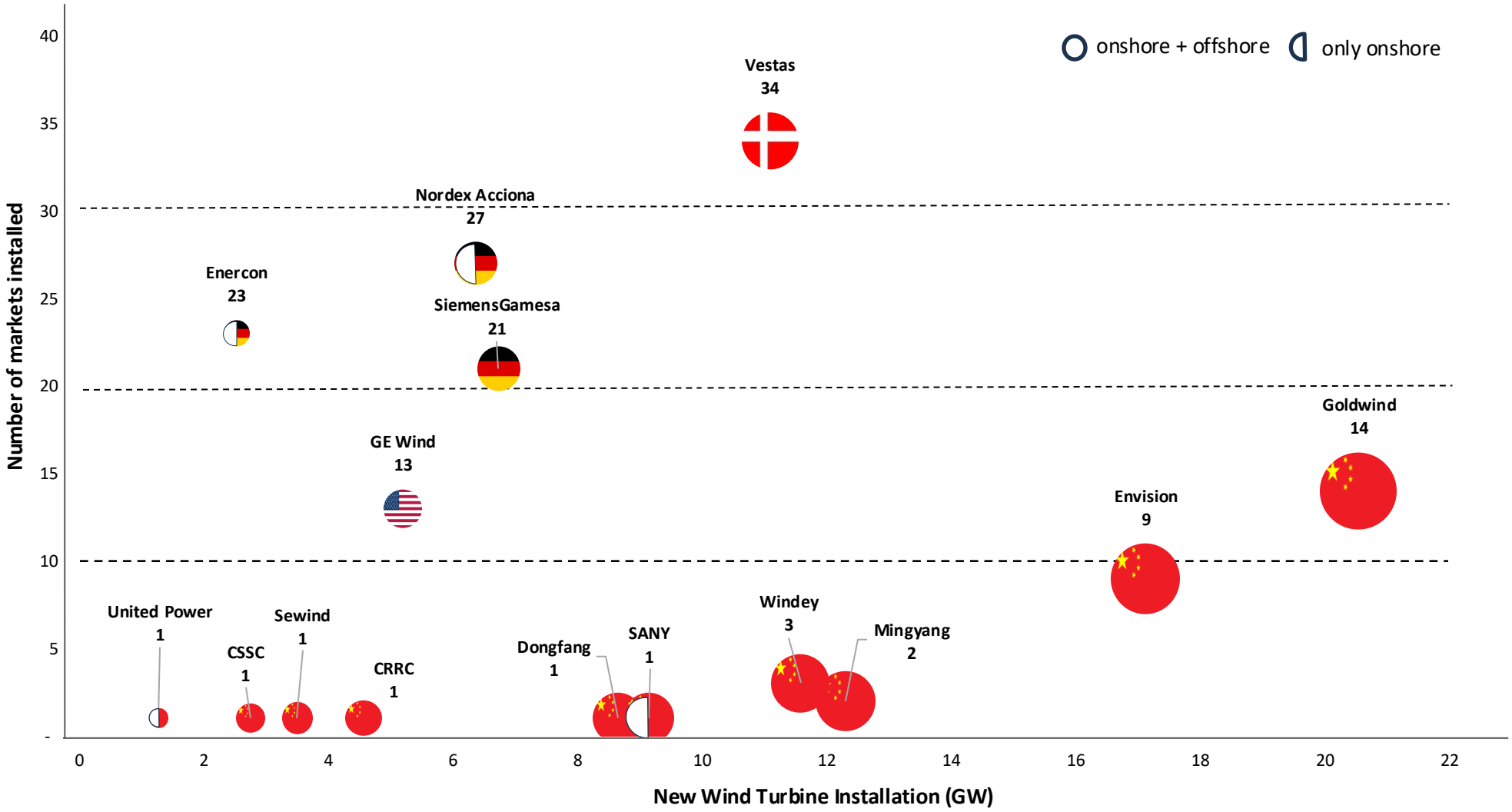


Source: GWEC Market Intelligence, April 2025

Supplier details (part 2 of 2)

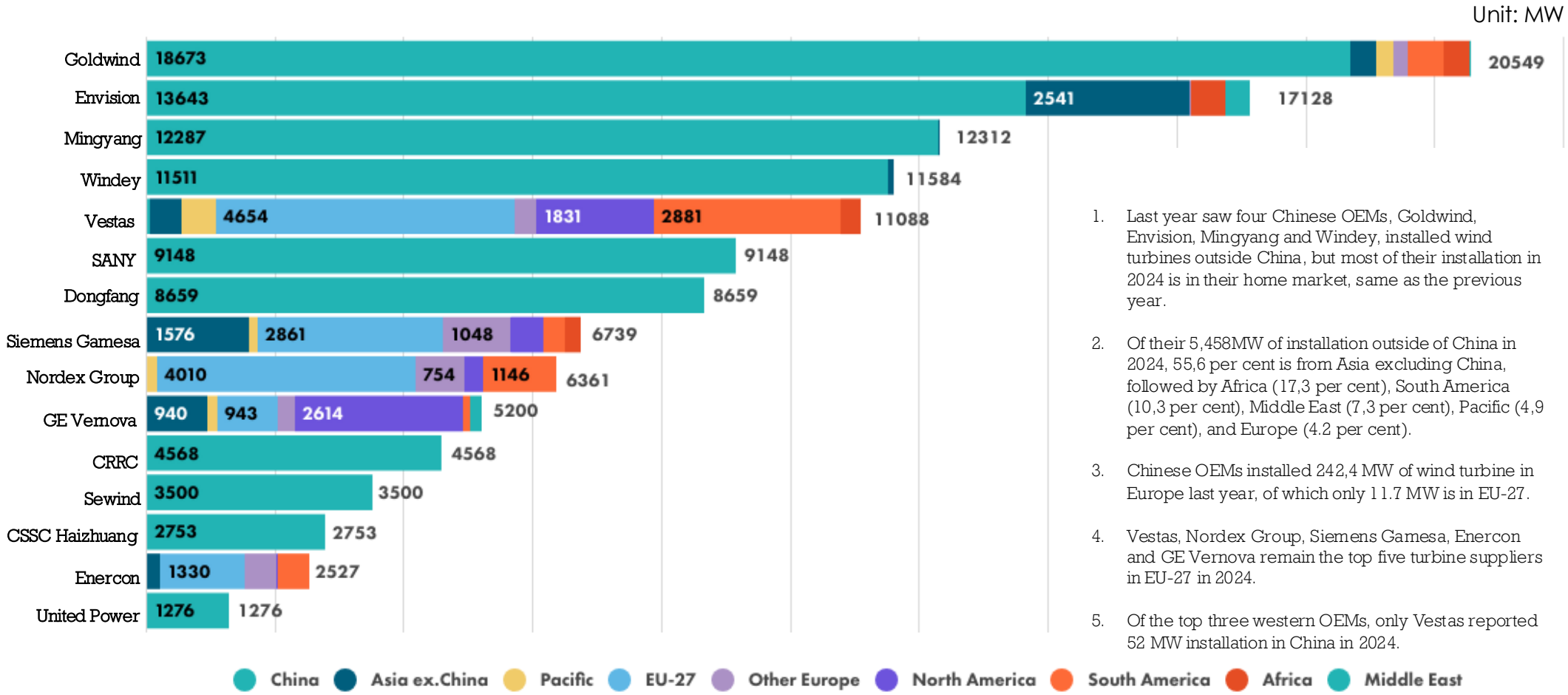
- **SANY** moved up two positions to sixth from 2023 as they had a record year in 2024 with their new installations (all onshore) increased by 22 per cent compared with 2023.
- **Dongfang** moves up three positions from 2023 due to its onshore wind and offshore wind installations in 2024 increasing by 50 per cent and 127 per cent respectively, compared with previous year.
- **Siemens Gamesa** fells two positions from 2023 to eighth place last year. With new installations in 21 markets, the supplier commissioned 6.7 GW of new capacity in 2024, of which 3.4 GW is from offshore wind, making it the largest offshore turbine supplier of the year globally.
- **Nordex Group** holds the same position as 2023, although its new installations in 2024 declined by 8 per cent compared with previous year.
- **GE Vernova** fells three positions to tenth place, as its new installations in 2024 decreased by 32 per cent compared with previous year, which is primarily due to the slow down of onshore wind at its home market. However, the American supplier retains the number one position in the US, the sixth year in a row.
- **CRRC** moves up one position to 11th in 2024. The Chinese supplier's onshore wind installations increased by 13 per cent last year from 2023. CRRC installed 615 MW of offshore wind in 2024, representing its official entry into the offshore wind market.
- **Sewind** fells one position from 2023 to the 12th. Its offshore wind additions dropped by 24 per cent compared with 2023, but it remains the largest offshore wind supplier in Chinese offshore market in total installations.
- **CSSC Haizhuang**, **Enercon** and **United Power** hold the same positions as 2023. CSSC Haizhuang and United Power lost 0.9 per cent and 0.4 per cent global market share respectively compared with 2023, but the German supplier's global market share stays unchanged.

Figure 1-4: Top 15 wind turbine OEMs' new installations in 2024



Source: GWEC Market Intelligence, April 2025

Figure 1-5: Top 15 wind turbine OEMs' new installations in 2024 by region



1. Last year saw four Chinese OEMs, Goldwind, Envision, Mingyang and Windey, installed wind turbines outside China, but most of their installation in 2024 is in their home market, same as the previous year.
2. Of their 5,458MW of installation outside of China in 2024, 55,6 per cent is from Asia excluding China, followed by Africa (17,3 per cent), South America (10,3 per cent), Middle East (7,3 per cent), Pacific (4,9 per cent), and Europe (4.2 per cent).
3. Chinese OEMs installed 242,4 MW of wind turbine in Europe last year, of which only 11.7 MW is in EU-27.
4. Vestas, Nordex Group, Siemens Gamesa, Enercon and GE Vernova remain the top five turbine suppliers in EU-27 in 2024.
5. Of the top three western OEMs, only Vestas reported 52 MW installation in China in 2024.

Source: GWEC Market Intelligence, April 2025

Table 1-2: Top 15 wind turbine suppliers ranking in total installations as the end of 2024

Rank	Supplier	Cumulative MW to end 2024	Total share end of 2024
1	Vestas	188,891	15.62%
2	Siemens Gamesa	142,945	11.82%
3	Goldwind	133,902	11.07%
4	GE Vernova	119,735	9.90%
5	Envision	81,549	6.74%
6	Enercon	63,855	5.28%
7	Mingyang	62,439	5.16%
8	Nordex Group	60,279	4.99%
9	Windey	47,181	3.90%
10	Dongfang	37,056	3.06%
11	Sewind	34,186	2.83%
12	SANY	31,619	2.62%
13	United Power	27,416	2.27%
14	CSSC Haizhuang	26,598	2.20%
15	CRRC	24,567	2.03%
	Others	126,877	10.49%
Global totals		**1,209,094**	**100%**

Source: GWEC Market Intelligence, April 2025

- In total wind turbine installations, the world's top-six wind turbine suppliers are **Vestas, Siemens Gamesa, Goldwind, GE Vernova, Envision** and **Enercon.** Compared with 2023, the only change is that Goldwind overtook fourth place, a position previously held by GE Vernova.
- **Vestas**, **Siemens Gamesa**, **Goldwind** and **GE Vernova** remain the turbine OEMs that have joined the **"100 GW" club** in total installations.
- **Mingyang** moves up one position from 2023 and replaced German **Nordex Group** as the world's seventh largest wind turbine OEM in total installations.
- **Ten Chinese** turbine OEMs are on **the Top 15** list in total installations by end of 2024, same as the previous year.
- Compared with 2023, Chinese wind turbine supplier **SANY** and **Dongfang** move up two positions and one position respectively while **Sewind**, **Unite Power** and **CSSC Haizhuang** fell one position, respectively. CRRC holds the same position as 2023.
- Indian suppliers **Suzlon** and German **Senvion**, which went bankrupt in 2019, dropped out of the Top 15 list in 2023. The two suppliers ranked as the No.16 and No.17 in total installations by end of 2024, respectively, same as the previous year.

Notes

1. Since Vestas has taken the full ownership of MHI Vestas, Vestas' total wind turbine installations as of the end of 2021 include the total installations from MHI Vestas, which is a joint venture between Vestas Wind Systems A/S and Mitsubishi Heavy Industries (MHI) established in 2013, with both entities owning 50 per cent of the company.
2. Turbine OEMs' cumulative installation data before 2018 is based on FTI Intelligence's Global Wind Market Update reports, which have now been transferred to GWEC under a signed agreement.
3. Decommission is not included in turbine OEMs' total installation.

Table 1-3: Fact sheet of top 15 wind turbine suppliers in 2024

Top 15 wind suppliers	Change in annual market share between 2022-2024	Cumulative market share (%) at end of 2024	Ranking in cumulative capacity installed	Number of markets supplied in 2024	Number of turbines supplied In 2024	Largest market in 2024	Most sold model in 2024	Offshore wind installation in 2024
Goldwind	2.3% ↑	11.1%	3	14	3,403	China	GW 191/5000H	Yes
Envision	0.3% ↑	6.7%	5	9	3,105	China	EN-200/6.25	Yes
Mingyang	1.3% ↑	5.2%	7	2	1,940	China	MySE5.0-193	Yes
Windey	0.4% ↑	3.9%	9	3	1,973	China	WD200-6250	Yes
Vestas	-1.8% ↓	15.6%	1	34	2,451	Brazil	V150-4.5	Yes
SANY	1.0% ↑	2.6%	12	1	1,585	China	SI-193/5.0	No
Dongfang	2.2% ↑	3.1%	10	1	1,315	China	DEW-G5000-195	Yes
SiemensGamesa	-1.1% ↓	11.8%	2	21	1,114	UK	SG-3.4-145	Yes
Nordex Group	-0.7% ↓	5.0%	8	27	1,214	Germany	N163-AIS 5.7	No
GE Vernova	-2.2% ↓	9.9%	4	13	1,415	USA	GE2.8-127	Yes
CRRC	0.2% ↑	2.0%	15	1	774	China	CWT5000/D195/H 110	Yes
Sewind	-1.0% ↓	2.8%	11	1	498	China	EW6.25N-202	Yes
CSSC Haizhuang	-0.9% ↓	2.2%	14	1	469	China	H193-6.25MW	Yes
Enercon	-0.03% ↓	5.3%	6	23	592	Germany	E138EP3E2-4.2	No
United Power	-0.4% ↓	2.3%	13	1	254	China	UP5000-195	No

Source: GWEC Market Intelligence, April 2025

- Chinese turbine OEM **Goldwind** increased its global market share in 2024 - more than any other company - followed by **Dongfang, Mingyang** and **SANY.**
- By the numbers of wind turbines installed in 2024, **Goldwind** leads the ranking followed by **Envision, Vestas, Windey** and **Mingyang** in that order.
- **Vestas** is the world's most globalised supplier, with a wide geographic spread of turbine installations in **34 countries** in 2024, followed closely by **Nordex Group, Enercon, Siemens Gamesa** and **Goldwind.**
- Among the 10 Chinese suppliers in the Top 15, **four** installed wind turbines outside China in 2024, but only **Goldwind** and **Envision** installed turbines in ≥ 5 markets.
- **Goldwind** is the leading international Chinese OEM in terms of number of markets supplied as the end of 2024.
- Of the Top 15 wind turbine suppliers, **11 installed offshore wind turbines** last year, accounting for 99 per cent of new offshore wind installations in 2024.

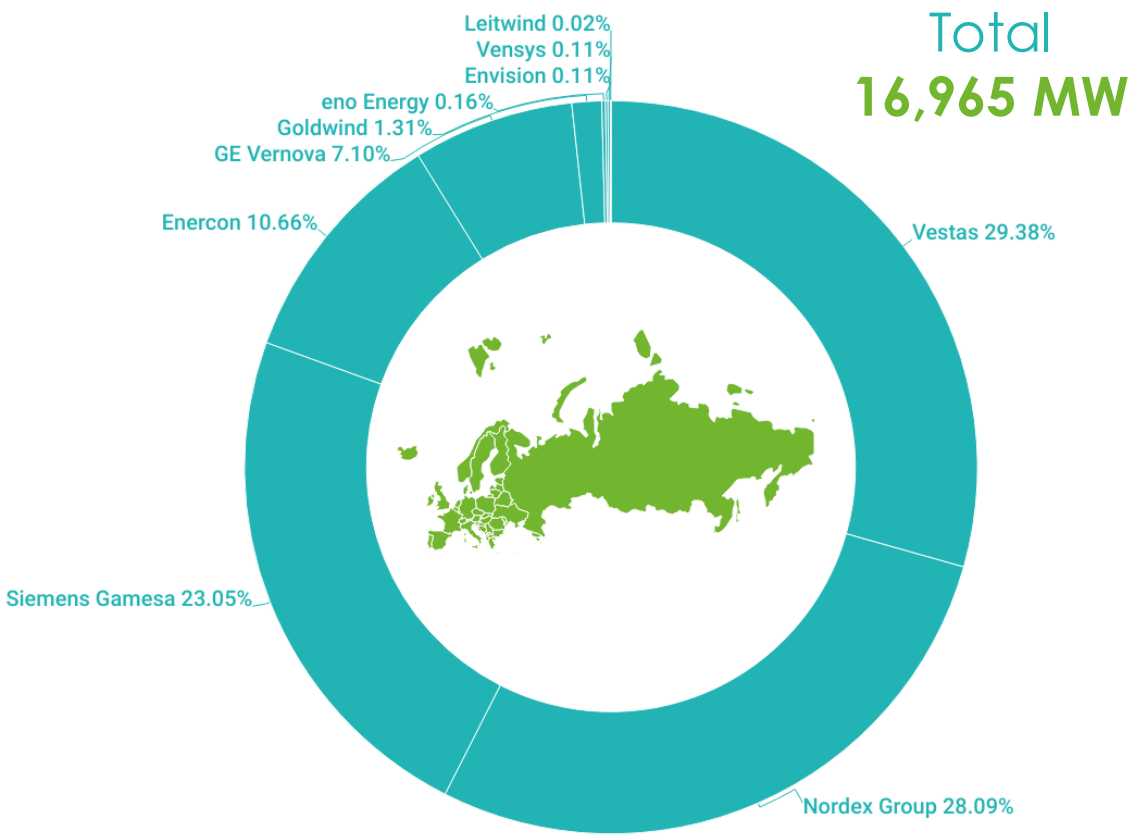
Table 1-4: Top five wind turbine suppliers delivering to the 10 largest global markets in 2024

Rank	Market		#1	#2	#3	#4	#5	New MW Installed 2024
1		China	Goldwind (21%)	Envision (16%)	Mingyang (14%)	Windey (13%)	SANY (10%)	87,233
2		USA	GE Vernova (59%)	Vestas (35%)	SiemensGamesa (6%)	Enercon (%)	Nordex Acciona (%)	4,460
3		India	Envision (28%)	SiemensGamesa (18%)	GE Vernova (14%)	INOX (13%)	Suzlon (11%)	4,444
4		Brazil	Vestas (53%)	Nordex Acciona (19%)	WEG (12%)	SiemensGamesa (8%)	Goldwind (6%)	4,272
5		Germany	Vestas (37%)	Nordex Acciona (25%)	Enercon (24%)	SiemensGamesa (8%)	GE Vernova (5%)	4,209
6		France	Vestas (38%)	SiemensGamesa (38%)	Nordex Acciona (18%)	Enercon (6%)	Vensys (%)	1,937
7		UK	SiemensGamesa (61%)	Vestas (16%)	GE Vernova (15%)	Nordex Acciona (4%)	Enercon (2%)	1,709
8		Finland	Nordex Acciona (58%)	Vestas (42%)	-	-	-	1,386
9		Spain	Nordex Acciona (29%)	GE Vernova (27%)	Vestas (23%)	SiemensGamesa (20%)	Enercon (0.5%)	1,273
10		Turkey	Nordex Acciona (46%)	Enercon (35%)	Goldwind (14%)	Vestas (5%)		1,236
							Total top 10 markets	112,158

Source: GWEC Market Intelligence, April 2025

Figure 1-6: Top wind turbine suppliers in Europe in 2024

Offshore and Onshore

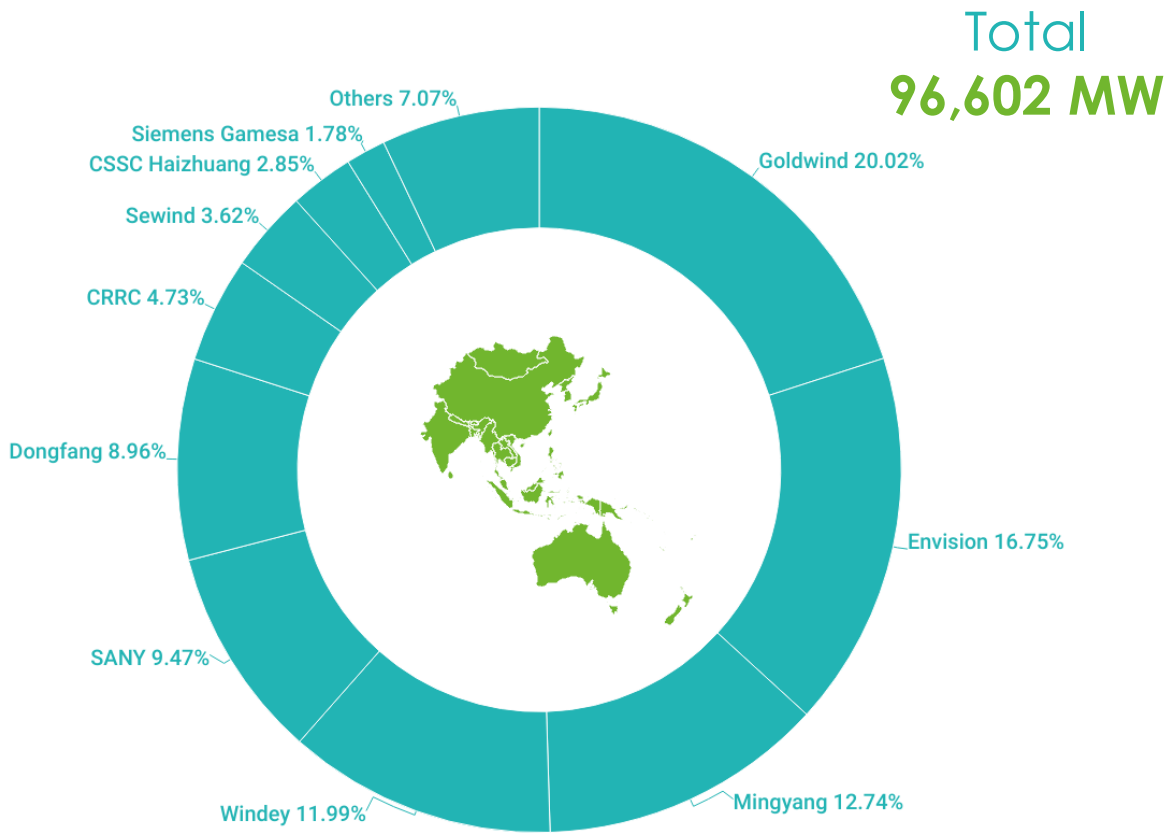


- **Europe recorded 3,212 turbines** installed from the supply side in 2024, of which 344 units were installed offshore.
- **European suppliers** consisting of **Danish, German** and **Spanish** turbine manufacturers continue to dominate in Europe in 2024 with 92 per cent market share, four per cent higher than 2023.
- Danish company **Vestas** retains the title of **leading turbine supplier** in Europe last year, although its market share this region declined by 3 per cent in 2024, compared with the previous year.
- **Nordex Group** holds the same position as 2023, thanks for its strong performance in Germany, Finland, Turkey and Poland.
- **Siemens Gamesa** also holds the same position as the previous year, although the group's market share increased by nearly two per cent in 2024 compared with 2023.
- **Enercon** replaced GE Vernova as fourth largest supplier in Europe, with its market share in 2024 increased by one per cent compared with 2023. Germany and Turkey remains the key markets for the German OEM in 2024.
- **GE Vernova** dropped one position to fifth-place in Europe last year as the American supplier lost four per cent market share in 2024 compared with the previous year. However, the supplier is still the largest non-European supplier in Europe last year.
- Other European OEMs that reported installations in this region in 2024 include **eno Energy**, **Vensys,** and **Leitwind.** Last year saw two Chinese OEMs- Goldwind and Envision- installed wind turbines in European continent, but their volume is relatively small (243 MW or 1.42 per cent).

Source: GWEC Market Intelligence, April 2025

Figure 1-7: Top wind turbine suppliers in Asia Pacific in 2024

Offshore and Onshore

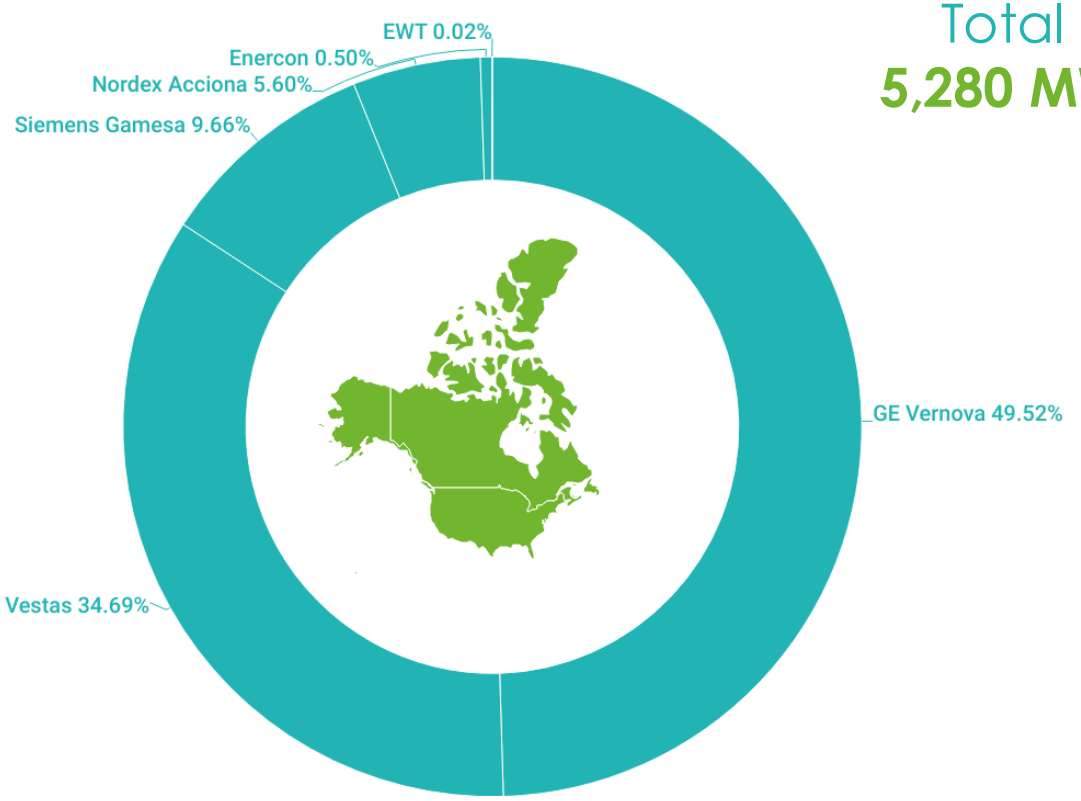


- As home to the world's largest wind turbine manufacturing base, **Asia Pacific** saw **16,823 wind turbines** installed during 2024, three per cent higher than the previous year, of which 98..5 per cent is in Asia.
- The Asia Pacific market has been dominated by **Chinese wind turbine suppliers** since 2008, when the establishment of a local Chinese wind supply chain was completed. 2024 saw 9 Chinese firms on this regional top ten list with Siemens Gamesa presenting the only non-Chinese supplier on the list.
- **GE Vernova ,Vestas, Enercon** and **Nordex Group** reported 1,085 MW, 1,063 MW, 191 MW and 154 MW of new installations in this region, ranked No.13, 14, 19 and 20 in 2024, respectively.
- Aside from Chinese firms, other local turbine OEMs based in this region and reported new turbine installations in 2024 include **Suzlon**, **Inox, Adani** and **Senvion India** (acquired by Saudi Arabia-based Alfanar in 2021) from **India**, **Doosan** and **Unison** from **South Korea.**

Source: GWEC Market Intelligence, April 2025

Figure 1-8: Top wind turbine suppliers in North America in 2024

Offshore and Onshore



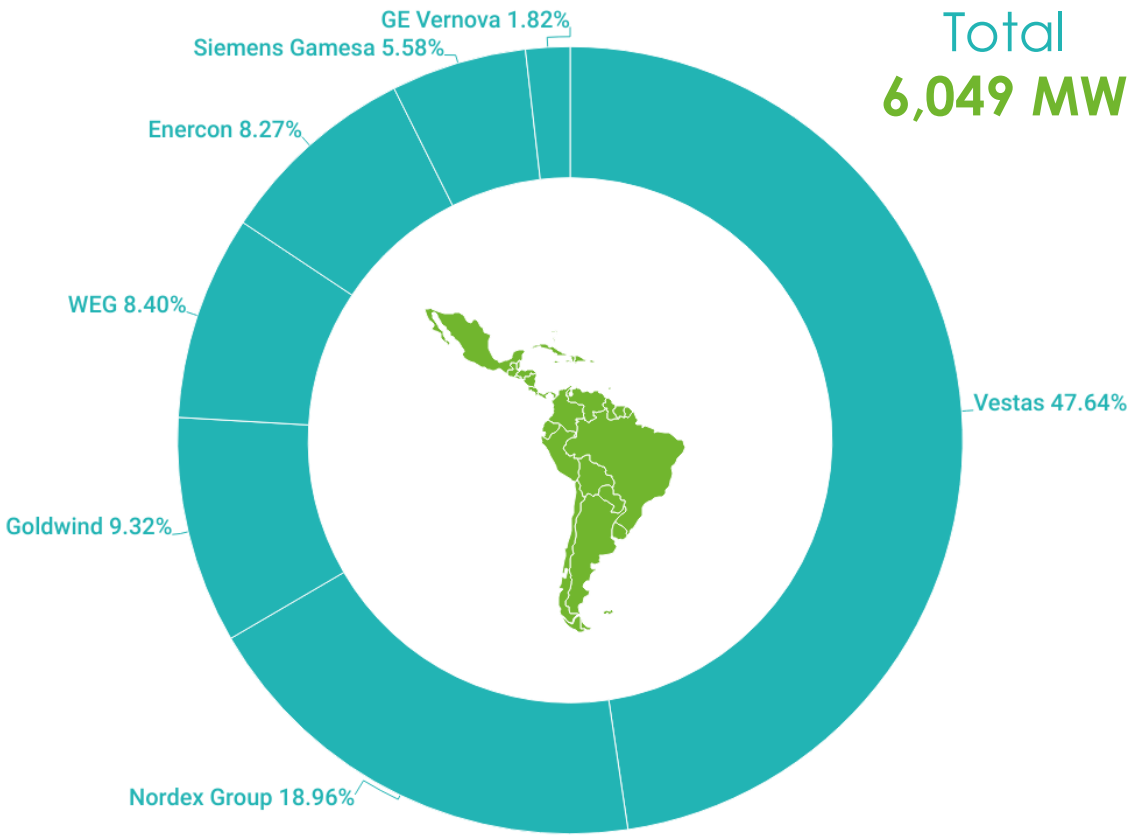
Total
5,280 MW

- GWEC Market Intelligence recorded **1,467 wind turbines** that were installed in North America (the US and Canada) in 2024, of which 1,312 were installed in the **United States** and 155 in **Canada**.
- **GE Vernova** and **Vestas** continue to dominate the North American market with 84 per cent of market share in 2024, but collectively they gained 12 per cent market share last year compared with 2023.
- **GE Vernova** remains the **largest supplier** in the region in 2024. The US supplier has been the leading supplier in its home market six years in a row, followed by Danish supplier Vestas.
- **Siemens Gamesa** retains the **number three position** in this region in 2024, although the company lost four per cent market share last year compared with 2023.
- **Nordex Group**'s market share in this region declined by three per cent in 2024 compared with previous year. The group only installed one unit wind turbine in the US in 2024, but it remains the **fourth-largest** wind turbine supplier in North America last year.
- German **Enercon** is the number five supplier in this region in 2024, with all their turbines installed in Canada, same as the previous year.

Source: GWEC Market Intelligence, April 2025

Figure 1-9: Top wind turbine suppliers in Latin America in 2024

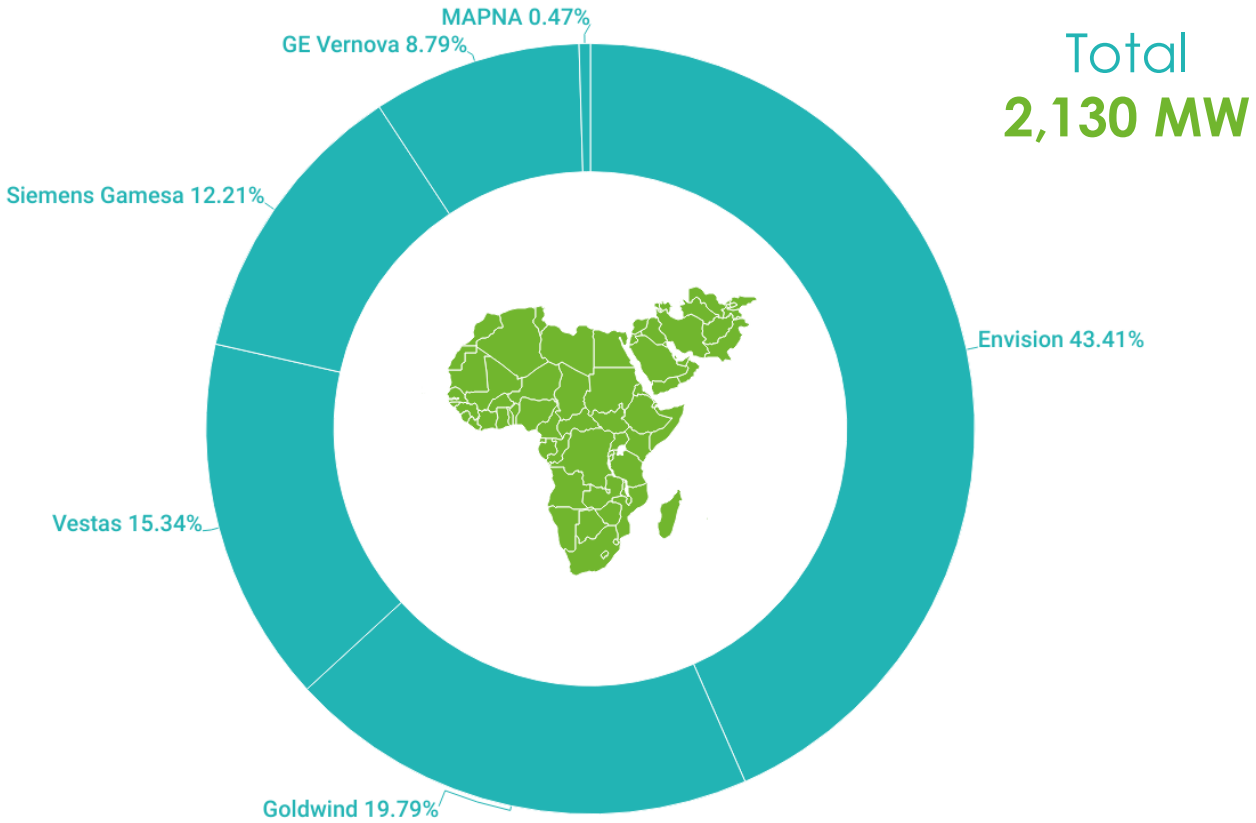
Offshore and Onshore



- Across Latin America, **1375 wind turbines** were installed during 2024, 12 per cent less than the previous year, of which 881 (or 64 per cent) were installed in **Brazil**.
- **Vestas** continues to hold the **top spot** in the region in 2024 with its market share in this region increased by nearly 12 per cent compared with the previous year. Brazil made up 79 per cent of Vestas' new installations in this region in 2024, same as 2023.
- **Nordex Group** retains the number two position in this region in 2024, relying on its installation in Brail, Chile and Peru, but the supplier lost 3.5 per cent market share in the region from 2023.
- **Goldwind** moves up two positions from 2023. The Chinese supplier replaced Siemens Gamesa as third-largest wind turbine supplier in this region in 2024. Goldwind installed 52 units of wind turbines totalling 312 MW, in Chile and 42 units, totalling 252 MW, in Brazil.
- Brazilian supplier **WEG** and German supplier **Enercon** also move up two positions last year as their market share in this region increased by five per cent from 2023, respectively.
- **Siemens Gamesa** and **GE Vernova** fell three positions to the **6th** and **7th place** respectively last year. Siemens Gamesa installed 52 unit wind turbines in Brazil and 3 in Dominican Republic last year while all GE Vernova's new installations in this region in 2024 is in Brazil, same as the previous year.

Source: GWEC Market Intelligence, April 2025

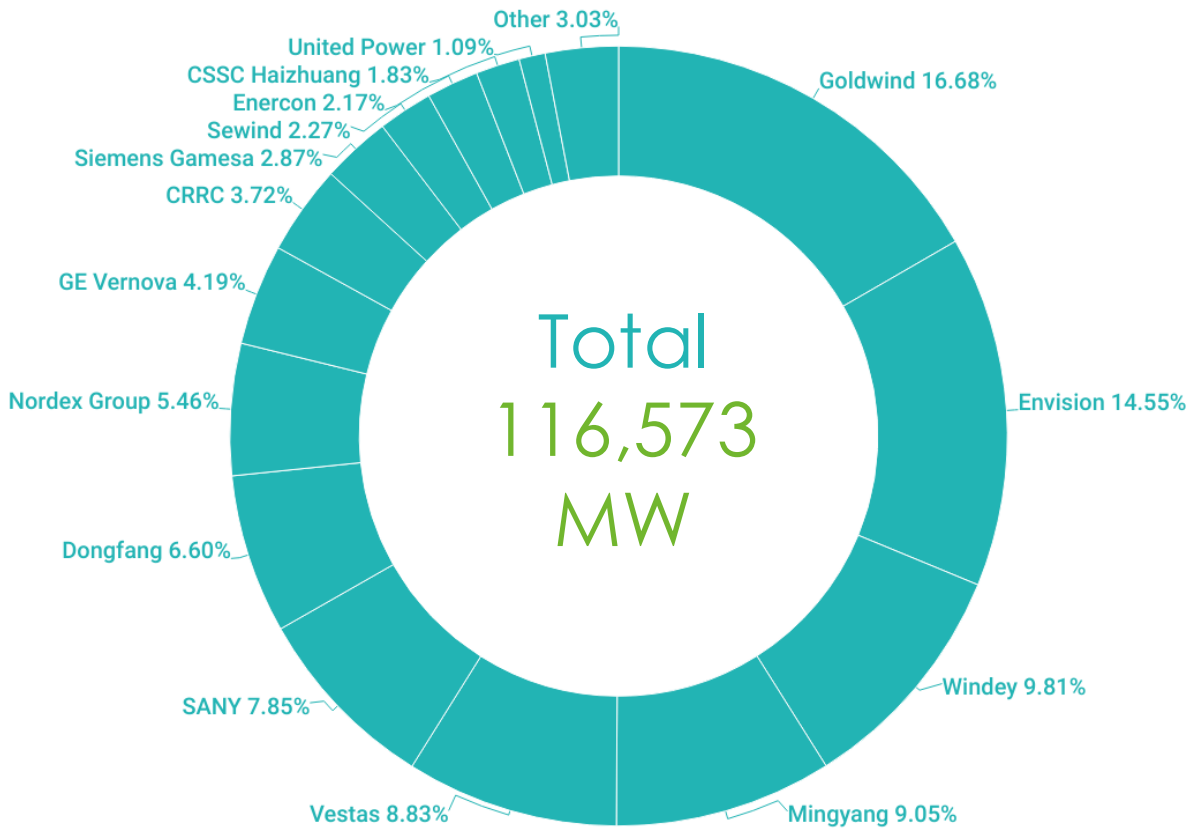
Figure 1-10: Top wind turbine suppliers in Africa and the Middle East in 2024 (offshore and onshore)



- **384 units of wind turbine** were installed in Africa and the Middle East in 2024 (compared with 295 units in 2022), of which 279 or 73 per cent is in Africa and the remaining in the Middle East. Six turbine OEMs reported installation in this region last year, compared with five in 2023.
- **Envision** installed 145 units of wind turbines, totalling 925MW, across three markets (Egypt, Morocco and Saudi Arabia) in this region, making it the largest supplier in 2024.
- **Goldwind** remains the second-largest supplier in the region in 2024. The Chinese supplier's new installations in this region increased by 53 per cent compared with 2023, relying on its new additions in Egypt (312 MW), South Africa (101 MW) and UAE (9 MW).
- **Vestas** and **Siemens Gamesa** hold the same position as 2023. The Danish supplier installed 73 wind turbines (327 MW) in this region, of which 71 units are in South Africa and the remaining in Egypt, while the German supplier installed 52 units of wind turbine (260 MW) in Morocco.
- **GE Vernova** fells four positions to fifth place last year, as its new installations in 2024 decreased by 55 per cent from 2023. The company installed 39 units of wind turbines in this region, of which all is in Israel.
- As the only local wind turbine OEM in the region, **MAPNA** installed four wind turbine, totalling 10 MW, in Iran in 2024.

Source: GWEC Market Intelligence, April 2025

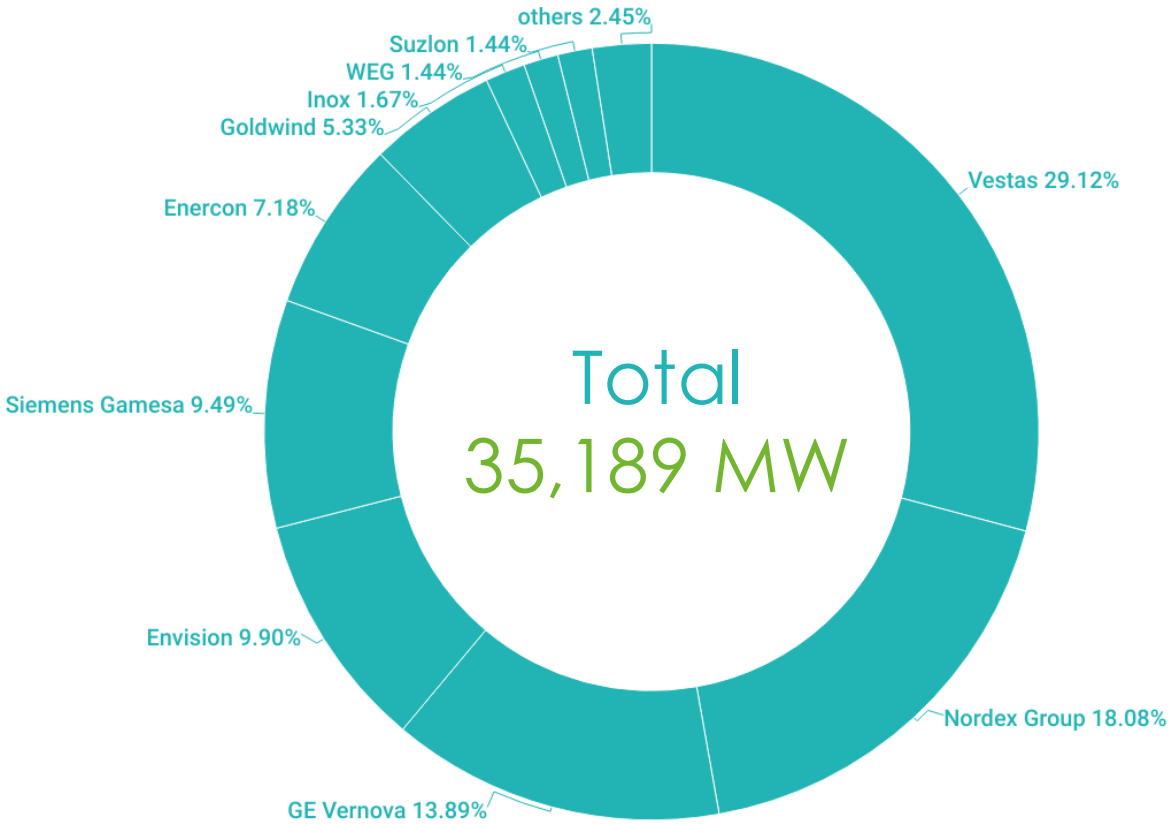
Figure 1-11: Annual onshore wind turbine suppliers in 2024



- New onshore wind installations surpassed the 100 GW milestone for the second year in a row, with more than **116 GW of onshore wind additions** were reported by wind turbine OEMs in 2024, marking a historical peak.
- Thanks for the strong onshore wind growth at its home market, Chinese suppliers **Goldwind** and **Envision** hold the same position as 2023, with their global onshore wind market share increased by two per cent and one per cent respectively compared with the previous year.
- Chinese suppliers **Windey** moved up one position from 2023 to **3rd** place last year while its rival on the Chinese market **Mingyang** and **Dongfang** moved up three positions from 2023 to 4th position and 7th position respectively in 2024.
- **Vestas**, **GE Vernova** and **Siemens Gamesa** fell 2, 3 and 2 positions last year from 2023 to **the 5th , 9th and 11th position** in 2024 respectively, but **Nordex Group** retains the **number eight** position last year, same as 2023.
- **SANY** fells one position to sixth place last year, but the Chinese supplier's new onshore wind installations increased by 22 per cent compared with 2023.
- German **Enercon** moves up one position from 2023 with its total new onshore wind installations increased by four per cent compared with the previous year.
- There are **10** Chinese suppliers on the **Top 15** onshore wind supplier list in 2024, the same as previous year.

Source: GWEC Market Intelligence, April 2025

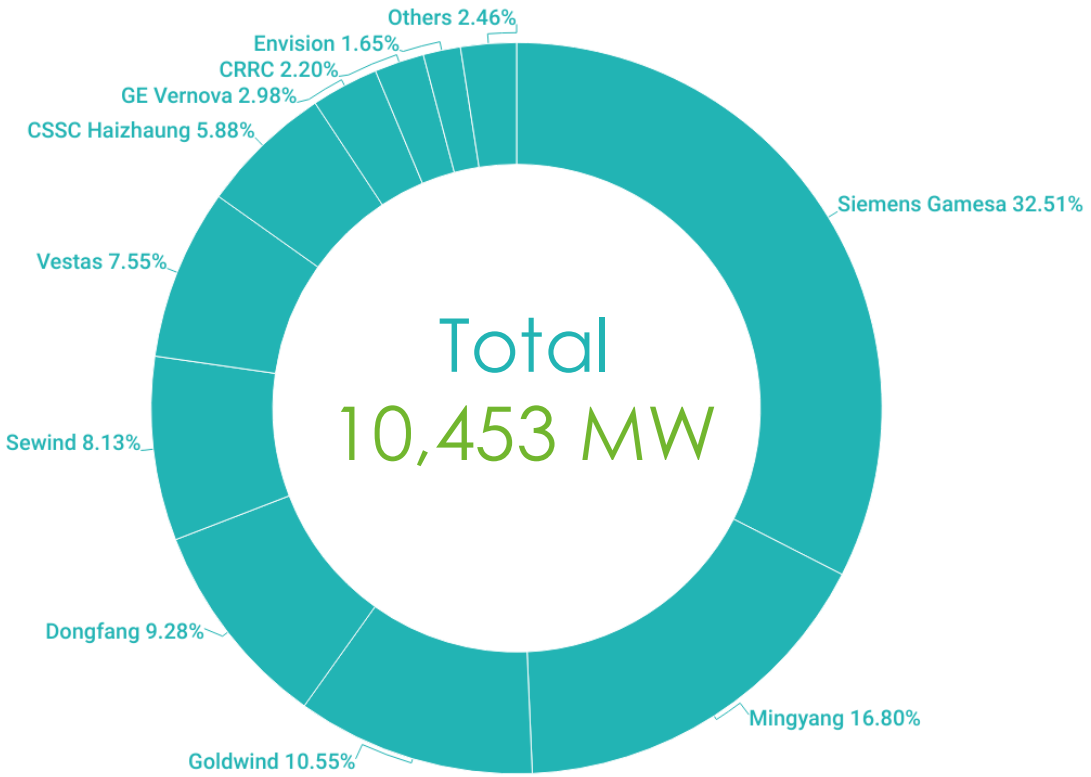
Figure 1-12: Annual onshore wind turbine suppliers excluding China in 2024



- When excluding China from onshore wind capacity installations in 2024, the number one supplier is **Vestas**, same as 2023.
- **Nordex Group** moved up one position from 2023 and replaced GE Vernova as the 2nd-largest supplier in 2024.
- The US turbine OEM **GE Vernova**, **Siemens Gamesa** and **Enercon** each feels one position from 2023 to the 3rd, 5th and 6th place respectively in 2024.
- Chinese suppliers **Envision** and **Goldwind** both had a record onshore wind installations outside of China last year with Envision moving up two positions from 2023 to 4th place and Goldwind staying at the same position as 2023.
- **Suzlon** fells two positions to 10th place last year due to its new onshore wind installations declined by 30 per cent compared with 2023 while Indian **Inox** moves up three positions from 2023 to the 8th place in 2024.
- With its new installations doubled last year compared with 2023, Brazilian **WEG** moves up one position to the 9th place in 2024.

Source: GWEC Market Intelligence, April 2025

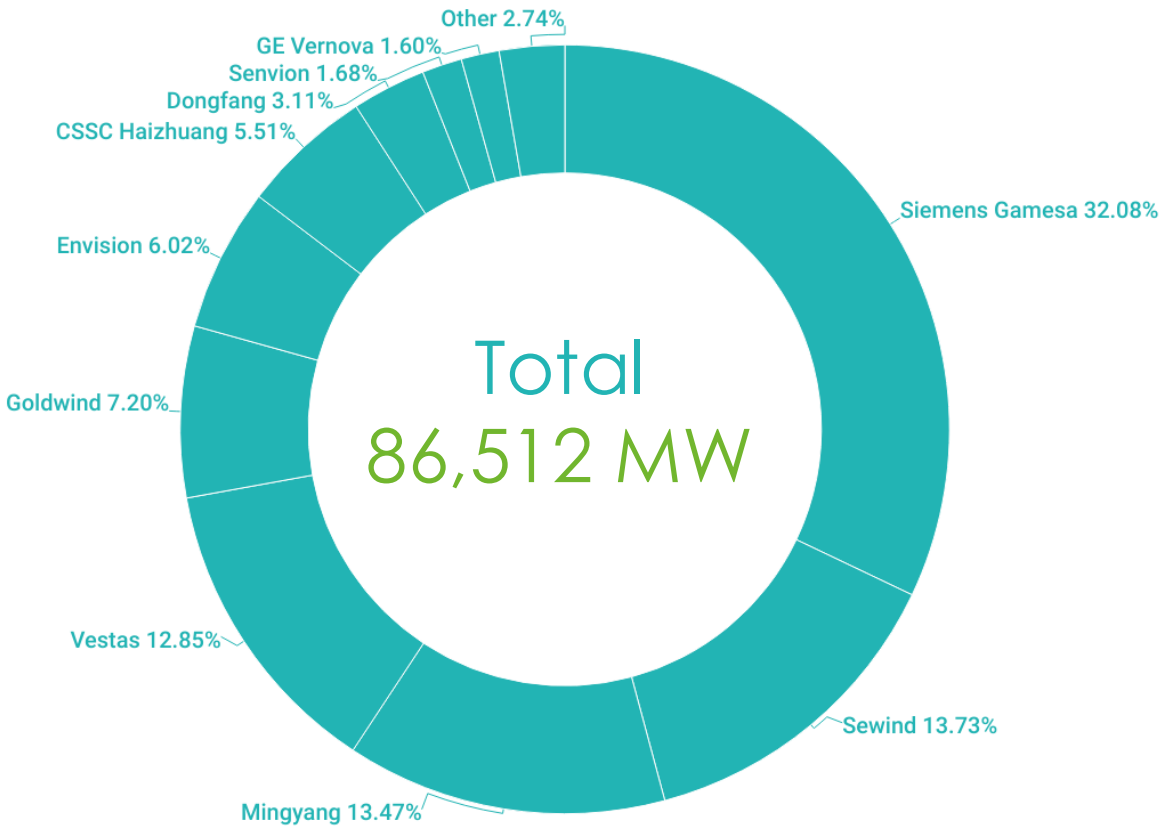
Figure 1-13: Top offshore wind turbine suppliers' annual installed capacity 2024



Source: GWEC Market Intelligence, April 2025

- **13 manufacturers** installed 1,065 units of offshore wind turbine - nearly 10.5 GW - in a single year. The new additions are 3 per cent lower than 2023, making 2024 the third-best year in offshore wind history.
- The **average size** of new installed offshore wind turbines is **9.8 MW** worldwide, and reaching **10.1 MW** in **Europe**, **9.6 MW** in **APAC**, **11.7MW** in **North America** in **2024,** respectively.
- **Siemens Gamesa** installed 349 offshore turbines, totalling 3.4 GW, across seven markets last year and replaced Mingyang as the world's largest offshore wind turbine supplier in 2024.
- **Mingyang** installed 193 units of offshore wind turbines in 2024. Of the 193 offshore wind turbines installed by Mingyang in 2024, 185 are in its home market- China and the remaining in Vietnam (intertidal).
- **Goldwind** moved up three positions to third-place last year with all 80 units of offshore wind turbines (1102 MW) installed in China.
- **Dongfang** moved up five position to fourth-place last year with all 103 units of offshore wind turbine (971 MW) installed in China.
- **Sewind** fells one position to fifth place last year due to its new installations dropped to 850MW, 24 per cent lower compared with 2023.
- **Vestas** fells one position to 6th position from 2023, because the Danish supplier's new offshore wind installations dropped by 25 per cent compared with the previous year.
- **CSSC Haizhuang** moved up one position to **seventh place** last year with its new installations increased by 27 per cent from 2023 but Envision fells seven positions to the 10th in 2024.
- **GE Vernova** moved up two positions to 8th-place last year from 10th place in 2023**.** The US supplier installed 24 units of Haliade-X 13MW offshore wind turbine in 2024, of which 20 in the UK and 4 in the US.
- **CRRC** entered the top 10 offshore wind supplier list for the first time. The Chinese supplier installed 27 units of offshore wind turbine, totalling 230 MW, in China last year.

Figure 1-14: Top ten offshore wind turbine suppliers' cumulative capacity to end of 2024

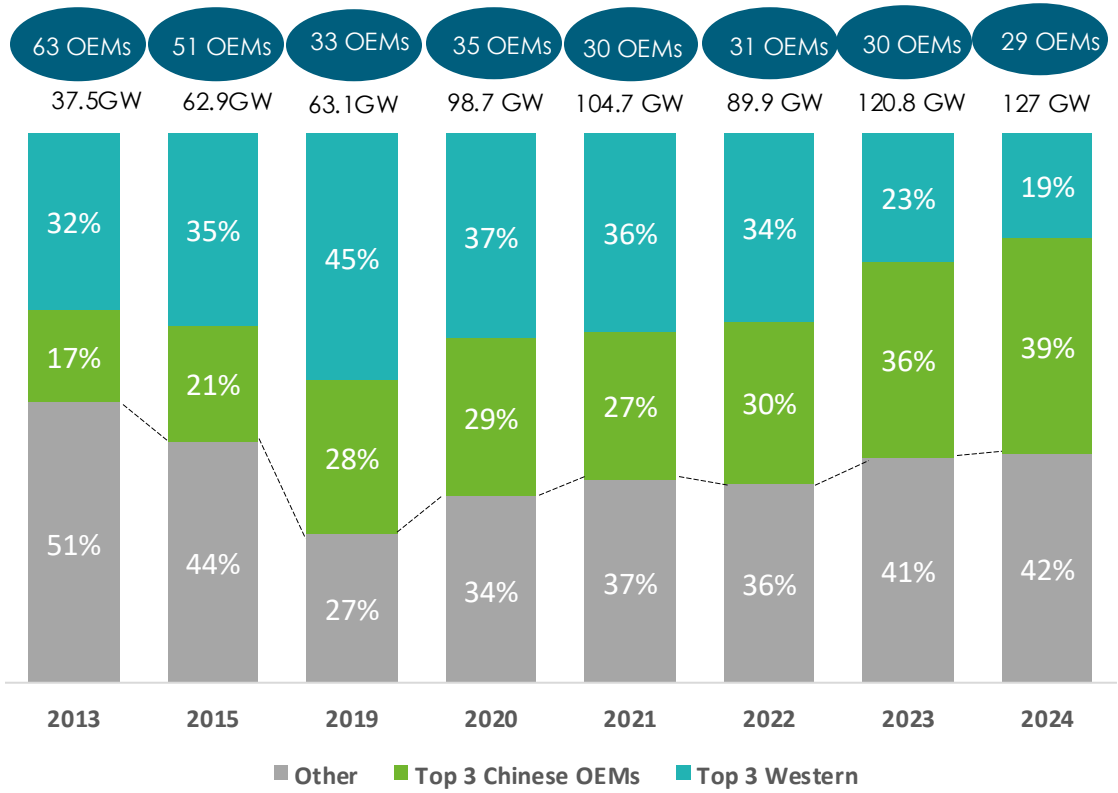


- Globally, a total of **86,512 MW** offshore wind energy was installed as the end of 2024.
- The two offshore wind pioneers, **Siemens Gamesa** and **Vestas** together made up **44.9 per cent** of total global offshore wind installations by the end 2024, 0.7 per cent lower than in 2023.
- **Siemens Gamesa consolidated** its global leading position in cumulative offshore wind installations. Thanks for its strong performance in 2024, the company gained 0.6 per cent market share last year compared with 2023.
- **Sewind** retains the number two position from 2023, however, as China's largest offshore wind turbine supplier in total offshore wind installation, the company lost 0.8% global market share in 2024 compared with previous year.
- **Vestas** fells one position to 4th place compared with 2023 cause the Danish supplier's market share in total offshore installations decreased by 0.7 per cent compared with 2023 while **Mingyang** moved up one position to 3rd place last year with its global market share increased by 0.5 per cent compared with the previous year.
- Compared with their ranking in cumulative installations in 2023, the suppliers in the positions 5 to 10 stay the same in 2024. They are **Goldwind, Envision, CSSC Haizhuang, Dongfang, Senvion** and **GE Vernova**.
- **Senvion** (now bankrupt) still holds a spot at the top 10 list last year, but the supplier is likely to drop out of the top 10 list next year.

Source: GWEC Market Intelligence, April 2025

Figure 1-15: Trends of OEM Market consolidation

Market shares of top six wind turbine OEMs show market dominance and consolidation
(per cent)



Top 3 Western – Vestas, Siemens Gamesa and GE Vernova (2013-2023), Vestas, Siemens Gamesa and Nordex Acciona (2024)

Top 3 Chinese – Goldwind, Envision and Mingyang (2013-2022 and 2024); Goldwind, Envision and Windey (2023)

Source: GWEC Market Intelligence, April 2025

- **63 OEMs** reported wind turbine installations in **2013**, making it the **peak year** in terms of the total number of suppliers in a single year. Since then, the number of suppliers has been declining, with **51** suppliers recorded in **2015**, **35** in **2020**, 30 in **2023** and **29** in **2024**.
- Figure 1- 14 shows that **Tier 1 wind turbine OEMs** began their market dominance from **2015**, when the **top six wind turbine OEMs** controlled **more than half** of the global market share. Following the market consolidation of the wind industry completed between 2015-2017 by companies such as GE-Alstom Power and Siemens-Gamesa, the trend of the Tier 1 OEMs dominating the market continued. **In 2019**, the global market share of the **top six companies** increased to **73 per cent**, the highest this group has ever achieved.
- Due to the wind power installation rush in China in 2020-2021, which created opportunities for tier 2 and 3 Chinese suppliers, and western OEMs have been losing market share in China since 2020, the **top 6 OEMs**' market share **dropped to 66 per cent** and **63 per cent** in **2020** and **2021**, respectively.
- Although the top 3 Chinese suppliers increased their market share by 3 per cent last year compared with 2023, the group (top six) **lost one per cent** market share in **2024**. This is primarily due to the **top 3 western OEMs** together **lost four per cent market** share in 2024 compared with the previous year.

Table 1-5: Global installed wind turbine units overview in 2024

Region	New turbines installed 2019 (units)	New turbines installed 2020 (units)	New turbines installed 2021 (units)	New turbines installed 2022 (units)	New turbines installed 2023 (units)	New turbines installed 2024 (units)
Asia	12,263	21,075	18,005	12,718	15,912	16,571
Europe	4,542	4,113	4,445	4,486	3,821	3,212
North America	3,948	6,827	4,370	3,078	2,027	1,467
Latin America	1,278	1,102	1,459	864	1,375	1,212
Africa	205	223	460	99	209	279
OECD Pacific	576	754	371	317	409	252
Middle East	81	25	125	13	80	105
Total Fleet	**22,893**	**34,119**	**29,234**	**21,575**	**23,833**	**23,098**

Source: GWEC Market Intelligence, April 2025

- In 2024, **23,098 new wind turbines** were installed globally, **3 per cent lower than in 2023**, which is primarily due to:
    - The **average turbine size continues to grow** reaching 5.5 MW worldwide last year.
    - New installations in **Europe, North America** and **Latin America** in 2024 **declined by 10%, 33%** and **25%** respectively compared with 2023.
- Of the 23,098 new turbines installed last year, **72 per cent** is in **Asia**, **14 per cent** in **Europe**, **6 per cent** in **North America,** 5 per cent in Latin America, 2 per cent in Africa, 1 per cent in OECD Pacific and 0.5 per cent in Africa.

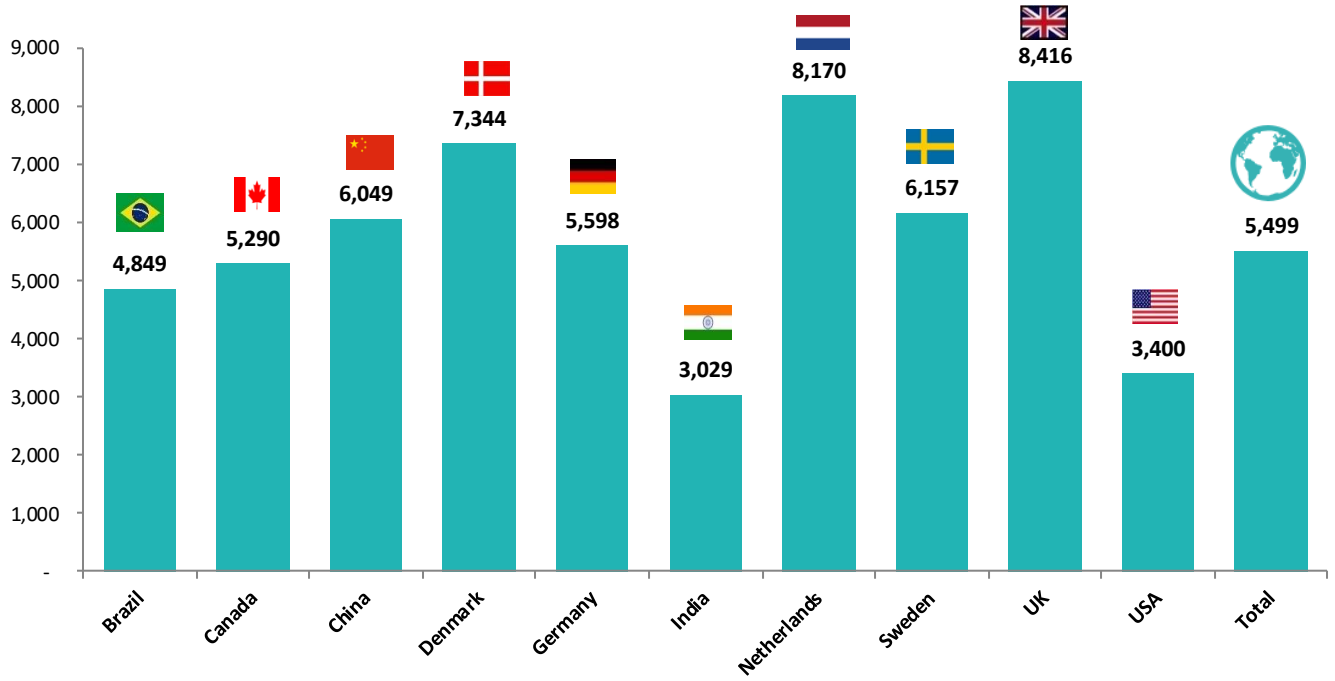
Table 1-6: New turbine units installed in top 20 markets in 2024

Rank	Country	New turbines installed 2024	Rank	Country	New turbines installed 2024
1	China	14,421	11	Australia	218
2	India	1,467	12	UK	203
3	USA	1,312	13	Chile	186
4	Brazil	881	14	Japan	182
5	Germany	752	15	Uzbekistan	182
6	France	484	16	Italy	174
7	Spain	253	17	Canada	155
8	Poland	243	18	Egypt	127
9	Tuekey	243	19	Netherlands	125
10	Finland	232	20	Argentina	115

Source: GWEC Market Intelligence, April 2025

- The **top 20 markets** accounted for **95 per cent** of new wind turbines installed in 2024, **same as** the previous year.
- **China** installed 14,421 units of new wind turbines in 2024, 2 per cent greater than 2023 and accounting for **62 per cent** of the **global market share** in **2024**.
- The **India** installed 1,467 units of new turbines in 2024 with 6 per cent share of the market, while **the US**, **Brazil** and **Germany** followed in third, fourth and fifth place with 6 per cent, 4 per cent and 3 per cent global market share, respectively.

Figure 1-16: Average size of new installed wind turbines by market in 2024

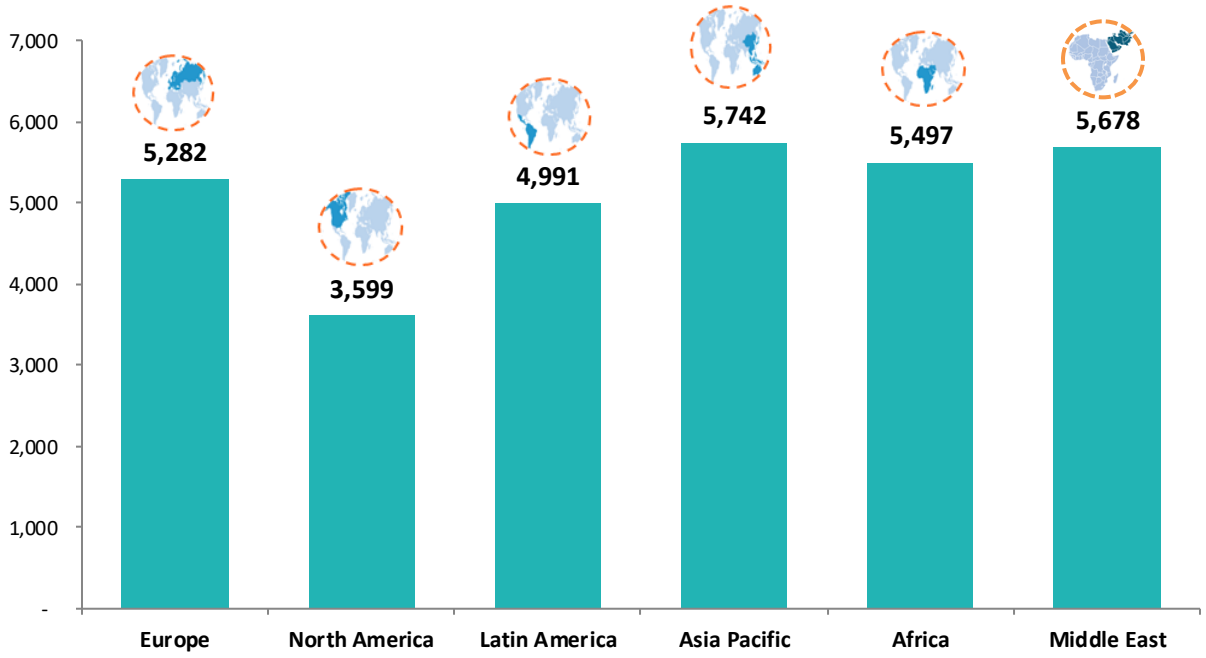


Country	Brazil	Canada	China	Denmark	Germany	India	Netherlands	Sweden	UK	USA	Total
Onshore	4,849	5,290	5,884	4,500	5,190	3,029	5,294	6,157	4,129	3,323	5,291
Offshore			9,913	8,000	10,054		11,000		12,340	11,667	9,815

Source: GWEC Market Intelligence, April 2025

- The upward trend in wind turbine size continues in 2024 with **the average turbine size worldwide** reaching almost **5,500 kW**, 9 per cent (or 435 kW) higher than in 2023.
- The **average onshore wind turbine size** in 2024 is **5,291kW** while the **average turbine size for offshore wind** reaches **9,815 kW**.
- With more than 75 per cent of its new installations located offshore last year, **The UK**'s average turbine size reaches 8,416 MW, the highest in 2024. For onshore wind alone, Sweden has the highest average turbine size in 2024.
- In 2024, the average size of newly installed wind turbines in the world's two largest markets, **China** and the **US**, is **6,049 kW** and **3,400 kW** respectively (compared with 5,585 kW and 3,517 kW in 2023).
- The average size of newly installed wind turbines in **India** passed the 3 MW threshold in 2024 (from 2,6 MW in 2023), but it remains the lowest among established wind markets.

Figure 1-17: Average size of new installed wind turbines by region in 2024



Region	Europe	North America	Latin America	Asia Pacific	Africa	Middle East
Onshore	4.698	3.533	4.991	5.572	5.497	5.678
Offshore	10,149	11,667		9,621		

Source: GWEC Market Intelligence, April 2025

- Newly installed wind turbines in **Europe** (in power rating) used to be bigger than those installed in the rest of the world, but the situation has changed since 2022. Last year saw the APAC, Africa and Middle East regions have higher average turbine size than Europe.
- **Asia Pacific** used to be the region with the lowest average turbine size, but that changed from 2021, primarily due to larger offshore and onshore wind turbines being installed in China to achieve the grid parity. Last year saw the average turbine size installed in this region reaches **5,742 MW**, **the highest** among the regions.
- Same as 2023, **North America** took **the lowest** average turbine size title as 694 units of small turbine (with power rating less than 3 MW) were installed in the US (out of 1,312 units).
- Looking at **onshore wind**, **Middel East** had the highest average turbine size in 2024 followed by Asia Pacific. For **offshore wind**, the region with the highest average turbine size is **North America**, followed by Europe.

Table 1-7: Breakdown wind turbine sizes by rated capacity installed in 2024

Product (Size range)	Units	MW	Share 2024
WTGs 0-499 kW*	2	0.5	0.00%
WTGs 500-749 kW	-	-	-
WTGs 750-999 kW	13	11.7	0.01%
WTGs 1000-1300 kW	-	-	-
WTGs 1301-1499 kW	-	-	-
WTGs 1500 kW	2	3.0	0.00%
WTGs 1501-1999 kW	3	5.8	0.00%
WTGs 2000 kW	68	136.0	0.11%
WTGs 2001-2499 kW	649	1,399.0	1.10%
WTGs 2500 kW	166	415.0	0.33%
WTGs 2501-2999 kW	813	2,238.1	1.76%
WTGs 3000 kW	335	1,005.0	0.79%

Product (Size range)	Units	MW	Share 2024
WTGs 3001-3599 kW	1,222	4,110.9	3.24%
WTGs 3600-3999 kW	307	1,129.6	0.89%
WTGs 4000-5000 kW	7,679	36,546.2	28.77%
WTGs 5001-6000 kW	3,087	17,388.5	13.69%
WTG 6001-7999 kW	6,881	44,567.4	35.09%
WTG 8000-9999 kW	979	8,323.5	6.55%
WTG 10000-12000 kW	709	7,235.5	5.70%
WTG 12001-15000 kW	175	2,377.9	1.87%
WTG >15000 kW	8	132.0	0.10%
Total	**23,098**	**127,026**	**100%**

**This size range only covers wind turbines with rated capacities ≥400 kW*

Source: GWEC Market Intelligence, April 2025

- The market share of wind turbines with power ratings **less than 2000 kW** was **only 0.01 per cent** in 2024.
- Wind turbines in the **2000-2999 kW** size range were the most popular products in 2020, with more than half of global market share. Following the upward trend in wind turbine power rating, however, its market share dropped to **3.3 per cent in 2024.**
- Wind turbines in the **3000-5000 kW** size range were the mainstream products in 2022 and made up more than half of total global turbine supply. However, **last year** saw the market share of this size range dropped to **33.7 per cent**, nearly five per cent lower than the previous year.
- The market share of turbines with power rating **greater than 5000 kW** was **63 per cent** in 2024, 7.3 per cent higher than 2023, primarily due to larger onshore turbines were installed in China and more offshore wind turbines with higher power rating being installed offshore across the global.
- Turbines with power rating in **6001-7999 kW** became **the most installed products** in 2024.

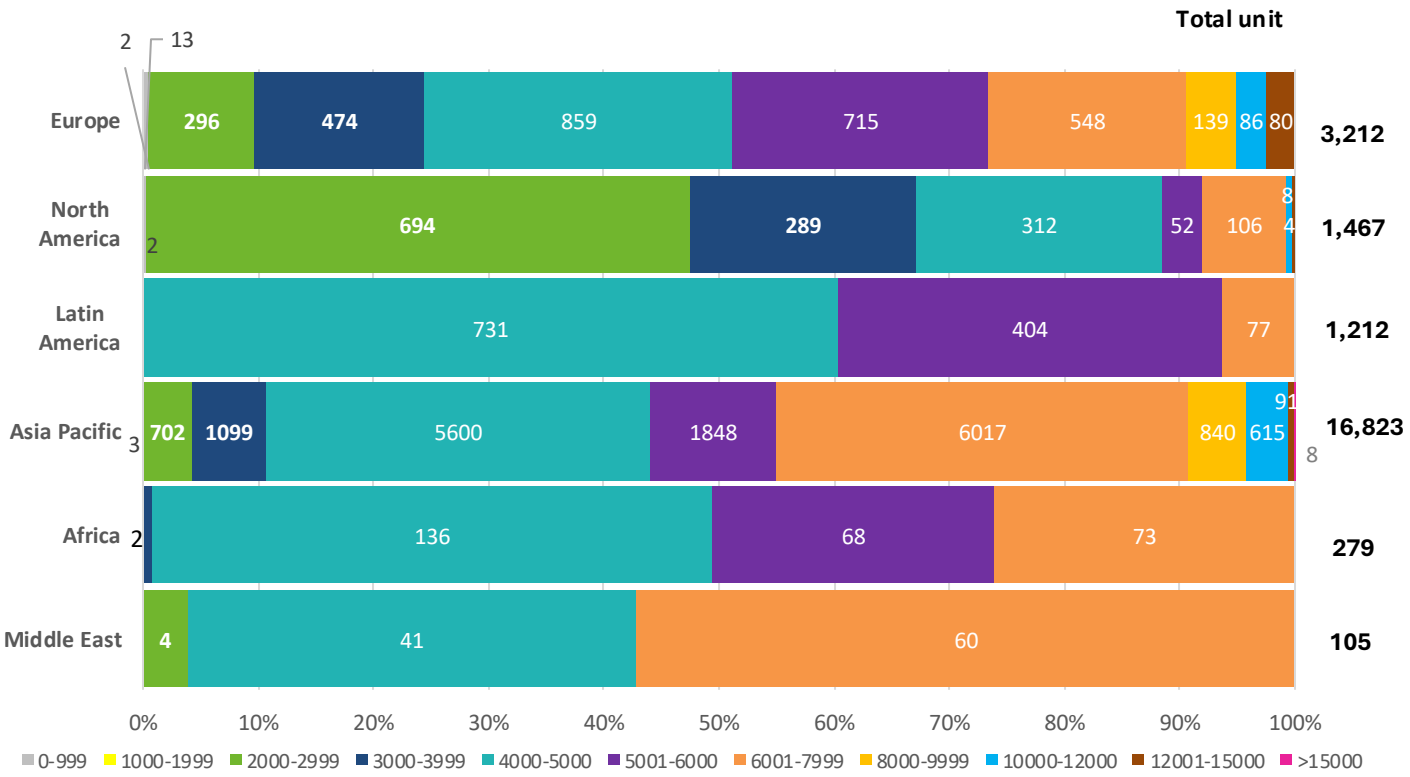
Table 1-8: Top five suppliers in different wind turbine size classes in 2024

Product (Size range)	Top Five Rank in 2024				
	1	2	3	4	5
WTGs 0-499 kW*	Leitwind				
WTGs 750-999 kW	Enercon	Leitwind	EWT		
WTGs 1500 kW	Goldwind	Vensys			
WTGs 1501-1999 kW	Vensys				
WTGs 2000 kW	Inox	Goldwind	Windey		
WTGs 2001-2499 kW	Vestas	Suzlon	Enercon	Siemens Gamesa	GE Vernova
WTGs 2500 kW	GE Vernova	Windey	Goldwind	CSSC Haizhuang	Dongfang
WTGs 2501-2999 kW	GE Vernova	Senvion India	Siemens Gamesa	Enercon	Suzlon
WTGs 3000 kW	Inox	Nordex Group	Sinovel	Windey	Goldwind
WTGs 3001-3599 kW	Envision	GE Vernova	Siemens Gamesa	Vestas	Windey
WTGs 3600-3999 kW	Nordex Group	GE Vernova	Vestas	Goldwind	CRRC
WTGs 4000-5000 kW	Goldwind	Vestas	Envision	Windey	SANY
WTGs 5001-6000 kW	Goldwind	Nordex Group	Envision	Mingyang	Enercon
WTG 6001-7999 kW	Envision	Goldwind	Windey	Mingyang	SANY
WTG 8000-9999 kW	Goldwind	Dongfang	Siemens Gamesa	Mingyang	Vestas
WTG 10000-12000 kW	Mingyang	Dongfang	Siemens Gamesa	Windey	Goldwind
WTG 12001-15000 kW	Goldwind	Siemens Gamesa	GE Vernova	Sewind	Envision
WTG >15000 kW	Goldwind	Mingyang	CSSC Haizhuang		

**This size range only covers wind turbines with rated capacities ≥400 kW*

Source: GWEC Market Intelligence, April 2025

Figure 1-18: Breakdown of wind turbine sizes by rated capacity installed by region in 2024

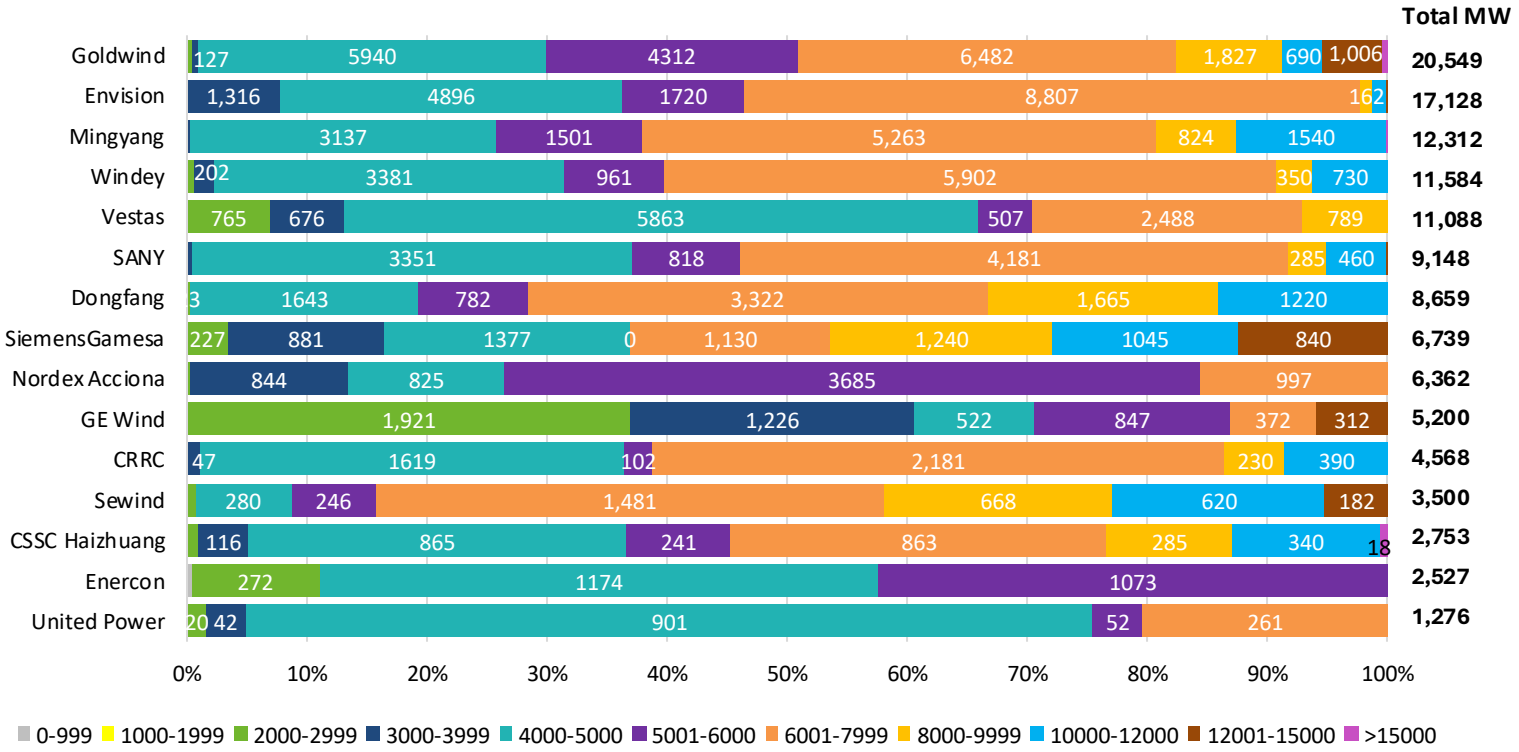


The size range only covers wind turbines with rated capacities ≥400 kW

Source: GWEC Market Intelligence, April 2025

- New installations in **Europe** is **more evenly split by turbine size classes** than any other region. Compared with 2023, however, turbines with power rating greater than 5,000 kW gained 7 per cent market share last year.
- Although wind turbines in the size range of **2,000-2,999 kW** remain as **the most popular products** in **North America** in 2023, turbine with power rating larger than 5,000 kW gained four per cent market share last year compared with 2023.
- In **Latin America**, turbines in the size range of **4,000-5,000 kW** remain **the most popular products** in 2024. Turbines with rated capacity in the range of 4,000-7,999 kW accounted for 100 per cent of new installations in this region last year.
- In **Asia Pacific**, turbine with power rating in the range of **6,001-7,999 kW** replaced turbine in the 4,000-5,000 kW size range as **the most installed products** in 2024.
- In **Africa**, turbines in the size range of 3,000-3,999 kW accounted for nearly 90 per cent of the installations in 2022, but its market share dropped to 0.7 per cent in 2024. Last year saw turbines with rated capacity **greater than 5,000 kW** made up **half** of its new additions.
- Same as Asia Pacific, wind turbines with a rated capacity in the range of **6,001-7,999 kW** became **the most popular products** installed in **Middle East** in 2024.

Figure 1-19: Breakdown of wind turbine sizes by rated capacity installed by Top-15 OEM in 2024

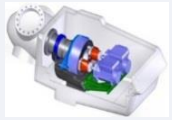


- As in 2023, **GE Vernova** is the only wind turbine OEM with more than one third of its new installations in 2024 coming from the **2,000-2,999 kW** size range.
- Turbines with power rating **greater than 6,000 kW** has become the most popular products for the **top six Chinese turbine OEMs** in 2024. More than 84 per cent of the turbines installed by Sewind in 2024 are from this size range.
- Turbines with power rating in the range of **4,000-5,000 kW** remain the most installed products for **Vestas, Enercon** and **United Power.**
- New installations by **Siemens Gamesa** are **more evenly split by turbine size classes** than any other turbine OEMs.

The size range only covers wind turbines with rated capacities ≥400 kW

Source: GWEC Market Intelligence, April 2025

Table 1-9: Global market share by turbine technology in 2024

Turbine technology	Conventional drive	Hybrid drive	Direct drive		Hydraulic drive	
			EESG DD	PMG DD	Full hydraulic	Hybrid hydraulic
						
Global market share (in MW)	62.2%	29.1%	1.1%	7.6%	-	-
Installed capacity(MW)	79,059	37,007	1,363	9,597	-	-
Installed unit	15,690	5,470	379	1,559	-	-

Source: GWEC Market Intelligence, April 2025

- The **conventional high-speed geared system** has been the mainstay of wind turbine technology since the industry's earliest days. Its market share, however, declined by 4.1 per cent to 62.2 per cent in 2024 compared with 2023.
- **Hybrid drive wind turbines** (medium-speed turbines) continues to gain popularity last year, with its global market share increasing from 25.0 per cent in 2023 to 29.1 per cent in 2024, a 4.1 per cent rise.
- Combining the market share of conventional high-speed drive with medium speed drive, **the global market share of geared-drive systems** in 2024 is **91.3 per cent**, same as the previous year.
- Direct drive wind turbines lost 12.4 per cent of their market share in 2023 compared with the previous year, which is primarily due to Goldwind, a market leader in PMG Direct Drive (DD) turbine production, is switching drivetrain technology from DD into medium-speed drivetrain, with the latter accounting for 88.6 per cent of its total installations in 2023. **Direct drive wind turbines held the same market share in 2024 compared with 2023**, but the EESG DD wind turbine lost 0.2 per cent market share in 2024 compared with previous year.
- No **hydraulic drive turbines** were installed last year, same as 2023.

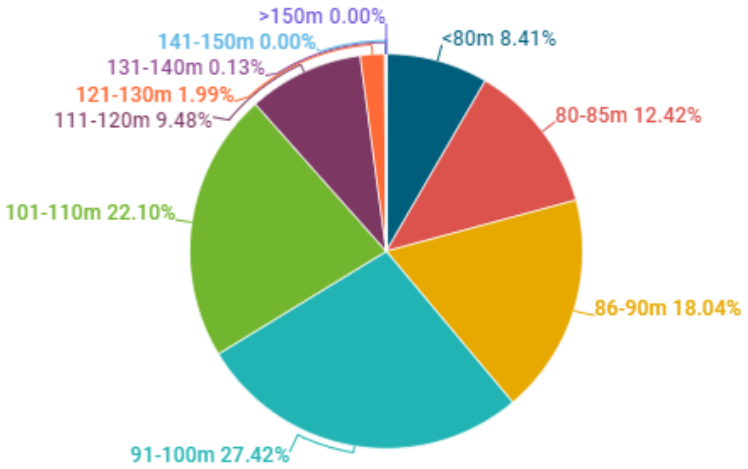
Table 1-10: Wind turbine manufacturer ranking by drivetrain technology in 2024

Turbine technology	Conventional gear-drive				Hybrid drive	Direct drive	
	DFIG	SCIG	HS PMG	EESG	MS PMG	EESG DD	PMG DD
MW installation	72,348	6,641	42	27	37,007	1,363	9,597
Position	Turbine manufacturer						
1	Envision (23.5%)	Vestas (95.7%)	Unison (91.5%)	Eno Energy (100%)	Goldwind (49.2%)	Enercon (99.9%)	Siemens Gamesa (49.5%)
2	Windey (16.0%)	Siemens Gamesa (2.6%)	Taiyuan Heavy Industry (8.5%)	-	Dongfang (16.6%)	EWT (0.1%)	Goldwind (24.4%)
3	SANY (12.6%)	Envision (1.4%)	-	-	Mingyang (13.1%)	-	Enercon (12.1%)
4	Mingyang (10.3%)	Sewind (0.3%)	-	-	Vestas (10.2%)	-	GE Vernova (5.7%)
5	Nordex Group (8.8%)	-	-	-	Sewind (7.5%)	-	WEG (5.3%)

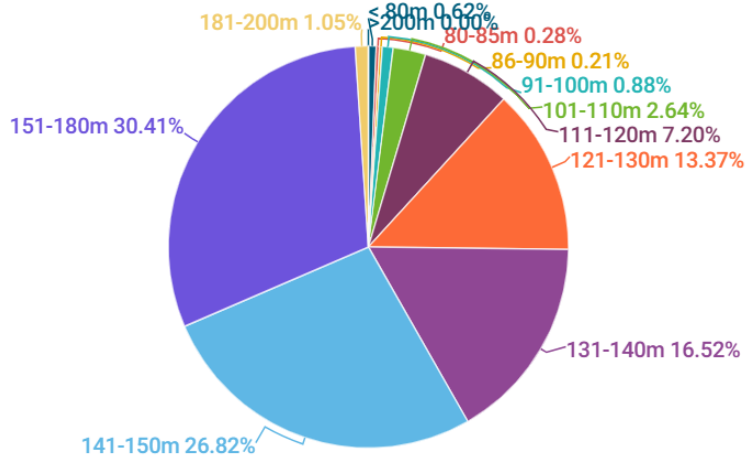
Source: GWEC Market Intelligence, April 2025

- There are four different technology configurations under the conventional gear-drive solution. The **high speed DFIG configuration** remains the most popular turbine technology, with 57.0 per cent global market share in 2024, almost the same as 2023. **Envision**, **Windey, SANY, Mingyang** and **Nordex Group** are the top five suppliers last year, together accounting for 71 per cent market share in this category, two per cent higher than 2023.
- **Vestas**, **Siemens Gamesa, Envision** and **Sewind** are the top four suppliers for turbines with **high speed SCIG configuration**, accounting for 5.2 per cent global market share in 2024, 2.6 per cent lower than the previous year.
- For the **high-speed PMG configuration** that accounts for 0.03 per cent global market share in 2024, all suppliers come from Asia. German supplier **Eno Energy** is the only supplier pursuing the **high speed EESG** drive train solution, same as 2023.
- **Mingyang** was the largest supplier of **medium speed wind turbine** in 2018-2022, but it was overtaken by **Goldwind** from 2023. Goldwind consolidated its leadership in this category last year followed by Chinese Dongfang. In addition to Goldwind, Dongfang and Mingyang, the other turbine OEMs in the top-five were Vestas and Sewind.
- **Enercon** continues to dominate the installation of **EESG DD wind turbines** in 2024, followed by **EWT** – same as 2023.
- With nearly 50 per cent global market share in **PMG DD category**, **Siemens Gamesa** consolidated its leading position in this category in 2024, followed by Goldwind and Enercon.

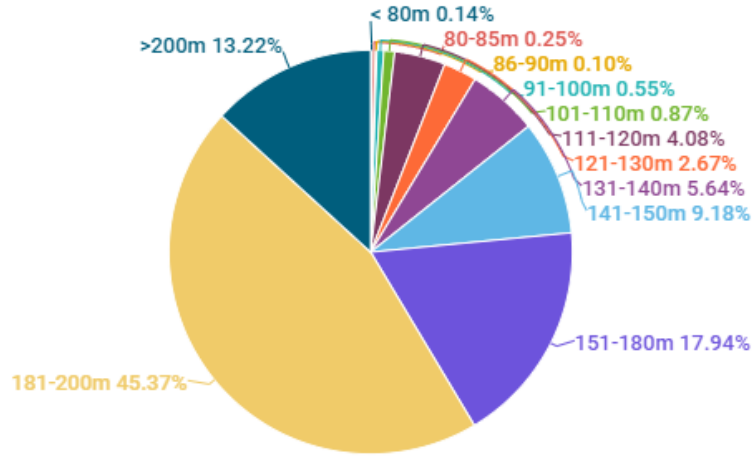
Figure 1-20: Global wind turbine rotor diameter breakdown, 2014 vs. 2021 vs. 2024



2014



2021

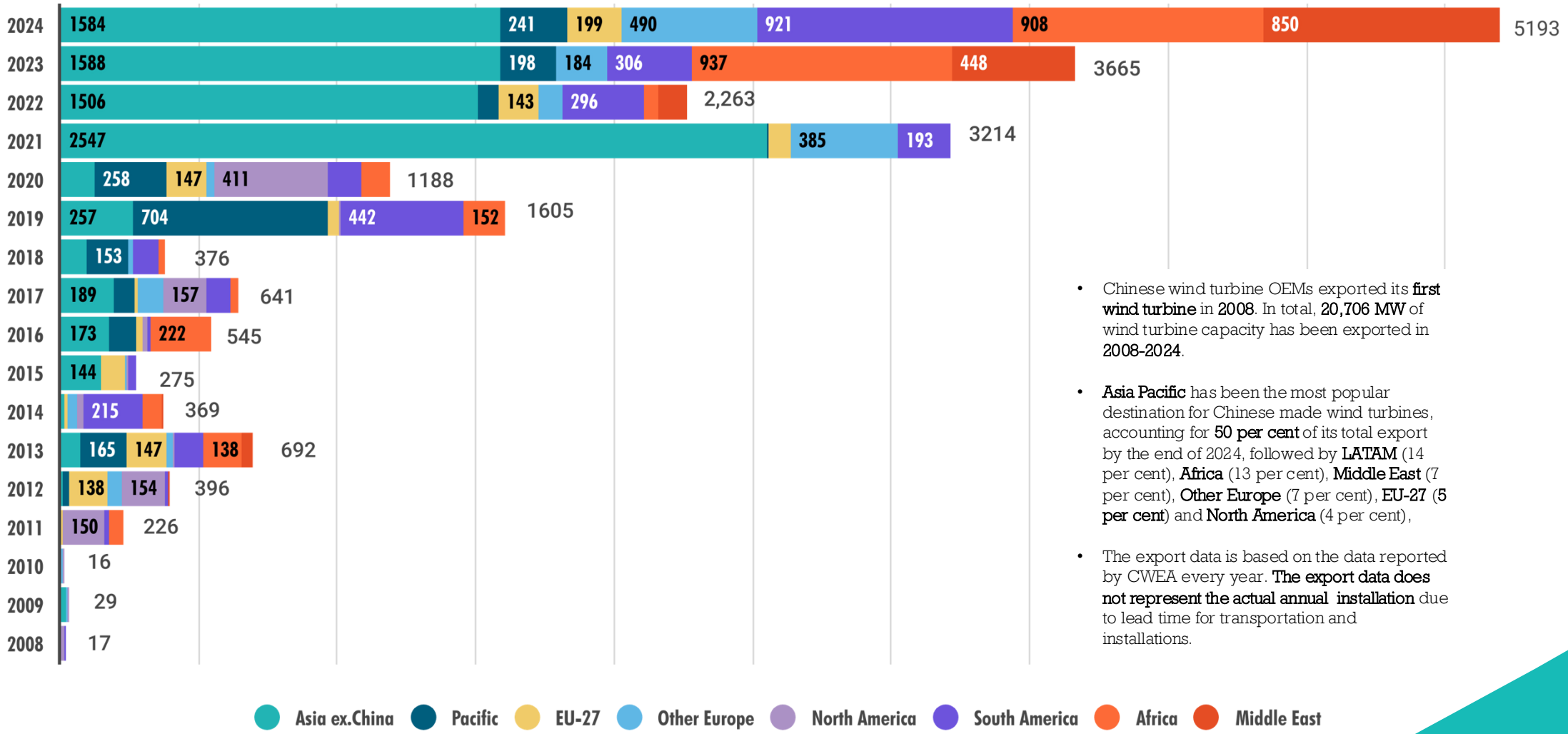


2024

- Driven by the reduction of LCOE and the growth of global offshore wind market, the upward trend in wind turbine rotor diameter continues with rotors greater than 180m becoming the mainstream products, accounting for 58.6 per cent global market share in 2024, compared 1.05 per cent in 2021.

Source: GWEC Market Intelligence, April 2025

Figure 1-21: Chinese wind turbine export by region, 2008-2024



- Chinese wind turbine OEMs exported its **first wind turbine** in 2008. In total, **20,706 MW** of wind turbine capacity has been exported in 2008-2024.
- **Asia Pacific** has been the most popular destination for Chinese made wind turbines, accounting for **50 per cent** of its total export by the end of 2024, followed by **LATAM** (14 per cent), **Africa** (13 per cent), **Middle East** (7 per cent), **Other Europe** (7 per cent), **EU-27** (5 **per cent**) and **North America** (4 per cent),
- The export data is based on the data reported by CWEA every year. **The export data does not represent the actual annual installation** due to lead time for transportation and installations.

Source: GWEC Market Intelligence, CWEA, April 2025

Appendix

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Acronyms

APAC – Asia Pacific
EMEA – Europe, the Middle East, Africa & the CIS Countries
FiT – Feed-in Tariff
FY – Financial Year
GW – Gigawatt
LCR – Local Content Requirements
M&A – Mergers & Acquisitions
MW – Megawatt
NEA – National Energy Administration
OECD – Organisation for Economic Co-operation and Development
OEM – Original Equipment Manufacturer
PPA - Power Purchase Agrement
PTC – Production Tax Credits
Q1 – Quarter 1
RES – Renewable Energy Source
RET – Renewable Energy Target
ROC – Renewables Obligation Certificate
RPS – Renewable Portfolio Standards
TWh – Terawatt Hour

About GWEC Market Intelligence

GWEC Market Intelligence provides a seriesof insights and data-based analysis on thedevelopment of the global wind industry. Thisincludes a market outlook, country profiles,policy updates, deep-dives on global windsupply chain and offshore wind among manyother exclusive insights.

GWEC Market Intelligence derives its insightsfrom its own comprehensive databases, localknowledge and leading industry experts.

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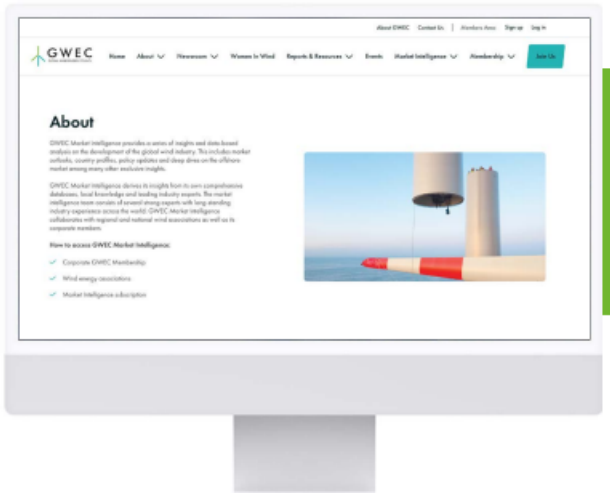
ISP - OEM - Self Perform database for key markets



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Appendix

GWEC Market Intelligence Products in 2025

Product	Frequency	Expected Release date
1. Wind Energy Stats/Market Data		
Wind Stats 2024 (historic annual, accumulative, decommision data)	Annual	April 2025
Global Wind Report 2025	Annual	April 2025
Wind Energy Statistics (wind energy penetration rate, jobs)	Annual	April 2025
2. Country Profiles/Policy Updates		
Country Profiles Onshores/Country Profiles Offshore	Annual	April 2025 (onshore)/September 2025 (offshore)
Ad-hoc Policy Updates	Ad-hoc	
3. Market Outlook		
Global Wind Market Outlook 2025-2030 (Q1 and Q3) Database + Report	Semi-Annual	April 2025 (Q1 Outlook) November 2025 (Q3 Outlook)
India Market Outlook Report 2025-2030	Annual	TBC
4. Supply Side Data		
Global Wind Turbine Supply Side Data Report 2024 (by OEM, by technology, by turbine ratings, models and drive train, etc)	Annual	May 2025
5. Auctions/Tenders		
Global Wind Auction	Quarterly	Q4 2024 results - March 2025
Auction Trends and Learnings	Quarterly	Q1 2025 results - May 2025 Q2 2025 results - August 2025 Q3 2024 results - November 2025
6. Offshore Wind Market		
Global Offshore Wind Report 2025	Annual	June 2025
Market Entry Opportunities (database)	Annual/Quarterly	After each Global Offshore Wind Task Force meetting
Global Offshore Project Pipeline (database, in operation and under construction)	Annual/Quarterly	June 2025
Global Offshore Turbine Installation Vessel Database and Report	Annual/Quarterly	October 2025
7. Components Assessment		
Gearbox (Q4 2025), Generator (Q4 2024), Global Wind Supply Chain Deep Dive (Q4 2023), Blades (Q4 2020)	Special Report	December 2025
8. Wind Asset Owners/Operators		
Asset Owners and Operators Database (Onshore & Offshore Ranking)	Annual	July 2025
Asset Owners and Operators Status Report (including strategical trends)	Annual	
9. O&M		
O&M Service Provider Database (ISP - OEM - Self-perform)	Annual	February 2025
O&M Service Provider Status Report (including regional trends)	Annual	
10. Energy transition, Digitalisation, New Technologies		
Auction design, community engagement and social acceptance for permitting, localisation, industralisation, trade, supply chain and grid associated policy analysis	Special Report	Throughout the year

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