Brazil Wind Energy - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-07-01 | 95 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License $4750.00
- Team License (1-7 Users) $5250.00
- Site License $6500.00
- Corporate License $8750.00

Report description:

Brazil Wind Energy Market Analysis

The Brazil Wind Energy Market size in terms of installed base is expected to grow from 35.40 gigawatt in 2025 to 50 gigawatt by 2030, at a CAGR of 7.15% during the forecast period (2025-2030).

Surging demand for clean electricity in industrial corridors, full Free Contracting Environment (ACL) liberalization by 2028, and an exceptional trade-wind resource in the Northeast underpin this expansion. Developers now negotiate long-term power-purchase agreements directly with heavy-industry off-takers, locking in revenue streams that reduce reliance on regulated auctions. Meanwhile, grid-reinforcement programs led by Chesf and the National System Operator (ONS) are adding 1,700 km of new transmission lines, gradually easing historic congestion that once stranded dozens of wind parks. The generation cost continues to fall as 4-6 MW turbines lift capacity factors above 50%, while concessional credit from BNDES and Banco do Nordeste keeps capital costs competitive. Currency volatility and licensing delays for offshore foundations remain watchpoints but have yet to derail the sector's growth trajectory.

Brazil Wind Energy Market Trends and Insights

Rapid scale-up of ACL power contracts boosting wind PPAs

Eligibility thresholds in the ACL fell to 500 kW in 2023, unlocking direct energy procurement for a far larger pool of commercial

buyers. Corporate PPAs now exceed USD 840 million in contracted value, led by agreements such as ArcelorMittal's deal that will meet 38% of its Brazilian load with wind by 2030. Sophisticated hedging products traded on the energy desk of B3 provide price certainty for both generators and buyers. As regulated subsidies taper, ACL contracts deliver competitive tariffs in the USD 23-34/MWh range, sustaining the bankability of new wind projects. Analysts expect a full ACL opening by 2028 to accelerate the Brazil wind energy market, allowing developers to match build-out schedules precisely to industrial demand curves.

Northeast grid expansion unlocking new interconnections

The 1,700 km Asa Branca line and related ONS projects are designed to evacuate surplus renewable power from wind-rich states toward load centers in the Southeast. Iberdrola's USD 1 billion stake in the corridor highlights foreign confidence in Brazil's grid roadmap. Historical curtailment that once left 36 wind farms offline has begun to ease as new circuits energize. Each kilometer of extra-high-voltage capacity unlocks stranded projects, translating to gigawatts of additional wind generation without tapping new sites. The expansion also enables hybridization, as solar farms in the Sertao can piggyback on reinforcement works, smoothing diurnal load profiles and improving overall grid stability.

Transmission congestion risk in Rio Grande do Norte & Bahia

A 2023 system disturbance that isolated the North-Northeast from the rest of Brazil cut 18,900 MW of load and exposed grid fragility. Peak curtailment has reached 2.5 GW in windy months, eroding merchant revenues and denting investor confidence. While new lines are under construction, interim constraints force some developers to accept suboptimal tariffs or site projects closer to weaker wind regimes with better grid access. The congestion premium also inflates connection fees, squeezing margins for independent power producers without long-term hedges.

Other drivers and restraints analyzed in the detailed report include:

Lower LCOE from 4-6 MW turbines accelerating repowering / Corporate decarbonisation targets of Brazilian C&I off-takers / Slow environmental licensing for offshore foundations & cables /

For complete list of drivers and restraints, kindly check the Table Of Contents.

Segment Analysis

Onshore plants delivered the entire 35.4 GW operational base in 2025, reflecting the maturity of land-based development corridors. The Brazil wind energy market size for onshore reached USD - (value omitted as no dollar figure supplied) while maintaining superior 45-50% capacity factors. Offshore prospects, although nascent, show an 85% CAGR through 2030 as federal legislation and global operator interest converge. Demonstration projects such as the 720 MW Asa Branca offshore array target first power in 2025, leveraging 8 m/s average wind speeds and consistent trade-wind regimes. Utility majors view marine sites as a hedge against land scarcity and transmission bottlenecks, given direct cable routes into Southeast demand centers. Supply-chain localization is underway, with blade workshops in Ceara port readying to serve floating-platform pilots. While cost curves remain above onshore benchmarks, access to deeper capacity pools and superior load factors underwrite the commercial logic of early movers in the offshore space.

Developers continue to favor the Northeast littoral, where bathymetry supports fixed-bottom foundations within 20 km of shore. IBAMA's phased licensing permits sequential data-collection campaigns, shortening the critical-path schedule. Nonetheless, investors seek clarity on revenue stacks, expecting the ACL to absorb most early offshore supply through bespoke PPAs rather than capacity auctions. Financing structures may blend BNDES green credit with export-credit guarantees from turbine OEMs keen to secure anchor orders. If grid bottlenecks onshore outlast transmission upgrades, the comparative advantage of a direct

offshore link into urban centers could accelerate capital deployment, reshaping Brazil's wind energy market's future geography.

Turbines rated 2-4 MW commanded 75% of installed capacity in 2024, reflecting procurement norms from Brazil's first decade of wind expansion. Above 4 MW machines are scaling at a 13% CAGR as LCOE declines and hub heights climb to over 140 m, accessing steadier layers of the atmospheric boundary. Repowering economics relies on reusing roads and foundations, cutting civil works by up to 40%, and enabling rapid redeployment of capital. The Brazil wind energy market share for sub-2 MW legacy units is shrinking every auction cycle, freeing sites for multi-megawatt replacements that squeeze more megawatt-hours from prime wind corridors.

Local content rules stipulate Brazilian-fabricated towers and nacelle assembly, prompting OEMs such as Goldwind to invest USD 28.6 million in a Bahia manufacturing hub. Vestas' 347 MW of orders in 2024 confirms sustained appetite for high-rating turbines, while Nordex's 112 MW Auren Energia deal shows diversified OEM participation. Grid operators welcome the ramp-rate flexibility of modern converters, which improve voltage control in a network increasingly saturated by renewable flows. Over the forecast, the shift to 4-6 MW machines is expected to pull the fleet-wide average rating to 3.9 MW, firmly embedding next-generation technology as Brazil's wind energy market's new norm.

The Brazil Wind Energy Market Report is Segmented by Location of Deployment (Onshore and Offshore), Turbine Capacity (Upto 2 MW, 2 To 4 MW, and Above 4 MW), Component (Turbine, Tower, Electrical Infrastructure, and Other Balance of Plant), Installation Type (New Installationa and Repowering), End-User (Utility-Scale and Commercial and Industrial). The Market Size and Forecasts are Provided in Terms of Installed Capacity (GW).

List of Companies Covered in this Report:

Vestas Wind Systems A/S / Siemens Gamesa Renewable Energy SA / GE Vernova (GE Renewable Energy) / Nordex SE / Xinjiang Goldwind Science & Technology Co. Ltd / Enercon GmbH / Neoenergia S/A / Enel Green Power Brasil / Voltalia SA / Engie Brasil Energia SA / Acciona Energia SA / EDF Renewables Brasil / Equinor ASA / AES Brasil Energia SA / CPFL Renovaveis SA / Atlantic Energias Renovaveis SA / Elecnor-Enerfin do Brasil / Statkraft Energias Renovaveis SA / Omega Energia S/A / TotalEnergies (Total Eren Brasil) /

Additional Benefits:

The market estimate (ME) sheet in Excel format /
3 months of analyst support /

Table of Contents:

Brazil Wind Energy - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-07-01 | 95 pages | Mordor Intelligence

To place an Order with Scotts International:

- - Print this form
- - Complete the relevant blank fields and sign
- - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	$4750.00
	Team License (1-7 Users)	$5250.00
	Site License	$6500.00
	Corporate License	$8750.00
	VAT	
	Total	

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*		Phone*	
First Name*		Last Name*	
Job title*			
Company Name*		EU Vat / Tax ID / NIP number*	
Address*		City*	
Zip Code*		Country*	
		Date	2026-02-10
		Signature