ESG & Capital Goods & Utilities

XP BESS Series: Brazil's storage market moves closer to take-off

What we heard from market participants ahead of Brazil's first BESS auction

Last week, XP Research ESG, alongside the Capital Goods and Utilities teams, hosted the inaugural **XP BESS Series**, bringing together companies and industry specialists from across the battery-storage value chain. Ahead of Brazil's first storage auction, scheduled for December, the discussions pointed to a market approaching a potential inflection point, supported by growing system flexibility needs, declining battery costs and expanding demand beyond utility-scale applications. **Below, we outline the key takeaways from the meetings.**

What changed after the BESS Series? After the series of events, we believe the **(+)** main positive surprise was that local players appear better positioned than we previously assumed. While localized solutions still carry a cost premium vs. fully imported systems, multiple participants highlighted that access to BNDES/*Fundo Clima* financing can offset a meaningful portion of this gap. As a result, financing may prove as important as equipment pricing in the first auction, potentially supporting a more rational competitive in the initial day. As of the second auction window, pricing is expected to be more competitive, with participants pointing to the ~6,000 projects initially submitted as evidence of a potentially crowded competitive landscape. On the other hand, we left the meetings with a somewhat **(-)** higher perceived risk of postponement. Discussions around cost allocation and potential legal challenges (specifically the "§6" of the current legislation and pending ruling of PL 3,716/26) remain unresolved, even though market participants continue preparing for an auction by Dec 2nd-4th. Still, several executives argued that a short delay would not necessarily be viewed negatively if it results in a final regulatory framework.

Takeaway for WEG. While we do not see energy storage becoming a major earnings driver overnight, we see it as another growth avenue to an already broad set of secular opportunities for WEG. We see BESS potentially reaching mid-single-digit share of revenues by decade-end, with its 4GWh capacity fully ramped. That said, the discussions reinforced WEG's favorable positioning in this market through its local-content strategy, access to financing, integration capabilities and service offering. More broadly, we continue to view WEG as a defensive and globally diversified compounder and see room for growth as the company captures the returns from investments made over the last several years.

BESS addresses a growing system need. Brazil currently curtails ~21% of its renewable generation potential while facing an estimated evening capacity deficit of 4.5-6.5GW. Across meetings, participants consistently pointed to BESS as one of the most effective tools to increase system flexibility, improve grid utilization and support emerging sources of demand such as data centers and electric mobility. While the inaugural LRCAP should accelerate adoption, most speakers viewed it as only one step toward a broader storage market in Brazil.

Local content creates opportunities beyond battery-cell manufacturing. Given China's scale and cost advantage, domestic cell production is unlikely to become competitive in the near term. Instead, Brazil's role should concentrate on battery-pack assembly, power electronics, EMS, engineering, integration and O&M services. Notably, foreign suppliers can meet BNDES's 15% local-content rules via partnerships with Brazilian companies, enabling participation in the first auction.

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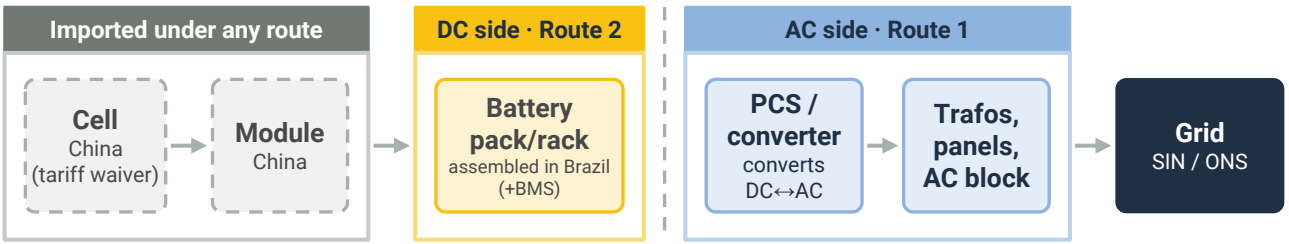
XP BESS Series: Moving closer to take-off

Financing access reinforced as a competitive advantage

Figure1: BESS Series Key Messages

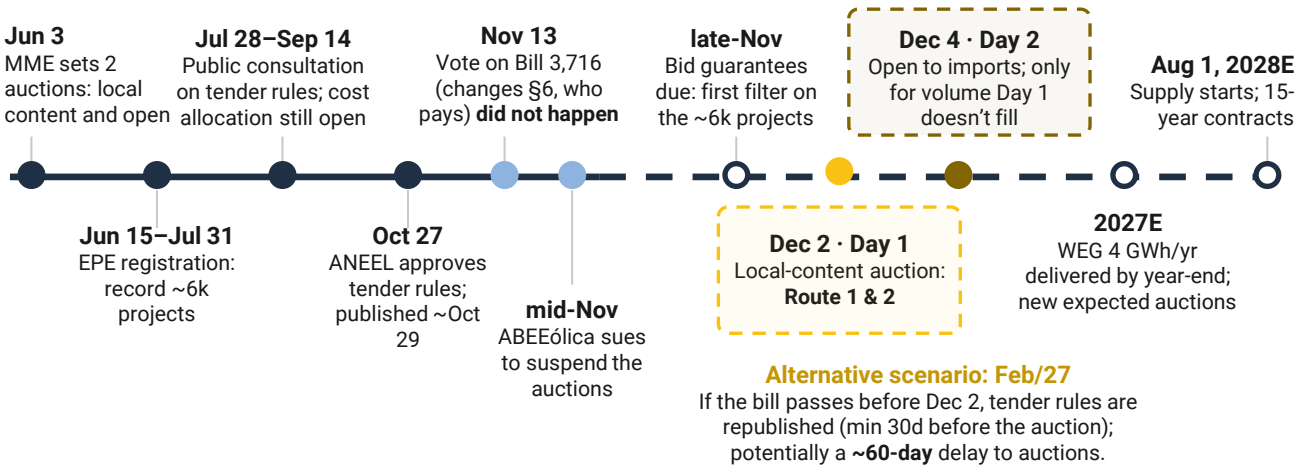
Topic	Key message
Auction size	~2 GW, with participants mentioning ~2-4 GW, potentially closer to the higher-end
Competition	~6k projects registered; guarantee requirements should filter heavily
Financing	Local content allows access to *Fundo Clima*. 100% if by Route 2, or 80% if by Route 1
Litigation	Dispute over §6 (discussions over charge responsibility – generators or consumers)
After-sales	Edge goes beyond price: local support, power electronics, long contracts (up to 15 yrs / LTSA)
Beyond the auction	C&I, 2027E transmission auctions with batteries (AC/RO), Amazonas isolated systems

Figure 2: BESS Auction Value Chain and Suppliers' Potential Routes



	Route 1 · AC side (Dec 2)	Route 2 · DC side (pack) (Dec 2)	Open auction · Day 2 (Dec 4)
Made in Brazil	PCS/converter, trafos, control panels	Pack assembly using imported modules/cells	Nothing required
BNDES financing	Up to 80% (~7% real, 16 years)	Up to 100%	Not eligible
Local content (15%)	Harder to reach with AC alone	Reached more easily	No requirement
Taxes	Imported pack at 18%	Cells exempt; claims for module import taxes' exemption	Imported pack/system pays ~18%

Figure 3: BESS Auction Timeline



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Highlights by meeting

Scaling local battery manufacturing ahead of new market opportunities

Harry Schmelzer, Sales Director Solar/BESS at WEG

BESS demand is gaining traction beyond the capacity auction. WEG highlighted growing demand across industrial applications, particularly peak shaving, time shifting and operational continuity. Structurally, the growth of data centers, AI and electric mobility is increasing the need for grid flexibility, further supporting on BESS adoption over time. On the other hand, high interest rates in Brazil remain a constraint for behind-the-meter applications.

Local manufacturing and financing are key competitive differentiators. Following the auction announcement, WEG doubled its planned BESS manufacturing capacity to 4GWh (ramping up from 400MW of capacity today), supported by ~R$300 million of investments and a potential revenue opportunity of R$3-4 billion, according to our estimates. As the company plans to assemble battery packs locally using imported cells (relying on outsourced PCS/transformers), we expect WEG to position in the auction's second local-content route (Route 2), providing access to Fundo Clima financing (100%). WEG also sees OEM solutions and long-term service agreements (LTSA) as important differentiators in long-duration contracts.

Compliance and execution capacity support WEG's positioning. Given WEG's established presence across several electrical-equipment categories, we see room for the company to participate in an important share of the submitted project designs. While battery-pack assembly is already localized, further localization of PCS and other components will depend on future investment decisions. Going forward, key risks for the market development in Brazil include remain FX volatility and financing rates.

Targeting local-content auction with 8GWh of prepared capacity

Tiago Tasso, President; Thiago Melo, Industrial Batteries Director; Spartacus Pedrosa, Executive Director

Moura appears well positioned to compete in the local-content auction. Through its partnership with CATL and Huawei, the company has prepared more than 8GWh of capacity, with civil works at its Belo Jardim facility completed and equipment deliveries underway. Moura intends to qualify under Route 2 by importing modules and assembling battery packs locally, which the company views as the most feasible route to meet the 15% local-content threshold for Finame/BNDES financing. Together, Moura and WEG have announced ~12GWh of capacity, which we view as potentially large enough to serve the auction's entire local-content segment on Day 1 (though further supplier diversification could still be reasonable).

Local assembly is only one part of Moura's competitive proposition. The company combines more than a decade of storage-related R&D, over 60 researchers at the ITEMM institute and a track record of more than 40 BESS projects with an integrated manufacturing, logistics, distribution, service and financing ecosystem. Moura is also requesting a temporary reduction in the 18% import tariff on battery modules used in domestic pack assembly, given the limited local module capacity and tight auction schedule. At the same time, it supports maintaining the tariff on fully assembled imported systems, which would preserve an incentive for local industrial development.

Beyond utility-scale projects, Moura sees a broader distributed-storage opportunity. Residential, commercial, agricultural and off-grid solutions could leverage its nationwide distribution network, e-commerce infrastructure and energy-as-a-service offering through 10-year contracts. Existing exposure to data centers, telecommunications, industrial applications and electric vehicles provides additional avenues for BESS adoption.

Brazil's storage market gains momentum as system flexibility needs rise

Markus Vlasits, Chair of the Board at ABSAE & CEO of NewCharge Energy

Brazil's growing mismatch between renewable generation and peak-hour capacity strengthens the case for BESS. According to Mr. Vlasits, Brazil currently curtails ~20.6% of renewable generation while facing a 4.5-6.5GW evening capacity deficit. Beyond utility-scale opportunities, he highlighted growing adoption in C&I applications, particularly in the Northeast, where storage is increasingly being used for load shifting, peak-demand management and tariff optimization.

The inaugural auction is likely the first step in a multi-year procurement cycle. Government indications point to ~2GW of contracting, versus ABSAE's estimate of closer to 4GW in demand and a broader system requirement of 5-7GW. Mr. Vlasits expects additional procurement rounds over time as renewable penetration continues to increase.

Local-content rules should not prevent international participation. The ~15% BNDES local-content requirement can be met across several parts of the value chain, supporting partnerships between international suppliers and local manufacturers, while financing access, technical support and maintenance capabilities could become increasingly important competitive differentiators.

BESS market gains traction beyond utility scale, with opportunities in C&I and agribusiness

Sergio Jacobsen, CEO of Micropower Energia

Falling battery costs are making storage increasingly competitive beyond utility scale. Micropower estimates battery capex has fallen ~66% over the last four years, making solar-plus-storage cheaper than diesel in several applications. The company sees particular opportunities in agribusiness, off-grid systems and behind-the-meter applications, where customers seek lower energy costs, load shifting and improved power quality.

Financing and execution capabilities remain the main bottlenecks. In Mr. Jacobsen's view, China retains a significant competitive advantage in battery manufacturing, making local cell production unlikely in the near term. Financing remains the main constraint to market expansion, while shortages of qualified labor, particularly in control engineering and monitoring, are already delaying some projects.

Data centers and regulatory changes could unlock additional demand. Micropower highlighted potential changes to distributed-generation rules (MMGD) as a future catalyst, while data centers, especially those linked to AI workloads, could become an important source of long-term BESS demand.

Beyond LRCAP: A broader market begins to take shape amid an expanding role of storage

Marcelo Rodrigues, Business Partner at SecPower, and Gabriella Reigada, CEO at SecPower

Storage opportunity extends well beyond the inaugural auction. Mr. Rodrigues and Mrs. Reigada noted that generation has grown 85% over the last decade, against ~22% growth in consumption, contributing to rising curtailment. In their view, commercial and industrial customers, residential applications, isolated systems and data centers should become meaningful growth vectors alongside utility-scale projects.

China should remain central to the supply chain, while Brazil captures integration activities. Battery-cell manufacturing is unlikely to localize, but Brazil can add value through pack assembly, control panels, EMS, engineering and system integration. SecPower expects to participate in the auction primarily through AC blocks and command-and-control systems.

Multiple use cases could make BESS a broader market than solar over time. Unlike solar, which was largely driven by lower generation costs, storage can address multiple system needs and combine different revenue streams. Mr. Rodrigues also highlighted data centers as a promising avenue, although energy availability, infrastructure and the broader business environment remain important constraints.

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