

6th Forum on LTES for the Clean Energy Transition

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Turning grid planning into bankable pipelines

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Integrated Energy Planning for a Continental Grid

- Brazil's Plano Decenal de Expansão de Energia (**PDE**) links generation, transmission and demand scenarios under **consistent LTES frameworks** (10-year horizon, updated annually).
- ≈30,000 km of new lines and 82.000 MVA in substations planned for the next decade.
- Joint work between MME (policy), EPE (planning), ONS (operation) and ANEEL (regulation).

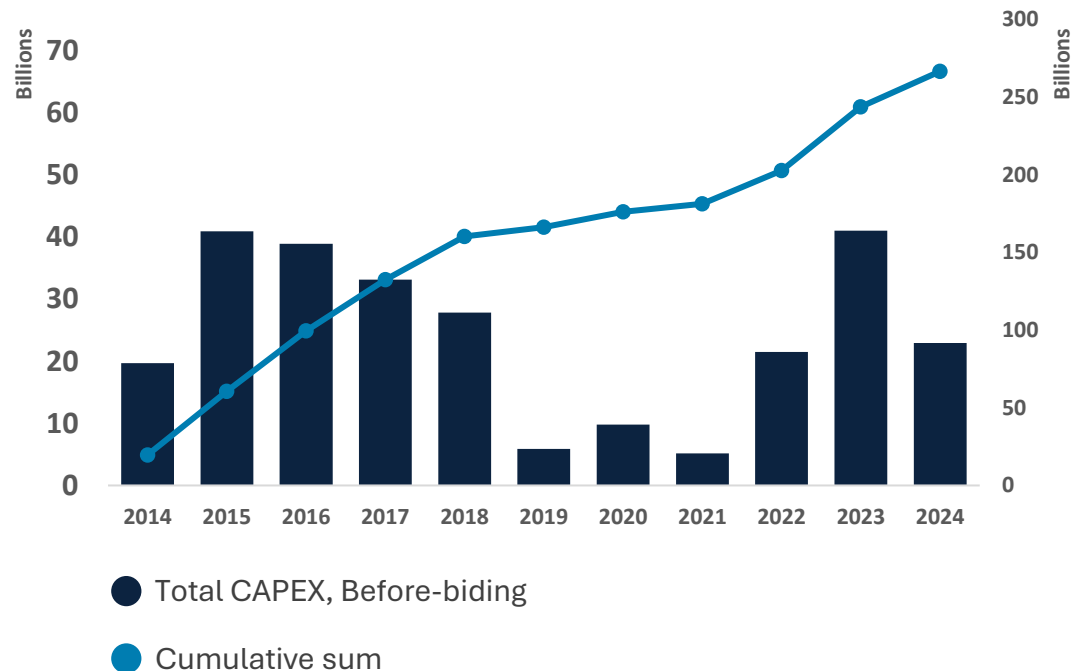


Our long-term scenarios don't end on paper. They end at substations with investors on site.

From Planning to Bankable Assets: The Auction Backbone

Investments in Transmissions Auctions - Brazil

Source: Adapted from ANEEL. Adjusted for inflation, 09/2025



- Transmission auctions are the main expansion mechanism in Brazil, awarding projects to private investors through competitive tenders.
- EPE's technical studies define routes, voltages, and environmental feasibility, minimizing developer uncertainty and enabling a consistent grid expansion.
- 43 € billion in transmission CAPEX contracted since 2014;

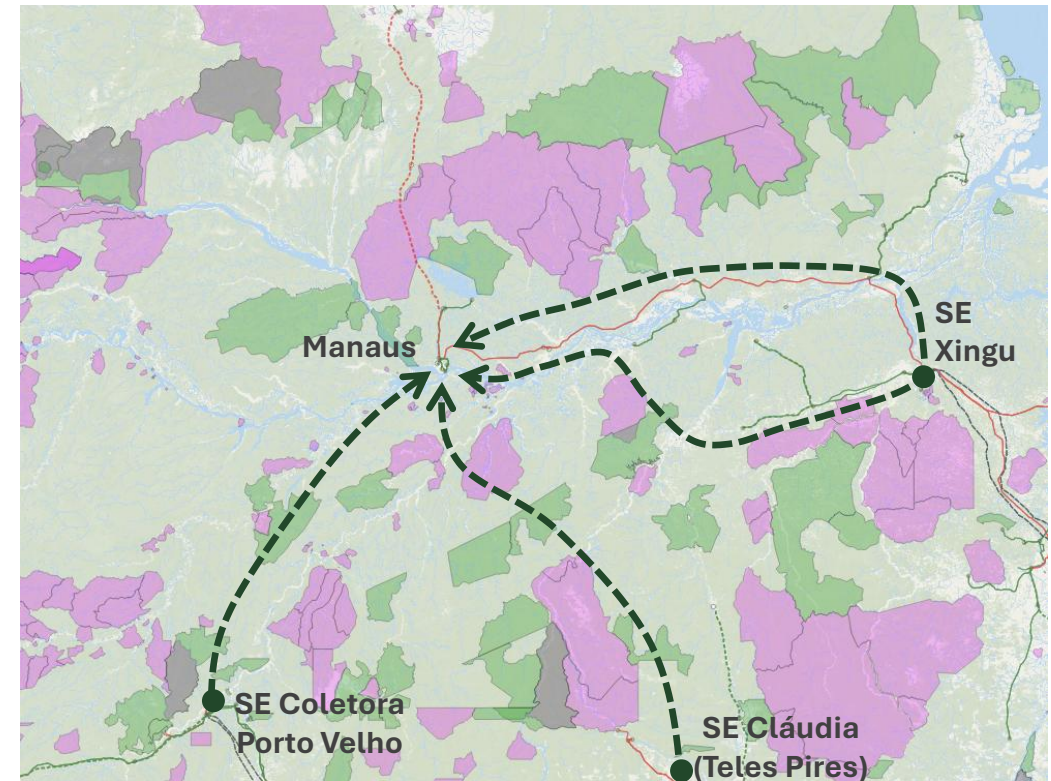
Public planning, private capital. Clear risk allocation is the bridge.

Integrating Environment from Day One: Planning for Acceptance and Speed

- Environmental screening by EPE identifies **priority corridors** and “no-go zones” before the auction stage, **reducing licensing risk**.
- Coordination with IBAMA and state agencies mitigates some potential conflicts.
- Specific technical reports for each asset prior to the auction.
 - Socio-environmental route analysis
 - Preliminary land cost estimates

You can't license what you didn't plan for. Environmental foresight is a fundamental part of the solutions.

Transmission alternatives evaluated for Amazonas



● Indigenous Lands

● Conservations Areas – Integral Protection

SE: Substation

Building Consensus, Not Just Circuits

- **Open stakeholder participation:** 6 national transmission study groups involving utilities, generators, state energy agencies, investors and the TSOs.
- **All technical reports publicly available** (www.epe.gov.br) — from single-line diagrams and simulations to socioeconomic justifications.
- **Clear signals create investor confidence:**
 - Every transmission auction in Brazil has been **fully contracted since 2017**.
 - Well structured auctions attracts **healthy competition** and **consistent discounts**.

Transparency builds trust, with investors and society.





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