



*The Brazilian development bank*



# Successful Practices in De-Risking Private Investment.

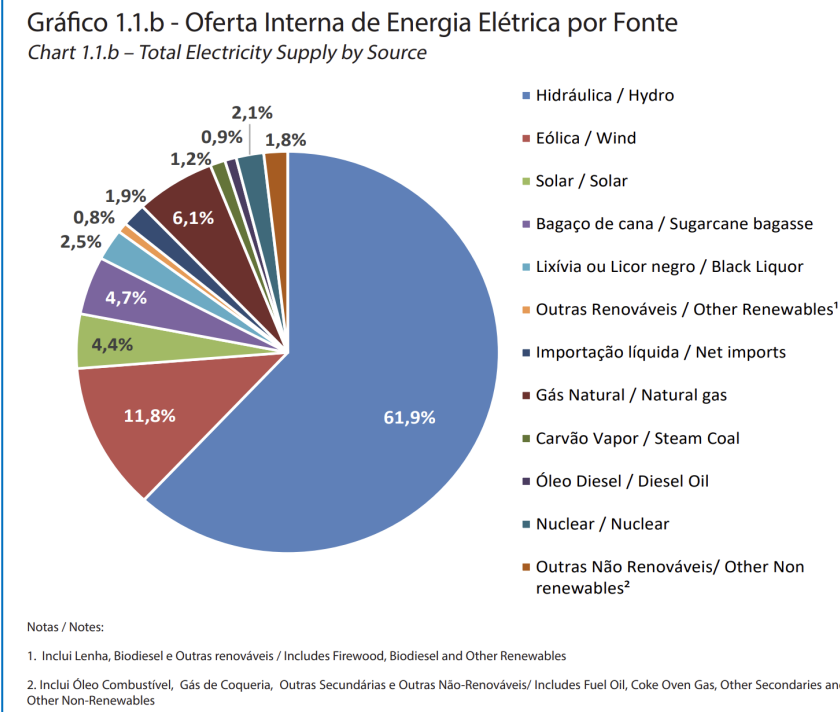
Insights from renewable energy deployment in Brazil.

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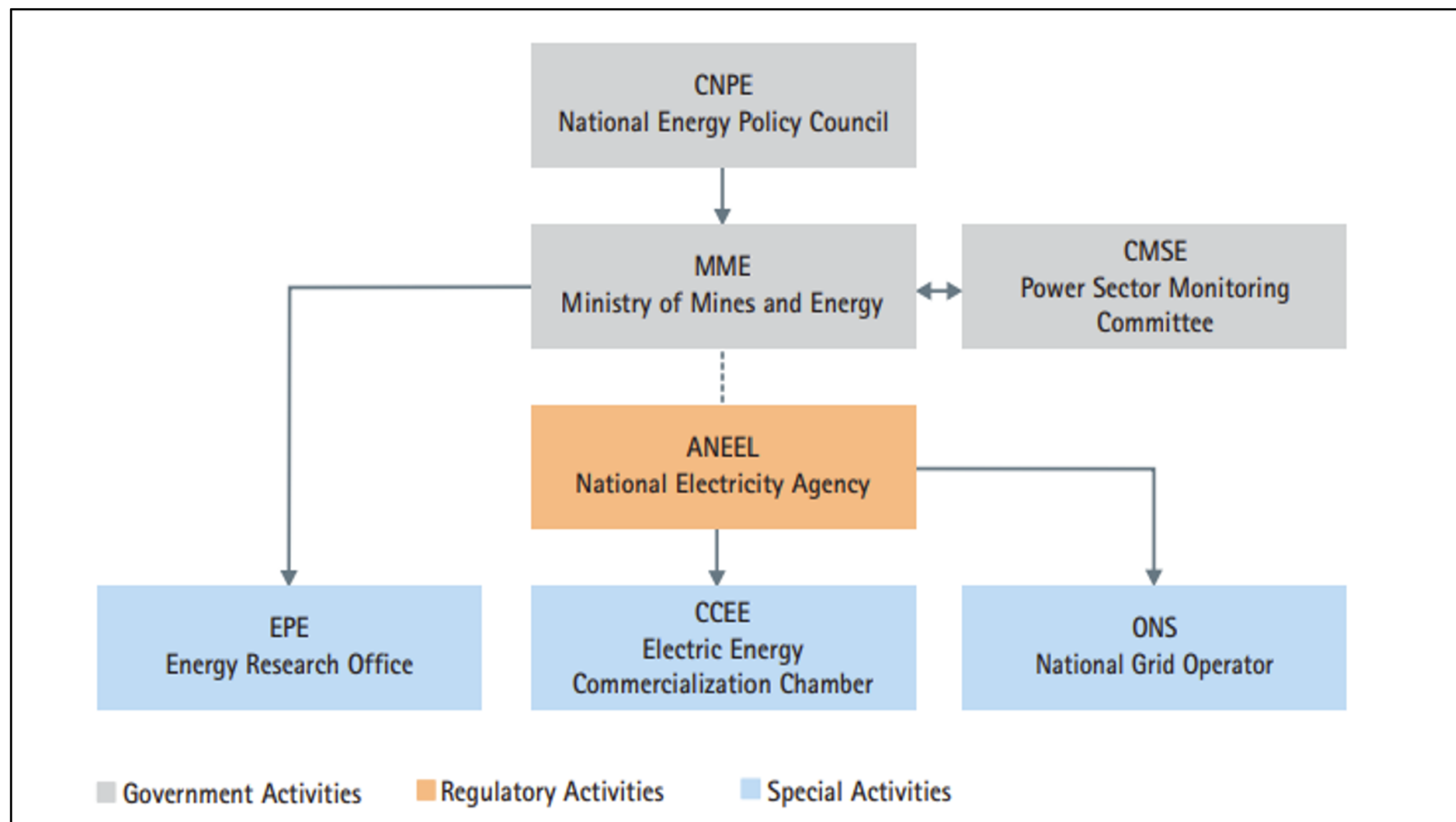
# Brazil's successful renewable energy deployment

- Predominance of competitive Renewable energy in the energy mix (over 90% RE share generation in 2023).
- Securing sufficient capital for investments mainly from private companies.
- Aligning climate change mitigation and energy security.
- Fostering energy transition as a socioeconomic development opportunity (fostering a domestic industrial supply chain - wind, job creation and regional development).



***Since the year 2000, RE accounted for around 80% of the additional installed capacity.***

# De-risking services by the Energy Planning institutions



Source: Tolmasquim (2015)

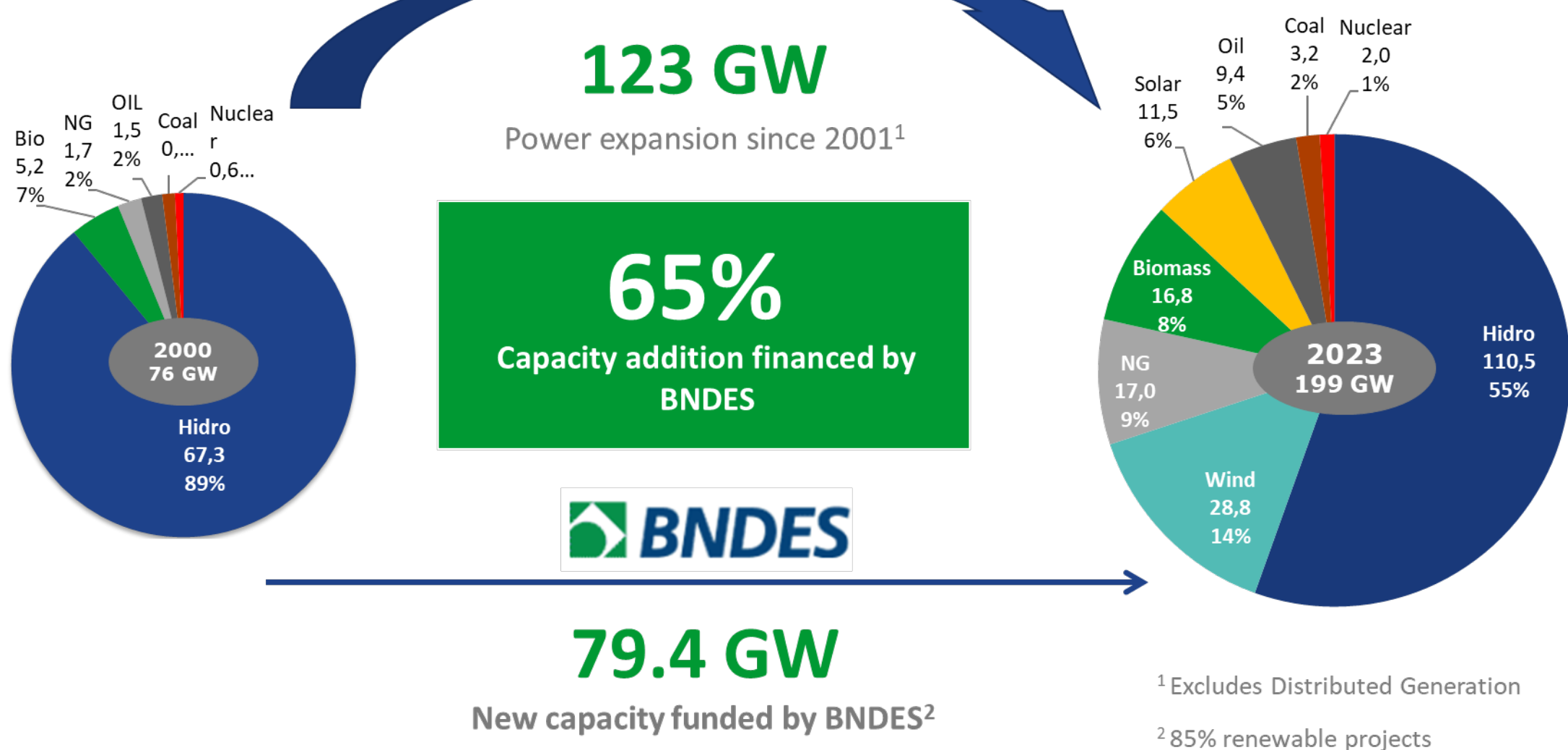
**FIGURE 8. Institutional Agents in the Brazilian Power Sector**

# De-risking services by the Energy Planning Institutions

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- **Market risk:**
  - EPE/MME produces long-term strategy plans and decennial plans.
  - Regulated market - Pipeline of Auctions and Long term [15 to 30 years] PPAs.
- **Offtake risk:**
  - Pool of different utilities (public and private). Gencos contracting with Discos.
  - Price cap tariff regulation – PPA pass through to consumers [ANEEL].
- **Grid and Transmission Risk:**
  - EPE/MME/ONS critical studies to reduce grid and transmission risk to renewable energy generators, transmission project corridors to facilitate the integration of significant amounts of renewable energy
- **Permitting Risks:** Alignment among EPE/MME and environmental authorities
- **Construction Risk:** MME/EPE conducts the technical qualification process.

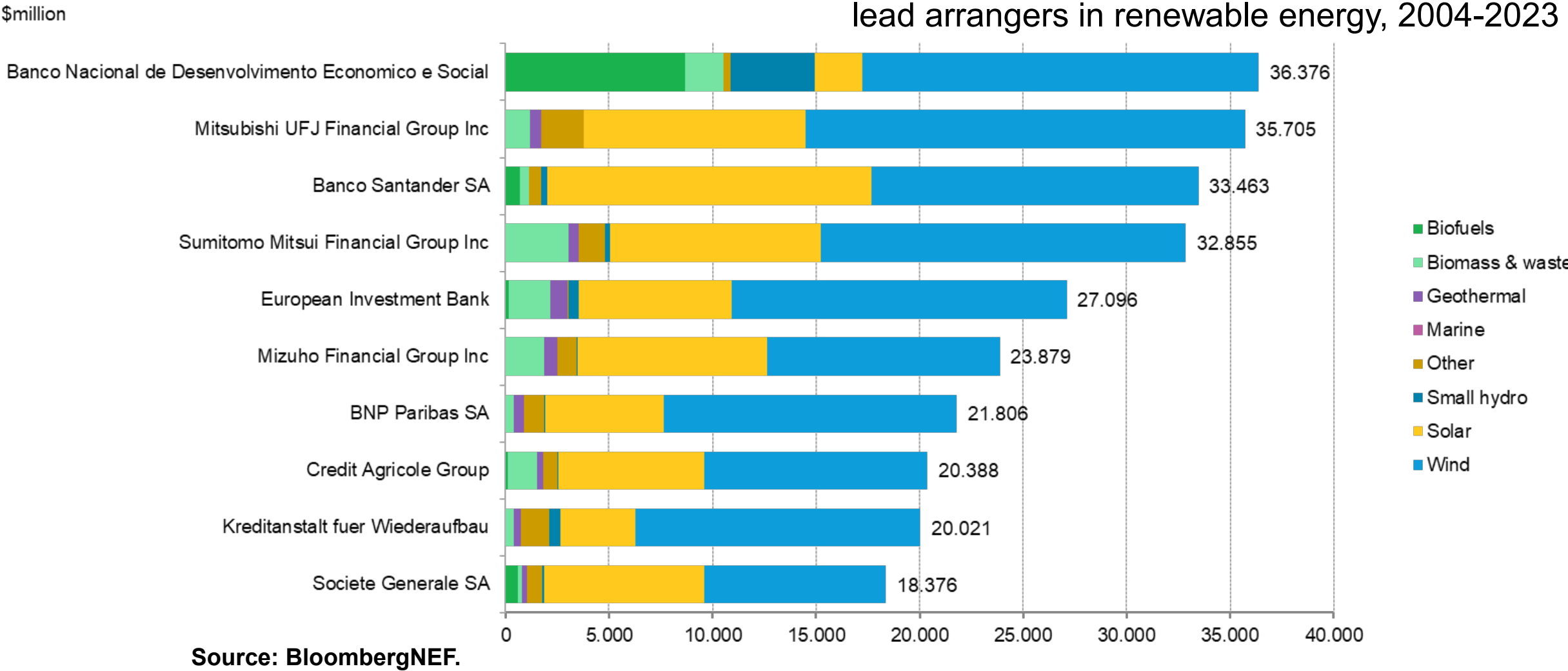
# BNDES has been instrumental for the expansion of the Brazilian power generation



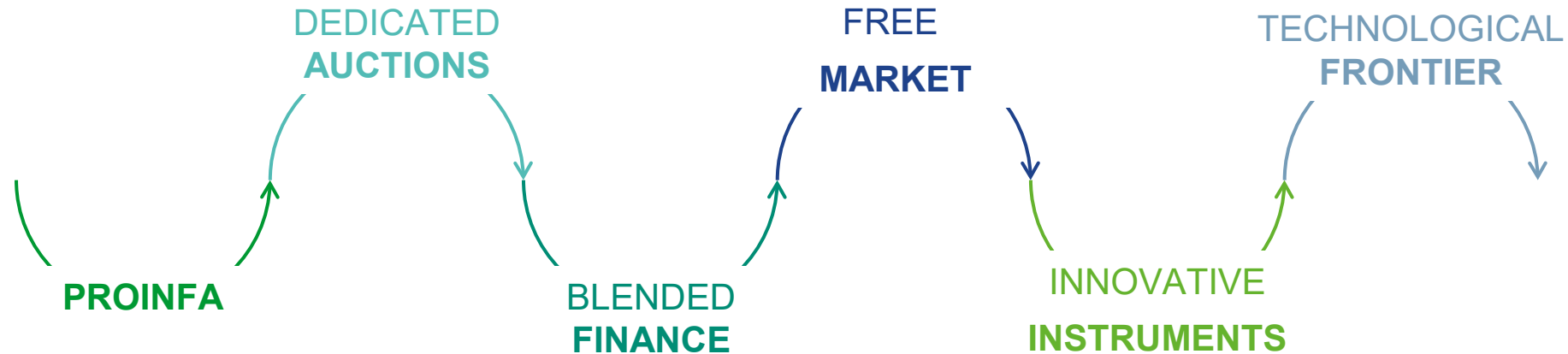
<sup>1</sup> Excludes Distributed Generation

<sup>2</sup> 85% renewable projects

# BNDES ranks as the top lender to clean energy globally



## BNDES's pioneering role in financing renewable sources



**Proinfa:** Support in the design of the PPA's guarantee structure and project financing.

**Dedicated auctions:** Communication of conditions prior to auctions. Better conditions for new technologies.

**Blended Finance:** funding combination for the first solar energy auction..

**Free market:** Methodological tool to solve ACL bankability with renewable sources.

**Innovative Instruments:** debentures, issuing coordination, *back stop credit*, funding in dollars, guarantees.

**Technological frontier:** hybrid renewable projects, offshore wind, storage, low carbon hydrogen, CCUS

# De-risking services by the National Development Bank [BNDES]

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- BNDES sectoral know-how and strong collaboration with energy planning authorities (MME/EPE) and other institutions;
- Long-term funding availability in local currency;
- Stable financial conditions announced prior to the auctions (predictability);
- Promoted resilient industrial supply chains;
- Pioneering role taking risks ahead of other financiers (adaptability and innovative approach);
- Major role in the development of the local capital market;
- Focal point for the partnership with multilateral finance institutions and other climate related funds

# Brazilian case - Key factors that secured the flow of capital and attracted private investment.

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- Jointly roles of domestic energy planning ecosystem and finance institution acting together to mitigate investment risks. Well-defined roles and responsibilities.
- Critical role of domestic expertise in energy planning and financing.
- Market design and PPA customized to mitigate specific investment risk through collaborative process (energy planning institutions and BNDES).
- Collaborative and adaptative process to develop bankable renewable projects with validation by domestic energy planning and finance institutions (enabling project finance structure).
- Secure availability of long-term funds in local currency at proper cost for renewable projects.



**Obrigado**  
**Gracias**  
**Thank you**