

INTERNATIONAL BUSINESS

TECHNOLOGICAL ARENA

Nuclear Energy Sector







WHO WE ARE?

SEBRAE - The Brazilian Micro
and Small Business Support Service
is a private non-profit organization
whose mission is to promote competitiveness
and sustainable development of micro and small
companies and to foster entrepeneurship.



HOW DO WE SUPPORT?

- Entrepreneurial Education
- Business Opening Guidance
- Business Management Training
- Culture of cooperation
- Technology Consulting
- Credit Access Guidance
- Support for Access to National and International Markets
- Eco-efficiency



Source: SEBRAE



WHO DO WE SUPPORT?

- ▶ 11.6 millions small formal business.
- The segment represents 99% of formal establishments and employs 51% of brazilians with a formal contract.
- > 40% of Brazilian exporting companies are micro and small companies.



Source: SEBRAE



But they were responsible for only **US\$ 1.24 billion** in international trade in 2018

Source: SEBRAE



WHY NUCLEAR ENERGY SECTOR?



Brazil Highlights

- PNE 2050 additional 8 GW to 10 GW
 by 2050 in nuclear energy =
 8 new nuclear power plants
- Expansion of Angra 1
- Modernization of Angra 2
- End of construction of Angra 3
- Multi-purpose reactor project
- US\$ 50 billions investments in 30 years
- Brazil controls fuel cycle technology



Source: ABDAN



World Highlights

- International Market: 158 new reactors by 2030
 US \$ 1.2 trillion (domestic market) and with international acquisitions of US \$ 530 million
- OECD Reduction in carbon emissions and 62% increase in nuclear energy by 2040
- > 50 countries use nuclear power in approximately 220 reactors for research purposes
- 50 reactors are under construction



Source: World Nuclear Association





Sebrae Support for the Nuclear Energy Sector

- Internationalization planning of the energy sector / APEX project
- Insertion in global supply and innovation chains
- NT2E Nuclear Trade and Technology Exchange
- Technological Arena







Insertion in Global Supply and Innovation Chains

TECHNOLOGICAL ARENA

Identify, structure and enable the execution of technological development and innovation projects which meet technological demands of the production chain of the nuclear energy sector, in a replicable way for other sectors.

TECHNOLOGICAL ARENA DEVELOPMENT OF TECHNOLOGICAL SOLUTIONS INTERNATIONALIZATION GENERATION OF NEW BUSINESS



Anchor Companies













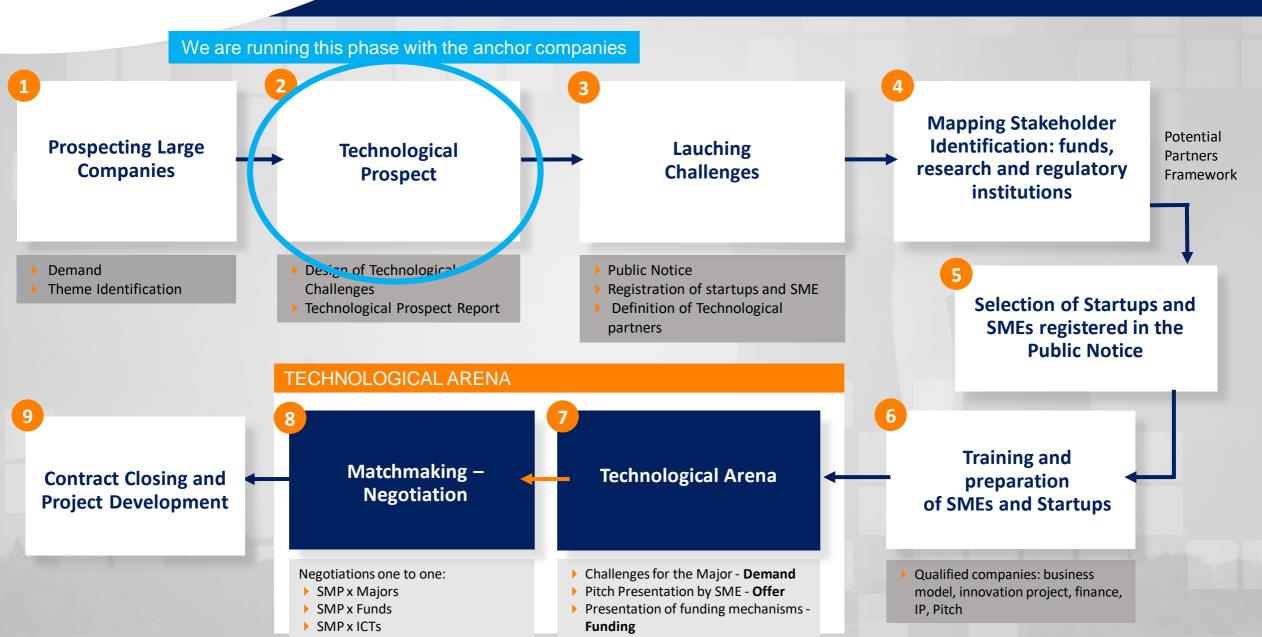


The Themes refer to **business processes**, operations, product lines, or R&DI **STRATEGY THEMES** programs that are critical and need to be solved. They are the focus and target the efforts to be carried out. The technological challenges are the different problems or limitations that the **CHALLENGES** company has when working on a particular theme. They represent gaps in themes that generate the need for technology, competence or solution. Solutions are different technological approaches available to solve a challenge. **TECHNOLOGIES** In some cases, companies may need a specific approach, in others, solutions **AND SOLUTIONS** have different technological bases. Requirements reflect characteristics and parameters that technology needs to **REQUIREMENTS** have or perform to solve the problem. Here the specific requirements for the operation of the technology are delimited.



INTERNATIONAL BUSINESS

HOW IT WORKS





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