



*O banco nacional  
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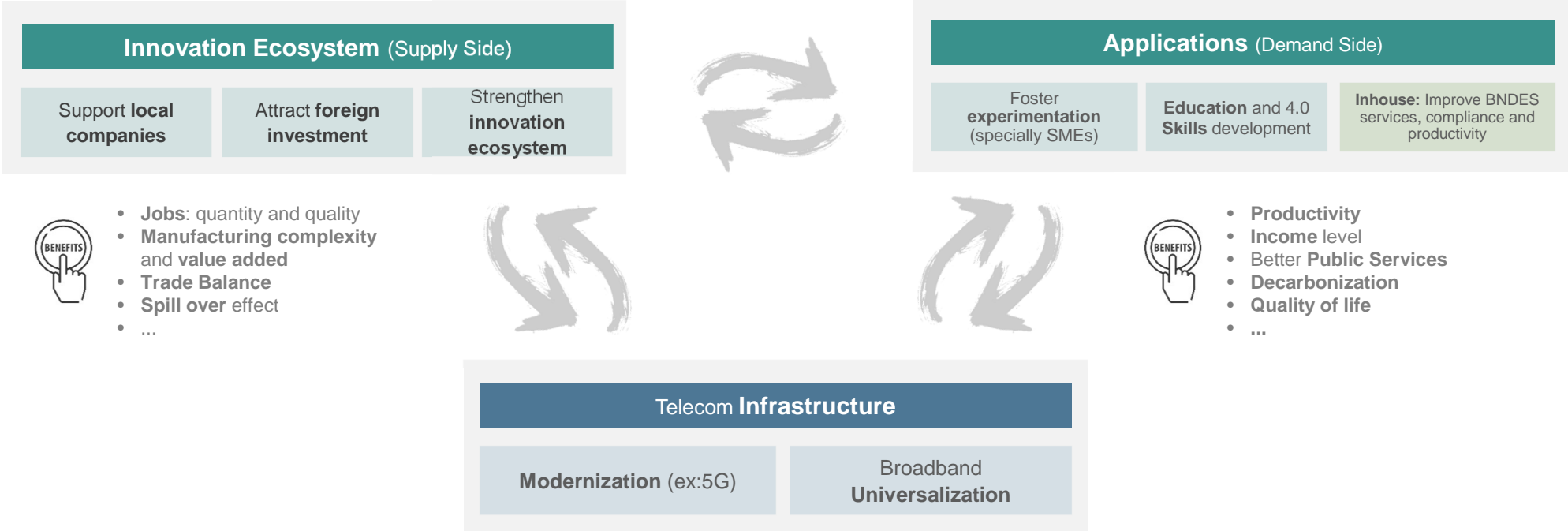
# Opportunities for LAC in an Emerging Technology-Based Economy: The Brazilian/BNDES perspective

ALIDE 2022

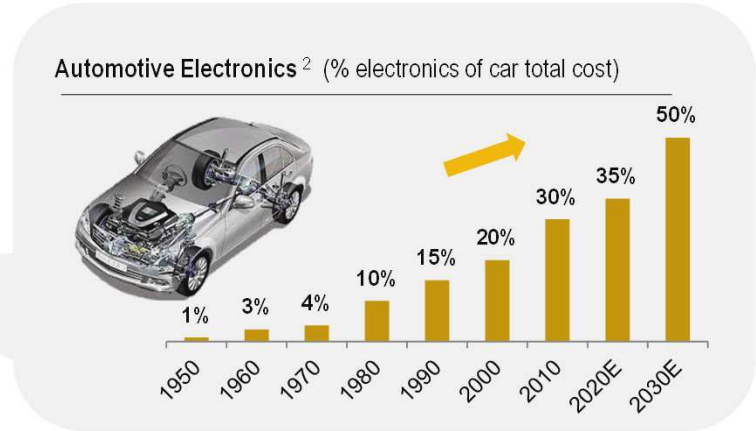
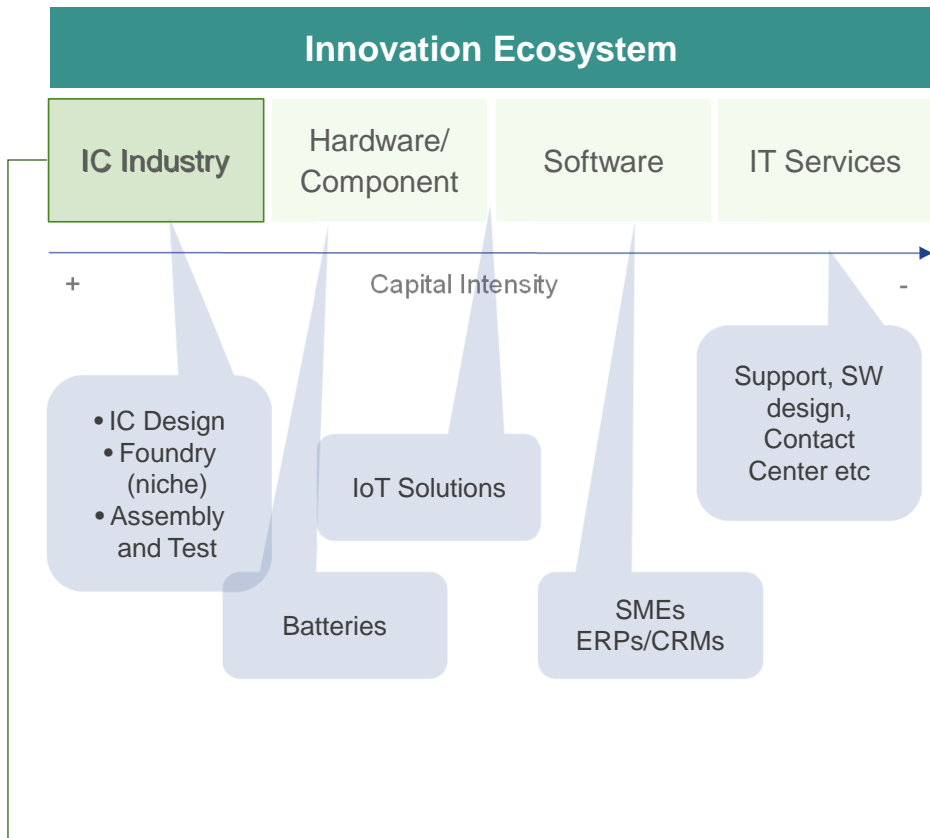
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Department (BNDES)



# > Emerging Technologies: BNDES Agenda



> **Innovation ecosystem:** opportunities in a context of supply chain disruption



**US\$ 200 MM**  
(20 projects)

- Equity
- Venture Capital Funds

Ex: Support for **IC Industry** ('12-'22)

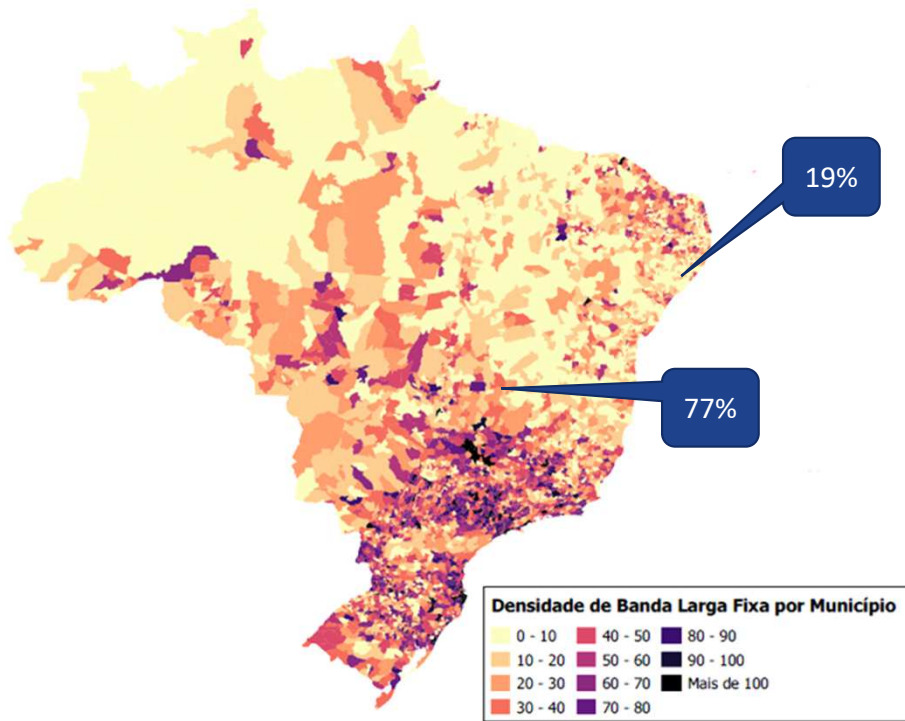
**US\$ 1 B**  
Annual revenues

- Debt
- Non Reimbursables

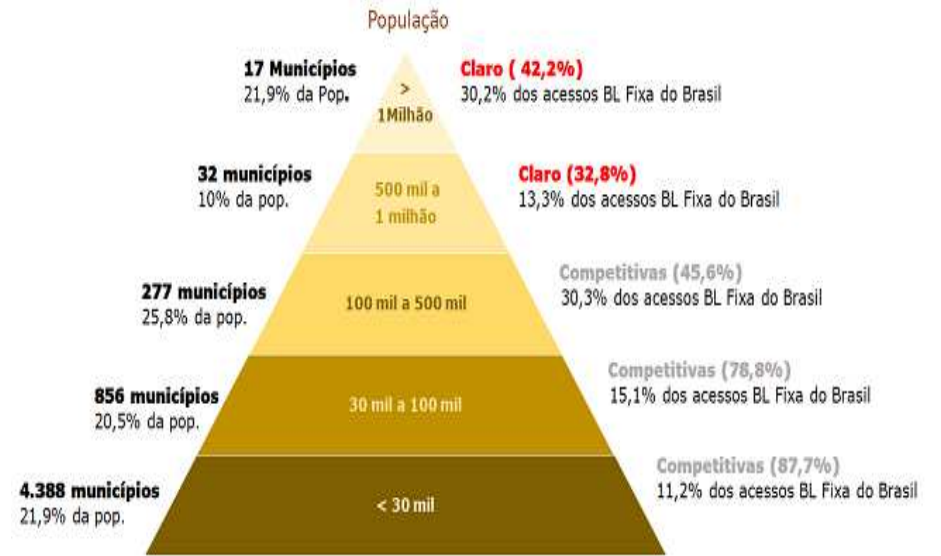
> **Infrastructure:** modernization must come with universalization concerns



**Fixed Broadband** household density: relevant disparity persists



**10k+ SMEs Internet Services Providers (ISPs)** are critical for broadband expansion in Brazil



- **BNDES Support** main focus: **SMEs ISPs**
- Debt (including funds) and Guarantees
- Universalization Fund (**FUST**): launch scheduled for S2/22: **rural areas** and **schools**

> Emerging Technologies: for what? (maybe the smartest question)

**Demand Side: Applications**

IoT	Blockchain	AI / Machine Learning etc	Big Data
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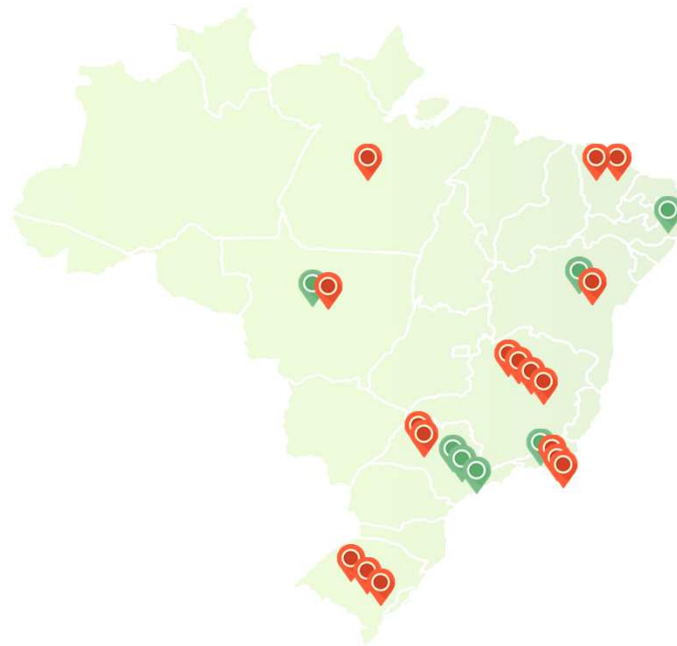
 **BNDES**

- **IoT Plan** ('17-'18) engaged over 2,200 contributions: start-ups, universities, SMEs, multinationals etc
- **Main question:** what are the main problems/opportunities and areas that IoT can help us to solve/get?
  - ✓ Framework: Min. C&T, Finep, Softex etc
- **Ex: BNDES Support**
  - ✓ **IoT Pilots:** non reimbursable (US\$ 10 MM)
  - ✓ **IoT Venture Capital Fund:** (US\$ 50 MM), w/ Qualcomm, Telefonica, Lenovo/Motorola, Multilaser, Banco do Brasil
  - ✓ **Debt**



## > IoT Pilots

- ✓ **IoT users concerns:** privacy, cybersecurity, process change, interoperability etc
- ✓ **IoT suppliers:** lack of “one-stop-shop”. Articulation is necessary
- ✓ **Start-ups:** difficulties to get into the game



- **11** IoT plans supported, **16** projects
- **1<sup>o</sup>** pilot concluded: 1Q/22
- **Main Challenges:** stakeholders articulation, counterpart and Pandemic



- Infant cancer
- Asset management
- Patient monitoring



- Conectivity in Brazilian *cerrado*
- Agricultural machinery management
- Rainfall monitoring
- Agricultural resources optimization



- Security solutions
- Public lighting telemanagement - smart cities
- Smart traffic light
- Advanced weather forecast system



- Industrial automation and process optimization
- IoT testbed (for quality control, and product and process traceability)



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