IoT pilots and SDGs

How the Brazilian
Development Bank fosters
IoT adoption for inequality
reduction

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BRAZIL's IOT ASPIRATION

Accelerate the implementation of the Internet of Things as a tool for the sustainable development of Brazil, capable of...

..increasing the economy's competitiveness...

...strengthening Brazil's manufacturing chains...



...and fostering better quality of life

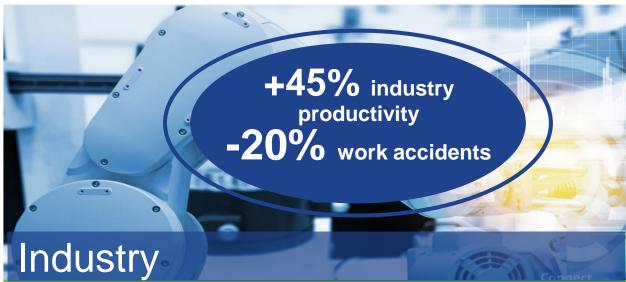


The study prioritized the environments with highest potential for Brazil, defining specific objectives for each one









Source: Consortium analysis, team analysis 3

BNDES has several options to support foreign investment in Brazil

Financial Instruments for IoT Solutions

- Credit for IoT solutions
- ICT Companies: €3.25Bi (last 3 yrs)
- Users: financial support for farmers, cities, hospital, industries, etc.

Investment Funds

- **€125M+ available** for investment in IoT companies (next 3 yrs)
- Co-investment with
 Corporate Venture and
 Institutional Funds (e.g. aerospace with Embraer)

IoT Pilots

- 1st initiative for coordinating IoT pilots in Brazil
- Demand driven applications

- ✓ BNDES to finance investment in local currency
- ✓ Co-invest in Funds for IoT companies

√ Joint investment in IoT pilots

In order to accelerate the adoption of IoT in the these select environments, we decided to start to work on a key initiative: BNDES IoT Pilots

BNDES IoT Pilots Goals

- Use IoT to solve Brazilian problems
- Foster local innovation and IoT ecossystem
- Identify sustainable IoT business models and scale up
- Faster the
 addressment/mitigate the risks
 of IoT thresholds (privacy,
 safety, interoperability, HR etc)



SOURCE: Consortium analysis 5

The Pilots will target the goals and applications set alligned to the SDGs



BNDES' Pilots



External Partnership

Cities



Health



Rural



Industry



- Mobility
- Water and **Energy**
- **Public safety**



- Management efficiency
- Chronic diseases
- Prevention



- Machine efficiency
- Sanitary safety
- Resources efficiency

- Resource and stock efficiency
- Capital optimization



Non-reimbursable funding is structured through an R&D Institution that should be part of the consortium

Criteria for projects selection

Relation to strategic objectives

Interoperability

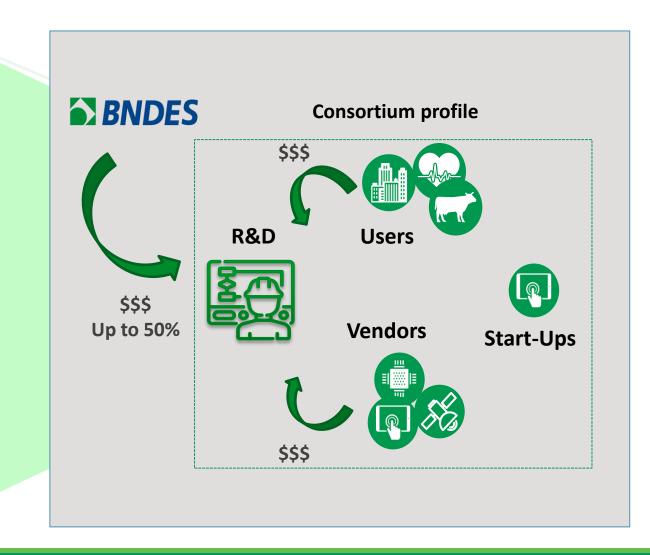
Financial contribution

Social Impact

Promotion of innovation

Replicability

Expected Economic Impact



External Evaluator



BNDES IoT Pilots - submitted projects

54 submitted projects

US\$ 90 million in total investments









17 projects

US\$ 25 million

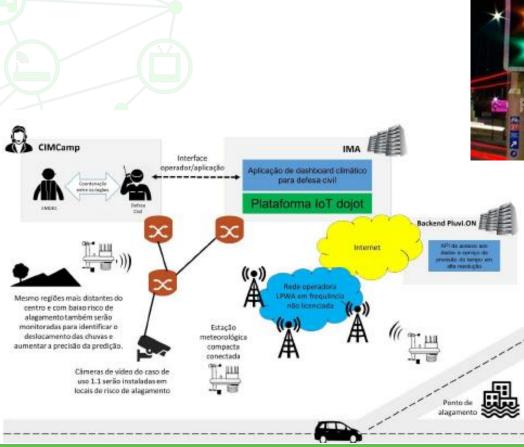


14 projects

US\$ 25 million

BNDES IoT Pilots – selected projects for smart cities





BNDES IoT Pilots – selected projects for health sector





BNDES IoT Pilots – selected projects for agriculture











Foster the adoption of IoT based solutions on Public Health System ("SUS")

Government initiatives could accelerate IoT adoption







"Plano Safra" (Inova Agro) 100 M EUR ('17)

"Educate" public agents for using technology

> **BNDES** financing to municipalities

It will be a pleasure to answer your questions eduardo.barbosa@bndes.gov.br Thank you!