

BNDES Support to Energy Efficiency

A case of energy efficiency PPP

Paris, November 3

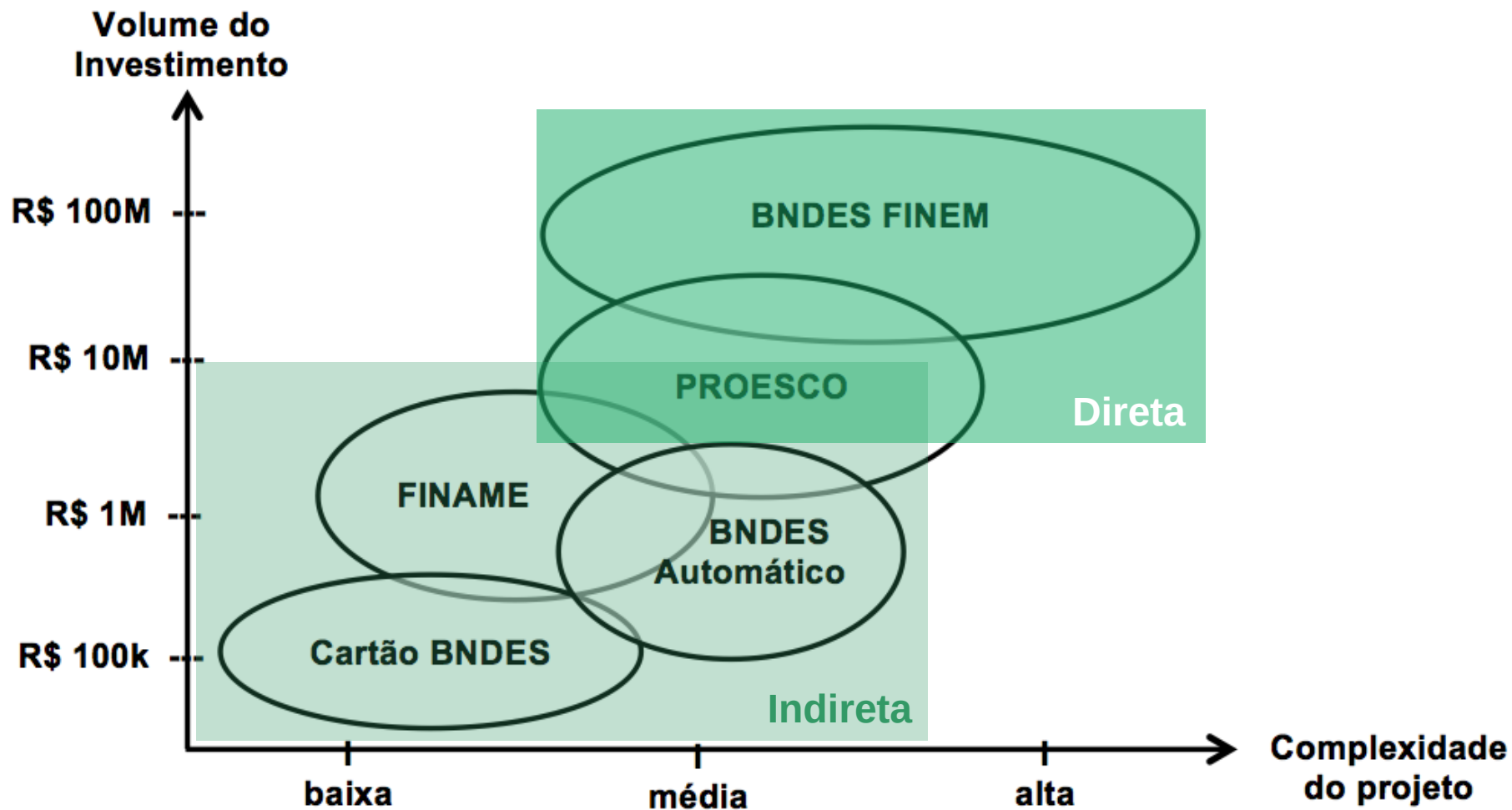
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 PPP case in the state of São Paulo

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 PPP case in the state of São Paulo

BNDES Support to Energy Efficiency



- Increase the awareness and scope of the line
- Reinforce the importance and priority of this sector for BNDES – this credit line has the best financial support conditions within BNDES Operational Policies
- Reinforce the role of the financial accredited institutions aiming at increasing capilarity and agility in this type of investment

BNDES Energy Efficiency

The new and increased PROESCO

Objective

Improve the communication and awareness of this type of investment

	Before	After
Name / Brand	BNDES PROESCO <i>"Exclusively for ESCO's ?"</i>	BNDES Energy Efficiency <i>Broader concept</i>
Final beneficiaries	▪ Companies specialized in energy saving and conservation (ESCOs) ▪ Energy final users ▪ Companies within the energy market – generation, transmission and distribution	▪ Companies registered with headquarters and management in Brazil ▪ Final beneficiaries may be shareholders of an entrepreneurship or service providers hired to execute services in third parties projects.

Special communication plan for accredited financial institutions

 BNDES Support to Energy Efficiency

 **PPP case in the state of São Paulo**

- ✓ **Objective**: “modernisation, optimisation, expansion, maintenance and control of the lightning infrastructure of São Paulo”
- ✓ **Administrative PPP** – starting operation on the first year of investments
- ✓ **Investments**:
 - Remodelling and efficient replacement: 580k lightning points replaced by LED. This choice is from the concessionary. The contract only sets targets in terms of performance and lightning levels
 - Construction of an Operational Control Center, with real time information
- ✓ **Management**:
 - Assets monitoring
 - Assets maintenance: preventive, corrective and routine
 - CCO maintenance

- ✓ Responsible for the bid: “SP Negócios” (municipality)
- ✓ Total gross: R\$ 7,3 Bi (~USD 1.8 Bi)
- ✓ Term of the concession: 24 years
- ✓ Term for modernisation of the lightning park = 5 years
- ✓ Payment characteristics:
 - 90% availability x 10% performance
 - Energy price risk is mitigated by the readjustment formula, which includes the component of changes in energy prices
 - Years 1 to 5:
 - **20% Change in energy price** / 20% IPC-FIPE / 60% IGP-M
 - From Year 6 (full LED):
 - **40% Change in energy price** / 35% IPC-FIPE / 25% IGP-M

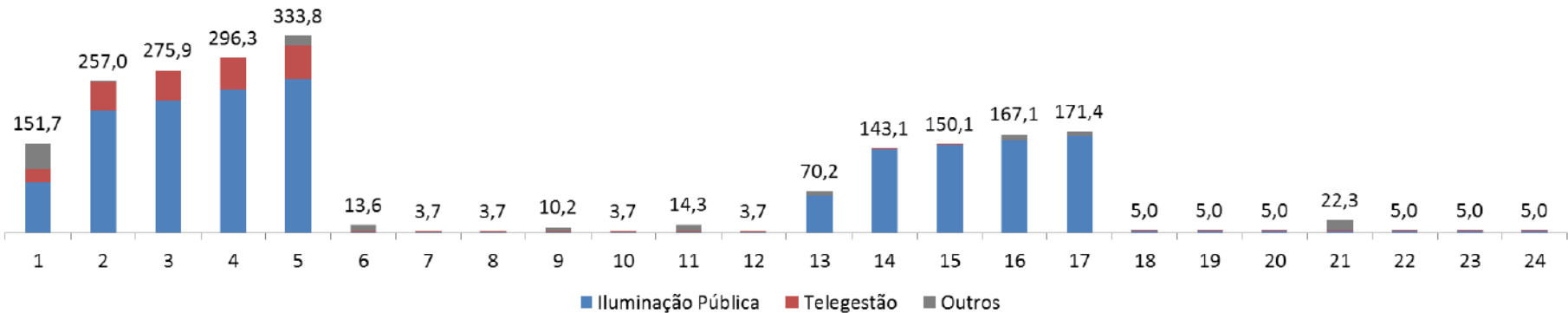
✓ LED modelling solution:

- LED lifetime: 12 years
- Special clause sets minimum lifetime of 10 years. Supplier must ensure 10 years minimum on the supply agreement
- 24 years contract include 2 changing cycles:
 - 1st cycle: Years 1 to 5
 - 2nd cycle: Years 13 to 18

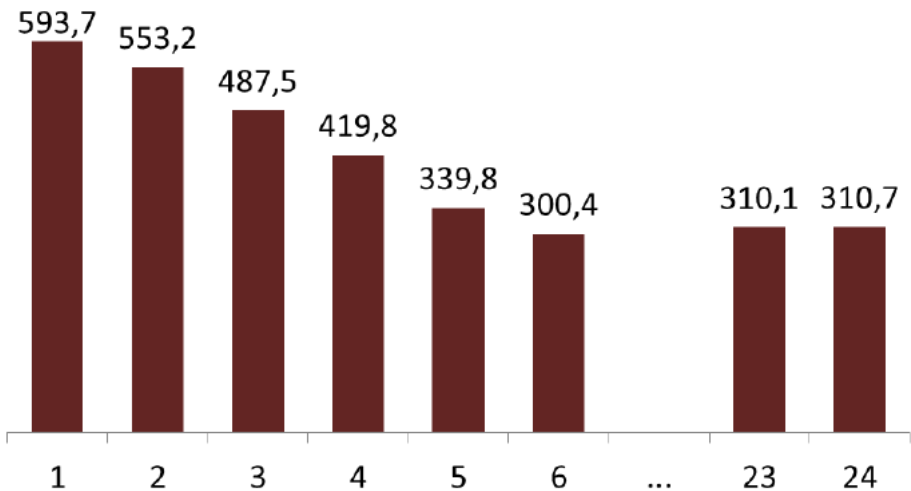
✓ CAPEX: 1st cycle - years 1 to 5: R\$ 1,3 Bi (BNDES financing)

- LED: public lightning: R\$ 1 Bi
- Management system: software + customisation + hardware: R\$ 229mi
- CCO + Call Center + Operational Units: R\$ 61mi
- Reinvestment: 2nd cycle: ~R\$ 0,8 Bi (from Year 13)

Estimativa de Investimentos (R\$ milhões)



Consumo Anual de Energia (GWh)**



48%
total estimated
consumption
decrease