



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



SUSTAINABLE DEVELOPMENT GOAL 9
INDUSTRY, INNOVATION AND INFRASTRUCTURE



APLICAÇÕES DO **Biogás** NA AGROINDÚSTRIA BRASILEIRA

Biogas applications for the Brazilian agro-industry



MINISTÉRIO DA
CIÊNCIA, TECNOLOGIA,
INOVAÇÕES E COMUNICAÇÕES

MINISTÉRIO DA
AGRICULTURA, PECUÁRIA
E ABASTECIMENTO

MINISTÉRIO DE
MINAS E ENERGIA

MINISTÉRIO DO
MEIO AMBIENTE

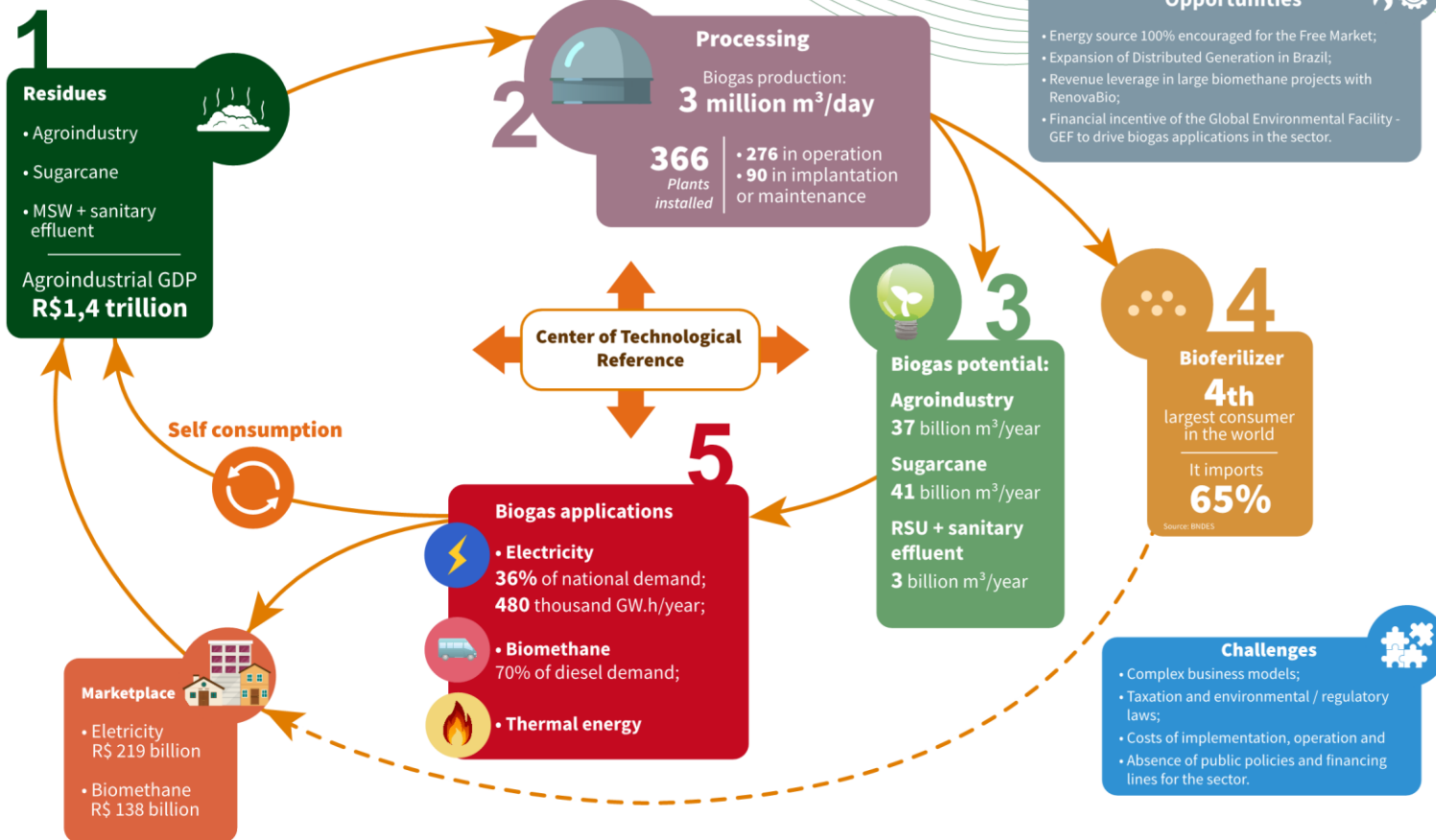


UNIDO Department of Energy

- Energy Solutions
- Inclusive and sustainable industrial development;
- Integration between local, regional and global partners;
- Emphasis on energy efficiency, climate technologies and business models that contribute to a circular economy;
- Present in more than 50 countries.



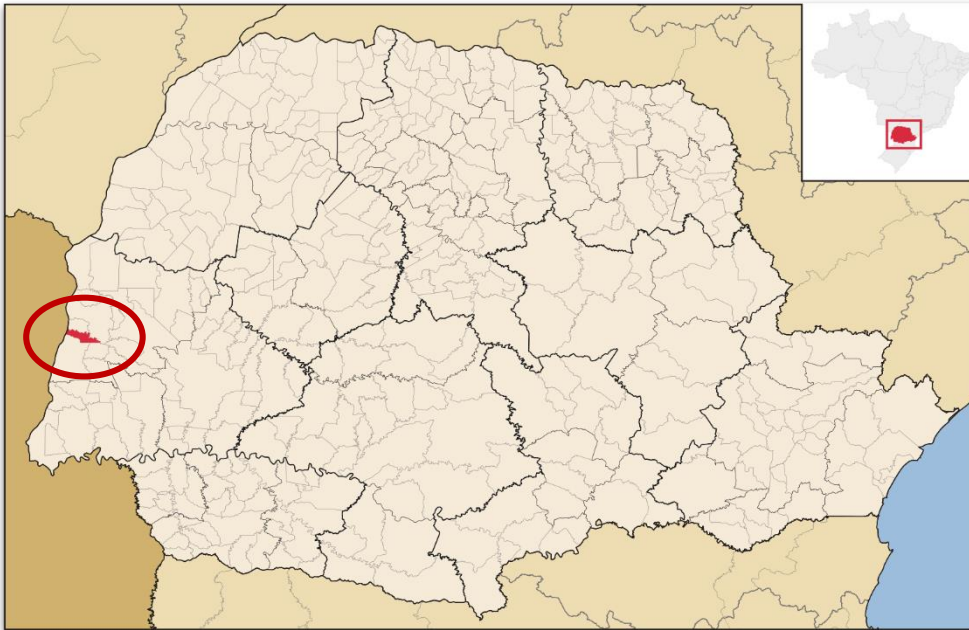
BIOGAS IN BRAZIL



Source: Agência Internacional de Energia (IEA), Associação Brasileira de Biogás e Biometano (ABiogás), Centro Internacional de Energias Renováveis (CIBIOGAS), Empresa de Pesquisa Energética (EPE), Universidade Estadual de Campinas (UNICAMP), Agência Nacional de Petróleo (ANP) e Agência Nacional de Energia Elétrica (ANEEL).

CASE

BIOGÁS INITIATIVE IN ENTRE RIOS DO OESTE/PR

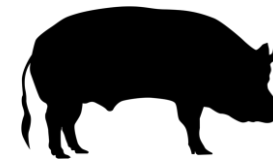


- **AREA: ~120 KM²**
- **INHABITANTS: ~4,500**
- **SWINES: BETWEEN 150K TO 200K**
- **LOCATED AT THE END OF A POWER DISTRIBUTION LINE**

CASE BIOGÁS INITIATIVE IN ENTRE RIOS DO OESTE/PR



18
FARMERS



~40k
SWINES



~200t
WASTE/DAY



20.6km
PIPELINE



~5,000m³
BIOGAS/DAY

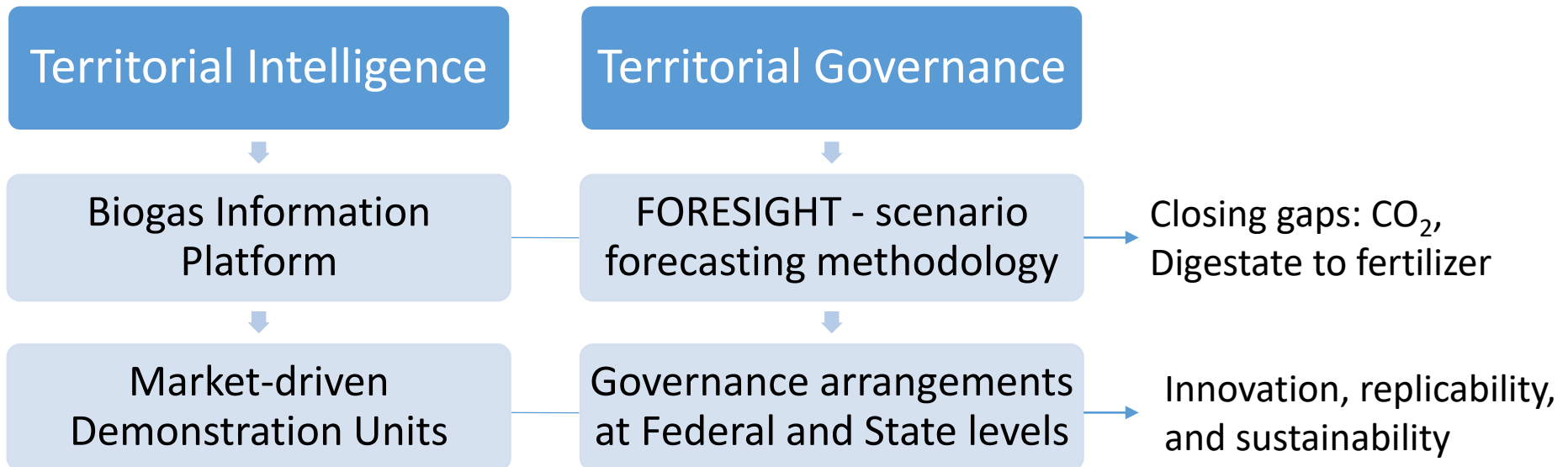


CASE BIOGÁS INITIATIVE IN ENTRE RIOS DO OESTE/PR



- COPEL: BRL 17MI INVESTMENT (~USD 4,5MI)
- BIODIGESTORS: FARMERS OWN INVESTMENT
- MUNICIPALITY: LAND, IMPLEMENTATION SUPPORT, OPERATION
- ~3,000 MWH/YEAR IN DISTRIBUTED GENERATION (2X240 KW GENERATORS)
- 72 UNITS FOR REMOTE SELF-CONSUMPTION

Lessons learned and next steps





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Thank you!

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