# MINISTRY OF MINES AND ENERGY

BENTO ALBUQUERQUE | MINISTER OF MINES AND ENERGY

**INDIA | NEW DELHI, JANUARY 23, 2020**

# BRAZIL & INDIA: COMPLEMENTARITIES

## MINING
80 mineral commodities

## MINING
95 mineral commodities

## ELECTRICITY
Installed capacity in expansion (44%)

## ENERGY
Indian invests in transmission lines in Brazil

## BIOFUELS
The largest producer of sugarcane ethanol

## 1ST
Largest sugar industry

## 1,1 MILLION BARRELS/DAY
Brazil became a net oil exporter and will be 5th largest producer by 2029

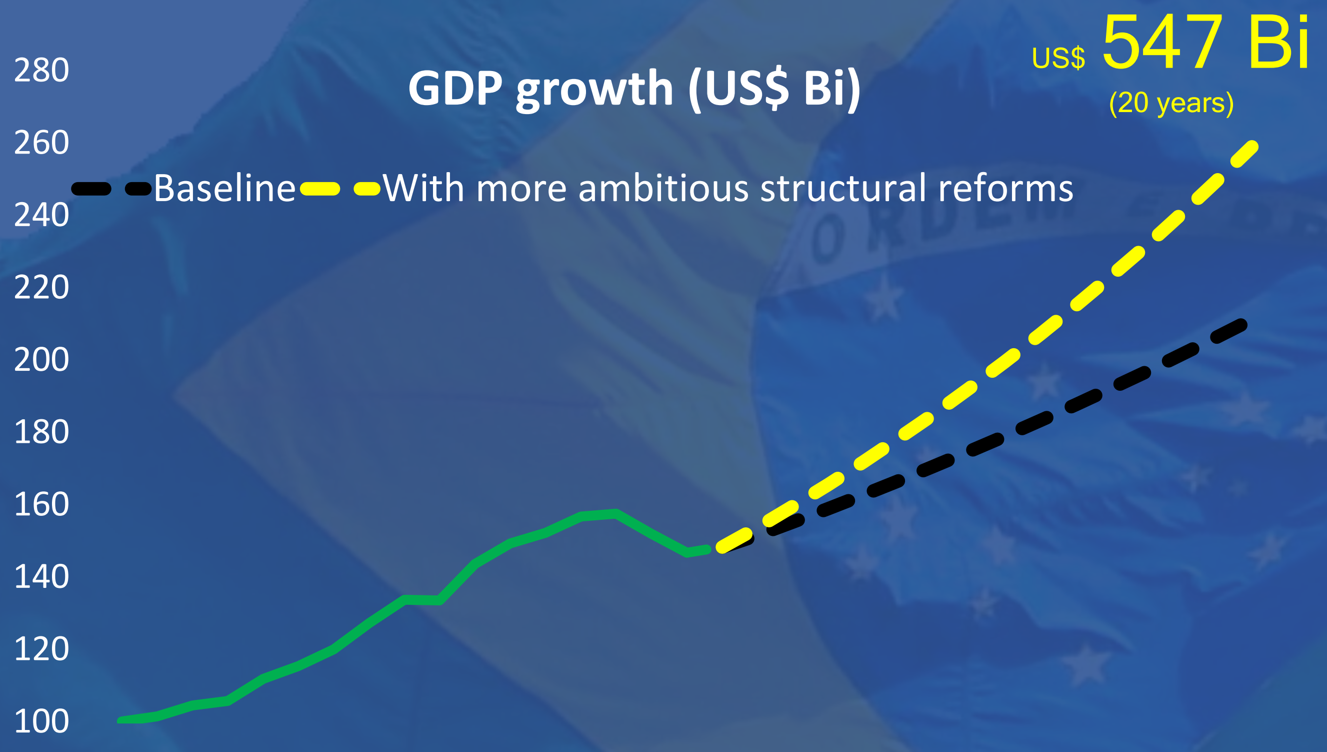
## 3RD
largest oil & gas consumer market (2019)
imports more than 80% of its demand.

## 9TH
Largest economy (GDP)

## 7TH
Largest economy (GDP)

(Source: OECD, 2019; ME/SPE/IBGE, 2020)

# BRAZIL ON A POSITIVE GROWTH PATH




Economic reforms will allow for **investments** and will enable a return of **confidence** and job **generation**.

(Source: OECD, 2019; ME/SPE/IBGE, 2020)

# CONCRETE DELIVERABLES IN 2019

**Oil & Gas**
open market agenda

+240 US$ BI
Oil and Gas investments (30 years)

**Energy**
Modernization program

5,8 US$ BI
Power generation and Transmission lines investments (6 years)

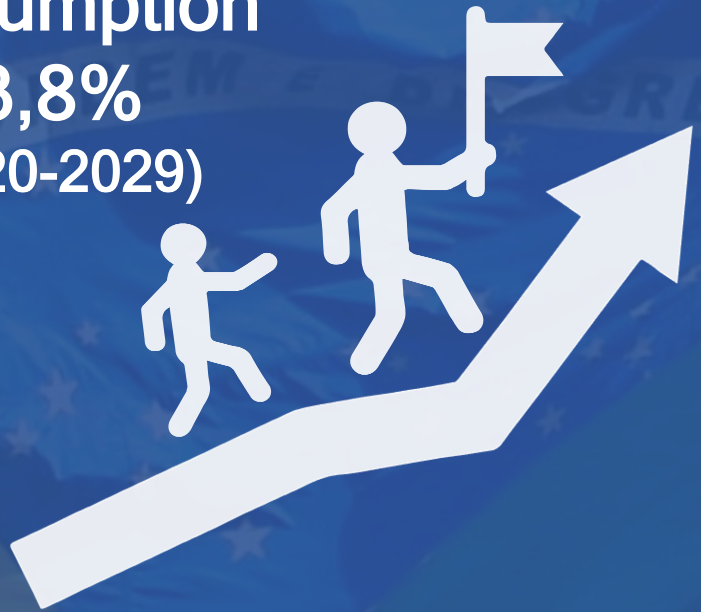
**Mining**
Improving the governance

US$ 61 MI
Mining investments (10 years)

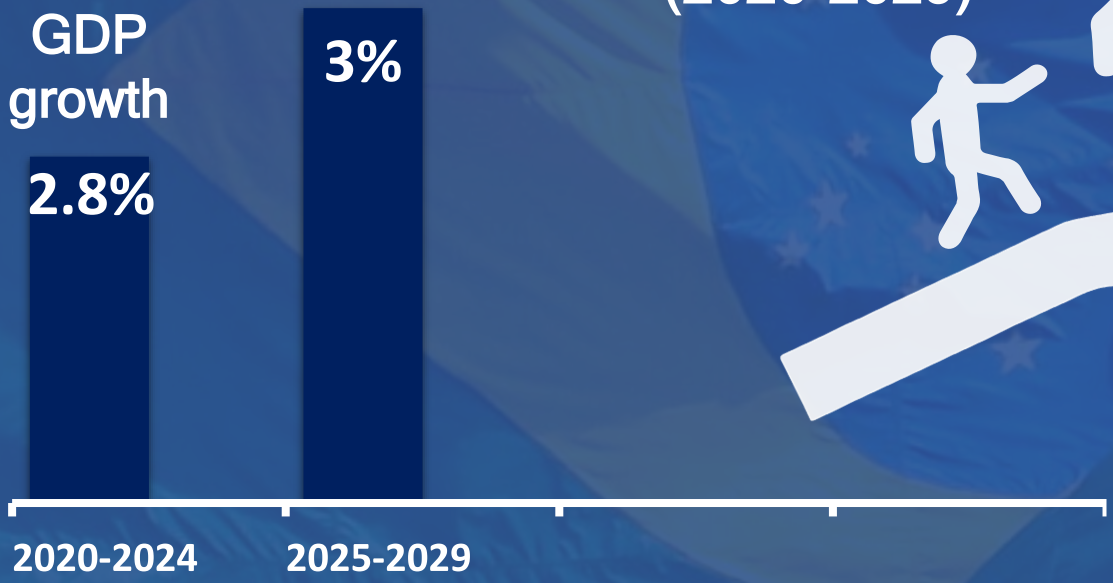
MME (2019) e PDE (2019).

# THE ROAD AHEAD

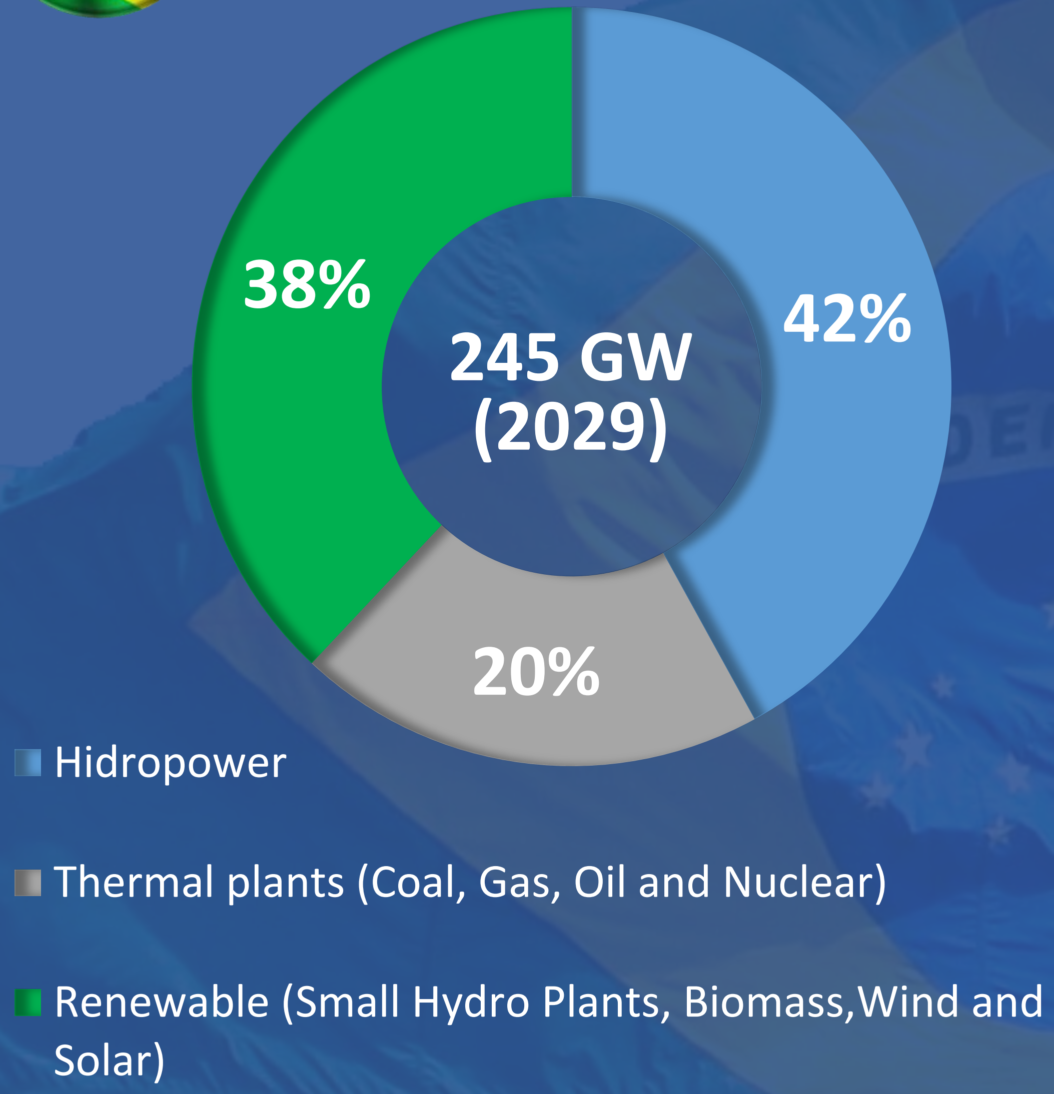
Average Electricity consumption
3,8%
(2020-2029)



**Energy demand** will continue to **grow.**



# WHERE WE´LL BE IN THE FUTURE




**48 %**

Share of renewables in our energy matrix (2029)

**By 2029, renewable sources will increase from 34GW to 83 GW in our installed capacity.**

# OIL, NATURAL GAS & BIOFUELS

**Brazil** has the **highest pre-salt well productivity** in the world

**Brazil** focus on **open market** agenda

**By 2030**, Brazil will have **doubled** its natural gas production capacity

**By 2030**, Brazil will be among the **5 largest** exporters in the world

# BRAZILIAN ENERGY TRANSITION
## (1970 -2020)


RenovaBio

**“THE BRAZILIAN CARBON CAPTURE MACHINE”**

- ✓ Proálcool (1975)
- ✓ Flexible Vehicles(2003)
- ✓ Ethanol E27 (27%)

- ❑ Biodiesel:
  de B2 a B10 (2008-2018)
  de B11 a B15 (2019-2023)
- ❑ RenovaBio (2020)

(Source: MME, 2019, Petrobras, 2019)

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PÁTRIA AMADA BRASIL
BRAZILIAN GOVERNMENT

# BRAZIL IS OPENING ITS MARKET

Brazilian Government Program to build an **open**, **dynamic** and **competitive** natural **gas market**

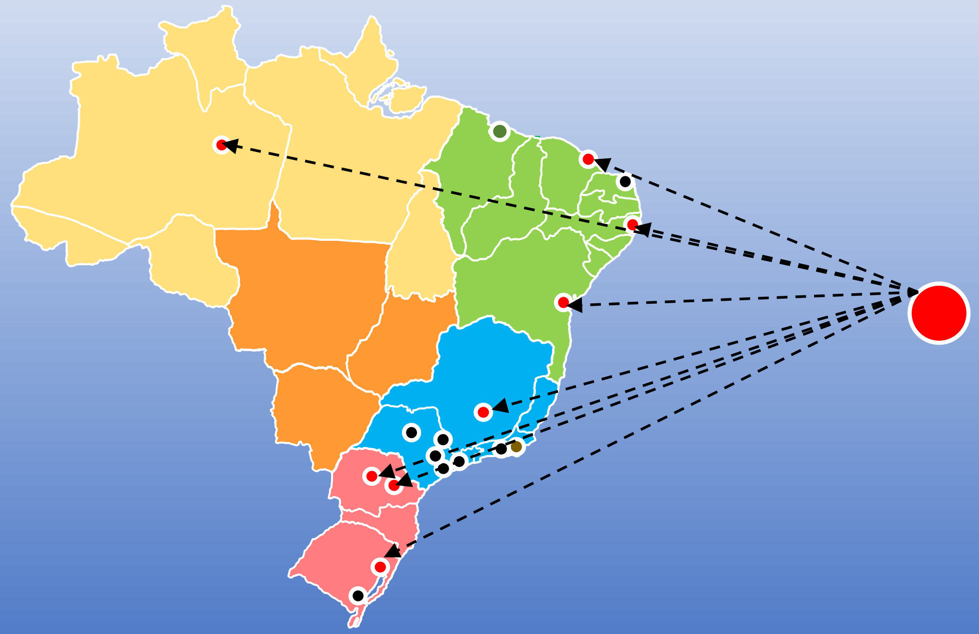
↔

**Development** of **competition**

**Integration** of the **gas to power** and **to industrial markets**

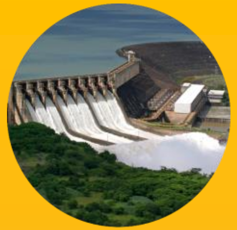
Conciliate **local*** and **federal regulations** (27 States)*

**Reduce tax barriers**



**Petrobras' refineries divestment projects (2021)**: eight active refineries, total capacity of **1.1 million bpd** (50% of Brazil)

(Source: MME, 2019, Petrobras, 2019)



# MODERNIZING OUR ENERGY SECTOR

**Open energy market** for all consumers

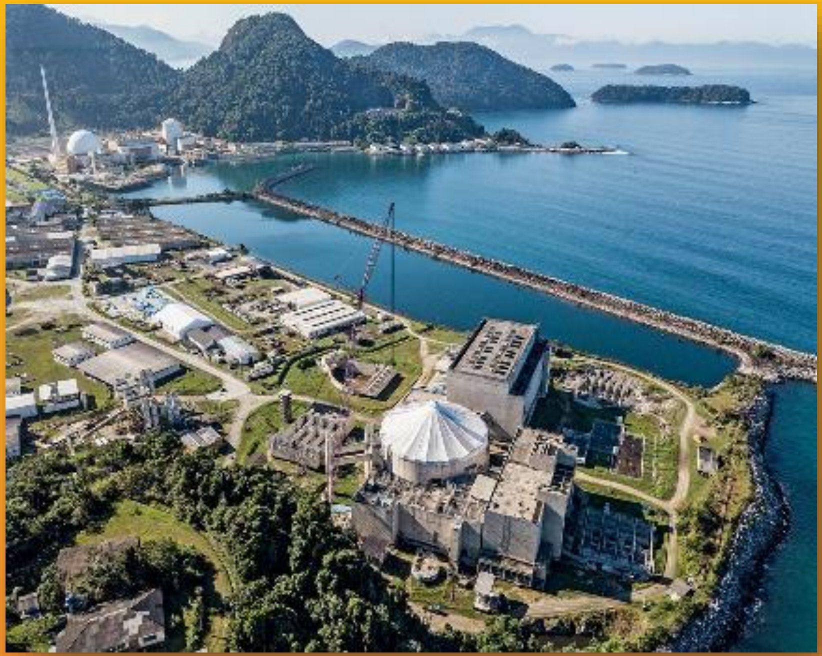
**Efficient** cost and risk **allocation**

**System expansion must guarantee safety and reliability**

**Regulatory rules prepared for new technologies**

# BRAZILIAN NUCLEAR POLICY

- **Uranium** reserves (**7th in the world)**
- **Full cycle** mastery;
- **Low carbon** emission;
- **90% of energy** availability.



(Source: MME, 2019; Eletrobras & Eletronuclear, 2019)

# THE KEY ROLE OF MINING

**80**
Number of mineral commodities with known reserves

**0.6%**
Brazilian mining in rights in exploration (9400 number of active mines )

**4%**
Brazilian mining production in relation to GDP

**21%**
Brazilian exports

- ✓ Regulatory **capacity;**
- ✓ **Digital mining**: faster assessment process (309 to 35 days);
- ✓ Under way: the **flexibilization** of the legal framework **to allow PPP for Uranium;**
- ✓ **Promoting auctions**

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- ✓ THE FUTURE IS BIO, IT IS OIL, IT IS GAS, IT IS NUCLEAR, IT IS WIND & SOLAR, IT IS COAL.
- ✓ IT IS DIVERSIFICATION.
- ✓ YOU'RE VERY WELCOME TO INVEST IN BRAZIL.

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