

**EMERGING MARKETS FOREIGN
DIRECT INVESTMENT STRATEGIES:
NEW PATHWAYS TO GREEN GROWTH
INVESTMENT OPPORTUNITIES IN BRAZIL**

Berlin, September 15th 2014

- **BRAZIL: OVERVIEW**
- **OPPORTUNITIES**
 - 1. ESTIMATED INVESTMENT**
 - 2. OIL & GAS**
 - 3. INFRASTRUCTURE**

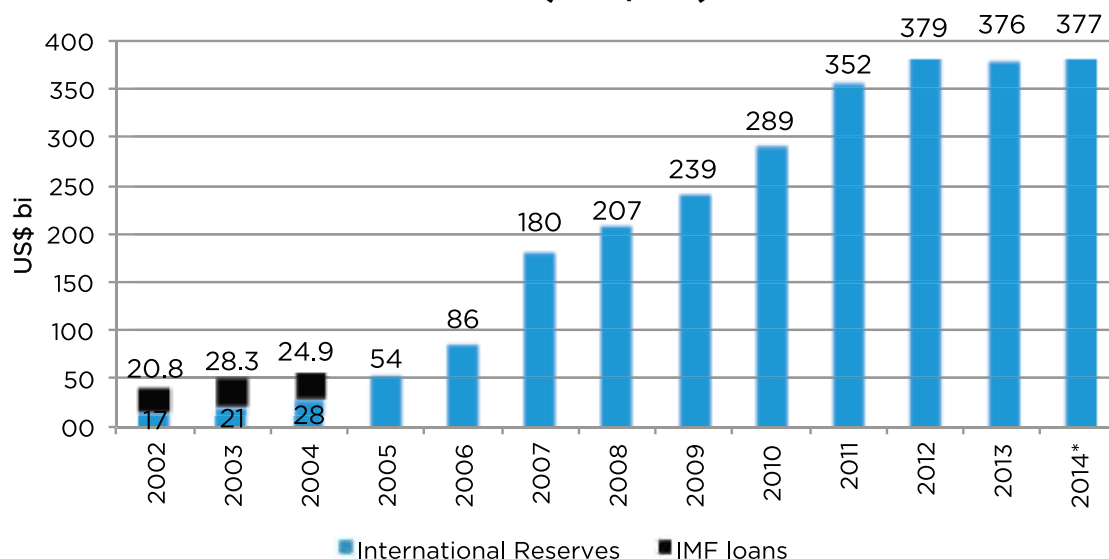
A large, dense crowd of people is shown from a high-angle, slightly blurred perspective, suggesting a large outdoor gathering or festival. The crowd is composed of many individuals, some wearing hats and casual clothing. The text "BRAZIL OVERVIEW" is overlaid in the center in a bold, white, sans-serif font. The background is a mix of various colors, with a prominent blue area in the upper right and a brown hat visible in the lower center.

BRAZIL OVERVIEW

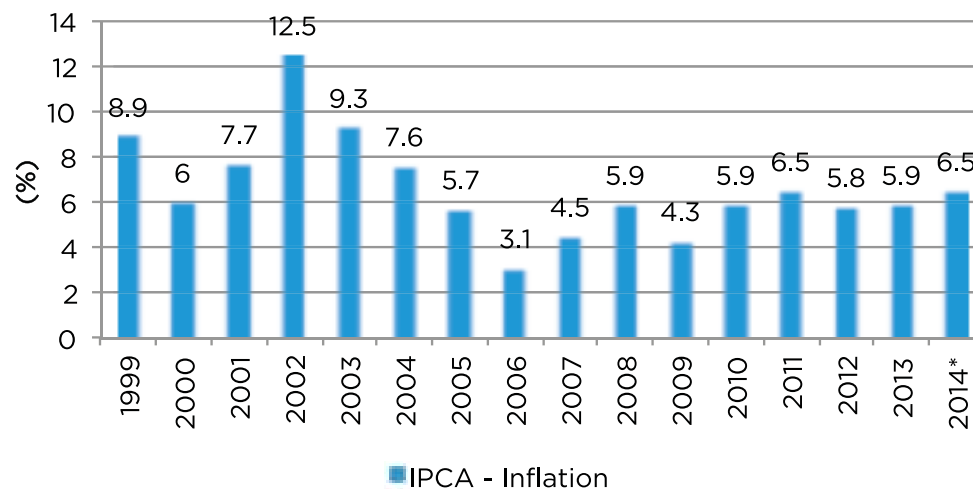
BRAZIL OVERVIEW

MACROECONOMIC

International Reserves (US\$ bi)



Inflation - IPCA (% anual)



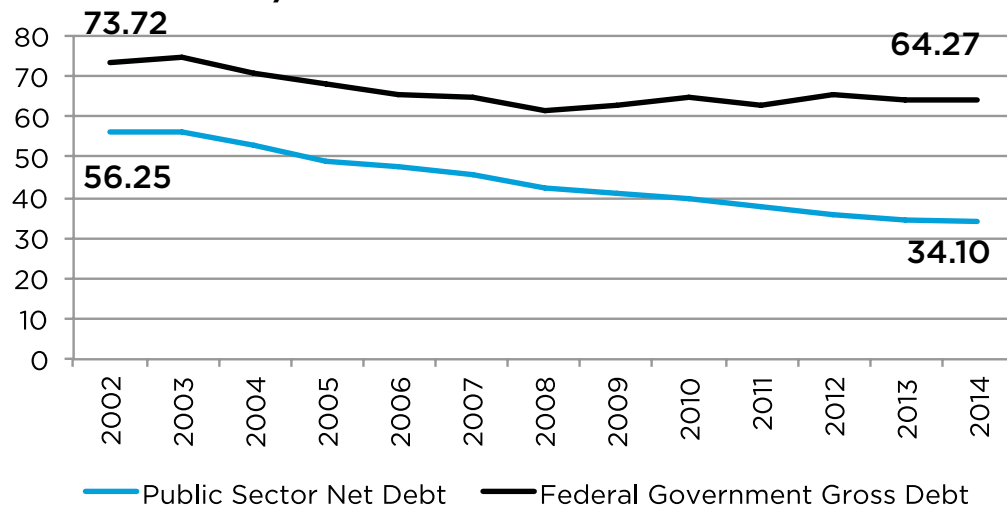
Source: BNDES

Source: BNDES

BRAZIL OVERVIEW

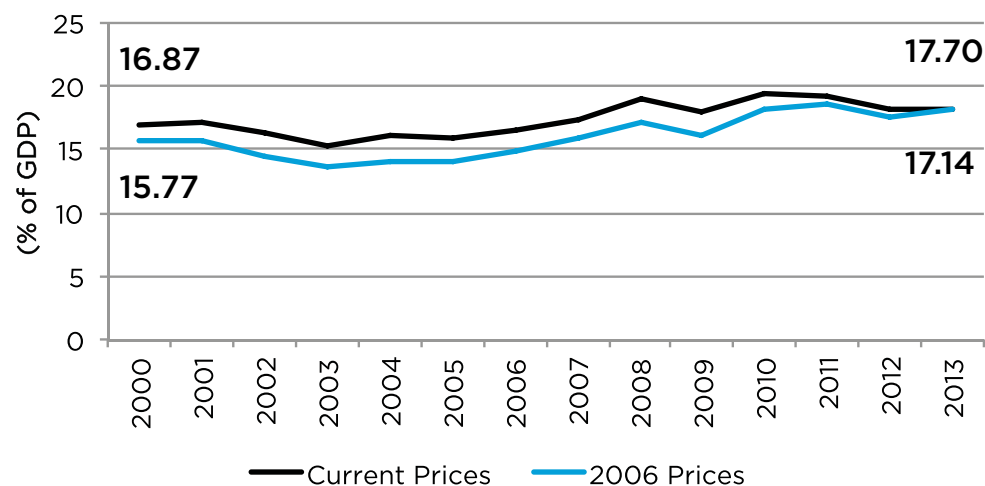
MACROECONOMIC

Public Debt / GDP



Source: BNDES

Investment Rate

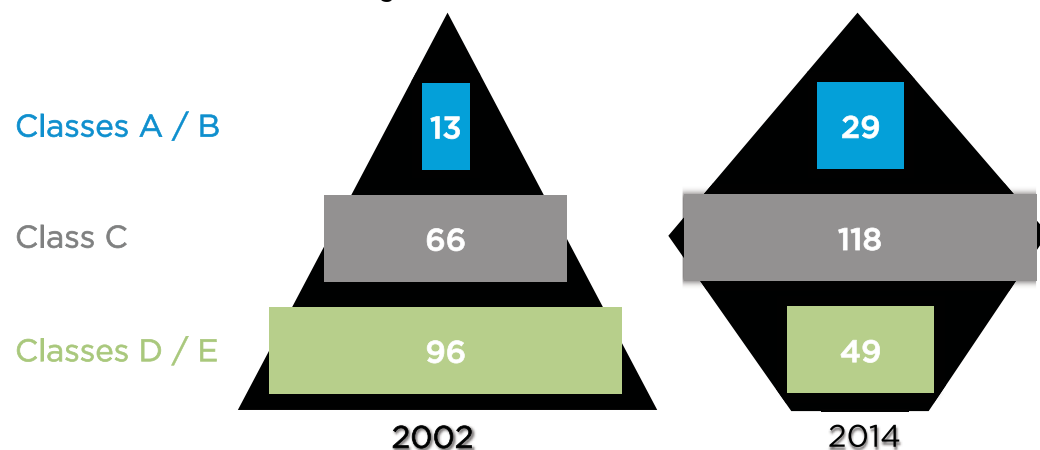


Source: BNDES

BRAZIL OVERVIEW

SOCIAL

Brazilian Social Pyramid

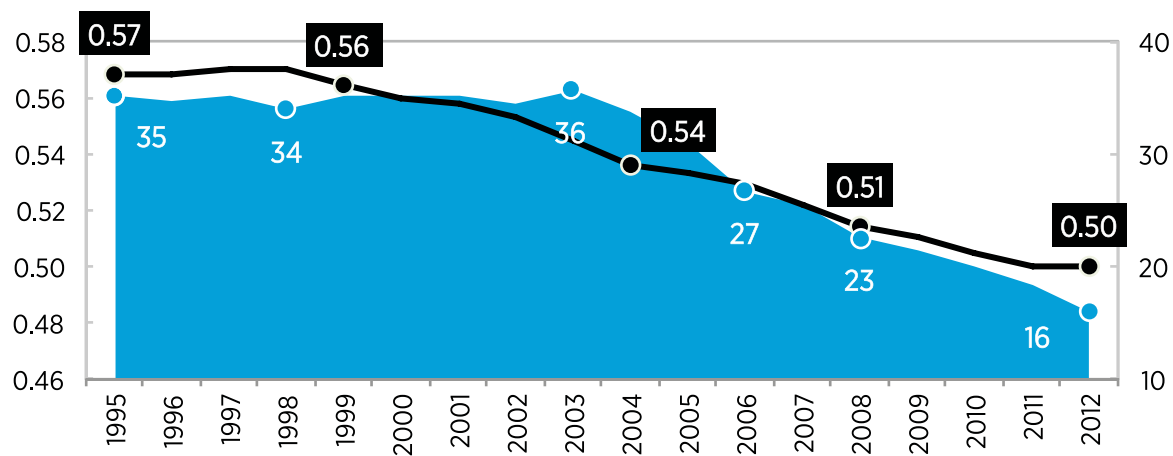


Total population: 175 million

Total population: 196 million

Source: BNDES

Ginni Coefficient

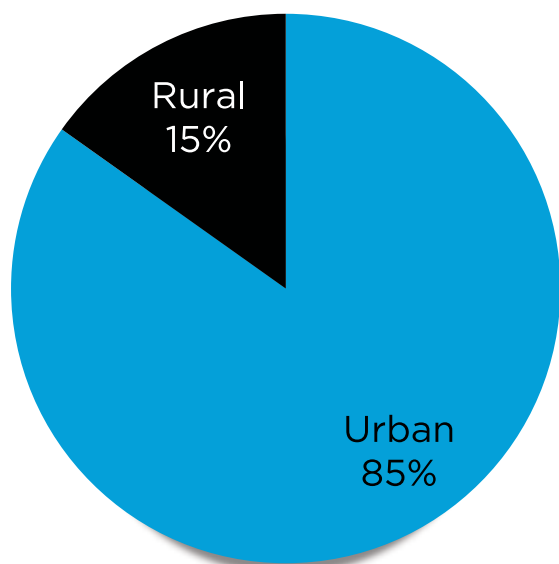


Source: IPEA

BRAZIL OVERVIEW

POPULATION

Brazilian Population (2012)



RANKING	TERRITORY	URBAN/RURAL	(1,000,000 PEOPLE)
Brazil		Total	196.87
		Urban	167.01
		Rural	29.86
1º	São Paulo - SP	Total	20.21
2º	Rio de Janeiro - RJ	Total	12.12
3º	Belo Horizonte - MG	Total	5.04
4º	Porto Alegre - RS	Total	4.05
5º	Recife - PE	Total	3.79
6º	Fortaleza - CE	Total	3.78
7º	Salvador - BA	Total	3.71
8º	Curitiba - PR	Total	3.29
9º	Belém - PA	Total	2.18

Source: PNAD - National Survey by Household Samples

An aerial photograph of a large offshore oil rig in the middle of a deep blue ocean. The rig is a complex of yellow and grey metal structures, including a tall derrick on the right and a helipad with a green and yellow landing area on the left. The word "OPPORTUNITIES" is written in large, white, bold, sans-serif capital letters across the center of the image, partially obscuring the rig's structure.

OPPORTUNITIES

1. ESTIMATED INVESTMENTS IN BRAZIL

2. OIL & GAS

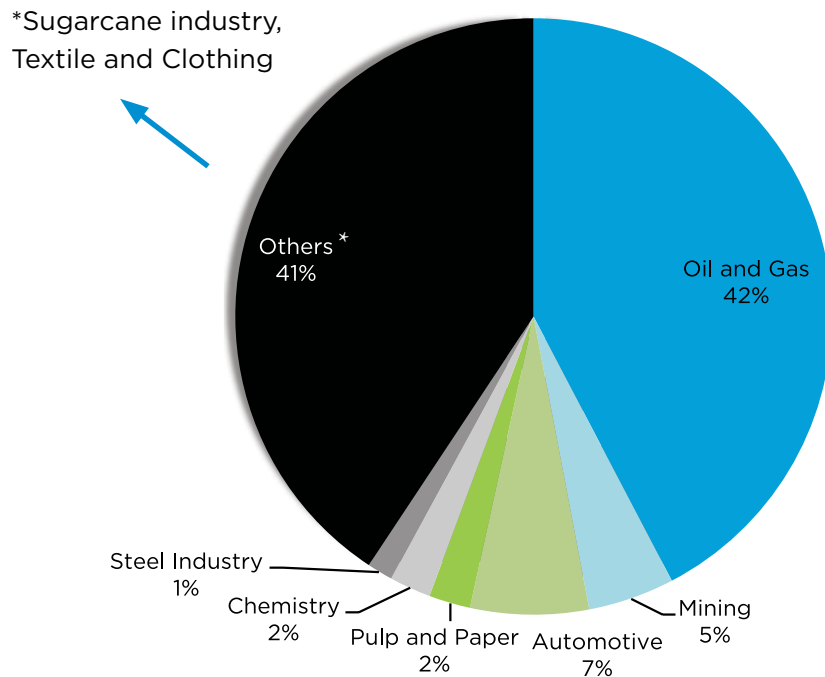
3. INFRASTRUCTURE:

- ENERGY GENERATION
- LOGISTICS
 - HIGHWAYS
 - RAILROADS
 - AIRPORTS
 - PORTS

1. ESTIMATED INVESTMENTS IN BRAZIL

During the period from 2014 to 2017, **investments amounting to US\$ 524.5 billion** are expected in the following sectors: **oil & gas and industrial sector**

Estimated Investment – 2014 - 2017

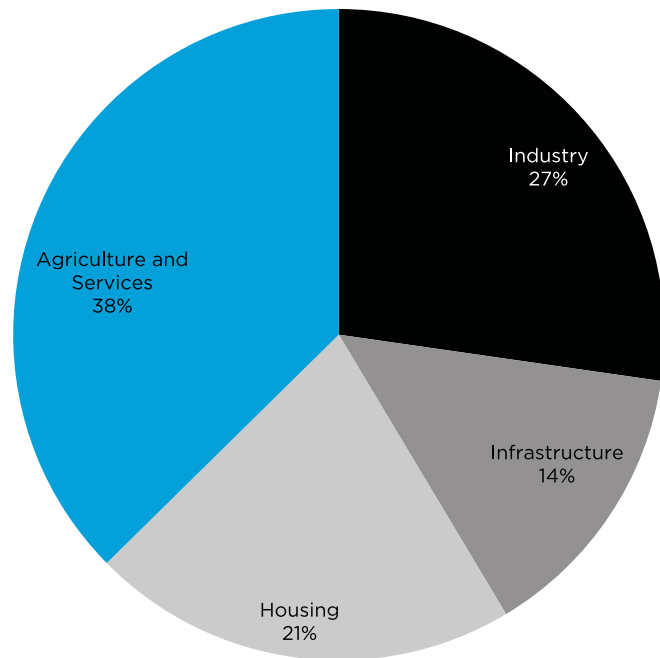


- The Oil and Gas segment concentrates 42% of the estimated investment in infrastructure
- Mining will be responsible for 5%
- Pulp and Paper segment concentrates 2% of the total

Source: Ministério da Fazenda.

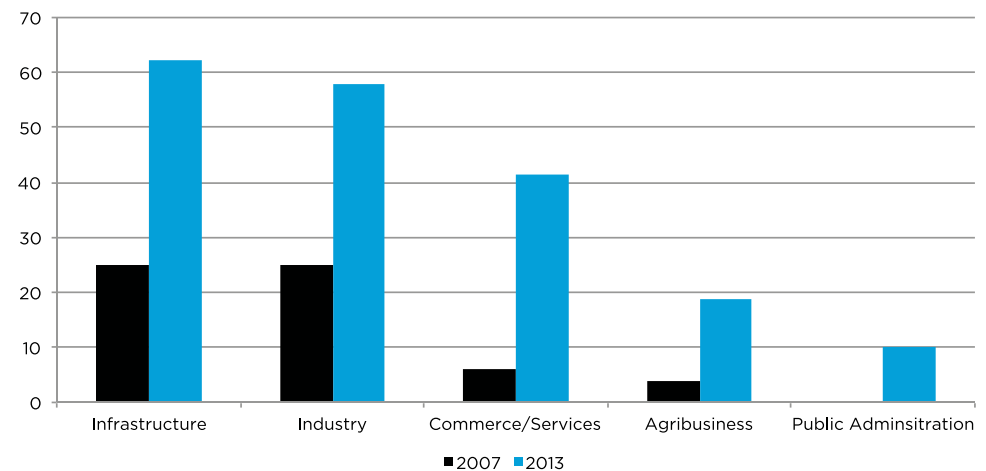
1. ESTIMATED INVESTMENTS IN BRAZIL

Estimated Investment
(2014 - 2017)



Source: BNDES

Investments from BNDES by Sector



Unit: US\$ billion current
Source: BNDES

1. ESTIMATED INVESTMENTS IN BRAZIL

PRE-SALT

- The **discovery of new deepwater oilfields** (pre-salt) has opened a new frontier for the oil and gas industries
- Development of the pre-salt will bring Brazil to a **new position in the oil market by increasing proven reserves** and doubling the production capacity by 2020
- Pre-salt development also represents overcoming challenges related to **technology, infrastructure and logistics**, regulation, taxes and human capital

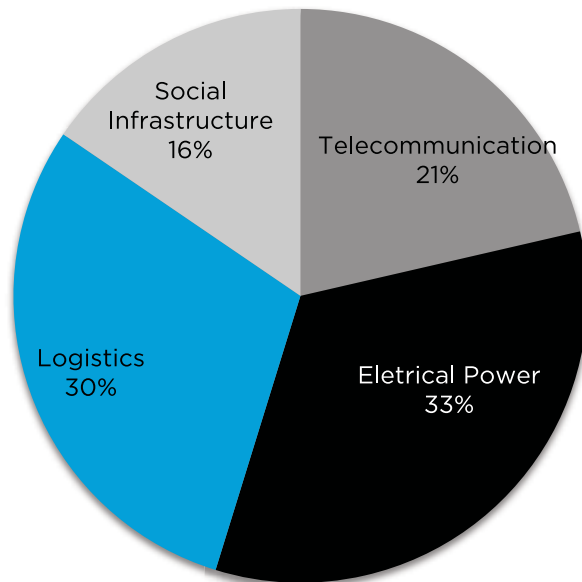


TOTAL INVESTMENT RELATED TO THE OIL AND GAS SECTOR IS ESTIMATED
AT US\$ 400 BILLION OVER THE DECADE.

1. ESTIMATED INVESTMENTS IN BRAZIL

During the period from 2014 to 2017, **infrastructure investments amounting to US\$ 261.4 billion** are expected, with the following distribution amongst sectors:

Infrastructure Investment Forecasted for 2014 - 2017

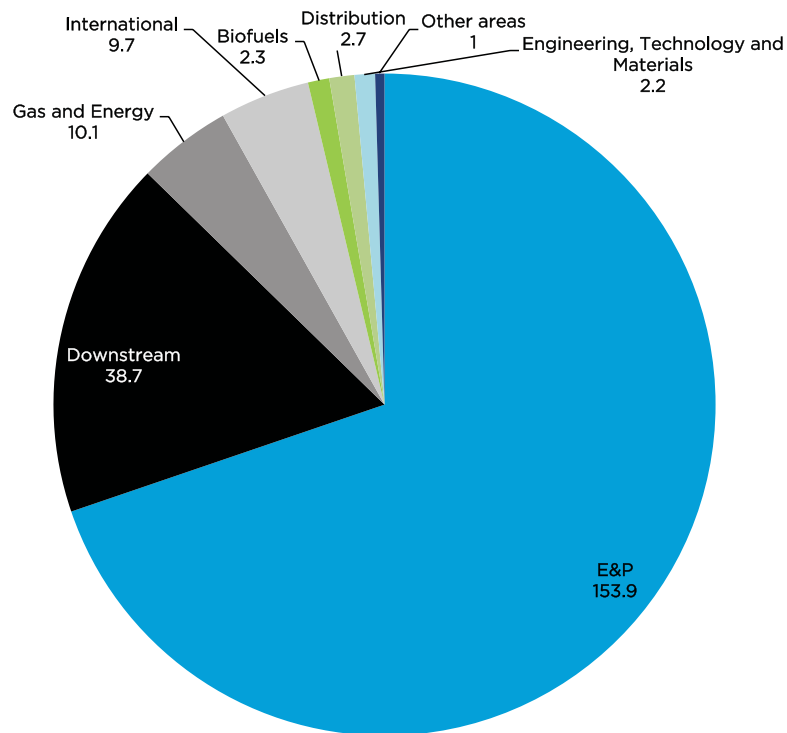


- The main energy-sector projects are **hydroelectric plants**, followed by nuclear and wind power
- In telecommunications, **third-generation mobile service** and broadband wireless internet are at the forefront
- **Logistics investment is led by the railway segment** followed by roadway and port projects

Source: National Bank for Economic and Social Development (BNDES)

2. OIL & GAS

BMP 2014-2018 (US\$ 220.6 billion)



Source: Petrobras

Libra Oil Field

- Massive oil field in the pre-salt area, offshore Brazil
- Estimated reserves: 7.9 - 18.2 billion barrels (recoverable)



Source: Petrobras

3. INFRASTRUCTURE

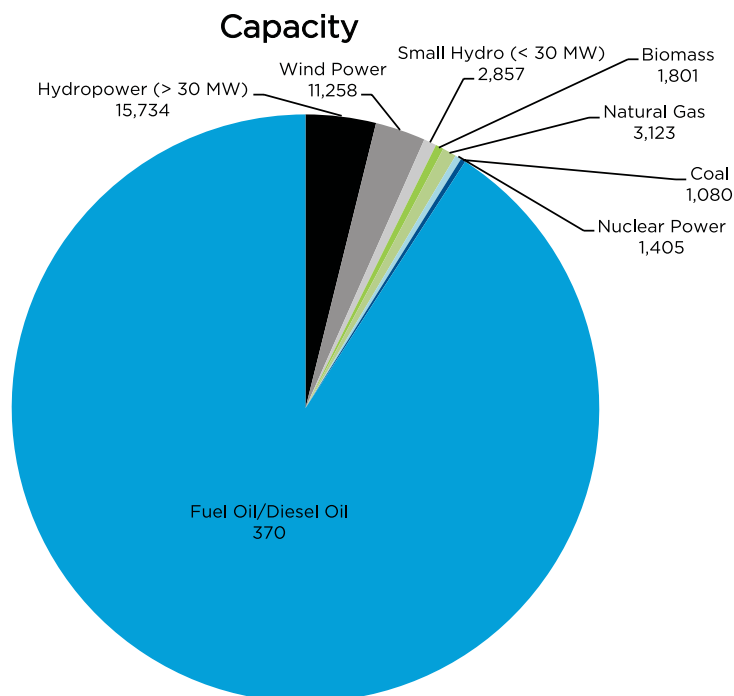
One of the key factors for socioeconomic growth is **INFRASTRUCTURE**:

- **ENERGY GENERATION**
- **LOGISTICS:**
 - HIGHWAYS
 - RAILROADS
 - AIRPORTS
 - PORTS

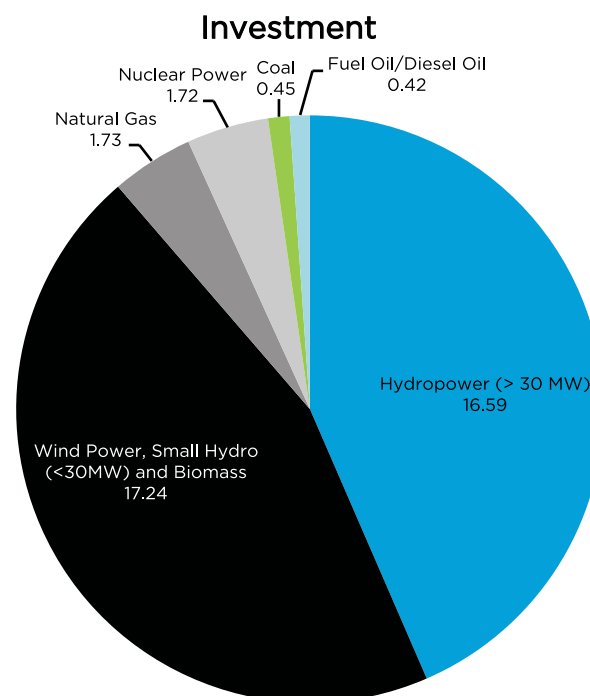
3. INFRASTRUCTURE

ENERGY GENERATION

Investment Program in Power Generation (2013-2018)



Unit: MW
Source: EPE



TOTAL = US\$ 31.8 BILLION

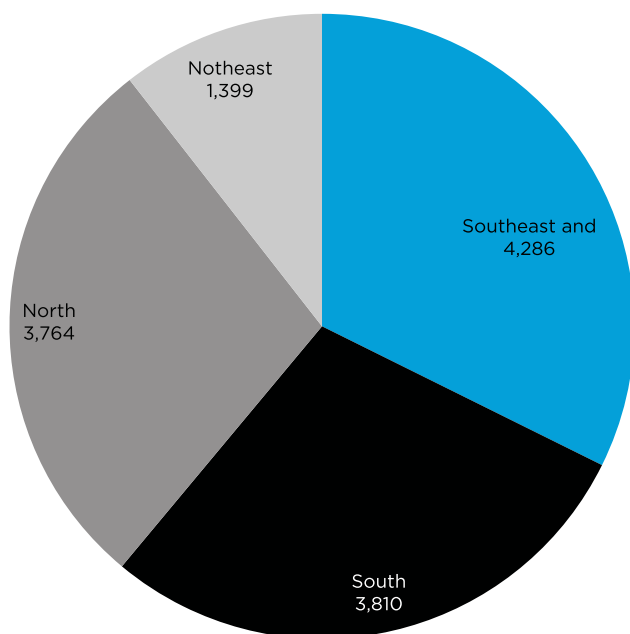
Unit: US\$ billion
Source: EPE

3. INFRASTRUCTURE

ENERGY GENERATION

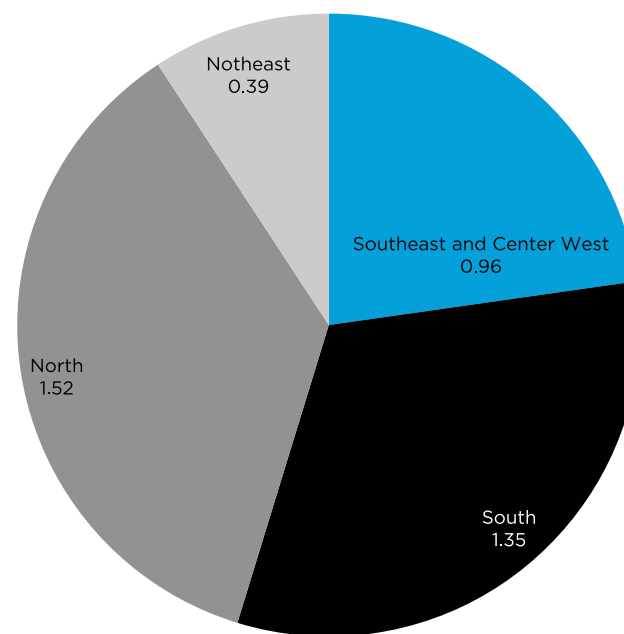
Investment Program in Power Transmission (2013-2018)

Transmission Lines



Unit: Km
Source: EPE

Investment



TOTAL = US\$ 4.2 BILLION

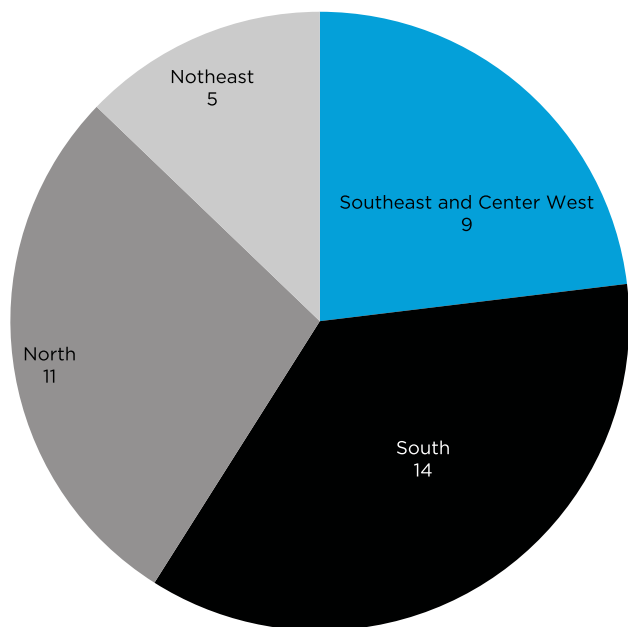
Unit: US\$ billion
Source: EPE

3. INFRASTRUCTURE

ENERGY GENERATION

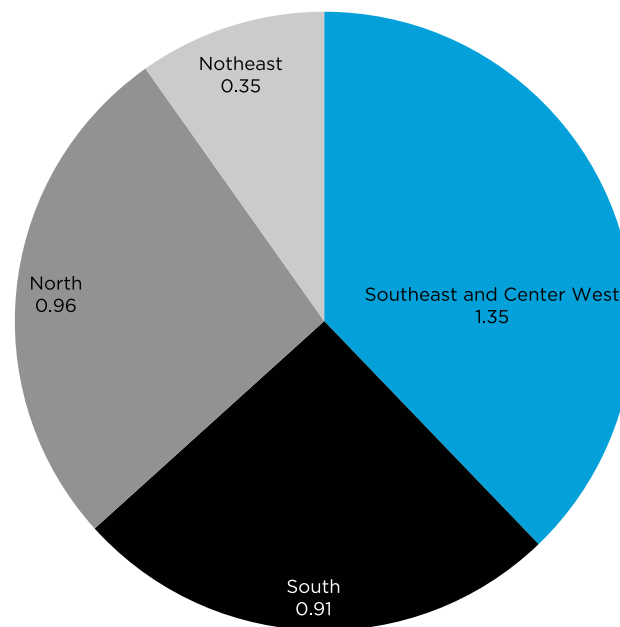
Investment Program in Power Transmission (2013-2018)

Substations



Unit: Number
Source: EPE

Investment



TOTAL = US\$ 3.7 BILLION

Unit: US\$ billion
Source: EPE

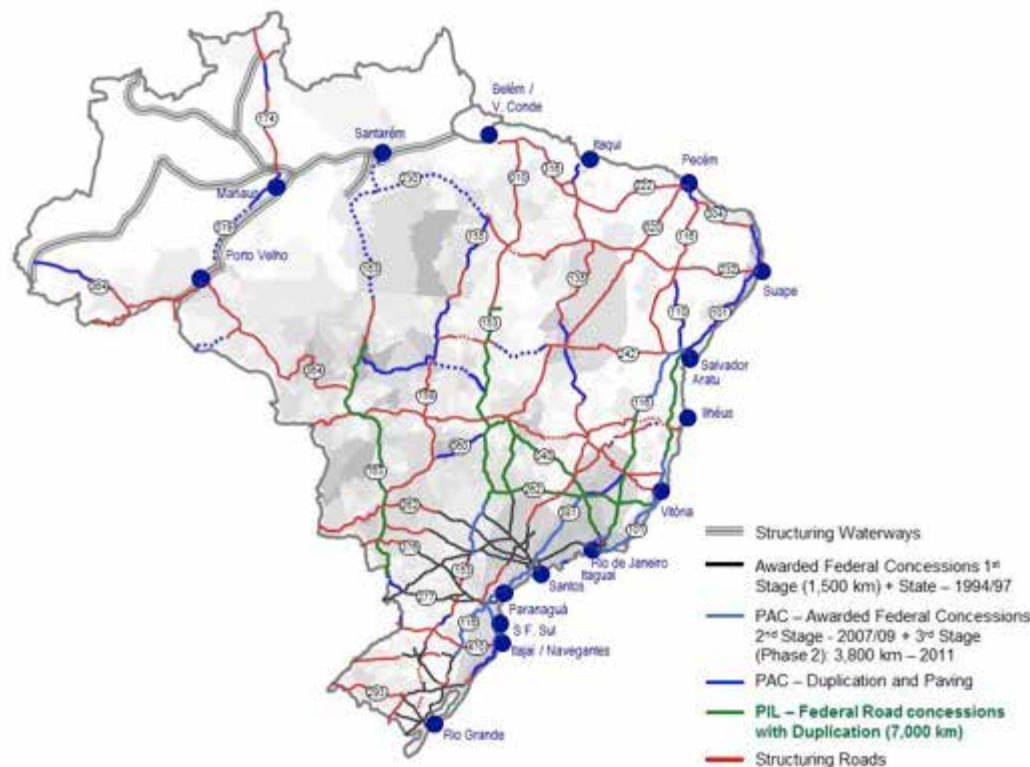
3. INFRASTRUCTURE

LOGISTICS

Investment Program in Logistics

I. Highways (Aug 15, 2012)

- Concession of 7.0 thousand kilometers of highways
- Estimated investment: US\$ 23.0 billion



Source: EPL

3. INFRASTRUCTURE

LOGISTICS

Investment Program in Logistics

II. Railroads (Aug 15, 2012)

- Concession of 10.0 thousand km of federal railroads
- Estimated investment: US\$ 45.5 billion for the next 35 years



Railway Açaílandia -
Vila do Conde Port (Barcarena)
Estimated extension of 457 km



Railway Rio de Janeiro -
Campos - Vitória
Estimated extension of 551 km



Railway Belo Horizonte -
Salvador
Estimated extension of 1,561 km

Source: EPL

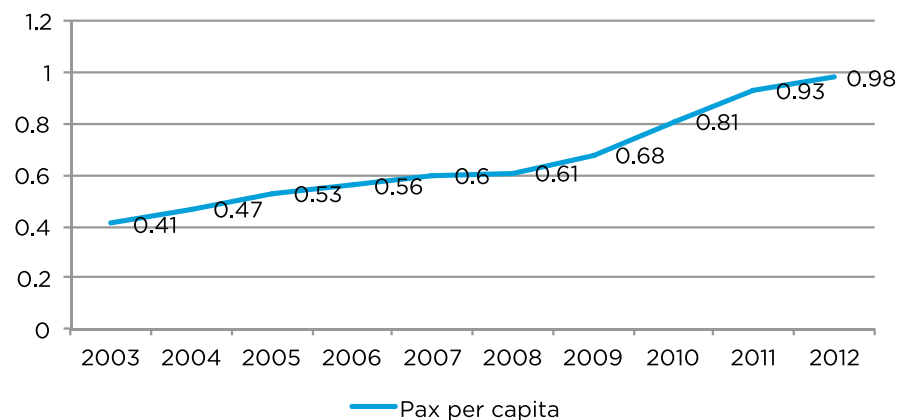
3. INFRASTRUCTURE

LOGISTICS

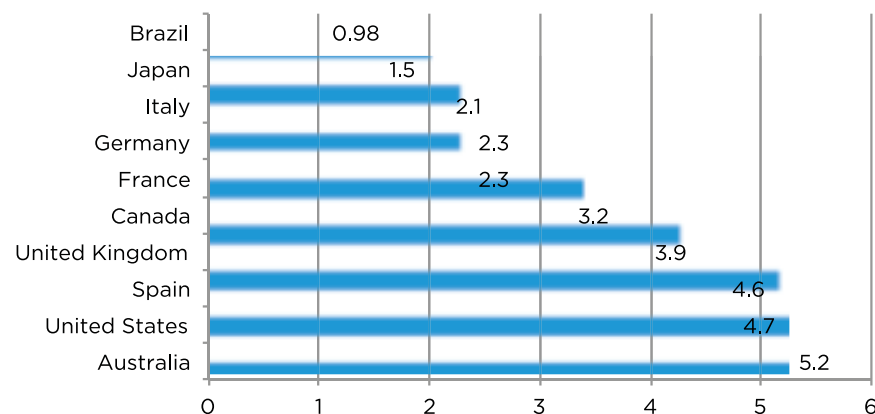
III. Airport concessions (2013)

- 2 Airports: Galeão (RJ) and Confins (MG) have been privatized (auction in November 22th)
- 270 Regional Airports ► Estimated investment: US\$ 3.6 billion

Growth Potential



Passenger / Population



Source: INFRAERO, IBGE, Estudo do setor aéreo (2009).

IV. Port concessions (2013)

- Estimated Investment: US\$ 27.3 billion

ABOUT FGV



FGV was founded in December 1944 to help boost the socioeconomic development of Brazil by training administrators for Brazilian private and public enterprise.

Since then, FGV has chosen to broaden its focus to the Economic and Social Sciences, as well as Administration, to become a center of quality and excellence in research and to spread knowledge at the undergraduate, continuing education, executive, specialized, MBA, Master's and Doctorate levels.

The role of FGV in the study, analysis and drafting of Public Policies reinforces it as a reputable Think Tank contributing to Brazil's increasingly important role in the international scene.

DR. SERGIO FRANKLIN QUINTELLA

Vice President

www.fgv.br

