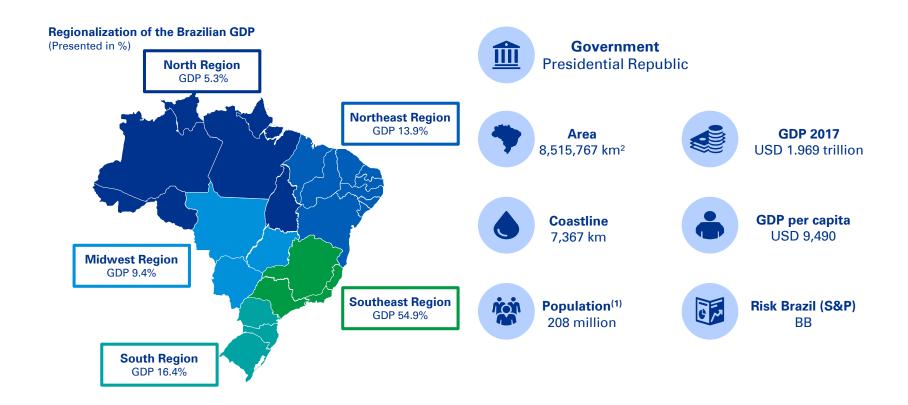


SESSION 4 - INFRASTRUCTURE

Mauricio Endo



Country Overview



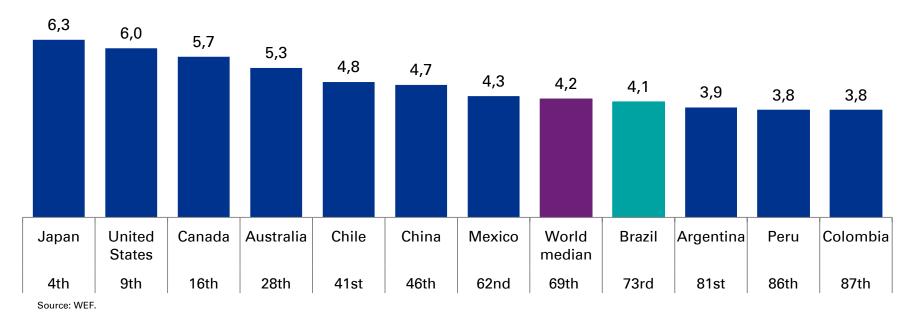
⁽¹⁾ Oxford Economics estimative for 2017; Source: Oxford Economics Database, Reuters and CIA Factbook



Quality of Infrastructure in Brazil (1)

According to the Global Competitiveness Index (GCI) Infrastructure quality ranking of WEF in 2017 - 2018, Brazil ranks 73th out of 137 countries. The ranking evaluates:

- The extent and efficiency of the transportation infrastructure capable of providing easy and safe movement of goods, services and people in airports, highways, railways and ports.
- The power supply quality, free of interruptions and faults.
- A solid and extensive telecommunication network that allows a fast and free flow of information.

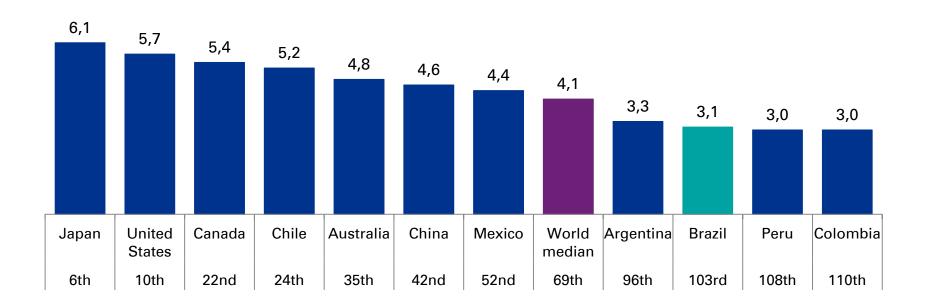




Quality of Infrastructure in Brazil (2)



Highways - 103rd place in 137 countries

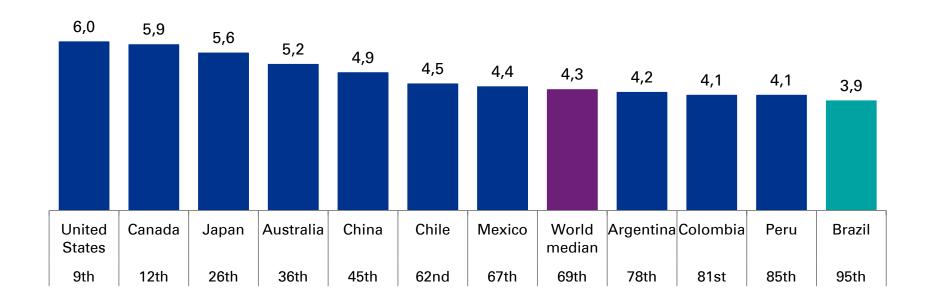




Quality of Infrastructure in Brazil (3)



Airports - 95th position in 137 countries

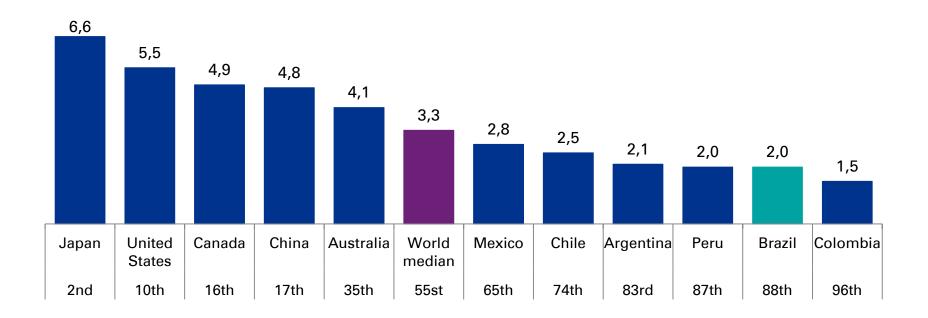




Quality of Infrastructure in Brazil (4)



Railways - 88th place in 101 countries

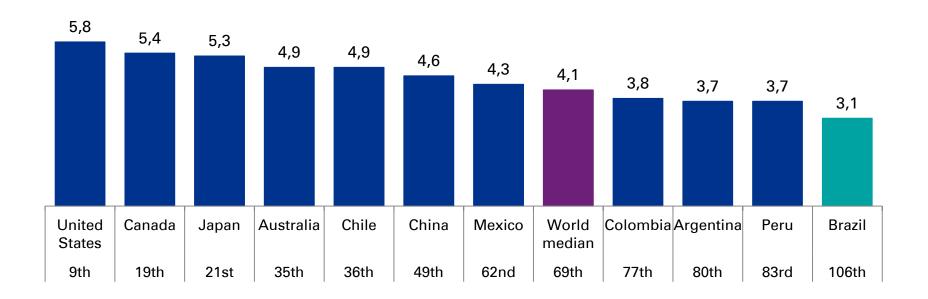




Quality of Infrastructure in Brazil (5)



Ports - 106th position in 137 countries

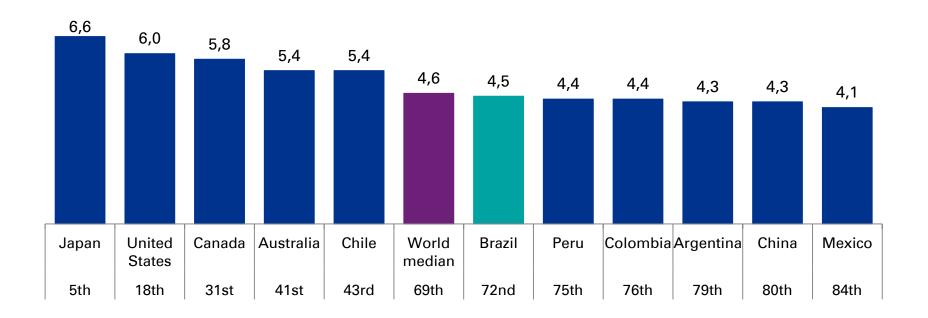




Quality of Infrastructure in Brazil (6)

((T))

Eletricity and telephony infrastructure – 72nd position in 137 countries





Contract Legal Framework



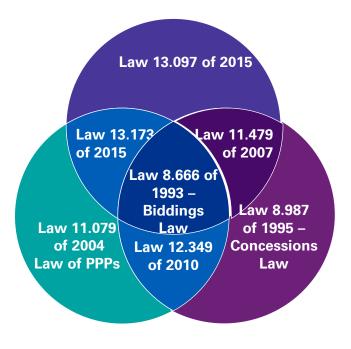
Law No. 8,666/93 (Bidding Law):
 Regulates art. 37, item XXI, of the Brazilian
 Federal Constitution; establishes rules for bids and contracts of the Public
 Administration.



Law No. 8,987/95 (Concession Law):
 Provides for the regime of Common
 Concession (non-subsidized concession)
 and permission of the provision of public services provided in art. 175 of the
 Brazilian Federal Constitution.



 Law No. 11,079/04 (PPP Law): Provides for the contracting of Public-Private Partnership (subsidized concession) within the scope of public administration.





Regulatory Agencies



Telecommunications





Civil Aviation and Airports



Waterway and Ports



Water







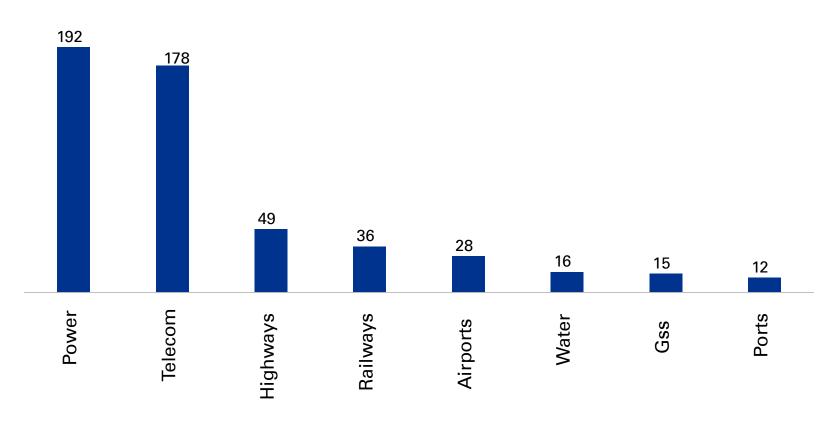
Timeline of Federal Privatization and Concession in Brazil

PRIVATIZATION: TELEBRAS (Telecommunication) ELETROBRAS (Distribution) **HIGHWAY HIGHWAY CONCESSION:** EMBRAER (Aircraft) **CONCESSION: HIGHWAY** ■ BR-050 MG – GO **CONCESSION:** VALE (Mining) BR 116/ RS **AIRPORT CONCESSION: RAILWAY CONCESSION: RAILWAY CONCESSION:** ■ BR-116 Galeão Airport RFN (Federal Railway Network) São Paulos's Rail Network Bahia Confins Airport 2017 1995 1996 1997 1998 2007 2009 2012 2013 **HIGHWAY HIGHWAY HIGHWAY HIGHWAY** HIGHWAY CONCESSION: CONCESSION: **CONCESSION: CONCESSION:** CONCESSION: Florianópolis' Airport BR - 040 BR 290/ RS BR 101 ES Régis Bittencourt Salvador's Airport **AIRPORT** Juiz de Fora – (Osório-Porto Alegre) fernão Dias **CONCESSION:** Rio de Janeiro Fortaleza's Airport **RAILWAY BR-101 RJ- ES** ■ BR – 116 – RJ **CONCESSION:** Brasilia Airport Porto Alegre's Airport Rio-Niterói Bridge Paraíba - Guarulhos Northeast's Rail **PORT TERMINAL** Transbrasiliana **Teresópolis** Airport Network **CONCESION:** Steel Road Viracopos 2 Ports terminals : Airport Santarém and Rio de Janeiro Wheat Terminal



Investiments trough Concessions (US\$ Billion)

Private investments added up to more than US\$ 500 Billion from 1990 to 2016

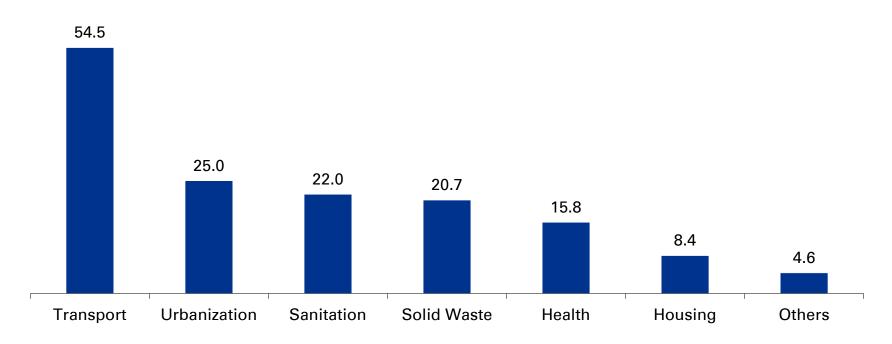


Source: World Bank



Investments trough PPPs (BRL billion)

PPP contracts investments added up to more than BRL145 billion (US\$ 40 billion) since 2015

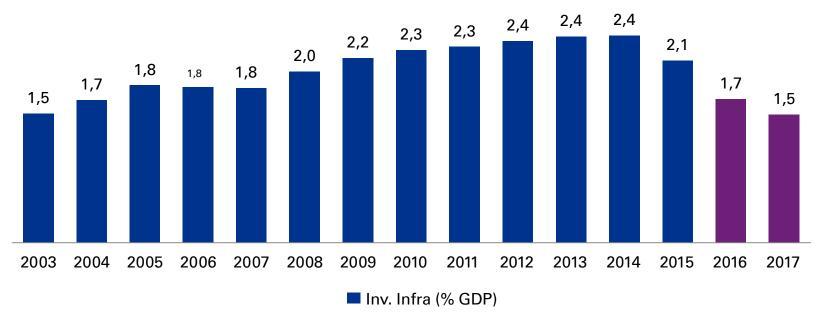


Source: Diário Oficial da União. Elaboração GO Associados.



Investments in Infrastructure in Brazil (2003-2017)

Need for investment: 5%

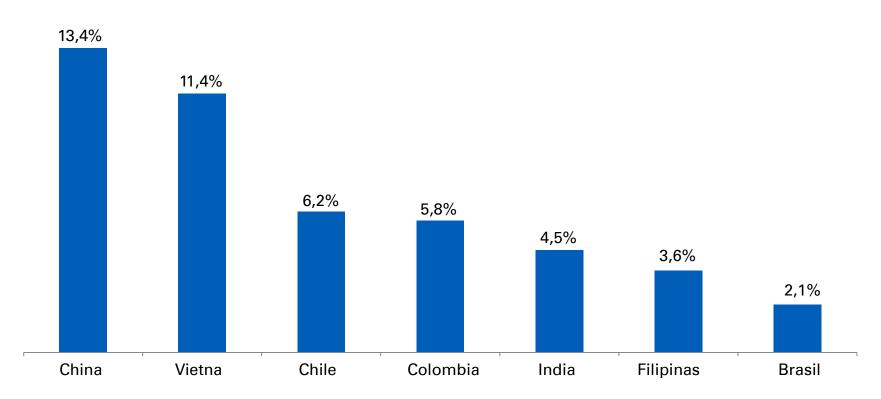


Note: Includes Energy, Transportation, Sanitation and Telecommunications. Oil and Gas not included. 2017 = Forecast Source: ABDIB.



Infrastructure investments in other countries

Annual Infrastructure Investments in developing countries as % of GDP

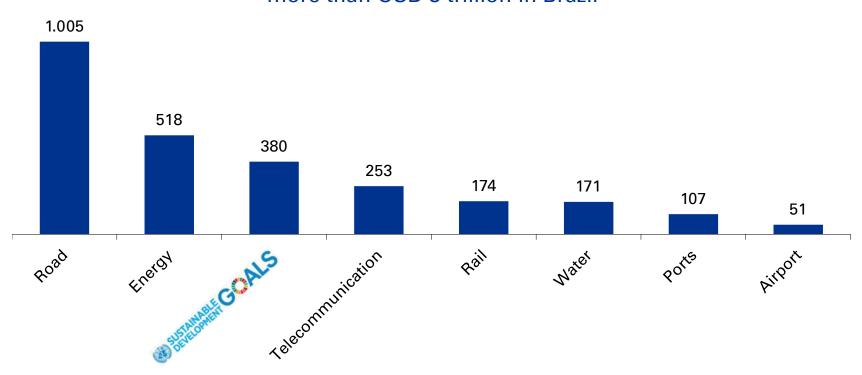


Source: ABDIB, World Economic Forum, Credit Suisse e International Institute for Management Development.



Total investment need forecast for Brazil 2018-2038 (US\$ billion)

Infrastructure investment needs for the next 20 years add up to more than USD 3 trillion in Brazil



Source: GIHub



PPI - Investment Partnership Program (Law 13.334/16)

Investment Partnership Program (PPI – Programa de Parcerias de Investimento), also named as Growth Project or "Avançar Parcerias" to incentivize and increase private investment through Privatization, Concessions and PPPs

PPI Objective:

- Expand opportunities for investment and employment
- Ensure the expansion and quality of public infrastructure
- Promote full and fair competition for the partnerships
- Ensure stability and legal certainty, guaranteeing minimum intervention in business and investments
- Strengthen the regulatory environment and the autonomy of regulatory agencies
- Encourage Privatization, Concessions and PPPs (Public-Private Partnerships)

PPI To define:

- The long term federal policies for the investments in federal public infrastructure trough partnerships and privatizations
- The federal public infrastructure projects/assets qualified for the partnerships and the strategic guidelines for structuring, tendering and contracting
- The federal policies to support partnerships in public infrastructure projects/assets in States, Federal District (Brasilia) and Municipalities.



PPI Growth Project Progress

Qualified 18 months 145 projects Of program Completed Investment of BRL 142 billion (US\$ 40 billion) 70 projects **Port** Oil and Gas **Power Airport 4 Power** 4 International 7 Terminal 4 Rounds of **Transmission and Airports Operations Auctions** Generation **Concessions Concessions Auctions**

Source: Special Secretariat of the Investment Partnerships Program.



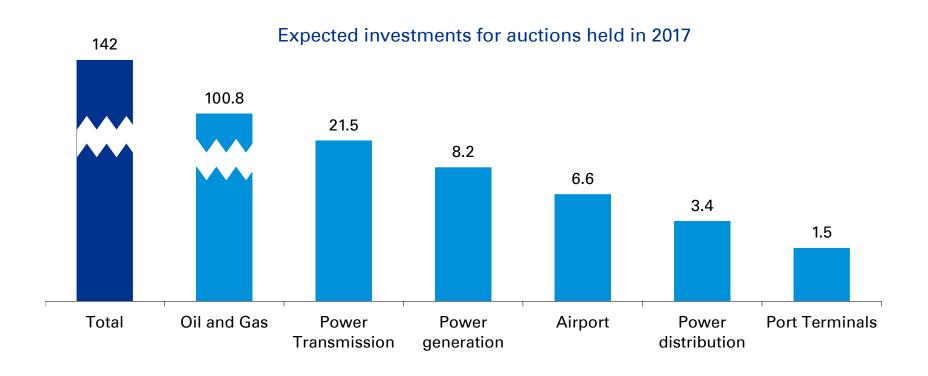
In progress

75 projects



PPI - Investments from auction of projects in 2017

As for the auctions held and contracts signed in 2017, it is worth highlighting the investment forecast about BRL 142 billion (US\$ 40 billion) over the next decades



Source: Special Secretariat of the Investment Partnerships Program.



PPI - Pipeline of projects for 2H2O18

13 Airports Concessions – AL, CE, ES, MT, PB, PE, RJ, SE.



7 Port Terminal Concessions – Cabedelo, Santos and Suape.



Highway Concessions – BR 153/282/, BR 364 RO/MT, BR 365 GO/MG, BR 101/ 290/386/ 448 RS

Railway Concessions – EF 151 SP/MG/GO/TO (North-South), EF 170 MT/PA (Ferrogrão) and EF 334 BA (Fiol)



74 Power Transmission and Distribution Concessions



4 CPRM mining rights



2 Bidding rounds of oil and gas fields exploration



PPP Communications Network Management Aeronautics Command - COMAER



Timeline

Bid

Auction

4th quarter of 2018

4th quarter of 2018

3rd quarter of 2018

4th quarter of 2018

4th quarter of 2018

2nd quarter of 2019

4th quarter of 2018

1st quarter of 2019

4th quarter of 2018

4th quarter of 2018

3rd quarter of 2018

4th quarter of 2018

3rd quarter of 2018

3rd quarter of 2019

3rd quarter of 2018

4th quarter of 2018

Source: Programa de Parcerias para Investimentos



States - Pipeline of Projects

- The fiscal crisis in brazil brought back the subject of privatization on the politic and economic agenda, and as a result states have 104 projects under study and to be tendered throughout the next years.
- The majority of these project will be either concession or PPP, but couple state companies will be sold.
- The 5 most common sector: Ports, Airports, Public Services, Tourism/Events, and Roads.

PI - 22 **CE-14 RN-6 AL-2 BA - 2 MT-6 MG** - 13 DF + GO - 18 **ES-4 RJ-1 MS-3 SP-4 SC-2 RS-7**

State Projects (104)

Opportunities

- Jericoacoara Airport (CE);
- Aracati Airport (CE);
- Highways GO-010/020/060/070/080/139; E213 (GO);
- Highways MT-100, MT-246 and MT-320 (MT);
- Highway ERS-324, ERS287 e ERS020 (RS);
- Industrial Complex and Port of Pecém (CE);
- Port of Luis Correia (PI);
- Sapucaia do Sul Zoologic (RS);
- Ceará Convention Center (CE).

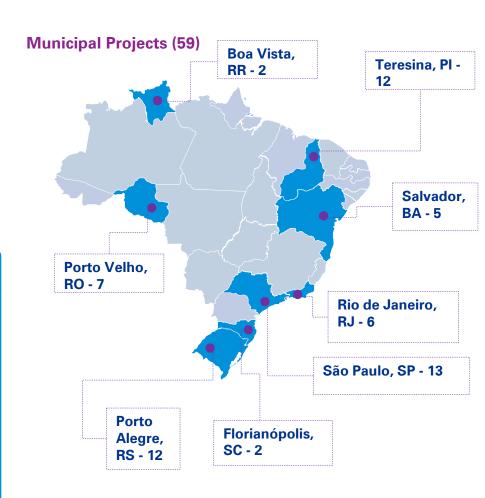


Municipalities - Pipeline of Projects

- Municipalities, like the States, also have 59 projects under study to be tendered throughout the following years.
- The majority of these project will be PPP and a couple state companies may be Privatized.
- The 2 most common sector: Public Services and Tourism/Events.

Opportunities

- Teresina Airport (PI);
- Salvador Convention Center (BA);
- Porto Alegre Convention Center (RS);
- Public illumination in Porto Alegre (RS);
- Public Illumination in Teresina (PI);
- Public Illumination in São Paulo (SP);
- Pacaembu Stadium (SP);
- Lindolfo Monteiro Stadium (PI);
- Waste management in Teresina (PI).







Thank you

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