Brazilian Economic Scenario and Investment Opportunities

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Outline

- An Attractive Investment Destination
- Oil & Gas Sector
- Infrastructure
- Energy
- How can Apex-Brasil can help you
Brazil – An Attractive Investment Destination
Brazilian remarks in market and production

- Largest consumer market in Latin America;
- 3rd largest market of cell phones, cosmetics and soft drinks;
- 5th largest market of personal computers;
- World’s 7th largest manufacturer and 4th largest consumer of automobiles;
- World’s 4th largest manufacturer of aircraft and top producer of models seating up to 120 passengers;
- Largest consumer market for renewable energies (UN);
- Largest producer of biofuels;
Brazilian remarks in market and production

- Top 5 producer of medical and dental equipment;
- Home to the world’s 10th largest petroleum reserves;
- 13th largest producer of scientific articles;
- 10th largest industrial producer;
- Leader in production and exports of several agribusiness products and 3rd overall largest exporter of agricultural goods.
Brazil is experiencing high rates GDP growth. The international crisis affected this tendency, but in the second semester of 2009 Brazil had already retaken the growth and for 2010, the forecast is a 7.5% rate.

Source: IBGE

* Forecast
Employment Rate

- In Brazil, from 2004 to 2009, **1.34 million** new jobs were created each year on average, and **2.3 million** jobs are expected to be created in 2010. Unemployment rate fell 35% in the last 5 years and reached a record low in September 2010: **6.2%** of the economic population.

Income growth

Per-capita income growth by region (average % 2003-08)

- North: Low income 8.3, Other classes 5.6
- Northeast: Low income 9.2, Other classes 6.2
- Southeast: Low income 9.1, Other classes 4
- South: Low income 8.4, Other classes 4.5
- Mid-west: Low income 10.1, Other classes 6.7

Source: IBGE / Ministry of Finance
Income growth

Growth of the population’s consumption capacity

Class incomes - Million of inhabitants and share of population

<table>
<thead>
<tr>
<th>Year</th>
<th>Class C</th>
<th>Class A/B</th>
<th>Class D</th>
<th>Class E</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>66</td>
<td>13</td>
<td>47</td>
<td>13</td>
</tr>
<tr>
<td>2009</td>
<td>95</td>
<td>20</td>
<td>44</td>
<td>20</td>
</tr>
<tr>
<td>2014</td>
<td>113</td>
<td>31</td>
<td>40</td>
<td>16</td>
</tr>
</tbody>
</table>

✓ Expansion of employment and income;
✓ Increase on minimum wage: **+63% from 2003 to 2009**;
✓ New social programs;
✓ Inflation under control.

Source: Ministry of Finance
Pushed by income and employment growth, Brazilian population has kept high rate growth in consumption, which stimulate production → Sustainable Growth

Source: IBGE / Ministry of Finance

*includes vehicles and motorcycles and its parts; and construction material
Brazil has became one of the leader recipients of FDI in the last decade, attracting investments for several sectors of its economy.

Source: Brazilian Central Bank
Booming sectors

Biofuels & Renewable Energy

Infrastructure

RE and Tourism

Oil & Gas

ICT

Electronic components
Brazil – An Attractive Destination for Oil & Gas Sector
Oil & Gas in Numbers

✓ Home to the world’s 16th largest petroleum reserves (proven)
✓ 11% of Brazil’s GDP
✓ 38 main worldwide players in the E&P sector
✓ 75,000 industry direct employees
✓ 200 subsea product and services companies

Main Investments Forecast

Near Term (2009-2013)
✓ Exploration and Production: US$ 131 billion dollars

Long Term (2010-2020)

<table>
<thead>
<tr>
<th>Drilling Rig Units</th>
<th>US$ 60 billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Units</td>
<td>US$ 51 billion</td>
</tr>
<tr>
<td>Subsea Production and Services</td>
<td>US$ 85 billion</td>
</tr>
<tr>
<td>Construction of new vessels</td>
<td>309</td>
</tr>
</tbody>
</table>

Petrobras CAPEX (2010-2014)
✓ Exploration and Production: US$ 108 billion dollars

* Source: ONIP – National Organization of Petroleum Industry and Petrobras
Equipment with local supply constraint

- Instrumentation and Gauging
- Gas Turbines
- Compressors
- Engines
- Alloys

<table>
<thead>
<tr>
<th>Equipments</th>
<th>Demand 2010-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Coolers</td>
<td>882</td>
</tr>
<tr>
<td>Wet Christmas Trees</td>
<td>540</td>
</tr>
<tr>
<td>Compressors</td>
<td>3,181</td>
</tr>
<tr>
<td>Power Generators</td>
<td>646</td>
</tr>
<tr>
<td>Turbines</td>
<td>595</td>
</tr>
<tr>
<td>Valves</td>
<td>834,000</td>
</tr>
<tr>
<td>Reactors</td>
<td>427</td>
</tr>
</tbody>
</table>

* Source: Prominp – Oil and Gas Industry National Mobilization Program
Local Content Policy (LC)

- Defined in Bidding Rounds
- Distinct Requirements for Onshore and Offshore E&P
- Minimum and Maximum percentage (equipments, labor and services)
- Formula LC% = local content/total content
- Certifiers (2007)

<table>
<thead>
<tr>
<th>Type of Exploration (9th Round)</th>
<th>LC%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onshore</td>
<td>70%</td>
</tr>
<tr>
<td>Offshore shallow</td>
<td>51%</td>
</tr>
<tr>
<td>Offshore 100m to deep waters</td>
<td>37%</td>
</tr>
</tbody>
</table>

* Source: ANP – National Agency of Petroleum, Natural Gas and Biofuels
Local Content Policy

“Round Zero”

Topside
LC min = 60%

Hull
Normally LC = 0% to 60%

Power Generation Module
LC min = 75%
Turbo generators
LC = 0%

Compression Module
LC min = 75%
Gas Compressors
LC = 0%

* Source: Prominp – Oil and Gas Industry National Mobilization Program
-sectorial Business Environment

- Funding (BNDES)
- Innovation Funding (FINEP)
- R$ 3 billion to Petrobras’ supply chain support plan (PROGREDIR)
- Training Programs (PROMIMP)
- Special Customs Regime (REPETRO)
Petrobras announces new oil frontier in Sergipe state
Relevant News

✓ Sinopec acquires part of Repsol Brazil by US$ 7bi

✓ Record in oil and natural gas production (2,089 mi boe/day and 66 mi cubic meters per day)

✓ 11th round of bidding in first semester (concession model)

✓ Ministry of Mines and Energy assures first pre-salt bidding in second semester (new sharing system)
## Infrastructure Projects in Brazil – History and Prospects

### Investments 03-09

<table>
<thead>
<tr>
<th>Category</th>
<th>US$ Billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure</td>
<td>304</td>
</tr>
<tr>
<td>Electric Power</td>
<td>53.5</td>
</tr>
<tr>
<td>Telecom</td>
<td>56.2</td>
</tr>
<tr>
<td>Sanitation</td>
<td>17</td>
</tr>
<tr>
<td>Transportation</td>
<td>48.2</td>
</tr>
<tr>
<td>Oil &amp; Gas</td>
<td>129.3</td>
</tr>
</tbody>
</table>

### Demand for next 5 years

<table>
<thead>
<tr>
<th>Category</th>
<th>US$ Billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure</td>
<td>403.5</td>
</tr>
<tr>
<td>Electric Power</td>
<td>71</td>
</tr>
<tr>
<td>Telecom</td>
<td>49.5</td>
</tr>
<tr>
<td>Sanitation</td>
<td>34</td>
</tr>
<tr>
<td>Transportation</td>
<td>60.5</td>
</tr>
<tr>
<td>Oil &amp; Gas</td>
<td>188.5</td>
</tr>
</tbody>
</table>

Source: ABDIB

1 US$ = R$ 2.00 (average 2009)
Infrastructure Projects in Brazil – Main Projects

Belo Monte Hydroelectric Plant
- Value: 19 Billion R$

Jirau Hydroelectric Plant
- Value: 9.3 Billion R$

Santo Antonio Hydroelectric Plant
- Value: 13.5 Billion R$

North-South Railway (North Branch)
- Value: 2.2 Billion R$

North-South Railway (South Branch)
- Value: 3.9 Billion R$

BR-101 (NE and S sections)

New Northeast Railway
- Value: 6 Billion R$

East-west railway
- Value: 6.5 Billion R$

Transposition of S. Francisco River
- Value: 5.2 Billion R$

Natural Gas Pipeline
- Value: 3.5 Billion R$

COMPERJ
- Value: 19.2 Billion R$

Port of Santos
- Value: 5 Billion R$

São Paulo Subway
- Value: 23 Billion R$

São Paulo Beltway

Oil Platforms
- Value: 12.6 Billion R$

Angra 3 Nuclear Plant
- Value: 8.5 Billion R$

High Speed Train
- Value: 34 Billion R$

Value of projects in Billion R$
Source: EXAME
# FIFA World Cup 2014 – 14 host cities

## Investments

<table>
<thead>
<tr>
<th>Host city</th>
<th>US$ Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANAUS/AM</td>
<td>1,497.35</td>
</tr>
<tr>
<td>SALVADOR/BA</td>
<td>4,097.75</td>
</tr>
<tr>
<td>FORTALEZA/CE</td>
<td>2,821.20</td>
</tr>
<tr>
<td>BRASÍLIA/DF</td>
<td>2,298.80</td>
</tr>
<tr>
<td>BELO HORIZONTE/MG</td>
<td>4,878.10</td>
</tr>
<tr>
<td>CUIABÁ/MT</td>
<td>797.35</td>
</tr>
<tr>
<td>RECIFE/PE</td>
<td>2,090.70</td>
</tr>
<tr>
<td>CURITIBA/PR</td>
<td>2,984.45</td>
</tr>
<tr>
<td>RIO DE JANEIRO/RJ</td>
<td>7,714.85</td>
</tr>
<tr>
<td>NATAL/RN</td>
<td>2,562.90</td>
</tr>
<tr>
<td>PORTO ALEGRE/RS</td>
<td>3,459.05</td>
</tr>
<tr>
<td>SÃO PAULO/SP</td>
<td>16,857.65</td>
</tr>
<tr>
<td><strong>Total Brazil</strong></td>
<td><strong>52,060.15</strong></td>
</tr>
</tbody>
</table>

Source: ABDIB

1 US$ = R$ 2.00 (average 2009)
### FIFA World Cup 2014 – value of projects

<table>
<thead>
<tr>
<th>Sector</th>
<th>Upcoming (US$ Mi)</th>
<th>In progress (US$ Mi)</th>
<th>Finalized (US$ Mi)</th>
<th>Total (US$ Mi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Mobility</td>
<td>25,371.30</td>
<td>3,762.50</td>
<td>1,353.10</td>
<td>30,486.90</td>
</tr>
<tr>
<td>Airports</td>
<td>2,572.15</td>
<td>851.10</td>
<td>3.0</td>
<td>3,426.25</td>
</tr>
<tr>
<td>Ports</td>
<td>370.35</td>
<td>0.00</td>
<td>0.00</td>
<td>370.35</td>
</tr>
<tr>
<td>Energy</td>
<td>1,269.75</td>
<td>61.90</td>
<td>0.00</td>
<td>1,331.65</td>
</tr>
<tr>
<td>Sanitation</td>
<td>2,600.45</td>
<td>3,610.70</td>
<td>0.00</td>
<td>6,211.15</td>
</tr>
<tr>
<td>Hotels</td>
<td>3,946.33</td>
<td>2,366.72</td>
<td>0.00</td>
<td>6,313.05</td>
</tr>
<tr>
<td>Hospitals</td>
<td>302.40</td>
<td>284.50</td>
<td>0.00</td>
<td>586.90</td>
</tr>
<tr>
<td>Security</td>
<td>627.15</td>
<td>0.00</td>
<td>0.00</td>
<td>627.15</td>
</tr>
<tr>
<td>Venues</td>
<td>1,546.25</td>
<td>1,160.50</td>
<td>0.00</td>
<td>2,706.75</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>38,606.13</strong></td>
<td><strong>12,097.82</strong></td>
<td><strong>1,356.10</strong></td>
<td><strong>52,060.15</strong></td>
</tr>
</tbody>
</table>

Source: ABDIB

1 US$ = R$ 2.00 (average 2009)
Sector Overview

☑️ The Brazilian Government strongly supports the growth of renewable energy, and the industry is backed by development facilities and growing market demand;

☑️ The expanded Renewable Energy Target will be equivalent to **14 GW-hours** in 2030. This target will accelerate the deployment of a broad range of renewable energy technologies;

☑️ Brazil produces **57 million** tons of waste per year, according to the IPEA, only **2.4%** of municipal waste is recycled.

**In 2009, 46 % of the Brazilian energy comes from renewable sources (vs. world’s average of 14%)...**
Opportunities

- Eolic energy
- Solar energy
- PCH – Small Hydroelectric Centers
- Biofuels
- Smart Grid
- Biogas (solid wastes)
How Apex-Brasil can support your company?
Apex-Brasil: the investor’s focal point to do business in Brazil

- Identifying suitable locations for different business models
- Providing strategic information and key contacts
- Organizing site visit and meetings with key players
- Setup servicing after care
CASE #1

Company: GE
Country: USA
Type of Investment: Global R&D Center

Apex Services
-Federal Government Coordination with INPI, INMETRO, MCT and ABDI;
- Brazilian Top executives mobilize;
- Information gathering about Brazilian talent pool, technology development, incentives and intellectual property;
CASE #2

Company Segment: Crane and Drilling Equipments Manufacturing
Country: Netherland
Investment Amount: US$100 millions

Apex Services
- Site location road show: SP, RJ, PE and ES;
- State Level agenda with key players to search appropriate land and to discuss incentives and grants;
- Strategic information about supply chain, labor costs, competitor analysis and legal framework;
CASE #3

Company Segment: Manifolds and Connectors
Country: UK
Type of Investment: Joint-Venture/Greenfield

Apex Services
- Supply chain info, purchase process and demand trends;
- Matchmaking with potential partners;
- Site location support;
- Arrangement of meetings BNDES (credit lines) and Petrobras;
“Economic growth and government programs are helping lift many Brazilians out of poverty and fueling a sense of optimism.”

“Brazil's $1.3 trillion economy is bigger than those of India and Russia, and its per-capita income is nearly twice that of China.”

“Economists and social scientists say the booming trade-oriented economy and innovative government programs are lifting millions from poverty and shaking what was once a certainty: that a person born poor in Brazil would surely die poor.”

The Washington Post. 2010
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