Current Challenges in the Oil and Gas Industry in Brazil

Marilda Rosado
Associate Professor of International law and Oil & Gas Law at Law School UERJ
2015
Summary

• Introduction
• General Overview
• Recent Trends
• Latin America selected countries
• Legal Highlights
• Upcoming Opportunities
• Challenges & Final Remarks
Introduction

• Highlights of Economical & social aspects
  *Potential & Contradictions*
  
• Timetable of Events
  *Progress or Regress?*

• Environmental challenges

• Law of the Sea, Blue Amazonia & Pre salt Santos Basin

• Energetic Populism and Regulation

• New institutional framework (1997 v. 2012)

• Pre salt, independents & onshore

• Corruption scandals and compliance
General Overview

- 204 million inhabitants
- GDP USD U$ 2,246 trillion (2013) – A decrease of 0.3% in comparison with 2012
- World Cup & Olympics: Major Structural Investments
- Middle class is 53% of total population
- Growth of local consumer market

Source: IBGE, Valor Econômico
Time Table of Events: Bid Rounds and others

- **1999**: Pre-salt discoveries: new paradigm
- **2000**: Creation of Inter-ministerial Group
- **2001**: MP 592/12 & Law 12734/12
- **2002**: Royalties Discussion
- **2003**: Blocks in the Pre-salt cluster
- **2004**: Pre-salt – new regulatory framework: Higher potential
- **2005**: Petrobras Capitalization
- **2006**
- **2007**
- **2008**
- **2009**
- **2010**
- **2011**
- **2012**
- **2013**

Source: ANP
Time line of Laws and events

1938: Creation of the National Petroleum Council

1953: Creation of Petrobras, through the Law 2,004

Late 1980’s: Braspetro opened subsidiaries in first-world nations, such as Norway, the USA and the UK

1977: Adoption of risk contracts

1995: Suppression of the prohibition concerning risk contracts, through the Constitutional Amendment No 9

1997: Suppression of the prohibition concerning risk contracts, through the Constitutional Amendment No 9

1997: Enactment of Law 9,478

Beginning of the new regime for oil and gas in Brazil

2010: Enactment of Law 12.351

Beginning of a new institutional framework

2014: Law 12,846, Anti-corruption Law

Source: Rosado, Marilda. “Sovereignty over Natural Resources Investment Law and Expropriation: The case of Bolivia and Brazil”
Recent Trends

- International and local crisis
- Drop of the oil barrel price (US$ 53,620 in March, 2015)
- Regulatory challenges
- 13th Bidding Round: Uncertainties
- Petrobras & Independent Producers face difficulties

Source: G1 Economia
Environmental Issues

• Licensing & permits: Excessive bureaucracy can delay up to one year the start of oil exploration & operations

• No specific environmental regulation for Pre-salt and Shale gas → Lack of precise guidelines can discourage investments.

• No Decommissioning legislation - abandonment of platforms without relevant environmental rules.

Source: Exame / Revista de Informação Legislativa do Senado Federal
Brazilian Development of Oil Production, in million barrels / day (onshore and offshore)

Source: ANP
Blue Amazon

- This area covers a ZEE of 200 nautical miles plus the area claimed in CLCS.

- **Potential richness**
  - Oil, gas, gold, diamond, iron, copper, phosphorus, tin, and
  - Enormous biodiversity
  - Fishing areas

<table>
<thead>
<tr>
<th>Brasil</th>
<th>Área Km²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Território</td>
<td>8.5 milhões</td>
</tr>
<tr>
<td>Zona Econômica Exclusiva</td>
<td>3.5 milhões</td>
</tr>
<tr>
<td>Extensão da Plataforma Continental</td>
<td>960 mil</td>
</tr>
<tr>
<td>ZEE</td>
<td>Amazônia Azul 4.5 milhões</td>
</tr>
<tr>
<td>Mar Territorial</td>
<td>12 milhas</td>
</tr>
</tbody>
</table>
UNCLOS & LEPLAC Project

• UNCLOS took effect on November 16th, 1994.

• Deadline for filing a claim in CLCS (Commission on the Limits of the Continental Shelf) : 10 years from UNCLOS’s enactment

• The Brazilian Continental Shelf Survey Plan – LEPLAC – (Plano de Levantamento da Plataforma Continental Brasileira) – aims at expanding the outer limits of Brazil’s Legal Continental Shelf (LCS) beyond the 200-nautical mile limit of the Exclusive Economic Zone (EEZ).
Maritime definitions in the U.N. Law of the Sea Convention

Note: nm = nautical mile

Area claimed by LEPLAC Project
Energetic Populism

- Principle of Permanent Sovereignty over Natural Resources, consecrated in UN Resolution 1,803 of 1962.

- Major Latin American oil producing countries controlled by populist governments.

- Oil profits often used for political purposes or to finance social projects.

- Decrease of foreign investment and new technologies, in some cases.

- Prospect of a decrease in offer of energy, in some cases.
Bolivia’s Case

- The second-largest gas reserves in South America.
- The most significant export activity to Brazil and to Argentina.

**The 1990’s: Privatization process**
Partial privatization of YPFB (oil and gas), ENDE (electricity), ENTEL (telecommunications), LAB (airlines), ENFE (railroads) and EMV (tin/antimony).

**July 2004: Binding Referendum**
- The majority of the population approved the Nationalization of the oil and gas sector.
- The new Hydrocarbons Law No 3,058 of 17 May 2005 was passed.

**10 May 2007: Contract between Petrobras and Bolivia**
Total transference of the property of the two PBR refineries in Bolivia to the government, for which PBR would receive US$ 12 million.

**1 May 2006: Supreme Decree No 28,701**
The State took control of the entire commercial and production chain of the oil and gas sector.

**25 January 2009: new Constitution approved by a national referendum**

Source: Rosado, Marilda. “Sovereignty over Natural Resources Investment Law and Expropriation: The case of Bolivia and Brazil”
Bolivia is the most significant exporter of natural gas to Brazil

### Natural gas imports to Brazil, according to the country

<table>
<thead>
<tr>
<th>Country</th>
<th>Natural gas imports to Brazil (million)</th>
<th>2013</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL (A)+(B)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>8.086</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>8.998</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>9.789</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>10.334</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>11.313</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>8.108</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>9.820</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>9.796</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>10.082</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16.513</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gás Natural (a)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td>451</td>
<td>349</td>
<td>-</td>
</tr>
<tr>
<td><strong>Gás Natural Liquefeito (GNL)' (b)</strong></td>
<td>-</td>
<td>-</td>
<td>35</td>
</tr>
<tr>
<td>Abu Dhabi</td>
<td>-</td>
<td>-</td>
<td>32</td>
</tr>
<tr>
<td>Angola</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Argélia</td>
<td>-</td>
<td>-</td>
<td>75</td>
</tr>
<tr>
<td>Bélgica</td>
<td>-</td>
<td>-</td>
<td>79</td>
</tr>
<tr>
<td>Catar</td>
<td>-</td>
<td>-</td>
<td>635</td>
</tr>
<tr>
<td>Egito</td>
<td>-</td>
<td>-</td>
<td>75</td>
</tr>
<tr>
<td>Espanha</td>
<td>-</td>
<td>-</td>
<td>27</td>
</tr>
<tr>
<td>Estados Unidos</td>
<td>-</td>
<td>-</td>
<td>88</td>
</tr>
<tr>
<td>França</td>
<td>-</td>
<td>-</td>
<td>166</td>
</tr>
<tr>
<td>Guiné Equatorial</td>
<td>-</td>
<td>-</td>
<td>89</td>
</tr>
<tr>
<td>Nigéria</td>
<td>-</td>
<td>-</td>
<td>75</td>
</tr>
<tr>
<td>Noruega</td>
<td>-</td>
<td>-</td>
<td>168</td>
</tr>
<tr>
<td>Peru</td>
<td>-</td>
<td>-</td>
<td>154</td>
</tr>
<tr>
<td>Portugal</td>
<td>-</td>
<td>-</td>
<td>57</td>
</tr>
<tr>
<td>Trinidad e Tobago</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**FONTE:** ANP/SCM, conforme a Portaria n° 43/1998.
**NOTA:** O Brasil começou a importar gás natural em julho de 1999 e GNL em novembro de 2008.
Refere-se às importações de GNL, em volume, na forma gasosa.

Source: ANP/SCM
SD No 28,701: Controversies

- Bolivian Constitution art. 96(1): The President may not establish rights and obligations through a supreme decree, unless the law is enacted, duly approved by Congress.

- Bolivian Constitution art. 22: Expropriation may proceed due to public need and failure to accomplish the social function of the property.

- The enactment of SD No 28,701 affected directly Bolivian operations of Petrobras and other companies.

Source: Rosado, Marilda. “Sovereignty over Natural Resources Investment Law and Expropriation: The case of Bolivia and Brazil”
How did the SD No 28,701 affect Petrobras?

- Nationalization of PBR by the art. 7 of SD No 28,701.
- Additional tax of 32 per cent over production, established by its art 4 of SD No 28,701.

Source: Rosado, Marilda. “Sovereignty over Natural Resources Investment Law and Expropriation: The case of Bolivia and Brazil”
Regulation in Brazil

Introduction of regulatory agencies in the ‘90s:
- Trade-off between flexibility and control: guaranty of free competition, prevent abuses of dominant position, and promote continuity and quality;
- Administrative flexibility;
- Informational gains;
- Credibility;

After ‘90s: Weakening of the regulatory agencies
- ANP x CNPE/ MME;
- Interruption of the Eighth Bid Round;
- Removal of Blocks in the Ninth Bid Round;
- Tenth Bid Round only for onshore blocks;
Main Laws: O&G Sector

- **Law 9.478/1997**
  - The Federal Government owns oil deposits, natural gas and other fluid hydrocarbons
  - ANP: regulation, contracting and inspection of Oil & Gas activities
  - Contract: Concession Agreements preceded by Bidding process

- **Law 12.351/2010**
  - For the Pre-salt polygon
  - Production Sharing: contractors exercise, at their own risk and expense, the exploration, evaluation, development and production activities
  - Right to appropriate cost in oil
  - Petrobras shall be the operator of all blocks entitled to minimum interest in the consortium not inferior to 30%.

- **Law 12.276/2010**
  - The Federal Government directly assigns to Petrobras, with due compensation, activities of research and production in areas that contain up to 5 billion barrels of oil.
New Institutional framework (as from 2010)

Three different Model Contracts

• Concession Agreements
• PSA’s
• Direct Assignment to Petrobras

Various entities

• Ministry of Mines and Energy (MME)
• Council for Energy Policy (CNPE)
• Energy Planning enterprise (EPE)
• Pre salt enterprise (PPSA)
• National Regulatory Agency (ANP)
• Petroleo Brasileiro S.A. (PETROBRAS)
Production Sharing Agreement

- Petrobras’s obligation as operator with participation not inferior than 30% in Sharing Production Agreements:

  - an opportunity or burden?
A Bill of Law has been filed by Senator José Serra (PSDB) on March 19th, 2015. – Bill of Law nº 131/2015.

The Bill’s aim is to suppress Petrobras’ right/obligation to undertake operatorship of all blocks in Pre-Salt Area.

Motivations:

- Financial pressure due to Petrobras’ Corruption Scandal;
- Oil exploration would probably be slowed down and affect Brazil’s economy.
- Concern about Petrobras dealing with huge portfolio.
Onerous Assignment areas

Source: Petrobrás

Orange: assignment
Grey pre-salt blocks
Yellow: post salt discoveries
Changes for PETROBRAS: privilege or curse?

- Strategic Interest of Government X Company and minority shareholders and its investors interests and concerns (Company Law, CVM, SEC requirements);

- Features of capitalization process;

- Contradictions under the 30% obligation to participate and role in the Direct Assignment Areas - Financial and Operational Challenges;

- Diversification of Brazilian Portfolio – other sedimentary Basins and other New Frontiers. Ex: Shale Gas
Institutional roles of different entities and operating committees

- Roles of MME, EPE and ANP; Hybrid role of PETROBRAS
- Conflicts resulting from strategic and technical differences between Petrobras and “Pré-Sal”
- Contradictions and duplication of representation of State (“Pré-Sal” and Petrobras within PSA)
- Size and training of “Pré-Sal”’s representatives
- Incompatibility with the EFFICIENCY and other constitutional principles?
Background for critical evaluation: investors’ expectations concerning latest changes

- Regulatory and Policy Stability
- Efficiency of the Regulatory Framework
- Investment

Latest Developments Brazilian legal doctrine – Constitutional and Administrative Law – confirm such approach
Brazil’s Special Moment: Still a Reality?
Brazil’s Special Moment: Still a Reality?

Source: Washington Post

- R$ Billion
- US$ Billion

Pre Salt discover (2007)
Global Crisis (2008)
End of Lula’s Government (2010)

Obs.: Atualizado até 13 de novembro de 2014  Fonte: Bolsa de Valores
The **lost** opportunities....

- 5 years gap from 10th to 11th Bidding Round (2008-2013).
- Problems with new institutional framework
- The costs of corruption: it costs **R$ 69 billion** to Brazil per year
Problems with new institutional framework

Brazil in crisis mode as ruling party sees public trust rapidly dissolving

Brazil protesters demand president's impeachment

Politics in Brazil: Awkward allies
The new Speaker of the lower house will make life difficult for Dilma Rousseff
Feb 7th 2015 | BRASILIA

Petrobras scandal: The Lava Jato Operation

- Conducted by Brazilian Federal Police.
- Petrobras’ executives are alleged to have paid politicians for contracts, using money skimmed from company profits.
- The main plea bargains were negotiated by a former Petrobras director, a former Petrobras executive manager, and a market currency dealer, and the MPF (Federal Prosecutors Office) acting within the jurisdiction of a Federal Judge of Parana state. Others may come.
- Very high profile private company executives are under arrest.
- Two other directors of Petrobras under arrest.
• Many crimes are being investigated
• Various investments under suspicion, including purchase of refinery in the US (Pasadena)
• Corruption network involving political parties and Petrobras officials
• Public opinion reaction
How is Petrobras facing such challenges?

- Investigations and creation of a compliance structure at the level of the board.
- Reduction of investments in 2015 of 25% to 35% (R$ 20 billion to R$ 30 billion) out of R$ 80 billion planned to be invested in 2015.

Source: Reuters / Petrobras Investor Relations – Notices & Facts
How is Petrobras facing such challenges?

• Cooperation with China Development Bank

• Facility Agreement of a cooperation arrangement to be implemented during 2015 and 2016. = US$ 3.5 billion facility agreement
Pre Salt: Opportunities & Challenges

• High Tax Revenue
• Social Fund: promotion of social and regional development and resources for investment in education and health
• Induction to technology development
• New opportunities for the industry development

Significant Contribution to Brazil’s development

Source: Oswaldo A. Pedrosa Jr.
Gas demand is growing faster than domestic production

Source: Sylvie d’Apote – Prysma E&T Consultores
Independent Producers
Brazil X USA

- About 35 medium or small enterprises;
- Contributes with only 0.1% to national oil industry;
- Creates 6,000 jobs.

- About 23 thousand small or medium enterprises;
- Contributes with 40% to American oil industry;
- Creates 300,000 jobs.

Source: Rosado, Marilda. “Produção de Petróleo e Gás em Campos Marginais – Regulação e Questões Jurídicas”
Opportunities for Independent Producers: Shale Gas

Shale Gas plays in Brazil

1. XISTO PERMIANO
   Formação Irati
2. XISTO TERCIÁRIO
   Vale do Paraíba – São Paulo
3. XISTO CRETÁCEO
   Maraú - Bahia
4. XISTO PERMIANO
   Formação Santa Brígida - Bahia
5. XISTO CRETÁCEO
   Alagoas
6. XISTO CRETÁCEO
   Ceará
7. XISTO CRETÁCEO
   Formação Codó - Maranhão
8. XISTO DEVONIANO
   Formação Curuá-Pará, Amazonas e Amapá

Fonte: Cepa/USP
Percentage distribution of proven oil reserves, according to Brazilian states, in 2013

Source: ANP
Infrastructure of the production of oil and derivatives in 2013

Source: ANP
How to comply

New Compliance Rules

Law Changes

Deadline Set for New Business Rules

Revised Guidelines Released

Companies must act

How rules affect you
Brazilian Anti-corruption Law

• Law 12.846/2014: effect on January 29th, 2014

• Imposes strict administrative and civil liability of legal persons for engaging in acts against the national or foreign public administration patrimony, principles of the public administration, or the international commitments assumed by Brazil.
Severe Penalties

- Compensation for the damage caused by the act;
- Companies in consortium can be held jointly liable;
- Sanctions of between 0,1% and 20% of the company’s gross revenue from the previous year;
- Never less than the benefit gained, if it is possible to estimate it;
- If the gross revenue cannot be determined: the fine ranges from R$ 6.000 to R$ 60.000.000. The companies are not immune to further Judicial sanctions.
Judicial Sanctions

• Exclusion from public financing incentives for one to five years;

• Seizure and confiscation of assets;

• Partial suspension of activities; and

• Dissolution of the legal entity.
Challenges for Brazil

- Corporate Governance
- Regulatory Governance
- Good Practices, Soft Law, Global Administrative Law
Thank You!

marildarosado@gmail.com
marilda.rosado@mralaw.com.br
+55 21 3576 7688