BRAZILIAN EXPLORATORY OPPORTUNITIES & STRATEGIES TO IMPROVE ATTRACTIVENESS
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Forward-looking data, information, projections and opinions expressed during the presentation are subject to change without prior notice.
OUTLINE

• BRAZIL E&P OVERVIEW & FUTURE LICENSING ROUNDS
• OPPORTUNITIES
  o OFFSHORE (PRE-SALT & POS-SALT)
  o ONSHORE (MATURE & FRONTIER BASINS)
• FINAL REMARKS
OUTLINE

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The State (Imperator) became the owner of the subsurface resources. The begining of whale oil replacement Standard Oil, Shell and Texaco installed in Brazil. Increased fuel imports National Consul of Petroleum (CNP) Lobato well, 1st oil discovered Candeias 1st commercial field 3 refineries installed (SP & RS) – 1.650 bbl

Auto industry expanded their investments

National Consul of Petroleum (CNP) was extinct
National Fuel Department was founded (DNC)

ANP and CNPE
Law nº 9.478
Flexible Monopoly Rules
PRH-ANP & PDI


www.anp.gov.br/institucional/a-historia-do-petroleo
Bidding rounds. Concession Regime. ANP delimit the blocks & CNPE deliberate. **FREE COMPETITION**

**PRESALT**
- Tupi Prospect
- Law nº 12.351 (Production Share, Presalt Polygon & strategic areas)
- "STAND BY" BIDDING ROUNDS

**Three Bidding Rounds**
- 11,12th on concession regime
- 1st on production share (Libra)
- Royalties reduction for incremental prod.

**Bidding Rounds Calendar**
- Local content new politics
- Good results on bidding rounds

**OPEN ACREAGE**

1999

2007-2013

2013

2017-2019

[Link to ANP website: www.anp.gov.br/institucional/a-historia-do-petroleo]
WHAT'S NEXT?
BIDDING ROUNDS

- SEPIA AND ATAPU FIELDS
  - Studies ongoing
  - 3rd quarter, 2021
  - ORDINANCE No 23, Jan. 23th, 2020

- 96 EXPLORATORY BLOCKS
  - ANP studies ✓
  - CNPE will define new schedule
  - RESOLUTION Nº 24, Oct. 18th, 2019

- 3 EXPLORATORY BLOCKS
  - ANP studies ✓
  - MME => CNPE deliberation
  - RESOLUTION Nº 19, Dec. 11th, 2018

- > 1.700 EXPLORATORY BLOCKS & FIELDS
  - On demand bidding rounds
  - Market driven choices
  - RESOLUTION Nº 17, Jun. 08th, 2017
  - RESOLUTION Nº 24, Oct. 18th, 2018

+ REATE: Revitalization of Oil&Gas E&P Activities Onshore (Res. Nº27,12/2019)

+ BidSIM: Improve Bid Rounds Attractiveness (Gov. Decree 10,320/2020)
SEPIA & ATAPU FIELDS
Surplus Volumes

MME Ordinance n° 23/2020, Jan. 27th, 2020
ANP RD 0290/2020
I) Approved Action Plan & II) Allow SDP, SDB e SPL


PPSA & Petrobras are negotiating compensation and co-participation agreement
ANP board approved on April 1st, 2020, temporary suspension of the 17th Bidding Round which was scheduled for 2020. ANP complied the letter from the MME requesting the suspension in view of the economic and social scenario due to the Covid-19 pandemic.
3 EXPLORATORY BLOCKS
> 1,700 EXPLORATORY BLOCKS

990 Blocks
(475.848 Km²)
Nomination
http://rodadas.anp.gov.br/pt/nominacao-de-areas

173 Blocks
(~68.194 Km²)
Studies concluded

567 Blocks
(~174.000 Km²)
On offer

Declaration of Interested
http://rodadas.anp.gov.br/pt/oferta-permanente/inscricao-de-licitantes

On study
COMPANIES CAN SUBMIT THEIR REGISTRATION ANYTIME

- **Until ninety (90) days**
  - Disclosure of the guarantee and sector of the interest declaration
  - Deadline for registration submission
  - Deadline for the bid bond guarantees and declaration of the sectors of interest
  - Public Session for Submission of bids

- **Until thirty (30) days**
- **Until seventy (70) days**
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PRE-SALT

Calache & Zalán (2012, O Brasil e o Mar no Século XXI)
PRE-SALT

Calache & Zalán (2012, O Brasil e o Mar no Século XXI)
Available Opportunities – LP7

VERY LOW GEOLOGICAL RISK PROSPECT
Neighbor to Several Fields
ÁGUAMARINHA BLOCK

0264_BMC_CAMPOS_FASE_II (RTM) – Arbitrary line - Courtesy CGG
PRE-SALT
Available Opportunities – LP7

MODERATE GEOLOGICAL RISK PROSPECT
Relevant Volumes
ESMERALDA BLOCK

R0264_SANTOS_CONSTELLATION (RTM) – Arbitrary line – Courtesy CGG
PRE-SALT

Santos Basin

Campos Basin

Cretaceous Hinge

Top of Aptian Map (Depth)

Pre-salt polygon
PRE-SALT PLAY
FRONTIER AREAS

OUTSIDE PRE-SALT POLYGON
Some Blocks Beyond 200 Nautical Miles
2D SEISMIC

-2 Km – 6 Km

-6 Km

0257_SCP2 (KPSDM) – Courtesy TGS Spectrum
2D SEISMIC

-2 Km - 6 Km

Salt

Spill Point

Faults

Thick layer of sediments

0257_SCP2 (KPSDM) – Courtesy TGS Spectrum
NEW SEISMIC INFORMATION – SURVEY ONGOING

0257_SCP3 (KPSDM) & SANTOS_3D-PHASE-1 (Fast track) – Courtesy TGS Spectrum
Decree nº 10, 320/2020

- It creates a work group, including (MME, ME and ANP) to improve the bidding round process in Brazil (BidSIM)

- There will be a reevaluation of Petrobras preferred rights in bids for production sharing agreements

- Reevaluation of productions sharing vs. concession agreements

PL nº 3,178/2019

- Propose to revoke Petrobras preferred Rights in bids for production sharing regime, and whether

- National Energy Policy Council should decide on contracts regime applied to pre-salt areas

ALWAYS RESPECTING SIGNED CONTRACTS
Production Highlights

• Offshore field (Pre and Pos-salt) represents 96.7% & 86% of Brazilian oil and gas production, respectively

• Total Production: 2,958 MMbbl/d of Oil and 124 MMm³/d of Gas

• 69.5% of total Brazilian production comes from Pre-salt play (113 well)

• Total production occurred with 6,989 well (508 offshore and 6,481 onshore)
E&P ENVIRONMENT

Three Different Profile

- 16,786 bpd per well (122 wells)
- 1,522 bpd per well (574 wells)
- 14 bpd per well (7,012 wells)

May/2020

E&P STRATEGIC INITIATIVES - MAXIMIZING OIL & GAS PRODUCTION

Accelerate the Pre-Salt Development

Improve Recovery Factor in Mature Fields & Advance to New Frontiers

Revitalize Onshore Exploration and Production

ATTRACT RIGHT PLAYERS TO EACH E&P ENVIRONMENT
POS-SALT

Calache & Zalán (2012, O Brasil e o Mar no Século XXI) - Edited
70 BLOCKS ON OFFER
Campos, Santos, SEAL, Ceará & Potiguar Basins

ANP Encourage Nomination
http://rodadas.anp.gov.br/pt/nominacao-de-areas

BR- Divestment Plan
Focus on Improve Recovery Factor
“On Offer” – Teaser BR Petrobras > Karoon

ANP - Permanent Offer

Field

Block
- R2
- R3
- R7
- R16
- P2
- P3
- P4
- P5
- P6

POS-SALT

ANP Acreage
Oil & Gas Concessions

70 BLOCKS ON OFFER
Campos, Santos, SEAL, Ceará & Potiguar Basins

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On Offer
On Study
POS-SALT

Sandstone Turbidites
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Onshore Mature Basins

Permanent Offer

- WELL-KNOWN GEOLOGY
- AVAILABLE INFRASTRUCTURE
- SMALL AND MEDIUM-SIZE COMPANIES PROFILE
- POSITIVE SOCIAL LOCAL IMPACT
- RECENT DISCOVERIES REPORTED
- ON DEMAND BIDDING ROUNDS
POTIGUAR SEDIMENTAR BASIN

Onshore/Shallow Waters, Refineries and Other non-Strategic Assets

Goal: Dramatically Improve Onshore Oil & Gas Exploration and Production

BR- Divestment Plan

- “On Offer” – Teaser BR
- Farmout 2019

ANP - Permanent Offer

Field
Block
- R7
- R11
- R13
- R14
- R15
- OP
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• FINAL REMARKS
**REATE 2020**

*Pillars*

- Innovate and simplify rules
- Stimulate the entry of new companies
- Enable large-scale production of onshore gas in compliance with the guidelines of the new gas market
- Promote free competition
- Recognize the value of onshore E&P activity for regional development
Revitalization of Oil & Gas E&P Activities Onshore (Res. No. 27, 12/2019)

Art. 4

I – Ministry of Mines and Energy (MME), which coordinates;

II – Civil House of the Presidency of the Republic;

III – Ministry of Economy (ME);

IV – Ministry of the Environment (MMA);

V – National Agency of Petroleum, Natural Gas and Biofuels (ANP);

VI – Administrative Council for Economic Defense (CADE); and

VII – Energy Research Company (EPE)
INFRASTRUCTURE
DATA AVAILABLE
EXPLORATORY HISTORY
EXP. ATTRACTIVENESS

SDB-ANP Multi-criteria Analysis
Onshore Frontier Basins

Reate 2020 – Muti-criteria Analysis

ANP Encourage Nomination
Highways & roads; thermoelectric, urban density, electrical line and oil & gas pilelines
Mainly seismic and well information
EXPLORATORY HISTORY

Multi-criteria Analysis

Previous analysis, discovery assessment plan, well results
Field proximity, exploratory opportunities, petroleum system status

Geological Evaluation
RESULTS
Multi-criteria Analysis
Recent News

BR- Divestment Plan

"On Offer" – Teaser BR
Petrobras > Eneva (2019)


Onshore production rank (Equivalent Oil)

Total Solimoes prod.: 106,253 boe/d
16,525 bpd oil and condensate
14,281 Mm3/d gas
1.150 ton/d GLP boe/d

April, 2020
REAL CASE
Muti-criteria Analysis

BR- Divestment Plan

- #Materia/ExibirMateria?p_materia=982843

Round 7 – Blocks with contracts ongoing
REAL CASE
Muti-criteria Analysis

BR- Divestment Plan

“On Offer” – Teaser BR


Round 7 – Blocks with contracts ongoing

ANP - Permanent Offer
Blocks on Study
Field on Study

ANP Encourage Nomination
http://rodadas.anp.gov.br/pt/nominacao-de-areas
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Final Remarks

Studies ongoing. Schedule to 3rd quarter, 2021

Geological evaluation concluded. Submitted to MME

Block on offer and on study

Governmental Discussions Ongoing

➢ Gov. Decree 10,320/2020
➢ PL no 3,178/2019

Goal: Accelerate Exploration and Development

PRE-SALT
Final Remarks

Geological evaluation concluded
CNPE will define new schedule

Block on offer and on study
Market-driven choices. On Demand Bidding Rounds
ANP Encourage Nomination
http://rodadas.anp.gov.br/pt/nominacao-de-areas

Support Petrobras Divestment Plan – Shallow Waters, Refineries and Other non-Strategic Asset

Governmental Discussions Ongoing
➢ Gov. Decree 10,320/2020
➢ PL nº 3,178/2019

Goal: Improve the Recovery Factor in
Mature Fields & Advance to Frontier Areas

POS-SALT
Final Remarks

Block on offer and on study on Mature & Frontier Basins

COMPANIES CAN SUBMIT THEIR REGISTRATION ANYTIME

ANP Encourage Nomination

http://rodadas.anp.gov.br/pt/nominacao-de-areas

Support Petrobras Divestment Plan – Onshore, Refineries and Other non-Strategic Asset

Governmental Discussions Ongoing

REATE: Revitalization Onshore Oil and Gas E&P Activities

(Res. N° 27, 12/2019)
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Additional Information
http://rodadas.anp.gov.br/pt/
www.anp.gov.br

http://rodadas.anp.gov.br/pt/nominacao-de-areas