The O&G Industry in Brazil: Investment Opportunities

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Well positioned for recovery



More than 15 **Production Units** expected to start operation until 2025

IEA (Oil 2021): "With US and Canadian growth tapering off, Brazil is poised to be one of the key sources of growth over the



Right assets in the right hands

Ongoing huge Petrobras divestment plan: new investors in Brazil

+ Measures to increase competitiveness



5% of Production growth

> Gas: 127 Mm³/d Oil: 2.94 Mbpd

Pre-salt high performance



Oil: 1.37 Mbpd

Oil and fuel oil with low sulfur content

18 areas sold in the 2nd Cycle of Open Offer

Asset's

acquisition

50 M&As



Emergency

flexibilization

measures

Safety and health

concerns - specific monitoring activity





We continue to make progress in opening the O&G sector





A completely **diverse sector** will emerge from Petrobras' Divestment Plan. All onshore and shallow water fields are being sold, as well as some great offshore post-salt concessions.

With new investments in mature fields, development of pre-salt fields, offshore blocks in the exploratory phase, and a calendar of new auctions, Brazil is ready to grow production and take a leading position in the sector.

Downstream



For the first time, half of the refining capacity (REFAP • RNEST • REPAR • RLAM • LUBNOR • REGAP • REMAN • SIX) is being sold by Petrobras, which will lead to a **competitive and open refining** and fuel market.

Measures are being taken to deal with the transition to this new environment and to bring competitiveness to the distribution sector.

Gas



First-ever effective opening in the natural gas market with Petrobras leaving the transport and distribution sectors.

A new gas bill has just been approved and a strong regulatory agenda is underway to create a new gas market and opportunities between suppliers and free consumers. A relevant open season calendar is set for this year.



The E&P sector

10th largest crude oil producer Potential to reach more than 5 million oil bpd in 2030 2021-2025 Investments Forecast: US\$ 50 billion



Strategy

Accelerate the pre-salt exploration and development

Ongoing Measures

Measures to further increase competitiveness being studied in the **BidSIM Program**. Ongoing discussion of the best **fiscal regime**



Number of producing wells

361 wells

2,352 boe/d

Average production per well

Increase the RF and accelerate exploratory activities in the new frontier basins

Onshore

Number of producing wells

6,012 wells

41 boe/d

Average production per well

Revitalize the **onshore**, increase the RF, promote the small and medium producers' market, intensify **exploratory activities**, quantify the oil potential

Measures to increase competitiveness being studied in the **ProMar and REATE Programs**

Contract's extension approval with royalties reduction on the incremental production

Onshore public technical data to be available for free in May 2021

Measures to accelerate the approval of M&As at ANP

Royalties Reduction for Small and Medium Companies under public consultation

Contracts and rules simplification







92 blocks on offer

Campos, Pelotas, Potiguar and Santos Basins Pre-salt opportunities beyond 200 nautical miles with 3D seismic recently acquired October 7th

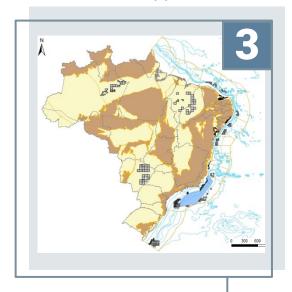




2 areas: Atapu and Sépia Round approved by CNPE Estimated: December 2021



Onshore Opportunities



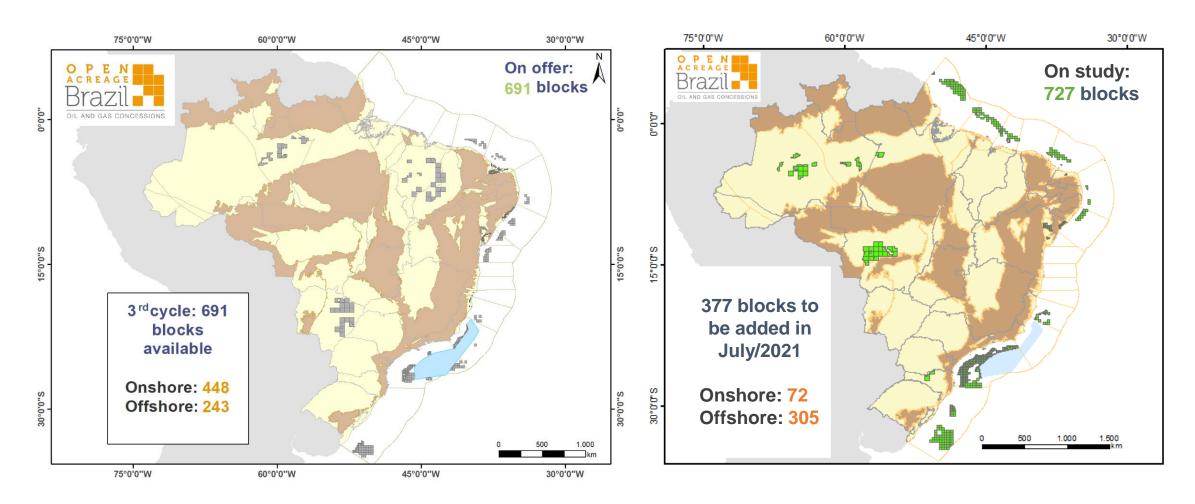
In addition to the 691 blocks available, we aim to put more 377 new blocks The 3rd cycle depends on the interest declaration





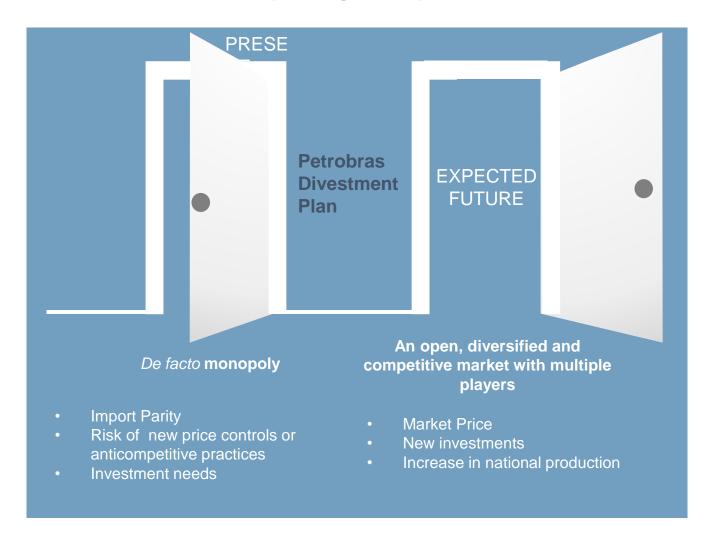
Opportunities in the Open Acreage

The Permanent Offer allows the market to decide when it will be the bid round and what will be part of the round Many onshore exploratory opportunities in addition to the ongoing Petrobras Divestment Plan (focused on mature fields)





7th largest oil products consumer 132 Mm³ consumed in 2020 (including biofuels)





The refineries' sale process will contribute to diversify the supply and to **increase competition** in the distribution sector. It is the greatest transformation in the downstream sector



The role of ANP is to work in the transition with an emphasis on **guaranteeing supply** and improving the regulatory framework, aiming an open and competitive market



In addition, ANP is working to better monitor the oil products stocks and to ensure transparency on the prices



There is also a huge regulatory agenda to increase competitiveness in the distribution and resale sectors



The Natural Gas Market

An open, liquid, competitive and transparent gas market is gaining momentum in Brazil





Brazil is in a privileged position in the energy transition



Renewables account for 46% of the energy matrix. Emissions in the energy sector are lower compared to the world average.





Since 2009, O&G production operated by Petrobras increased more than 40%, without increasing emissions. Petrobras goals: **25% reduction in absolute operating emissions by 2030**; Zero routine flaring by 2030; 40Mton CO2 reinjection by 2025 in CCUS projects

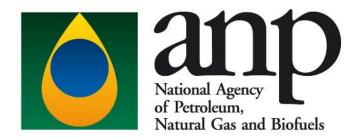
Public policies like Renovabio Program show the country will continue to advance in this agenda. In 2020, more than 14 million tons of greenhouse gas emissions were avoided.



3% of the R&D resources from the O&G industry obliged to be applied in Brazil are spent on renewables projects. More than 20% of the vehicle matrix is fueled by renewables (ethanol and biodiesel).

A new government program (Fuel of the future) was approved by the CNPE (i.e.: incentives to the large-scale use of 2nd generation ethanol; R&D to encourage fuel-cell technology; creation of green corridors to supply heavy vehicles powered by biomethane; introduction of BioJetFuel etc)





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