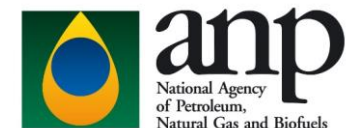


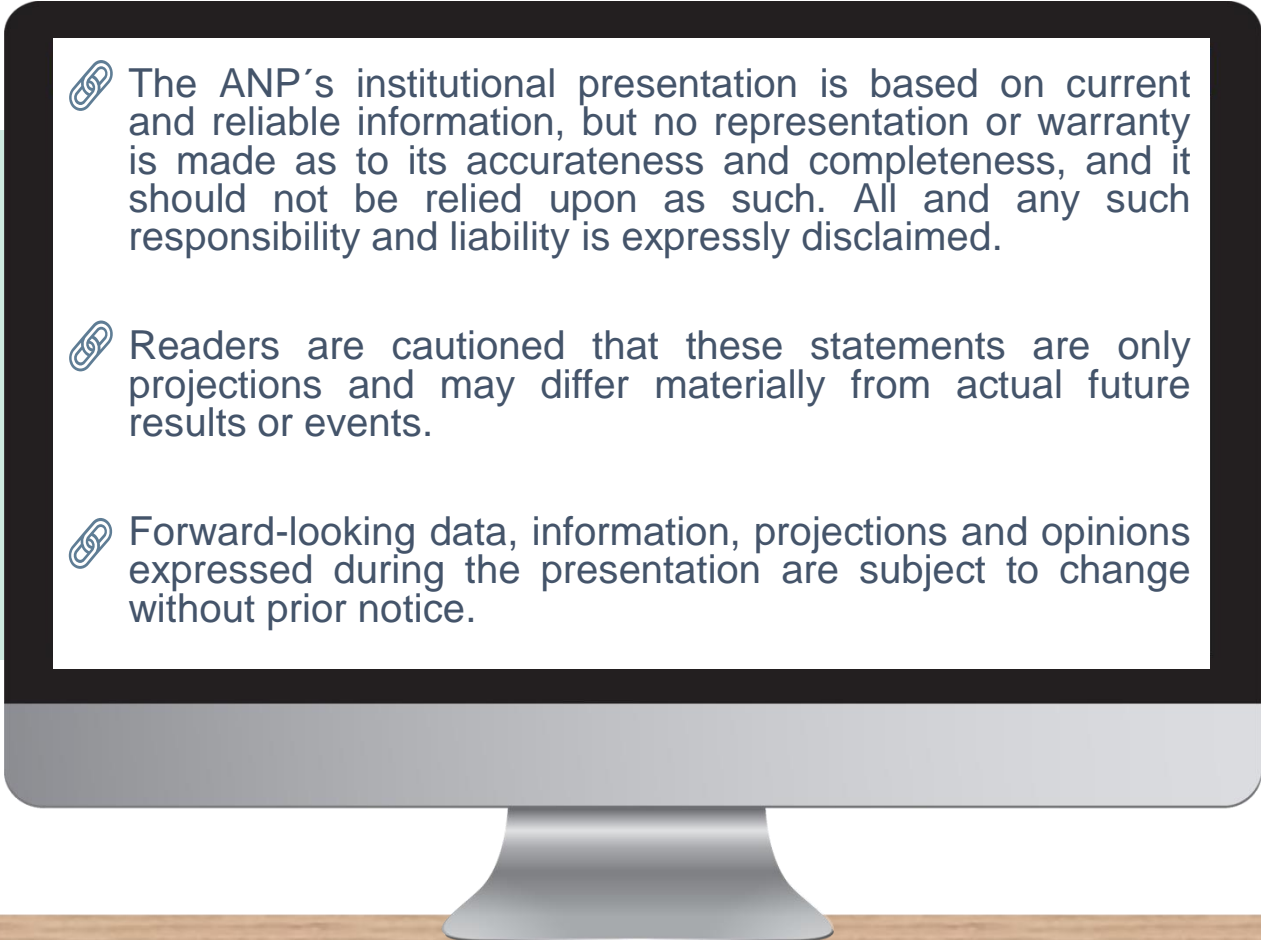
The O&G Industry in Brazil: Investment Opportunities

Rodolfo Saboia
Director-General

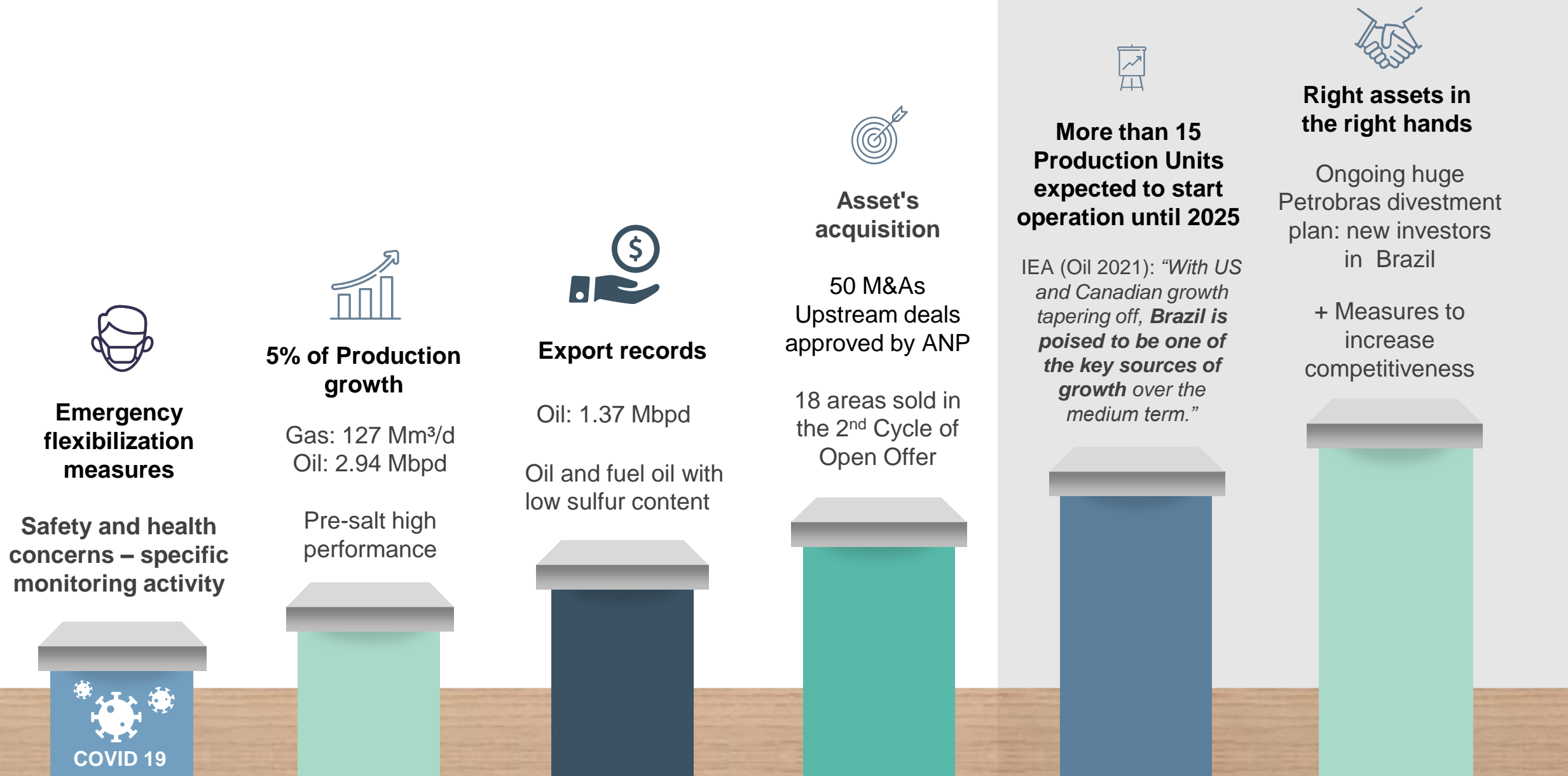
April 7th, 2021



Disclaimer

- 
- A stylized illustration of a computer monitor with a black bezel and a silver base, positioned centrally on a wooden desk. The monitor's screen displays three bullet points, each preceded by a paperclip icon.
- 🔗 The ANP's institutional presentation is based on current and reliable information, but no representation or warranty is made as to its accurateness and completeness, and it should not be relied upon as such. All and any such responsibility and liability is expressly disclaimed.
 - 🔗 Readers are cautioned that these statements are only projections and may differ materially from actual future results or events.
 - 🔗 Forward-looking data, information, projections and opinions expressed during the presentation are subject to change without prior notice.

Resilience in 2020 and ready for recovery



Well positioned for recovery

An unprecedented transformation

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

E&P



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

Ongoing Measures



Pre-Salt

119 wells
22,097 boe/d

Accelerate the **pre-salt** exploration and **development**

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



Post-Salt Offshore

361 wells
2,352 boe/d

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

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**



Onshore

6,012 wells
41 boe/d

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

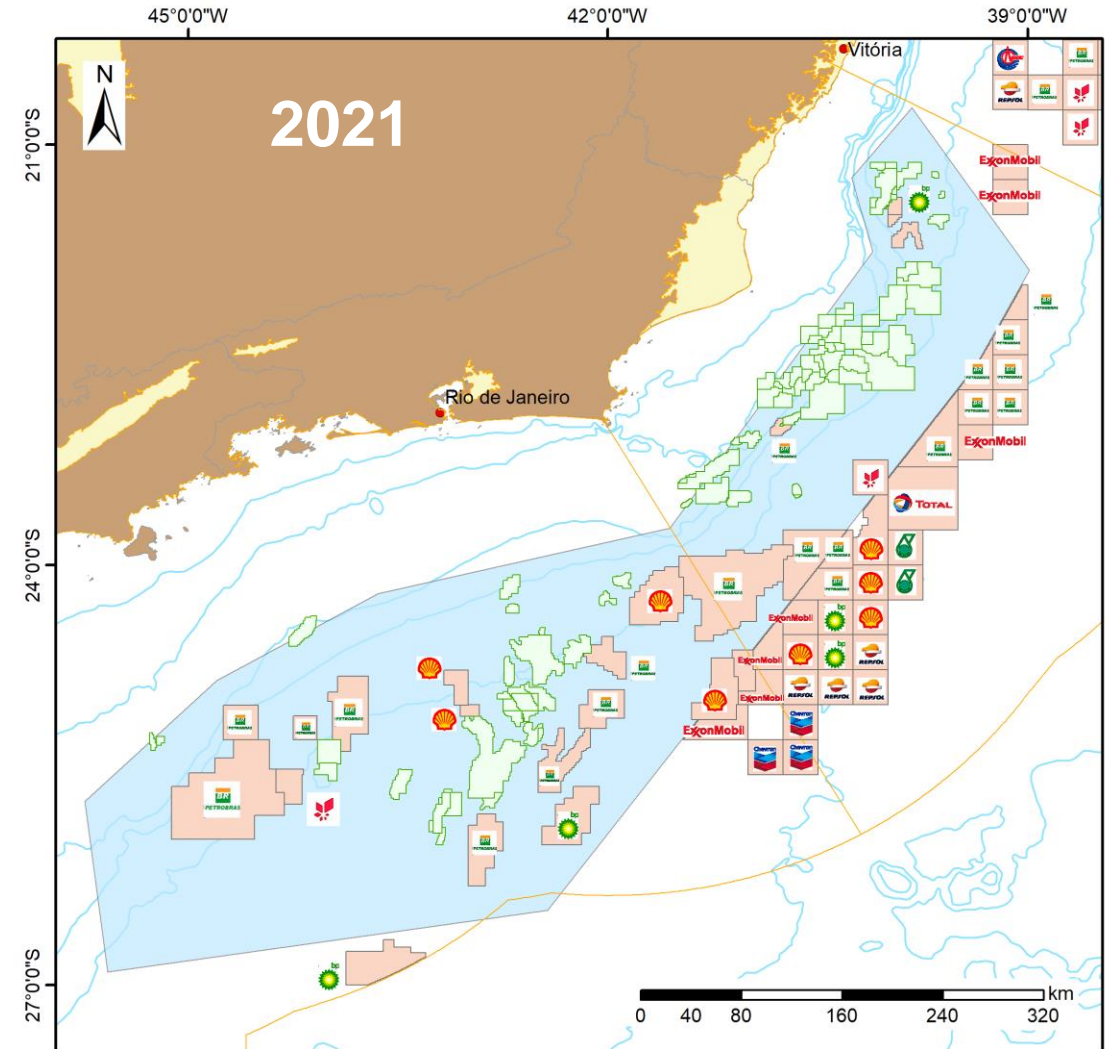
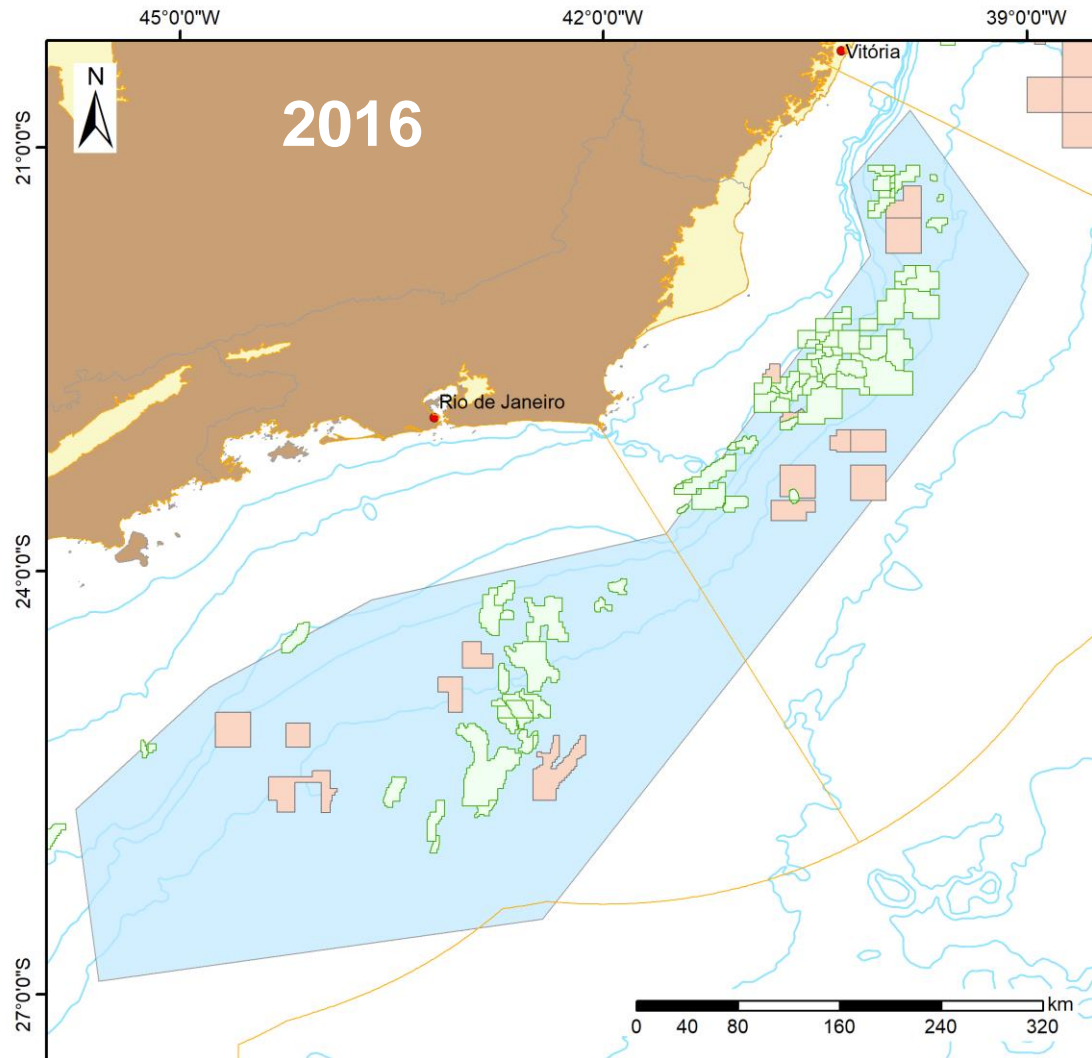
Measures to **accelerate the approval of M&As** at ANP

Royalties Reduction for Small and Medium Companies under public consultation

Contracts and rules simplification

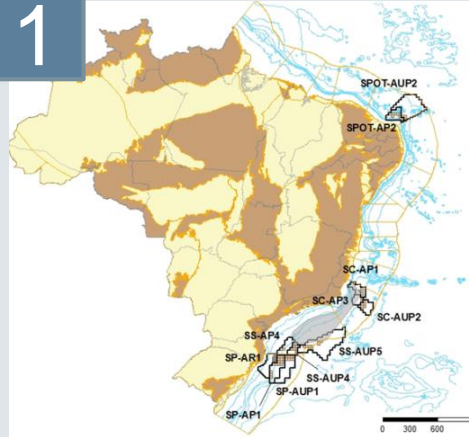
A lot has been done with great success

Campos and Santos basins (2016 and 2021)



Brazil has great opportunities in 2021 auctions

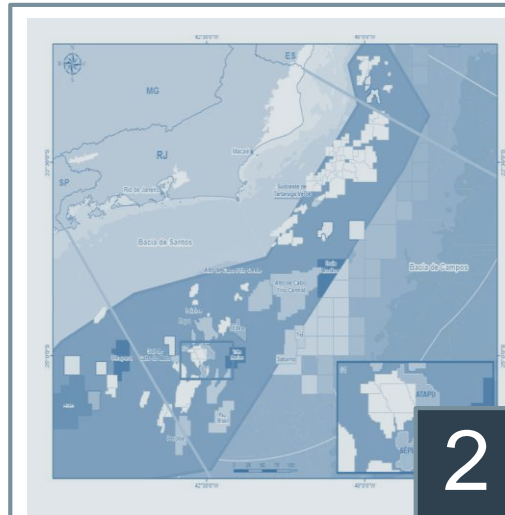
1



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

ROUND 17
Brazil
OIL AND GAS CONCESSIONS

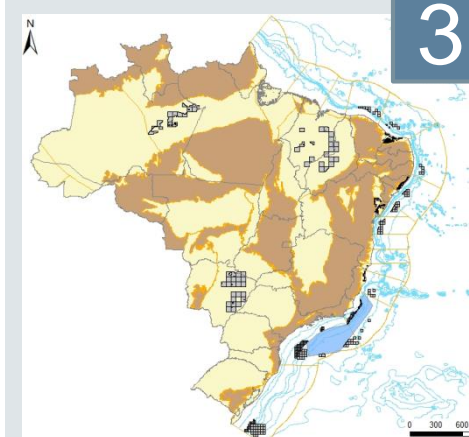
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2 areas: Atapu and Sépia
Ongoing negotiation between Petrobras and PPSA
To be scheduled

TRANSFER OF RIGHTS SURPLUS
Brazil
PRODUCTION SHARE

3

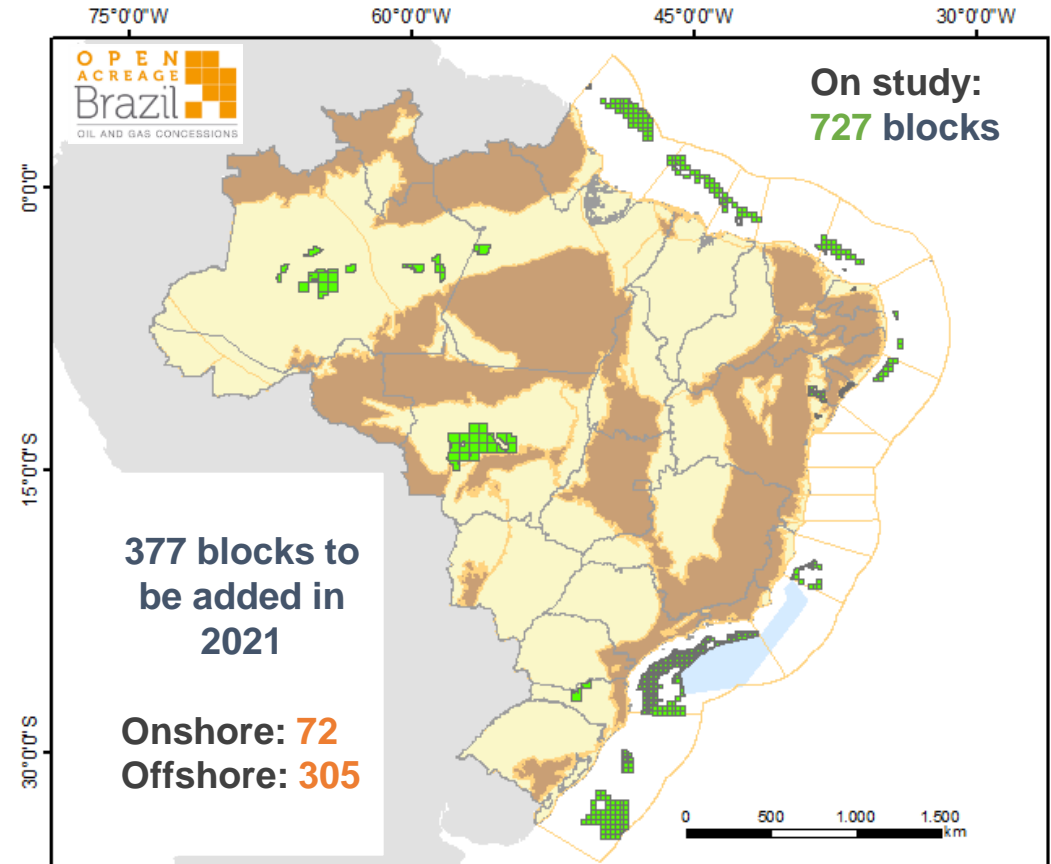
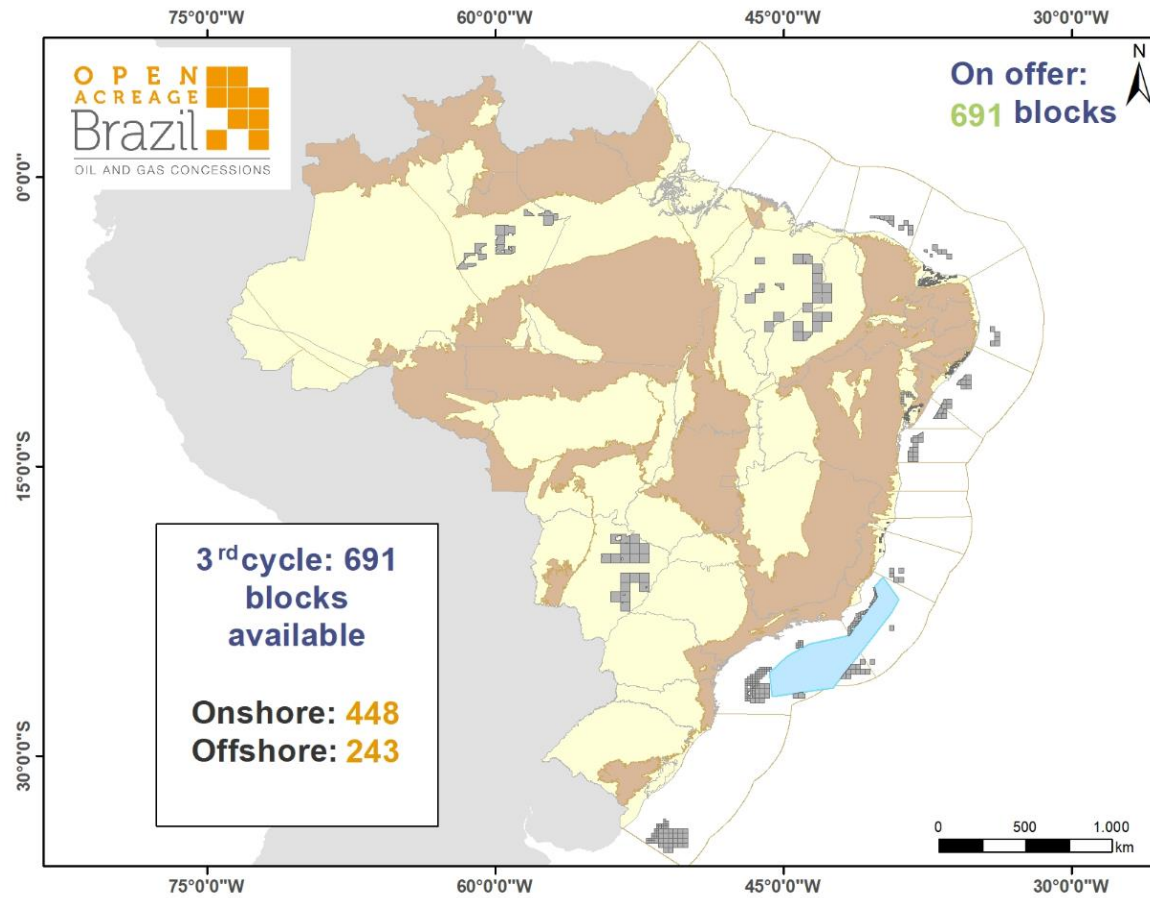


In addition to the ~700 blocks available, we aim to put more 377 new blocks
The 3rd cycle depends on the interest declaration

OPEN ACREAGE
Brazil
OIL AND GAS CONCESSIONS

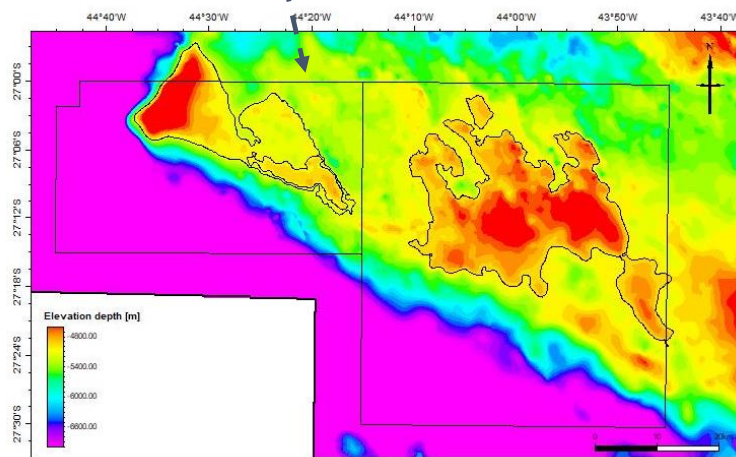
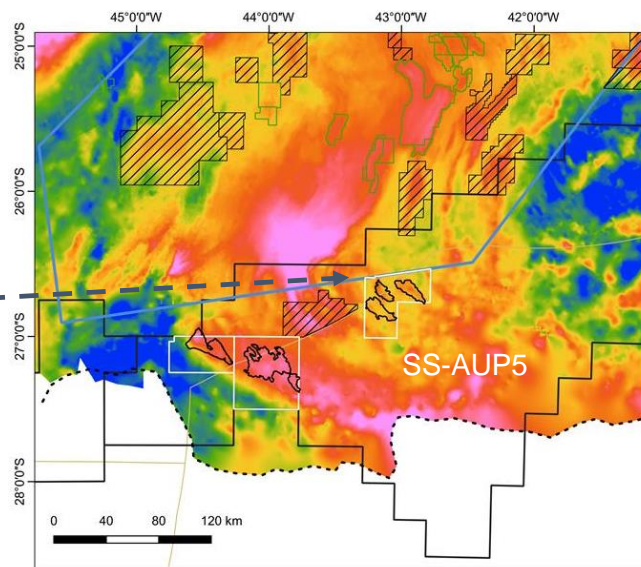
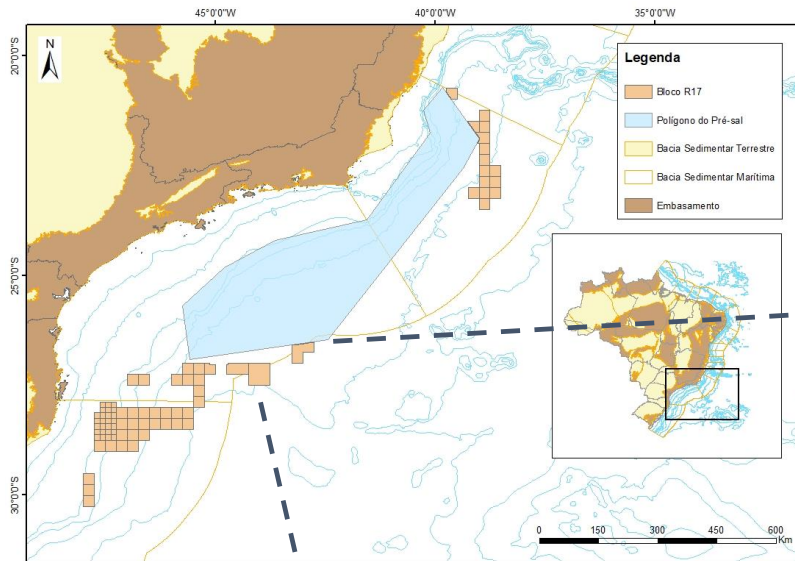
Opportunities in the Open Acreage

The Permanent Offer allows the market to decide when it will be the bid round and what will be part of the round



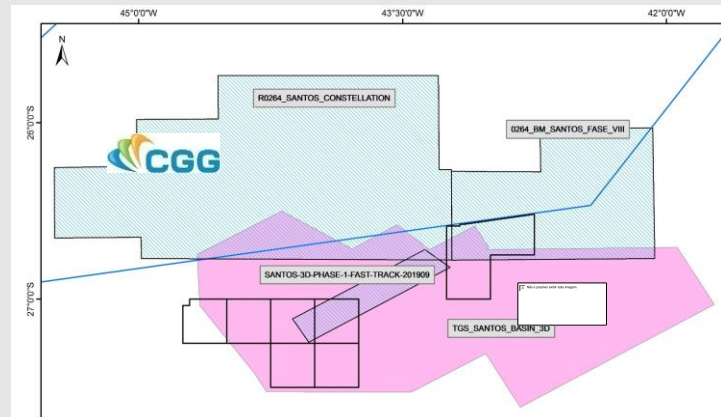
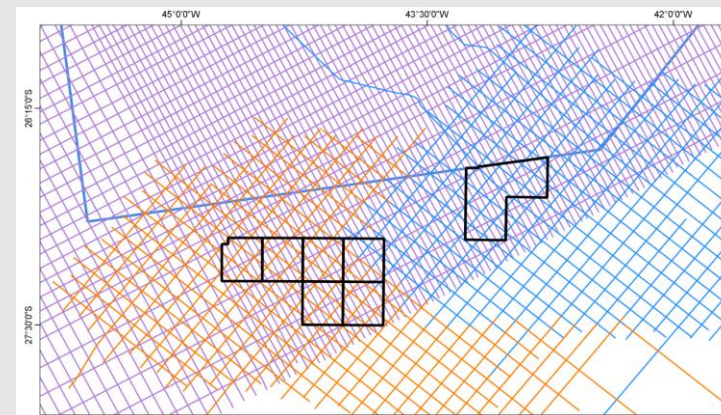
Opportunities in the 17th Concession BID

New frontier pre-salt opportunities mapped by ANP



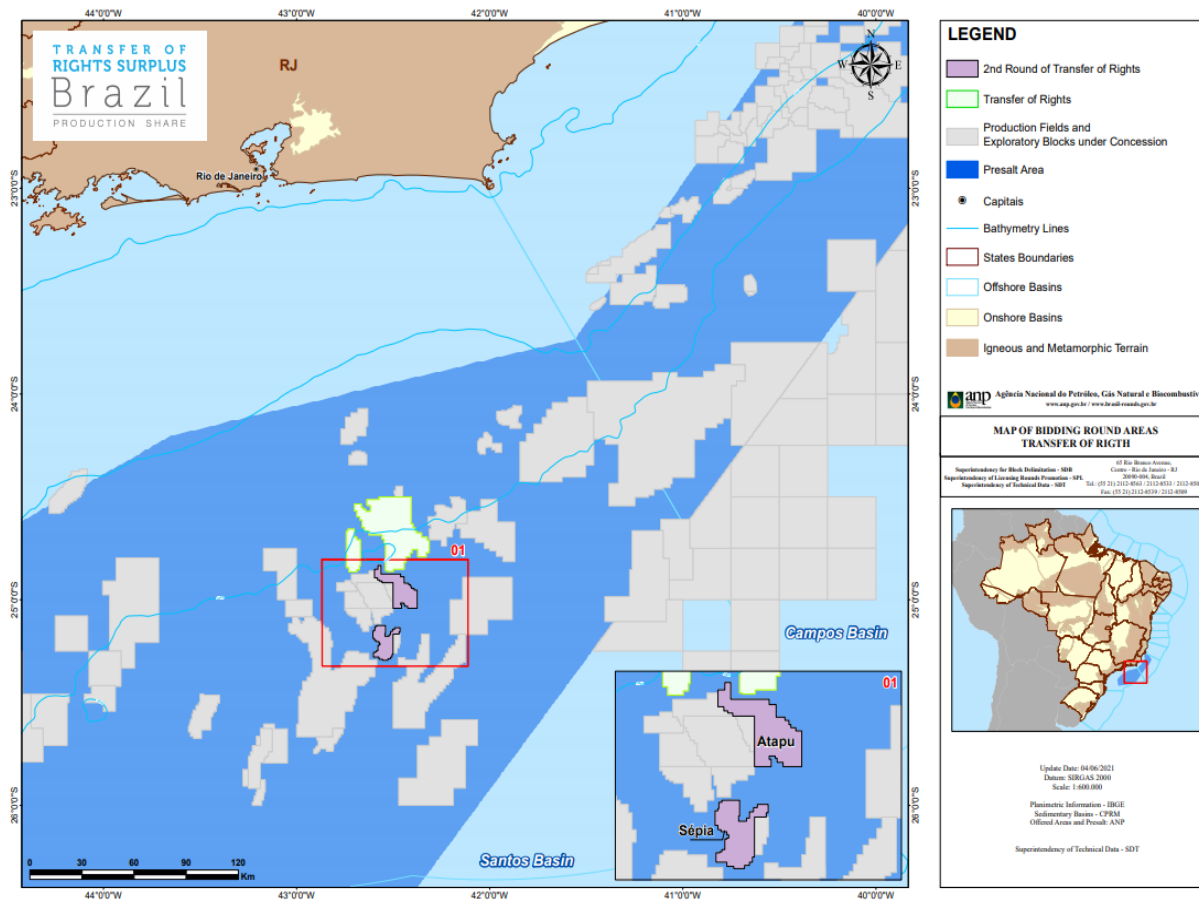
SS-AUP5: Moderate to high geological risk prospects, **BETTER PREMIUM**, beyond 200 nautical miles.

Region covered by 2D and 3D seismic



Opportunities in the Transfer of Rights Surplus

Resources already discovered and under development. Great Opportunities Round to be scheduled



 **Sepia and Atapu OOIP: ~12 Billion bbl**

Atapu: In production since June 2020 (P-70)

February 2021 production by well	Average Oil Production (bpd)	Average Gas Production (thousand m ³ /d)
9-ATP-1-RJS	41,540	1,376
3-BRSA-1172-RJS*	2,861	91

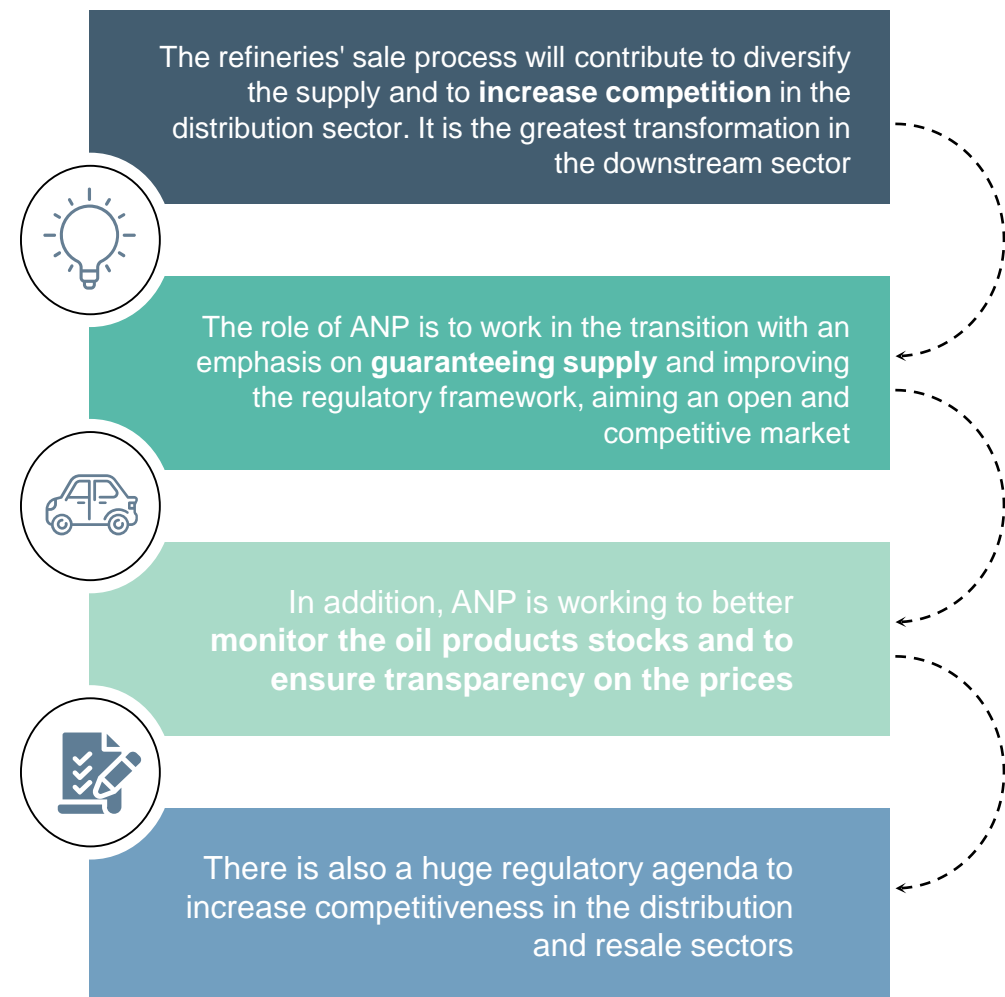
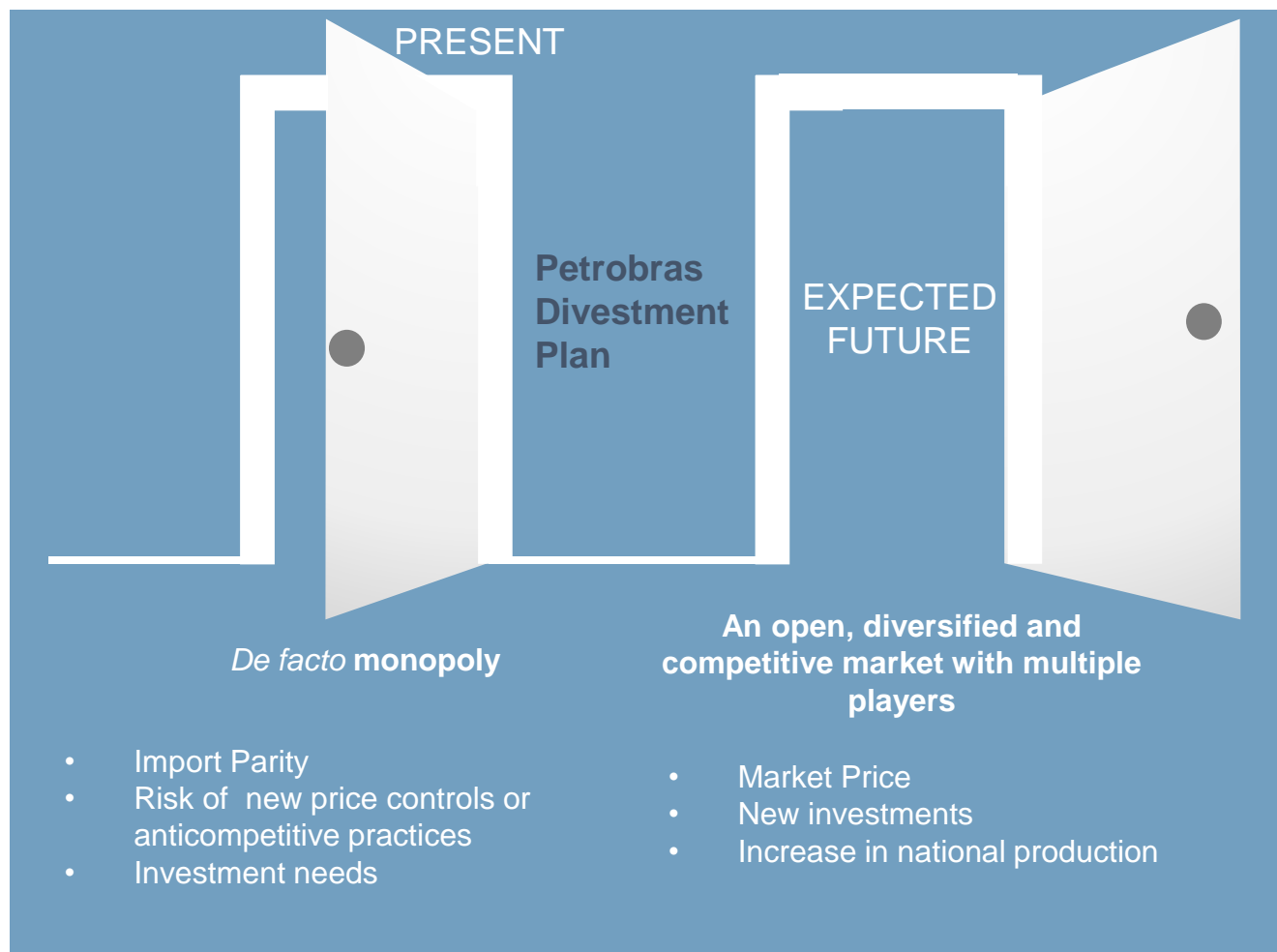
*Started production late february

Sepia: Scheduled to start production in 2021 (FPSO Carioca)

The Downstream Sector

7th largest oil products consumer

132 Mm³ consumed in 2020 (including biofuels)



The Natural Gas Market

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



Brazil has great potential to develop its gas market. Gas production will more than double by 2030 and the government is working to monetize this gas.



A New Gas Law has just been approved by the Congress.



ANP has a strong regulatory agenda to put in place the new gas market, based on the new gas law, the Decree 9,616/2018, CNPE Resolution 16/2019 and the agreement between CADE and Petrobras.

2021 Open Season Calendar

Incremental Open Season:

TAG

TBG (Focused on expanding the southern section)

NTS (Focused on the implementation of the Itaboraí Guapimirim Gas Pipeline)

Annual Open Season to offer available capacity:

- TBG Open Seasons 2 and 3 to offer available capacity for 2021 (starting on May)-2025 and 2022-2026

- NTS Open Season 1 to offer the available capacity for 2022-2026 - Preferably coordinated with Open Season 3 from TBG

- TAG Open Season 1, to offer available capacity for 2022-2026

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



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**).



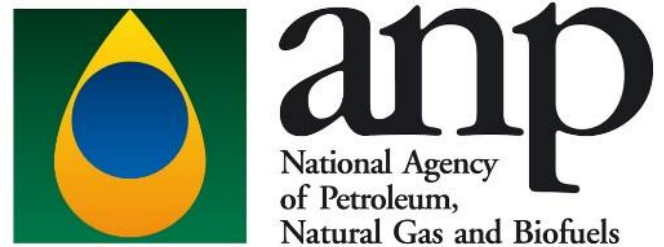
Brazil is the **2nd largest producer and consumer** of biofuels and benefits from a longstanding well-established industry: 80% of our automobiles are flex-fuel.



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**.



A new government program (Fuel of the future) is under development (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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