



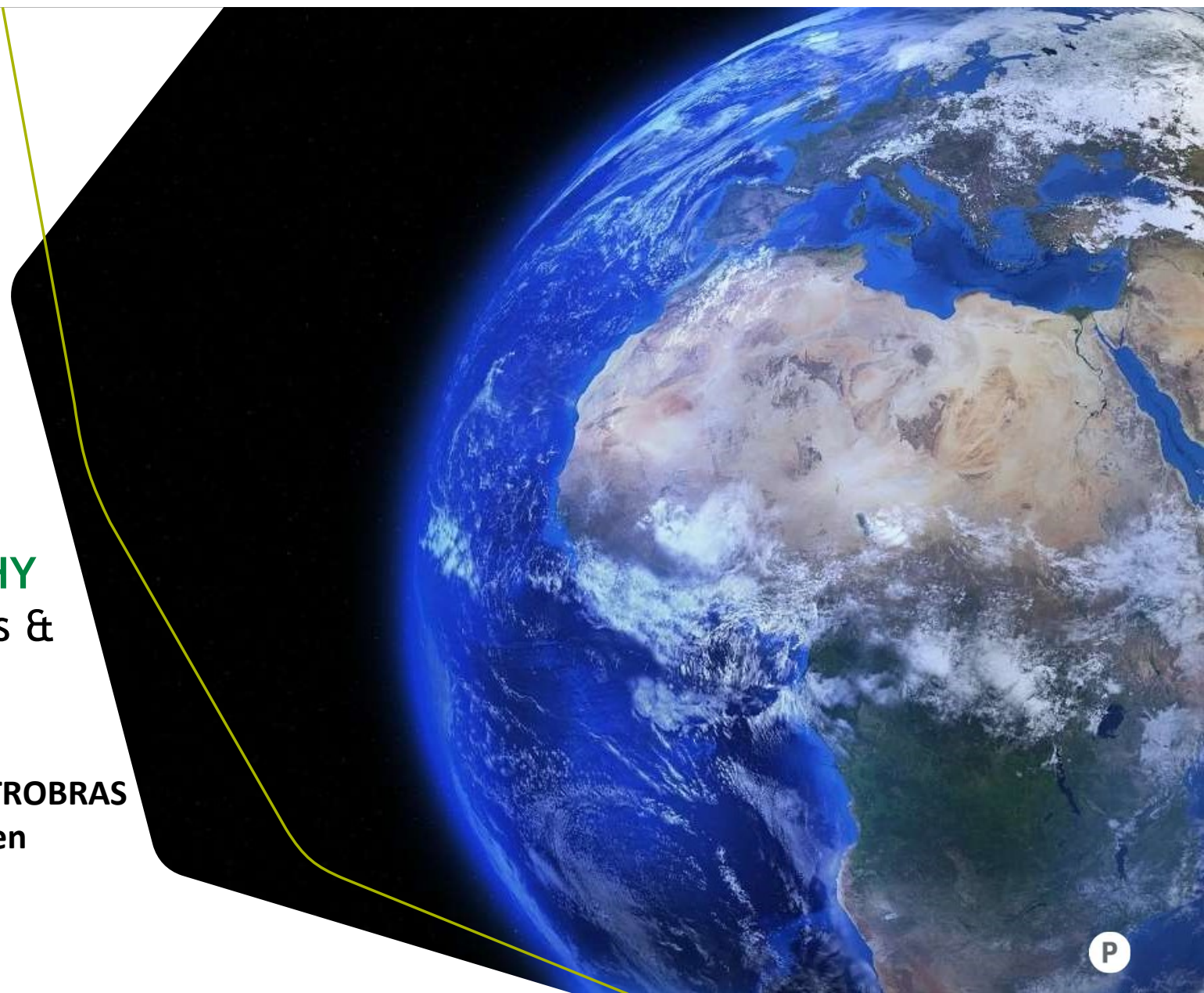
# HIGHLIGHTS OF PETROBRAS 2021-2025 STRATEGIC PLAN

by

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Chief Institutional Relations &  
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FINLAND DELEGATION VISIT TO PETROBRAS  
& Ambassador Jouko Leinonen  
30 September 2021



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The presentation may contain forward-looking statements about future events that are not based on historical facts and are not assurances of future results. Such forward-looking statements merely reflect the Company's current views and estimates of future economic circumstances, industry conditions, company performance and financial results. Such terms as "anticipate", "believe", "expect", "forecast", "intend", "plan", "project", "seek", "should", along with similar or analogous expressions, are used to identify such forward-looking statements. Readers are cautioned that these statements are only projections and may differ materially from actual future results or events. Readers are referred to the documents filed by the Company with the SEC, specifically the Company's most recent Annual Report on Form 20-F, which identify important risk factors that could cause actual results to differ from those contained in the forward-looking statements, including, among other things, risks relating to general economic and business conditions, including crude oil and other commodity prices, refining margins and prevailing exchange rates, uncertainties inherent in making estimates of our oil and gas reserves including recently discovered oil and gas reserves, international and Brazilian political,

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We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information or future events or for any other reason. Figures for 2021 on are estimates or targets.

All forward-looking statements are expressly qualified in their entirety by this cautionary statement, and you should not place reliance on any forward-looking statement contained in this presentation.

In addition, this presentation also contains certain financial measures that are not recognized under Brazilian GAAP or IFRS. These measures do not have standardized meanings and may not be comparable to similarly-titled measures provided by other companies. We are providing these measures because we use them as a measure of company performance; they should not be considered in isolation or as a substitute for other financial measures that have been disclosed in accordance with Brazilian GAAP or IFRS.

### Non-sec compliant oil and gas reserves: cautionary statement for us investors

We present certain data in this presentation, such as oil and gas resources, that we are not permitted to present in documents filed with the United States Securities and Exchange Commission (SEC) under new Subpart 1200 to Regulation S-K because such terms do not qualify as proved, probable or possible reserves under Rule 4-10(a) of Regulation S-X

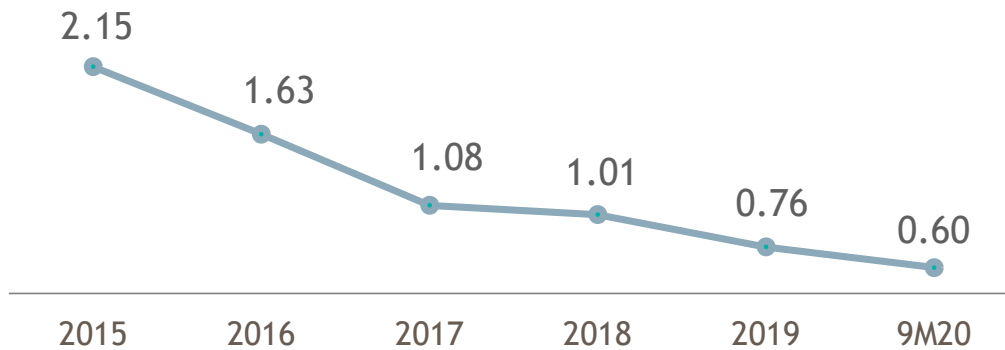


# Safety as priority



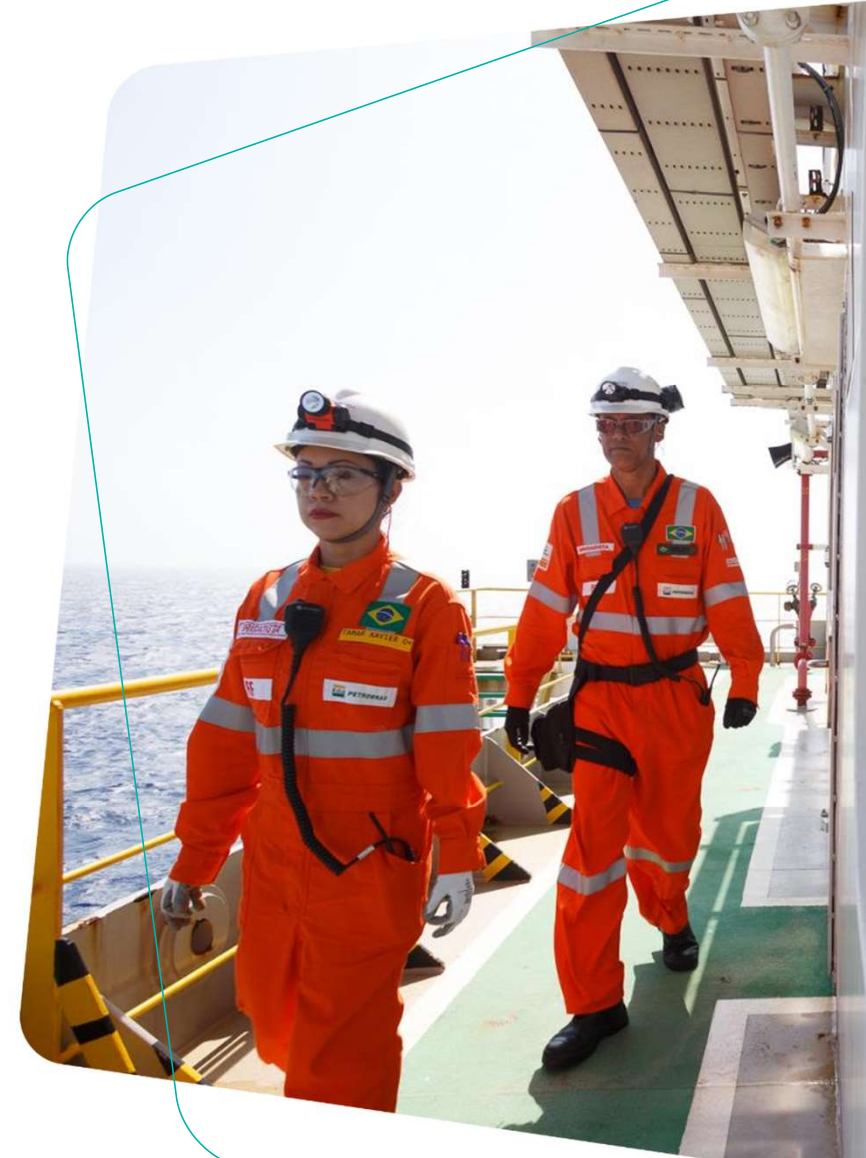
TRI

Total recordable injuries  
per million man-hours



Ambition of zero fatalities

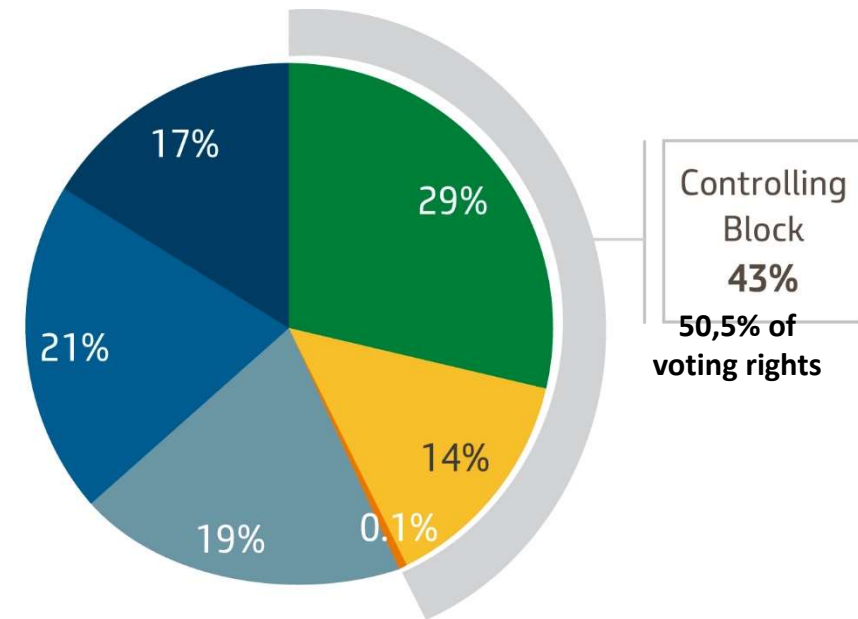
- » Top metric is TRI <1.0
- » Continuous reduction of TRI, with a level significantly below our peer group benchmark



## WHO WE ARE



- 46,000 employees
- World leader in deepwater exploration and production
- Largest publicly traded company in Latin America
- One of the biggest Latin American company(market value)
- Approximately 700,000 shareholders
- Fleet of 130 ships
- Daily oil production: 2,8 boe
- Proved oil reserves: 9,59 billions of barrels (boe)



FEDERAL GOVERNMENT	BNDES/BNDESPar/FPS
CAIXA ECONÔMICA FEDERAL	BRAZILIANS IN B3
FOREIGNERS IN B3	NEW YORK STOCK EXCHANGE

PÚBLICA

# Key messages

PETROBRAS  
DAY<sup>20</sup><sub>19</sub>



Safety as a priority



Active portfolio  
management



Debt reduction and capital  
discipline



Digital transformation

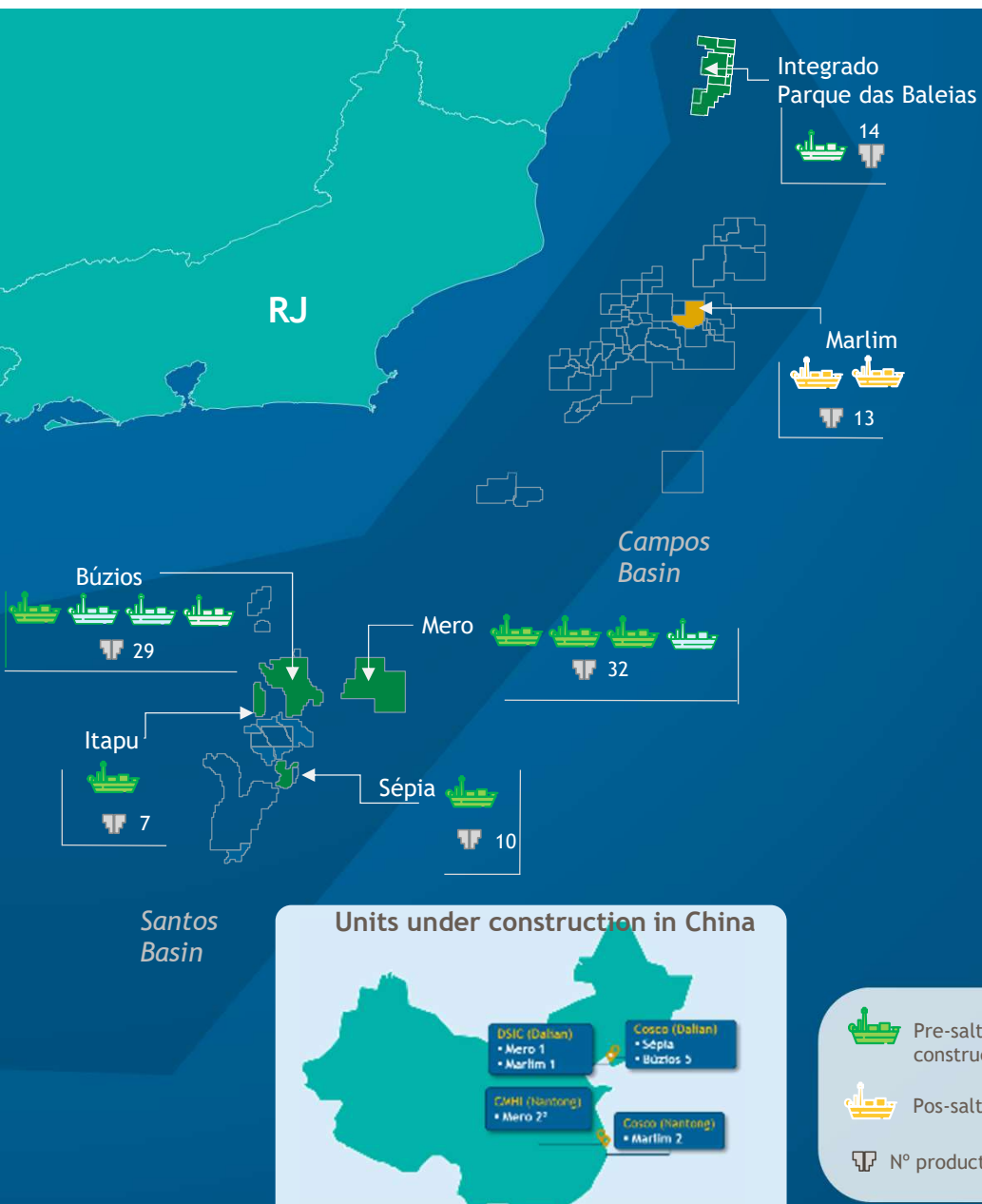


Resilience to low oil prices
















Transition to low-carbon  
economy





## Petrobras is the leader in FPSO projects

6 fields and 13 new FPSOs from 2021 to 2025

2021	2022	2023	2024	2025
 <b>Mero 1 FPSO Guanabara*</b> 180kbpd	 <b>Búzios 5 FPSO Alm. Barroso*</b> 150kbpd	 <b>Itapu P-71</b> 150kbpd	 <b>IPB*</b> 150kbpd	 <b>Búzios 7° P-78</b> 180kbpd
 <b>Sépia FPSO Carioca*</b> 180kbpd		 <b>Mero 2 FPSO Sepetiba*</b> 180kbpd	 <b>Búzios 6 ° FPSO Alm. Tamandaré*</b> 225kbpd	 <b>Búzios 8° P-79</b> 180kbpd
		 <b>Marlim 1 FPSO A. Garibaldi*</b> 80kbpd	 <b>Mero 3 FPSO Mal. Duque de Caxias*</b> 180kbpd	 <b>Mero 4*</b> 180kbpd
		 <b>Marlim 2 FPSO Anna. Nery*</b> 70kbpd		



Pre-salt under construction



Pre-salt under procurement



Pos-salt under construction



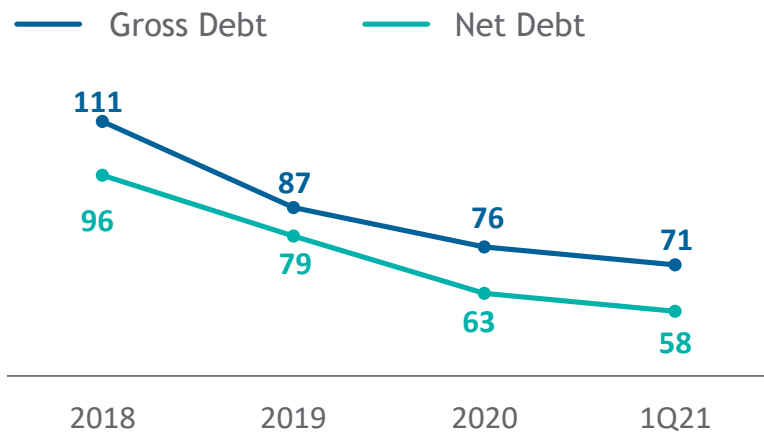
Nº production wells

\* Chartered unit

CAPEX 2021-25: US\$ 17 billion

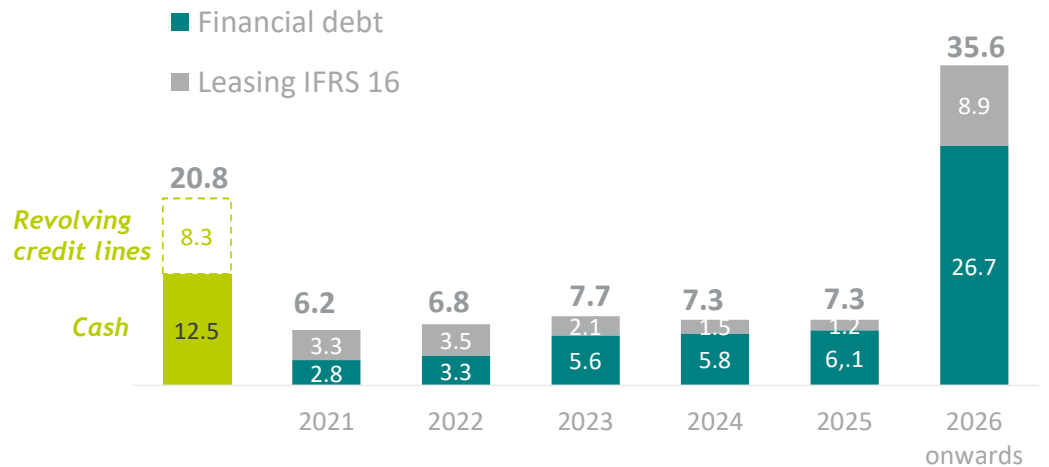
# We continue to reduce indebtedness

## INDEBTNESS\* US\$ billion



In April, additional reduction of US\$ 3.2 billion in gross debt

## AMORTIZATION PROFILE US\$ billion



- » Average debt maturity of 11.84 years
- » Average financing rate of 6.0% p.y

\* As of 2018, amounts include leases



# The largest R&D Center in Latin America

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DAY<sup>20</sup><sub>19</sub>

## CENPES

*Lab of the labs*

*Total area - 308,000 m<sup>2</sup>*

*147 Labs*

*+ 8,000 equipment*

*12 PostDocs, 261 PhDs and  
420 MsCs*

*Largest R&D center in Latin  
America*



# *ESG* Environment and Low Carbon Strategy

# Carbon in our Strategy



Transparency:  
carbon quantified  
in the critical  
processes



Resilience of position  
in fossil in view of low  
carbon transition



Strengthening of  
skills to create value  
in low carbon



Double resilience

Economic  
Low breakeven  
( $< \text{US\$ } 3,5/\text{bbl}$ )



Environmental  
Low carbon

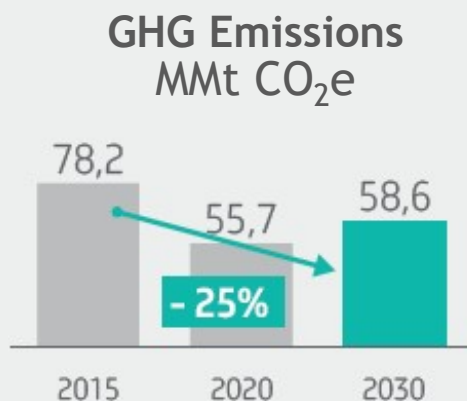


# Carbon performance is an imperative

In a global context that requires a large reduction in greenhouse gas emissions, it is important to prioritize oil and gas that are produced more efficiently, at low cost and with low carbon emissions.

## WE HAVE REDUCED GREENHOUSE GAS EMISSIONS

In 2020, we operated with greenhouse gas emissions below the level of a decade ago, with a total emitted 5% lower than in 2019, consolidating the profile of the decline in our absolute operational emissions for the past few years. We established a target to reduce 25% of our greenhouse gas emissions from our operations by 2030 compared to 2015.



## WE ARE ONE OF THE COMPANIES WITH THE BEST CARBON EFFICIENCY IN OIL EXPLORATION AND PRODUCTION

From 2009 to 2020, we reduced our carbon intensity in the E&P segment by 47%. This means that for every barrel of oil and gas we produce, we emit 47% less greenhouse gases into the atmosphere.

### E&P Carbon Intensity kgCO<sub>2</sub>e/boe produced\*



\*Total wellhead operated production



# Our ten sustainability commitments

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DAY<sup>20</sup><sub>19</sub>



1. Zero growth in absolute operating emissions until 2025<sup>1</sup>
2. Zero routine flaring by 2030
3. 40MM tonCO<sub>2</sub> reinjection by 2025 in CCUS projects
4. 32% reduction in carbon intensity in the upstream segment by 2025
5. 30%-50% reduction in methane emission intensity in the upstream segment by 2025
6. 16% reduction in carbon intensity in the refining segment by 2025
7. 30% reduction in freshwater capture in our operations with focus on increasing reuse by 2025
8. Zero increase in residues generation by 2025
9. 100% of Petrobras facilities with a biodiversity action plan by 2025
10. Investments in environmental and social projects

<sup>1</sup> Carbon commitments related to 2015 base. Other commitments based on 2018

## Slide 12

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**MRdB1**

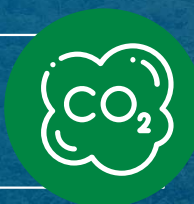
Mariana Rits de Barros; 06/11/2019

# Transition to a low carbon future

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DAY<sup>20</sup><sub>19</sub>

Petrobras production is the second lowest in carbon intensity in the industry

## Actions to decarbonization



- Closed flare deployment
- CO<sub>2</sub> capture and storage
- Leakage and repair monitoring
- Vapor tank recovery
- Energy efficiency

CAPEX for decarbonization  
**US\$ 100 million/year**

## R&D for decarbonization and renewables



- CO<sub>2</sub> capture and storage
- CO<sub>2</sub> subsea separation
- Supercritical CO<sub>2</sub> turbine
- Renewable diesel and bio-jet fuel
- Offshore wind and solar
- OGCI: partnership initiatives

R&D CAPEX  
**US\$ 70 million/year**



# Opportunities in renewable diesel, BioJET and low sulphur bunker



## Renewable diesel and BioJET fuel *Opportunity for co-processing of vegetable oils*

- Attractiveness in a scenario of competition with biodiesel
- Technologies that add value to refining assets and enable routes for the transition to a low carbon economy
- Subject to regulatory approval



## IMO 2020 *Opportunities in Asian, European and US markets*

- Pre-salt oil has low sulphur content
- Refining system producing bunker to meet IMO specs

### Bunker 0.5%

- 2020 potential gain (vs. 2018): ~ **US\$ 1 billion**
- 85% of Petrobras fuel oil production is suitable to produce bunker 0.5%

### Crude Oil

- 2020 potential gains (vc. 2018): + **US\$ 540 million**
- Estimated oil exports for next 12 months: **590 kbpd**

# Innovation for efficiency in GHG emissions

New concepts and technologies aiming emissions reduction

## REINJECTION OF CO<sub>2</sub>

In our pre-salt fields, we have the third largest CO<sub>2</sub> reinjection program in the world.



**7 million tons**

of CO<sub>2</sub>  
reinjecting in 2020



**18% of CCUS\***  
**projects worldwide**

\*Carbon Capture, Utilization  
and Storage

## FLARE GAS RECOVERY SYSTEM

In order to reduce gas consumption in the flare, a safety equipment, our new platforms have a system that safely recovers this gas when flows are small, minimizing greenhouse gas emissions.

## ALL ELECTRIC – FULLY ELECTRIFIED PLATFORM

In this option, the use of electricity in platform equipments is maximized, with a more efficient arrangement and with greenhouse gas emissions up to 20% lower. We are negotiating the use of this concept with regulatory agencies.

## HISEP®

With this technology, patented by Petrobras, and in testing phase, the gas leaving the reservoir is already separated and reinjected, from a system located at the bottom of the sea. With this arrangement, oil production from the field is increased and it is possible to achieve lower greenhouse gas emissions for each barrel of oil produced.

## DIGITAL TRANSFORMATION

We have developed a pilot panel so that each of our operators and managers can evaluate emissions in real time. In test on Santos Basin platforms.

# Beyond Operations

Wide R&D to build on world class opportunities on the low carbon transition.  
Leverage synergies with capabilities and infrastructure.

## Advanced renewable fuels

We will produce a new generation of fuels, more modern, sustainable and with higher quality



### RENEWABLE DIESEL

- It is an advanced biodiesel that reduces by 70% greenhouse gas emissions from its production and use when compared to conventional fossil diesel. This performance is also 15% better than the biodiesel currently sold in Brazil.

- Test phases were successfully concluded and its production on an industrial scale and commercialization as biodiesel are in process of authorization by the ANP.



### AVIATION BIOKEROSENE (BIOQAV)

- Lower greenhouse gas emissions compared to other aviation fuels.
- May be used to meet International Civil Aviation Organization emission reduction targets.

## Forest and climate

Besides investing in emissions reduction of our operations, we voluntarily support 15 projects that recover and conserve natural areas in the Amazon, Atlantic Forest, Cerrado and Caatinga, with the following main accumulated results:

## Voluntary support



**850 thousand tons of CO<sub>2</sub>**  
– estimated potential contribution in carbon fixation and avoided emissions



**100 thousand hectares**  
recovered or conserved by direct actions of the projects



**35 million hectares**  
of Protected Areas with strengthened management (Indigenous Lands and Conservation Units) and sustainable handling



**Over 1.5 million**  
of seedlings produced



**9,700 people**  
directly benefited until the conclusion of the projects



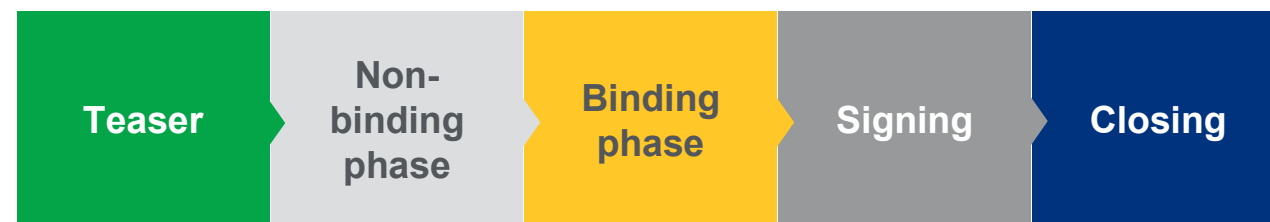
**About 100 partnerships**  
planned, including Universities and Research Institutes







## Divestments with solid governance approved by regulatory bodies and agreements encouraging the entry of new investors



Refining  
market

**8**  
Refineries

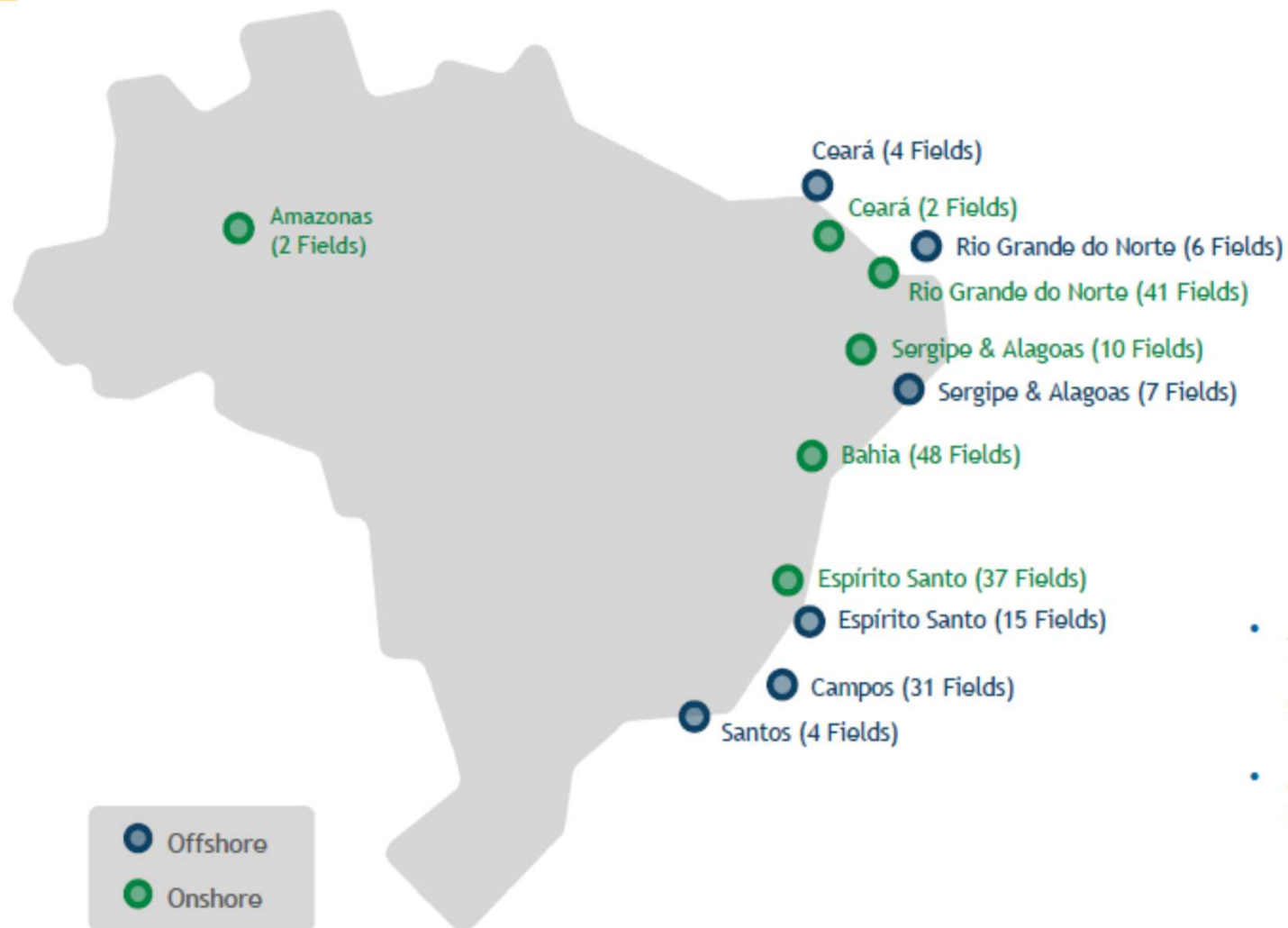
**1.1**  
Capacity  
MMbpd



Gas  
market

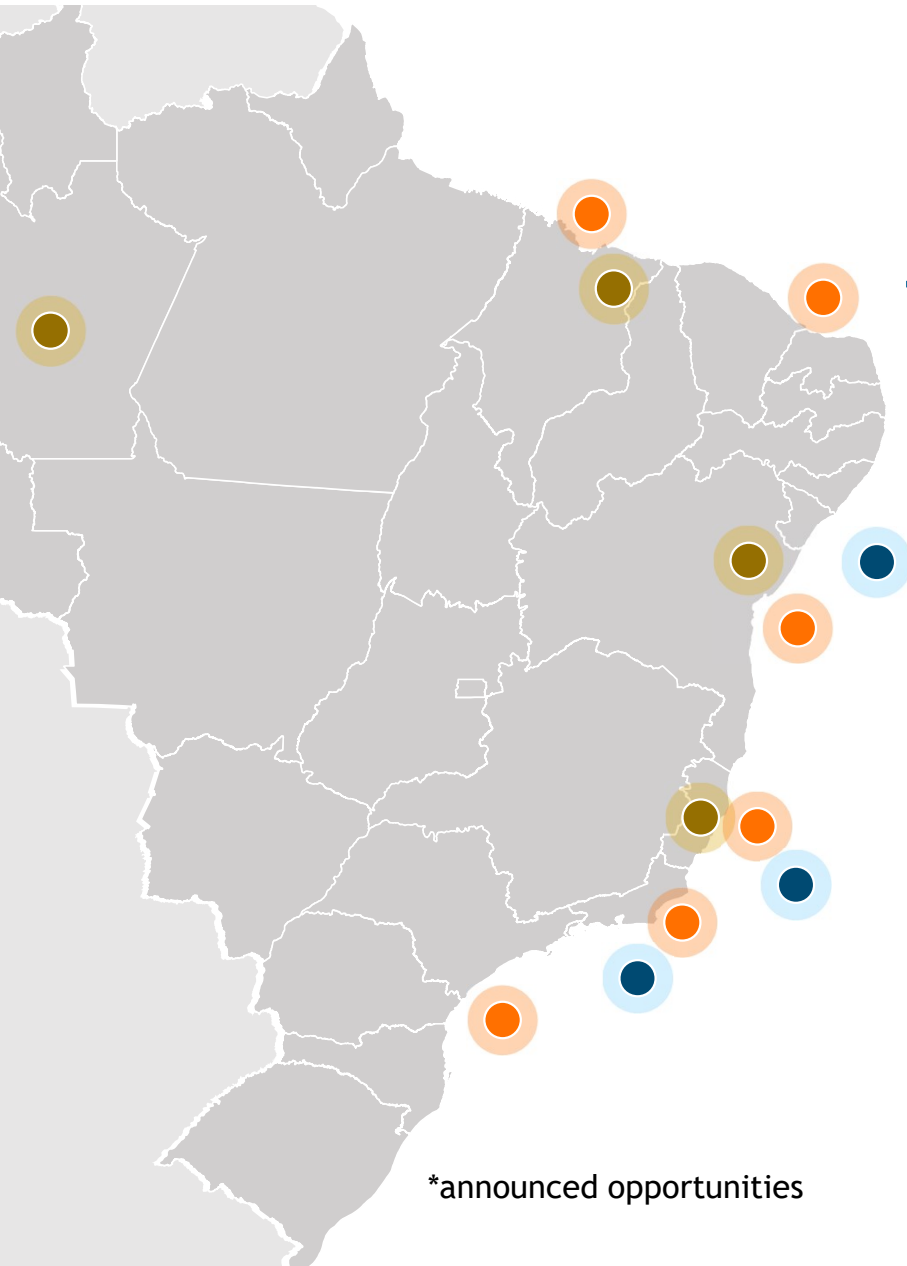
- NTS - 10%;
- TAG - 10%;
- TBG - 51%
- Gaspetro - 51%

## Divestments continue moving forward



- Approximately 70% of our E&P concessions in Brazil, in mature oilfields, onshore and shallow waters, are planned to be divested
- Already announced divestments: <http://www.petrobras.com.br/ir>

## Several opportunities in Brazil's Upstream, attracting investors specialized in onshore, shallow waters and mature fields



### 67 ONSHORE FIELDS

- AM: Urucu Cluster
- BA: Miranga, Recôncavo and Rio Ventura Clusters
- CE: Fazenda Belém Cluster
- ES: Cricaré Cluster

### 19 SHALLOW WATER FIELDS

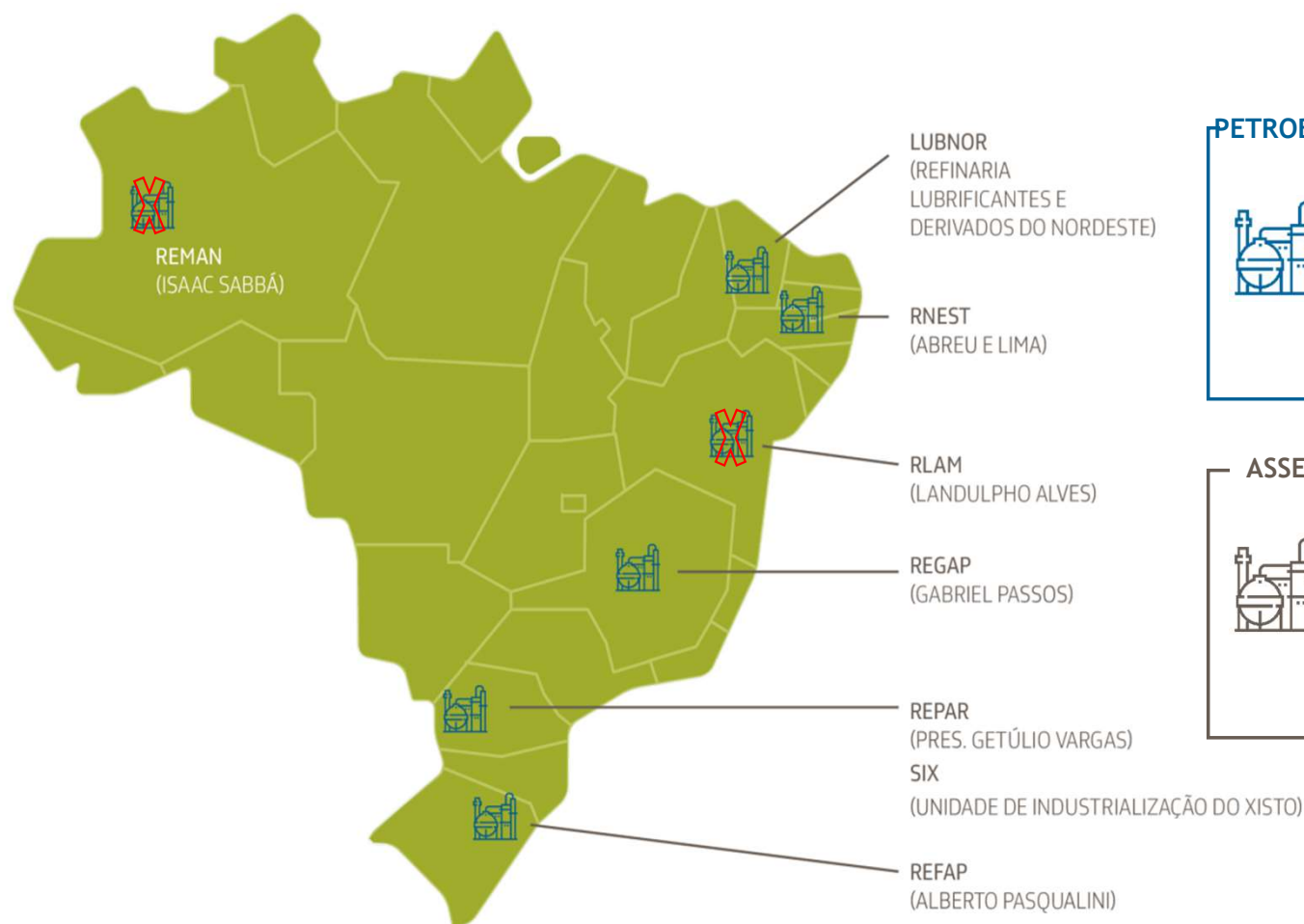
- SP: Merluza Cluster
- BA: Manati Field
- RJ: Garoupa Cluster
- CE: Ceará Cluster
- ES: Peroá Cluster

### 8 DEEP WATER FIELDS

- SE: Sergipe Cluster
- ES: Golfinho and Camarupim Clusters
- RJ: Papa-Terra Field



## And a major divestment in refining, bringing competitive dynamics to Brazilian market



### PETROBRAS CURRENT PORTFOLIO



**13**  
Refineries



**2.2**  
Capacity  
MMbpd

### ASSETS TO BE DIVESTED



**8**  
Refineries



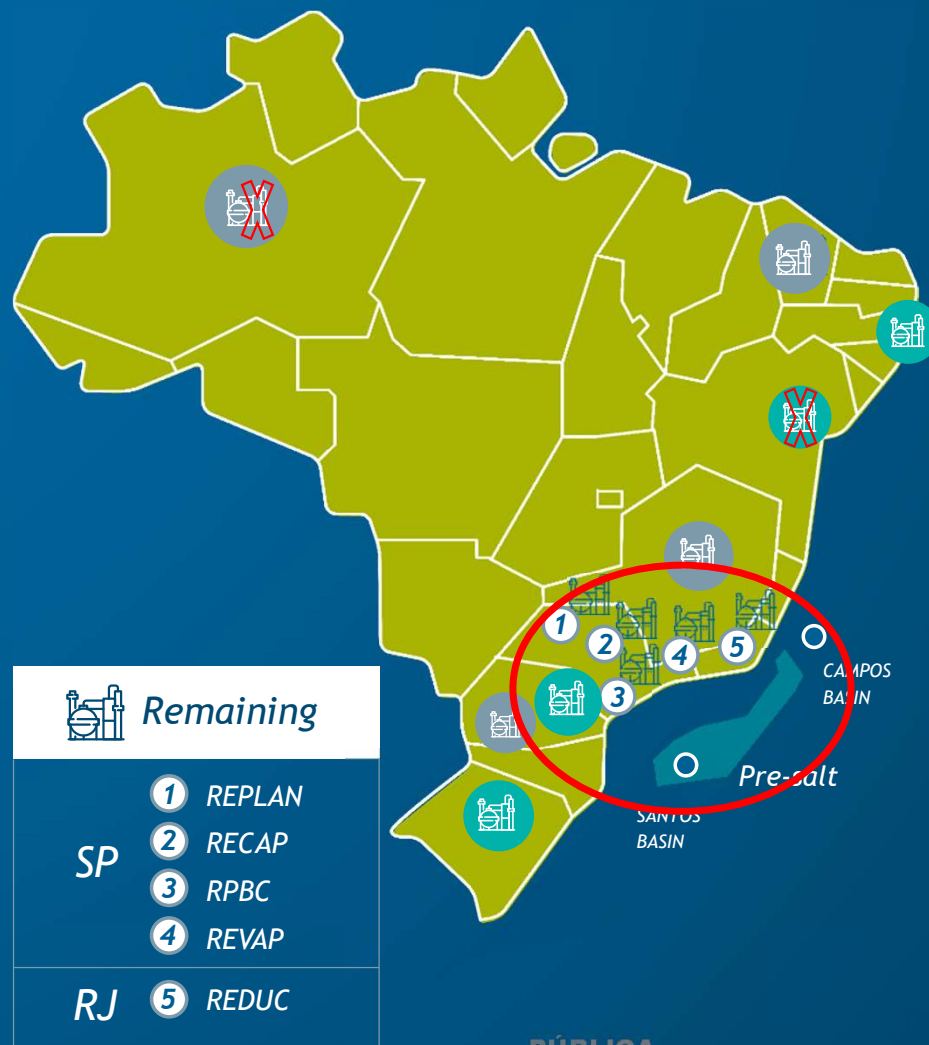
**1.1**  
Capacity  
MMbpd

# Adding competition to downstream

## Divestments of 8 refineries

RNEST, RLAM, REPAR and REFAP

REGAP, REMAN, LUBNOR and SIX



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# Petrobras of the future

## Culture of Value



EVA management system,  
Cultural transformation

## Low Cost of Capital



Sound balance sheet

## Sustainability



High energy low carbon

R&D aimed for the long term

## World-class Assets



### Pre-salt

- Rebuilding exploratory **portfolio**



DT<sup>1</sup>

- **EXP100**: Exploratory risk reduction
- **PROD1000**: Development time reduction
- Industrial automation: increased security and efficiency
- Future opportunities for lower-cost gas

## Efficient & Low-cost Refining



- Capacity of 1.1 MMbpd



DT<sup>1</sup>

- Digital twin: higher operational efficiency
- Augmented reality: increased security and efficiency
- AI<sup>2</sup> applied to asset management
- Digital refinery of the future

## Logistics and Marketing



DT<sup>1</sup>

- Strengthen capabilities for trading of oil, oil products, LPG, natural gas and LNG
- Blockchain
- Logistics 4.0

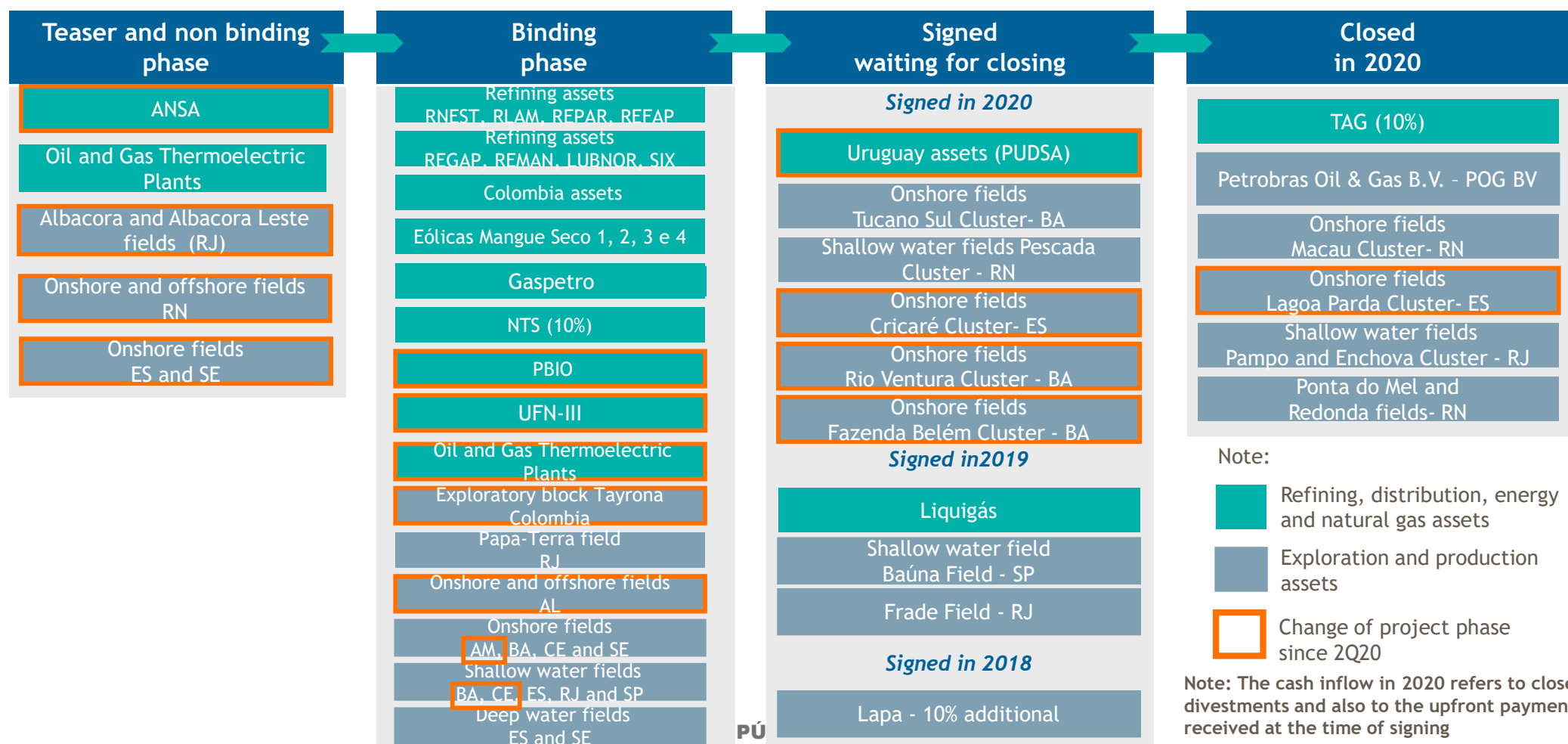
<sup>1</sup> Digital transformation

<sup>2</sup> Artificial Intelligence



# Divestments continue moving forward

Total cash inflow of US\$ 1.0 billion in 2020



# Portfolio Management

*Divestments in 2021 (up to May 11<sup>th</sup>)*



## CLOSINGS

- Frade field
- Mangue Seco Wind Farms 1, 3, 4
- Petrobras Uruguay Distribución (PUDSA)
- BSBios
- 10% of NTS



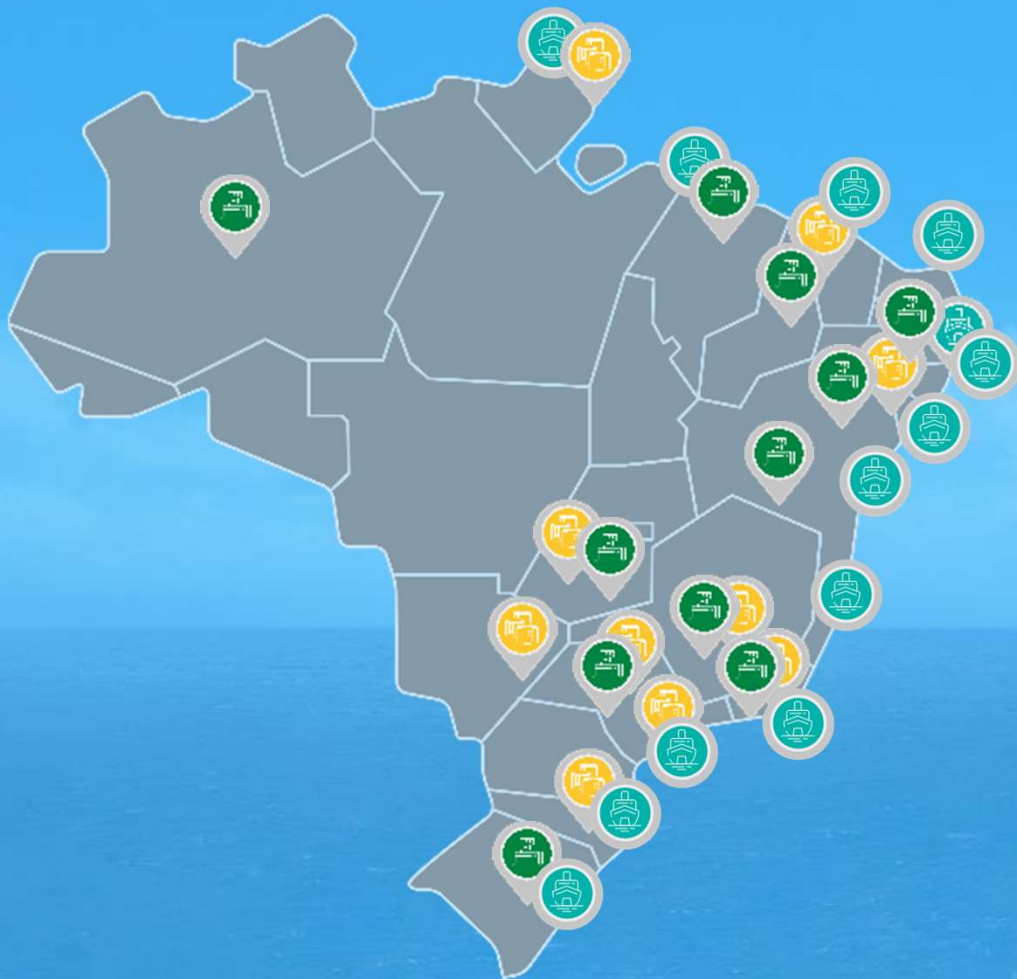
## SIGNINGS

- Mangue Seco Wind Farm 2
- RLAM Refinery
- Peroá Cluster
- Miranga Cluster
- UTEs Camaçari Cluster
- Rabo Branco field

Total transactions value of US\$ 2.5 billion

Cash inflow of US\$ 472 million

# Active portfolio management



## Waterway Terminals

2021

Southeast: 9 terminals  
South: 5 terminals  
Northeast: 7 terminals  
North: 2 terminals

2025

Southeast: 8 terminals  
South: 1 terminal  
Northeast: 1 terminal



## Onshore Terminals

2021

Southeast: 13 terminals  
South: 3 terminals  
Northeast: 3 terminals  
Midwest: 2 terminals

2025

Southeast: 13 terminals  
Midwest: 2 terminals



## Pipelines

2021

Southeast: 84 pipelines  
South: 9 pipelines  
Northeast: 58 pipelines  
North: 18 pipelines  
Midwest: 6 pipelines

2025

Southeast: 82 pipelines  
Midwest: 6 pipelines



# PETROBRAS

<https://www.investidorpetrobras.com.br/en>



**THANK YOU!!**  
**OBRIGADO!!**  
**KIITOS!**

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