

# 2<sup>nd</sup> quarter 2023 Performance

Webcast  
August 4, 2023

FPSO Almirante Barroso  
1<sup>st</sup> oil in May 2023



# Disclaimer

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, economic and social developments, receipt of governmental approvals and licenses and our ability to obtain financing.

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 2Q23 on are estimates or targets.

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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.

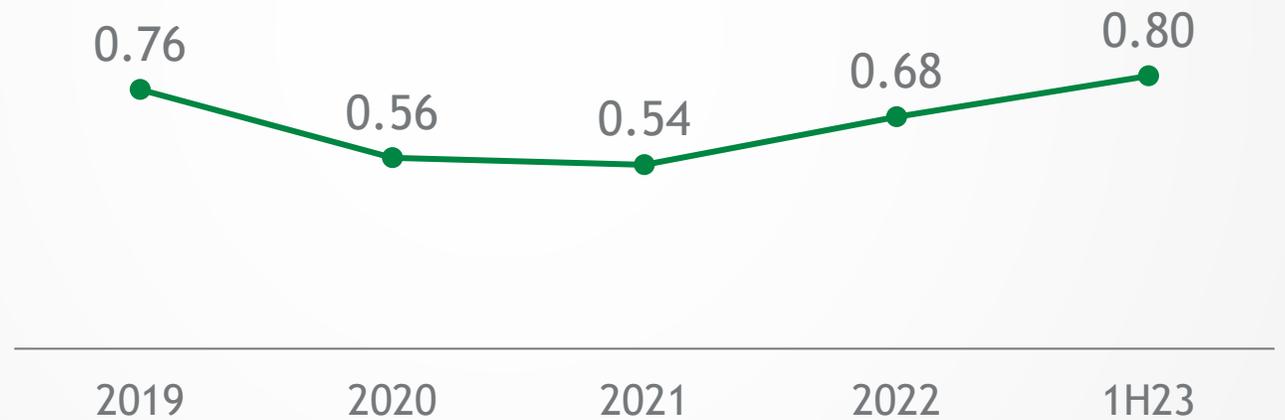


# Safety as a value



TIR

*Total recordable injuries per million man-hours*





# *Financial Highlights*

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# Financial highlights in 2Q23

## Robust Recurring EBITDA

US\$ 11.7 billion

## Consistent OCF

US\$ 9.6 billion

## Net debt /EBITDA

0.74 x

## ROCE

12.8%

## High Net Income

US\$ 5.8 billion

## FCF

US\$ 6.7 billion

## Taxes paid

R\$ 56.1 billion

## Dividends paid

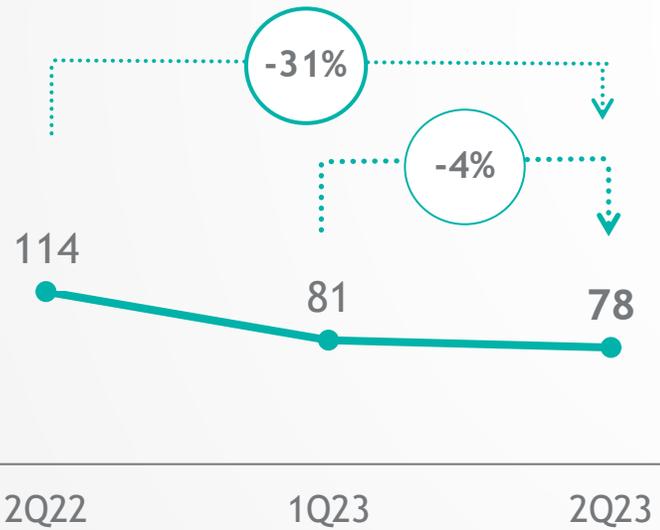
US\$ 6.2 billion dividends<sup>1</sup>, cash maintained at US\$ 15.8 billion

<sup>1</sup> First and second installments of the proposed dividends for the 4Q22 results, paid on 05/19 and 06/16/2023

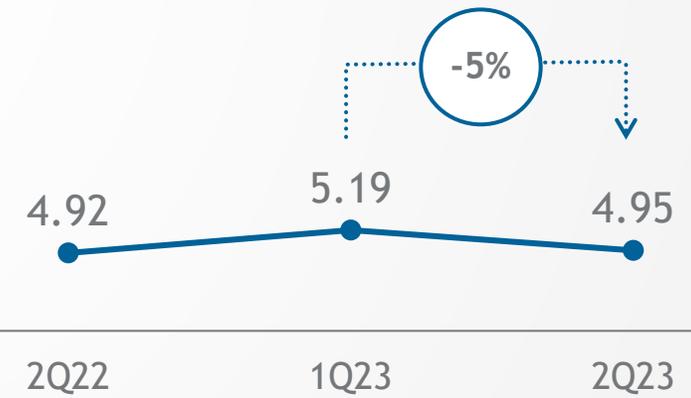
OCF = Operational Cash Flow · FCF = Free Cash Flow

# External environment

BRENT  
US\$/bbl

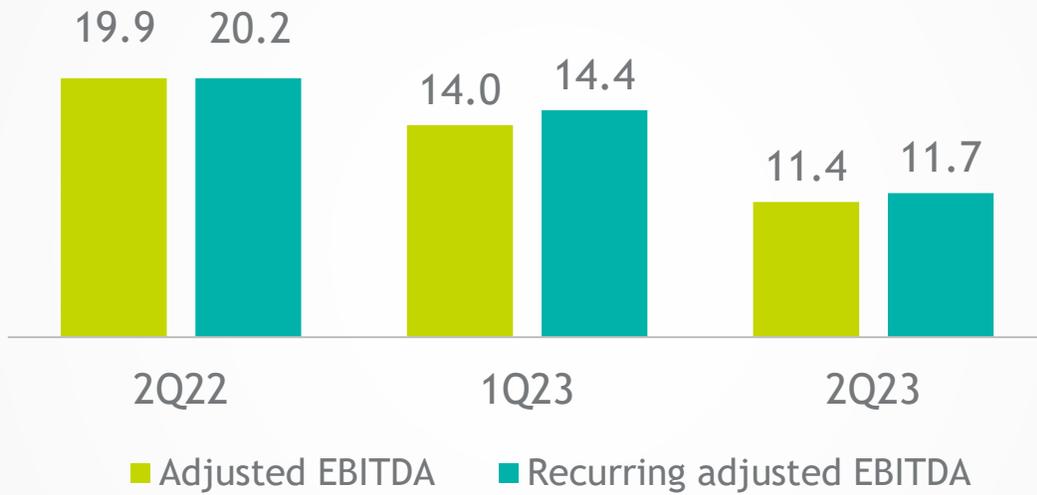


EXCHANGE RATE  
R\$/US\$ - Average exchange rate



# EBITDA

US\$ billion



<b>BRENT</b> (US\$/bbl)	114	81	78
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- > Due to the devaluation of Brent, a drop of more than 40% in international diesel crack spreads, lower oil exports and increased LNG imports.

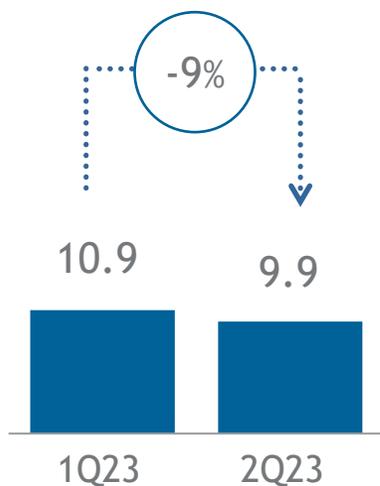


# EBITDA per business segment

Ajusted EBITDA  
US\$ billion



## Exploration & Production

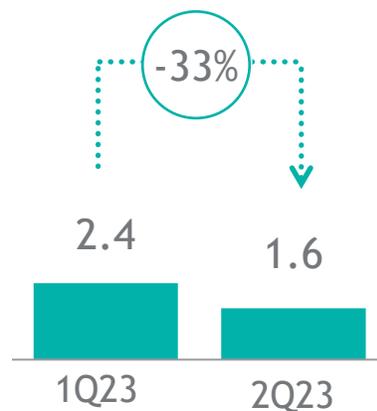


- EBITDA reflects the drop in Brent and higher tax expense related to taxes on oil exports



## Refining, Transportation & Marketing

■ EBITDA with inventory turnover ■ EBITDA at replacement cost



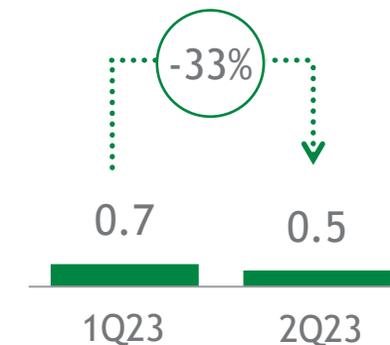
- Due to the more than 40% drop in international diesel crackspreads, mitigated by the lower inventory turnover effect as a result of the lower Brent variation



- Drop of more than 40% in international diesel crackspreads



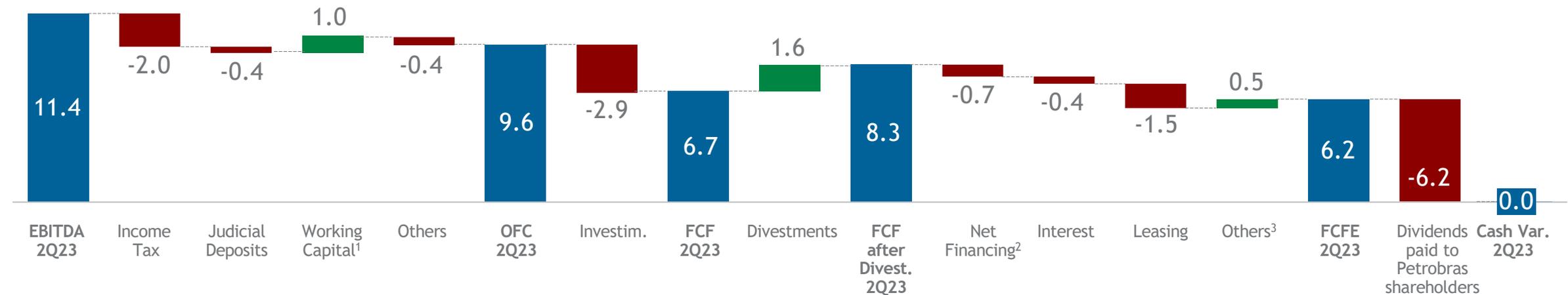
## Gas and Power



- Lower EBITDA mainly due to higher LNG volumes as a result of the reduction in Bolivian gas

# Strong cash Generation

## EBITDA x OCF x FCF x FCFE CONCILIATION US\$ billion



- › OCF impacted mainly by payment of income taxes, mitigated by the positive effect of working capital, especially the reduction of accounts receivable.
- › **Divestments:** mainly Potiguar Cluster (US\$ 1.1 billion) and Norte Capixaba Cluster (US\$ 0.4 billion).
- › **Liability Management:** amortization of US\$ 0.7 billion over 2Q23.
- › **Dividends:** payment of US\$ 3.7 billion in May/23 and US\$ 2.5 billion in June/23, relative to the first and second installments of the complementary dividends for the year 2022.

<sup>1</sup> Accounts receivable, inventory and suppliers

<sup>2</sup> Includes funding, amortizations, prepayments and goodwill on securities repurchases

<sup>3</sup> Includes dividends received, participation of non-controlling shareholders, investments in securities and exchange variation on cash

OCF = Operational Cash Flow

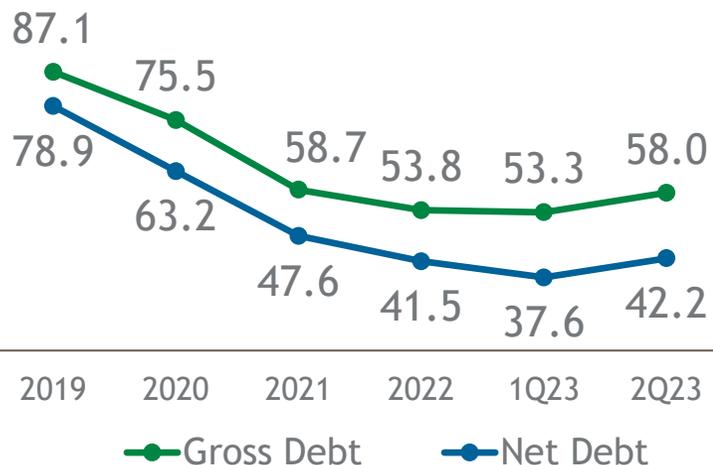
FCF = Free Cash Flow

FCFE = Free Cash Flow to Equity

# Debt trajectory

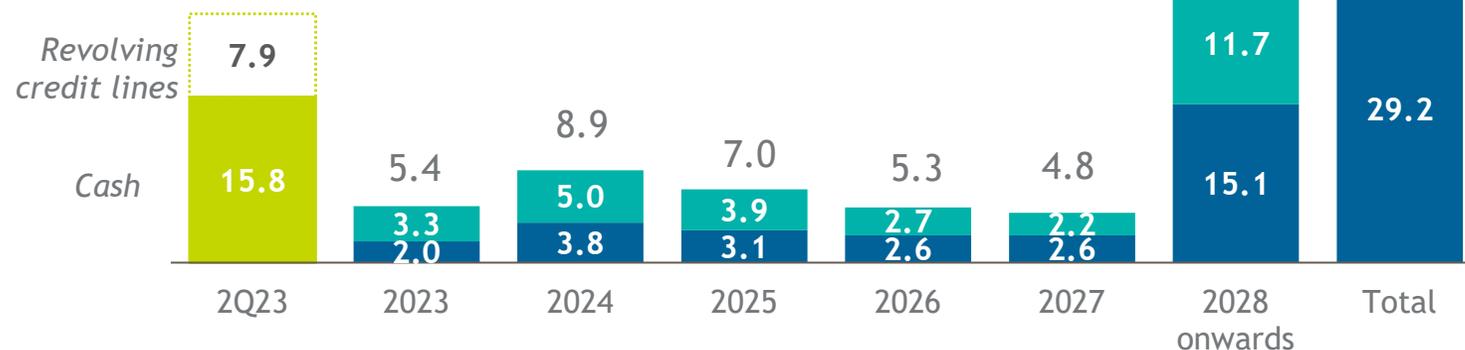
## INDEBTNESS

US\$ billion



## AMORTIZATION PROFILE

US\$ billion



- > Average Debt maturity of 12.12 years
- > Average financing rate of 6.6% p.y.

Leasing  
Financing

- > Gross debt under control at US\$ 58 billion, even after the increase in leases due to the startup of chartered FPSOs Anna Nery and Almirante Barroso.
- > Reduction of financial debt by US\$ 0.6 billion, reaching US\$ 29.2 billion on 06/30/2023.



Gross debt remains within the range defined in the Strategic Plan

# Portfolio management



Petrobras' Portfolio Management involves partnerships, acquisitions and divestments



Unsigned divestments remain under evaluation.



Closing of the sale of projects that had already been signed<sup>1</sup>:

- Albacora Leste fields - RJ (1Q23)
- Norte Capixaba Cluster - ES (2Q23)
- Potiguar Cluster - RN (2Q23)

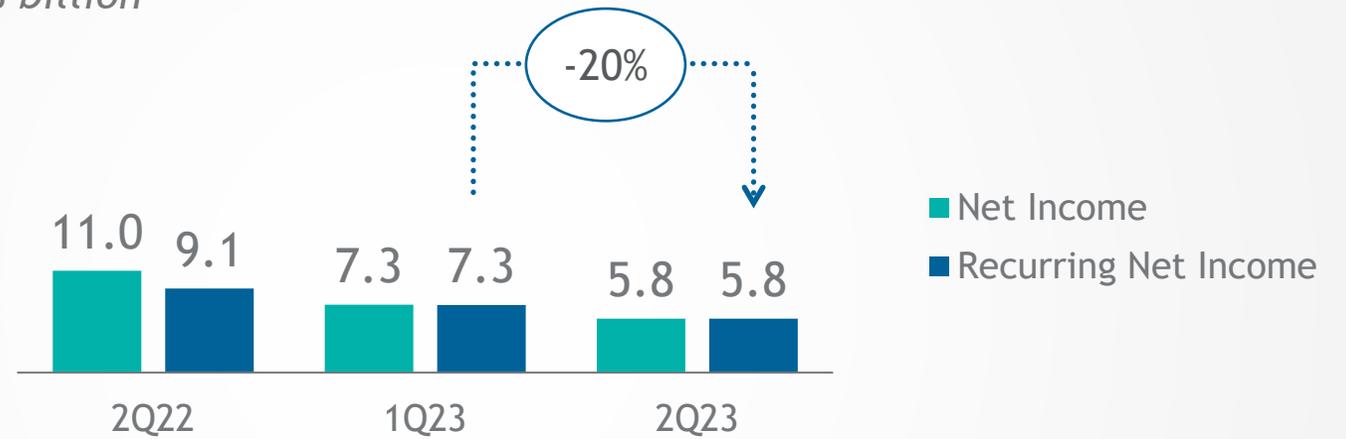
Total cash inflow by June 2023<sup>1</sup>: US\$ 3.5 billion

<sup>1</sup> Source: Financial Statements 2Q23



# Net result

2Q23 x 1Q23  
US\$ billion



- › Brent devaluation
- › Drop of more than 40% in international diesel crackspreads
- › Higher operating expenses, mainly reflecting higher impairment expenses (-US\$ 0.4 billion) and higher tax expenses (-US\$ 0.1 billion).

# Return to society: R\$ 56.1 billion in taxes in the 2<sup>nd</sup> quarter

54%<sup>1</sup> of cash generation returned to society



<sup>1</sup> Taxes and government take paid to the Federal Government, States and Municipalities divided by Cash Flow from Operations + taxes and government take paid

Note: values presented on a cash basis



# Improving the Shareholder Remuneration Policy

On 28/07/2023, the Board of Directors approved the improvement of the Shareholder Remuneration Policy, including the possibility of share buybacks

-  **PERCENTAGE OF THE FORMULA**  *Change in formula percentage from 60% to 45%.  
**Remuneration to shareholders = 45% x Free Cash Flow***
-  **INCLUSION OF SHARE BUYBACKS**  *Principles of the Policy now include:*
  - *Share buybacks as a possibility to remunerate shareholders.*
  - *Commitment to the cancellation of repurchased shares.**Amounts related to buybacks should be deducted from total.*
-  **ACQUISITION OF PARTICIPATIONS**  *Inclusion of equity acquisitions in the formula in order to maintain investment capacity.*
-  **FORMULA PERIODICITY**  *The formula will be applied, each quarter, on the Company's consolidated cash flows for the respective quarter.*
-  **GROSS DEBT REFERENCE**  *Replacement of references to specific figures by the words "maximum level of indebtedness defined in the Strategic Plan".*

# Remuneration to Shareholders 2Q23

## Dividends and Interest on capital approved

*The Board of Directors approved the following distribution of dividends and interest on capital related to the 2Q23 results, based on the improved Policy:*



### REMUNERATION

R\$ 1.15 per share

Base Data: 08/21/2023



### PAYMENT

**1<sup>a</sup> Parcel on 11/21/2023**

- Interest on capital: R\$ 0.37 per share
- Dividend: R\$ 0.21 per share

**2<sup>a</sup> Parcel on 12/15/2023**

- Dividend: R\$ 0.57 per share



### PREMISES

- Commitment to distributing the results generated
- Financial sustainability of the Company
- Capital discipline, optimization of cash allocation and management of liabilities

# Share buyback program

*Demonstrates management confidence and commitment to strategic plan execution, capital discipline and market pricing*

- *First buyback program after improvement of Shareholder Remuneration Policy*
- ***157.8 million** preferred shares (PETR4), representing around **3.5%** of the Free Float of this class of shares*
- *Term: 12 months*
- *Comprises, together with Dividends, remuneration to shareholders according to current policy*



# *Corporate Highlights*





# Highlights



## FULL ATTENTION TO PEOPLE > *To create a healthy and diverse working environment with respect and welcoming*

- Creation of management structure for diversity, Equity and Inclusion
- Petrobras Program against Sexual Violence and Structuring of the Reception Channel for victims of violence at work
- Implementation of the organizational well-being structure focused on tackling violence at work
- Creation of the Mental Health coordination
- Signature of the term of adhesion to the Mind in Focus Movement of the UN Global Compact in Brazil
- Actions to rebuild the workforce and review transfers.
- 783 new employees in 1H23



## RESPECT FOR THE ENVIRONMENT > *To build a more sustainable world*

- Issuance of Installation License for the Asphalt Temperature Reducing Additive System at REVAP, with energy efficiency gains of up to 35% and sustainability.
- Sustainable disposal of floating vessels, promoting the implementation and practices of ESG in the decommissioning processes (green disposal of floating platforms at Petrobras).



## FOCUS ON RESULTS > *Solutions for business*

- Implementation of industrial wireless sensing: wireless sensors to measure temperature, noise and vibration of equipment in the automation plant, connected to the wireless network (LTE - Long Term Evolution) at P-77. A value delivery of CENPES portfolio, with integrated performance with several areas of the company.

# Governance and Compliance

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**GOVERNANCE** - We released the 2023 Annual Public Policy and Corporate Governance Letter 2023.



**COMPLIANCE** - With a focus on awareness and sensitization on the theme "Prevention of Discrimination, Moral Harassment and Sexual Violence", face-to-face and online training was carried out for the workforce and leaders. Twenty-nine lectures were held, reaching an audience of approximately 4,800 professionals from the administrative and operational areas, including Petrobras and Transpetro.



**INC** - Centralization in the Corporate Integrity area of the process of investigating cases of sexual violence, with the deadline for completion set at 60 days.



# Responsabilidade Social



- Training 100% of employees in human rights by 2025
- Due diligence process manual of human rights, with the goal of verifying 100% of operations by 2025
- Affinity groups to increase equity and inclusion in the workforce
- Fighting discrimination and harassment and promoting diversity
- Local social responsibility and community relations plans

## Publication of the Sustainability Report (data 2022)



Direct contributions to society of approximately  
**R\$ 900 million**

R&D for biodiversity, water management of effluents and waste  
**R\$ 95 million**

Environmental Compensation Fund  
**R\$ 66.5 million**

<b>R\$ 32 million</b> cultural and sports projects	<b>R\$ 462 million</b> mandatory social and environmental programs
<b>R\$ 272 million</b> donations	<b>R\$ 121 million</b> voluntary social and environmental projects

In 3 years, there has been a reduction in fresh water withdrawal  
**20%**

and reduction the generation of process residue  
**18%**

# *Highlights in Energy Transition and Sustainability*

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We have approved the new Natural Gas commercial policy and have already signed contracts for supply with Comgás, Copergás and SCgás

**25%**  
of the market  
re-contracted from 2024  
onwards in the new policy

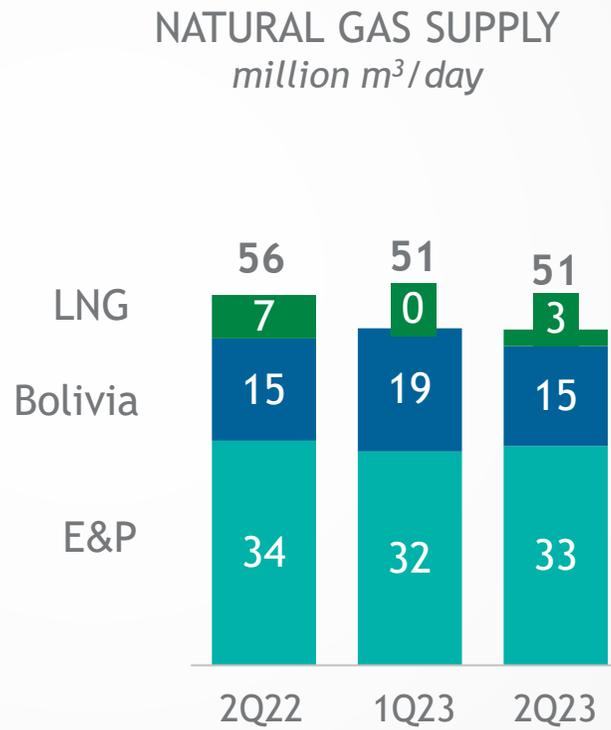
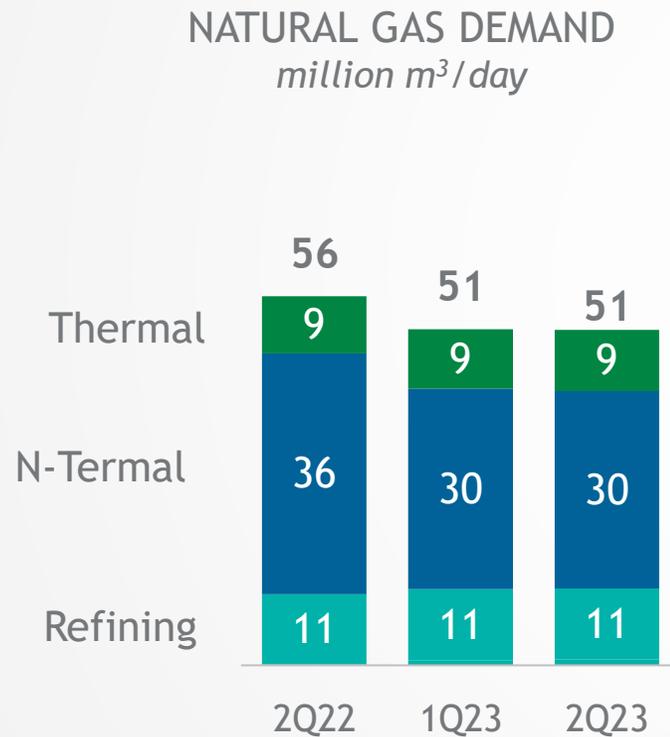
**R\$75 billion**  
Amount of new  
contracts



### Petrobras Safety and Reliability Flexibility for Customers

- 1 Contractual horizon**  
*Greater diversity, with options from 4 to 11 years (2034)*
- 2 Starting date**  
*Product options as of 2024 and 2026*
- 3 Indexes for commodity price**  
*Brent and Henry Hub indexed product options*
- 4 Natural gas delivery location**  
*Products with HUB or City-Gate delivery*

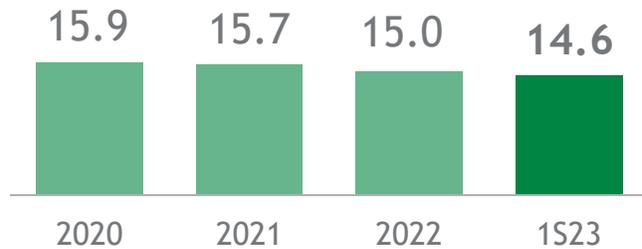
# Stability in natural gas market supply



# Emission indicators

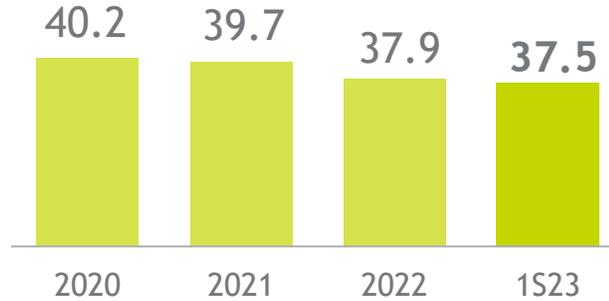
We remain on track to improve efficiency

E&P CARBON INTENSITY\*  
E&P PORTFOLIO  
kgCO<sub>2</sub>e/boe produced



› The rates in the Tupi and Búzios fields are 10.1 and 10.2 kgCO<sub>2</sub>e/boe, respectively.

REFINING CARBON INTENSITY  
kgCO<sub>2</sub>e/CWT\*\*



› The rate at our largest refinery, REPLAN, is 31.7 kgCO<sub>2</sub>e/CWT.

CARBON INTENSITY THERMOELECTRIC  
tCO<sub>2</sub>e/MWh



CARBON INTENSITY

2025  
↓  
2030

E&P 15 kgCO<sub>2</sub>e/boe

REFINING 36 kgCO<sub>2</sub>e/CWT

E&P 15 kgCO<sub>2</sub>e/boe

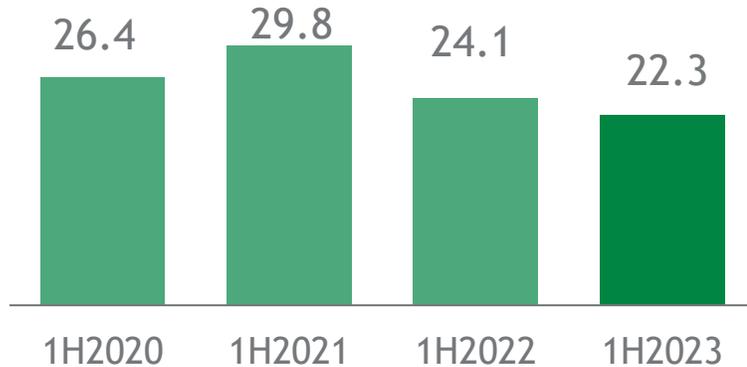
REFINING 30 kgCO<sub>2</sub>e/CWT

\* From 2023 onwards, we started to monitor the performance of the E&P segment through 3 metrics: The IGEE-E&P of units deployed is the top metric, with a target in 2023 of 15.04 kgCO<sub>2</sub>e/boe and an accumulated result of 13.9 in 2Q23. The IGEE-E&P of New Units under implementation is presented as a target in the scorecard of selected executives. The IGEE-E&P Portfolio is the combination of both indicators and is related to our history and commitment to sustainability.

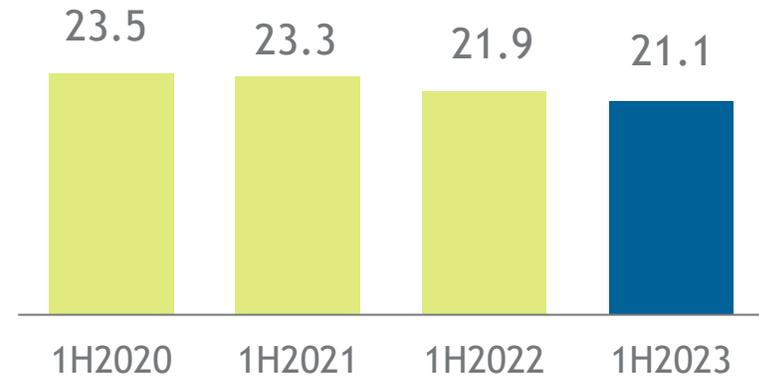
\*\* The CWT (Complexity Weighted Tonne) of a refinery considers the potential CO<sub>2</sub> emission, in equivalence to distillation, for each process unit. The target for 2023 is 37.8 kgCO<sub>2</sub>e/CWT.

# Absolute Emissions

TOTAL OPERATIONAL EMISSIONS\*  
MM tCO<sub>2</sub>e



O&G OPERATIONAL EMISSIONS \*  
(excludes electricity dispatches)  
MM tCO<sub>2</sub>e



*The low thermoelectric dispatch and implementation of efficiency and loss reduction actions in the operating segments were vectors for lower GHG emissions.*



*Absolute operational O&G emissions are on a downward trajectory, consistent with our ambition of long-term emissions neutrality.*

\* Consider emissions related to Scopes 1 and 2, and include all operated assets

## Highlights in Climate and decarbonization of operations

(scopes 1 and 2)



**We achieved the lowest rate of GHG emissions in Refining in June since the beginning of the measurement (2019).**

The outcome (36.7 kgCO<sub>2</sub>e/CWT) is the result of investments in energy efficiency under the RefTOP program and emissions management at refineries.



**We signed the 1<sup>st</sup> charter contract for a hybrid support vessel (batteries and marine fuel)**

The vessel will use batteries assisting the main engines and will be deployed by October 2024, potentially reducing GHG emissions of around 15%.



**100% renewable electricity purchased**

We have obtained international certificates (I-REC: Renewable Energy Certificate) that guarantee that 100% of the electricity purchased for our operations in Brazil in 2022 was generated by renewable sources.



**We invested R\$ 200 million in new gas treatment systems at Replan and Refap**

In June and July, the new gas treatment systems started operating to reduce particulate emissions into the atmosphere

## Products with a lower carbon footprint

(scope 3)



**We will expand diesel production capacity with renewable content by 2023**

In the 2<sup>nd</sup> quarter we received authorization from ANP to operate another co-processing unit at REPAR, expanding potential production capacity from the current 5 million liters per day to up to 12.3 million liters per day.



**We signed a cooperation agreement for the generation of petrochemical products and fuels of entirely renewable origin at the Riograndense Oil Refinery**

The partnership involves (Petrobras, Braskem and Ultra) and the first industrial test of the technology developed by the Research and Development Center (Cenpes) is scheduled for November 2023.



**First test with 24% renewable content marine fuel**

Considering the full life cycle of the product, the expected GHG emissions reduction is 17%.

A large FPSO vessel, the Almirante Barroso, is shown in the ocean. The vessel is a dark-hulled ship with a complex network of steel structures, including a tall crane on the left side. The sky is blue with scattered white clouds. In the distance, another smaller FPSO vessel is visible on the horizon.

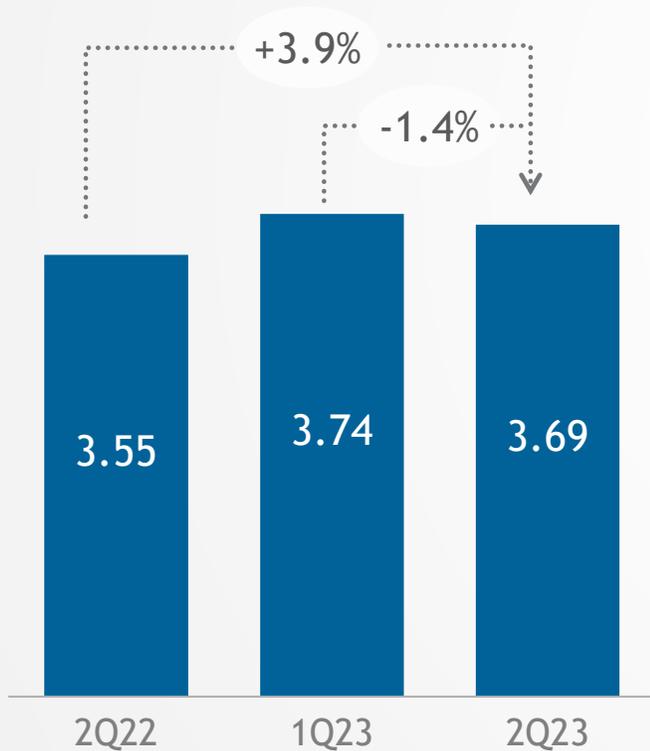
# *Exploration & Production Highlights*

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*FPSO Almirante Barroso,  
in Búzios field  
1<sup>st</sup> oil in May, 31<sup>th</sup>*

# 4% increase on the Operated Production in comparison with 2Q22, and quarterly record on the Pre-salt

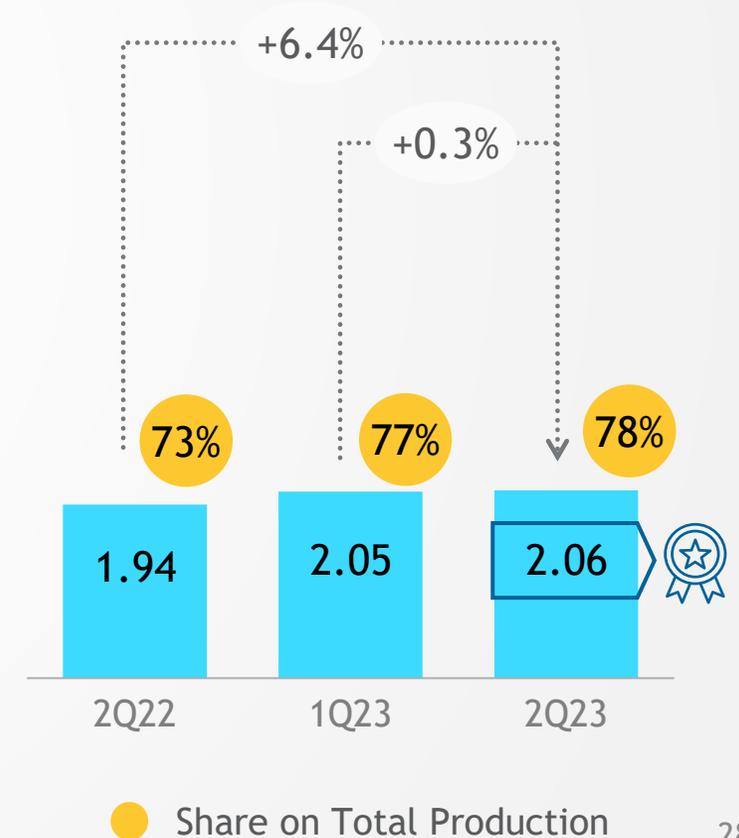
TOTAL OPERATED PRODUCTION  
*million boed*



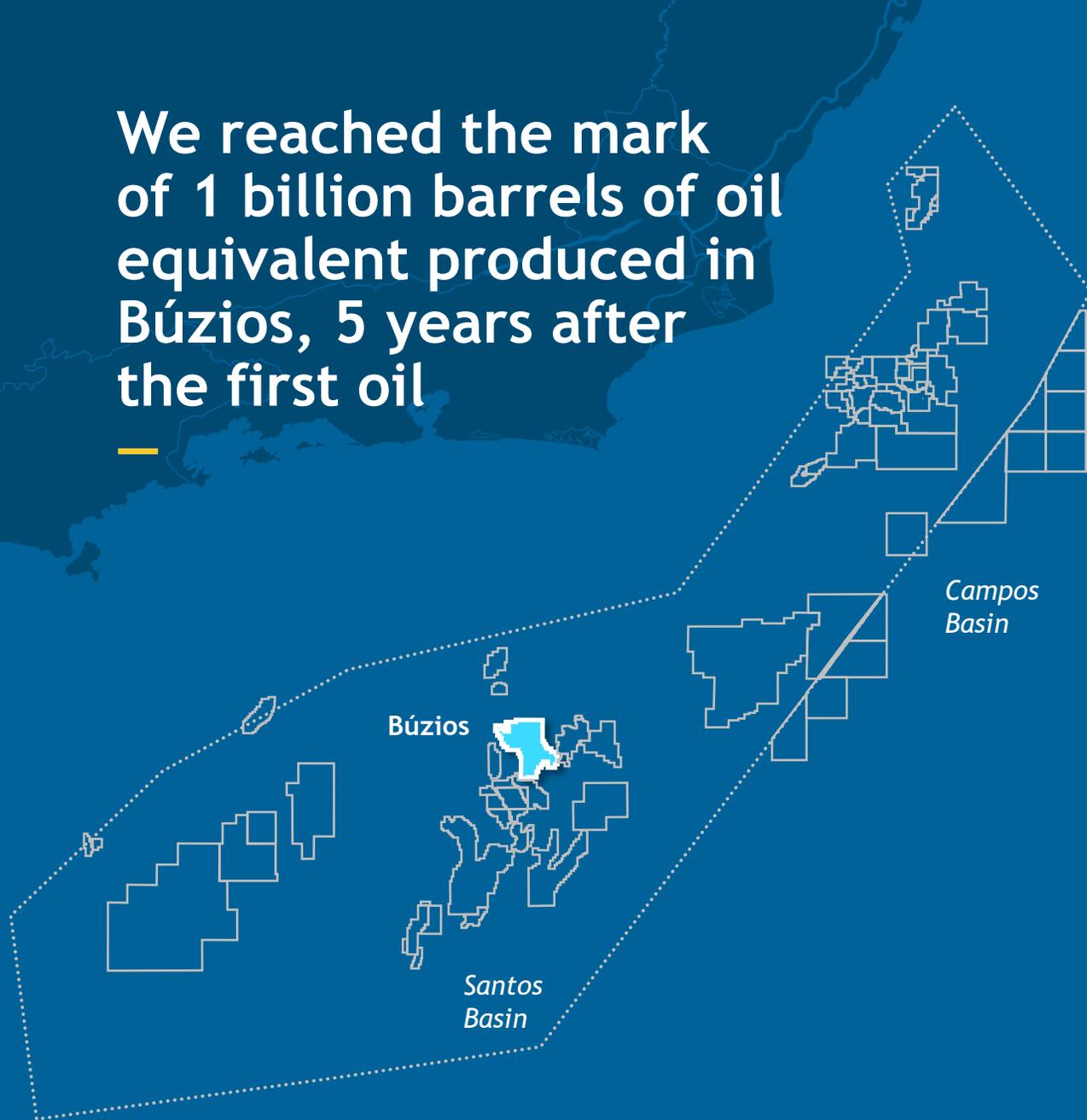
OIL AND GAS OWN PRODUCTION  
*million boed*



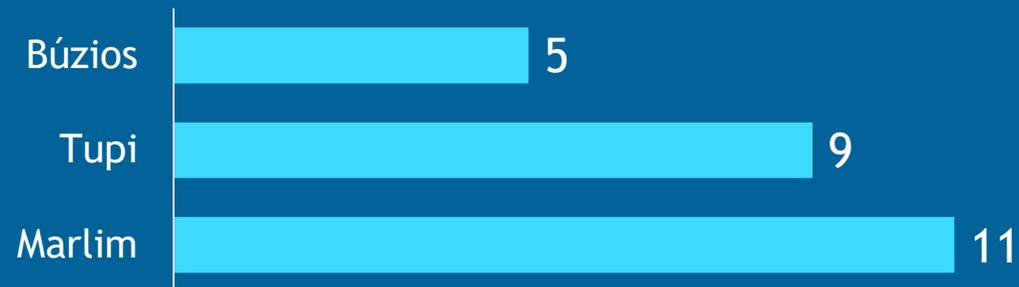
PRE-SALT OWN PRODUCTION  
*million boed*



We reached the mark of 1 billion barrels of oil equivalent produced in Búzios, 5 years after the first oil



Time to reach accumulated production of 1 billion boe (years)



### QUARTER HIGHLIGHTS

1<sup>st</sup> oil of FPSO Almirante Barroso, 5<sup>th</sup> unit operating in the field

Monthly record of operated production in the Búzios shared deposit (jun/23)

Oil and NGL: 635 kbpd

Total Production: 802 kboed

# We have resumed production in all 38 facilities of the Bahia Terra Cluster



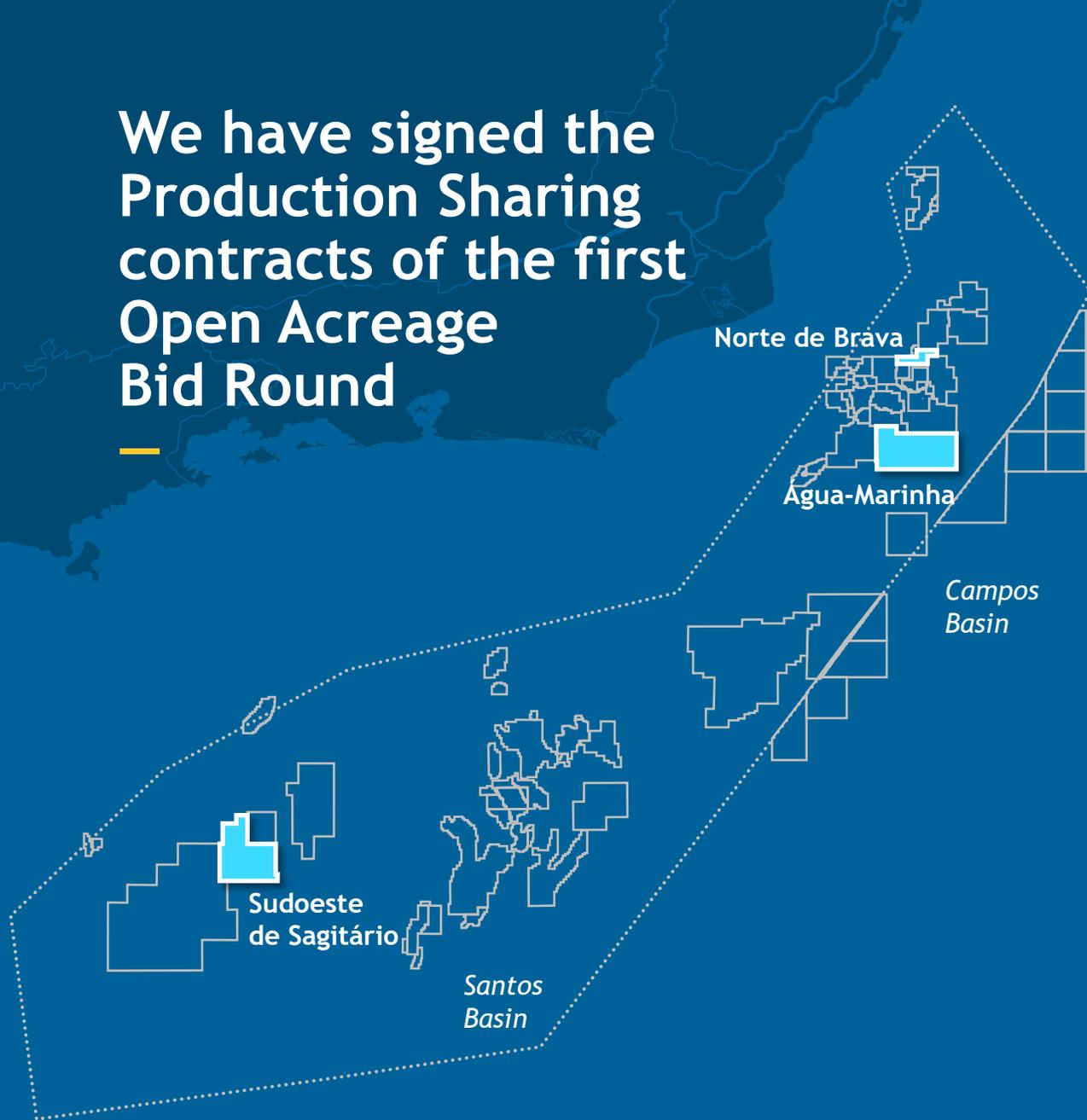
## BAHIA TERRA CLUSTER

- We have resumed production on Bahia Terra Cluster, with operational procedures to assure a safe return to the operations

- Authorization will allow the reestablishment of 100% of the total production of the cluster

- We acted diligently to fully comply with the conditions established by ANP, reinforcing our commitment to operational safety in all activities

# We have signed the Production Sharing contracts of the first Open Acreage Bid Round



## Norte de Brava (Campos Basin)

Petrobras 100%

Bonus (Petrobras share): R\$ 511.7 million

## Água Marinha (Campos Basin)

Petrobras 30% (OP) TotalEnergies 30% Petronas 20%  
QatarEnergy 20%

Bonus (Petrobras share): R\$ 19.6 million

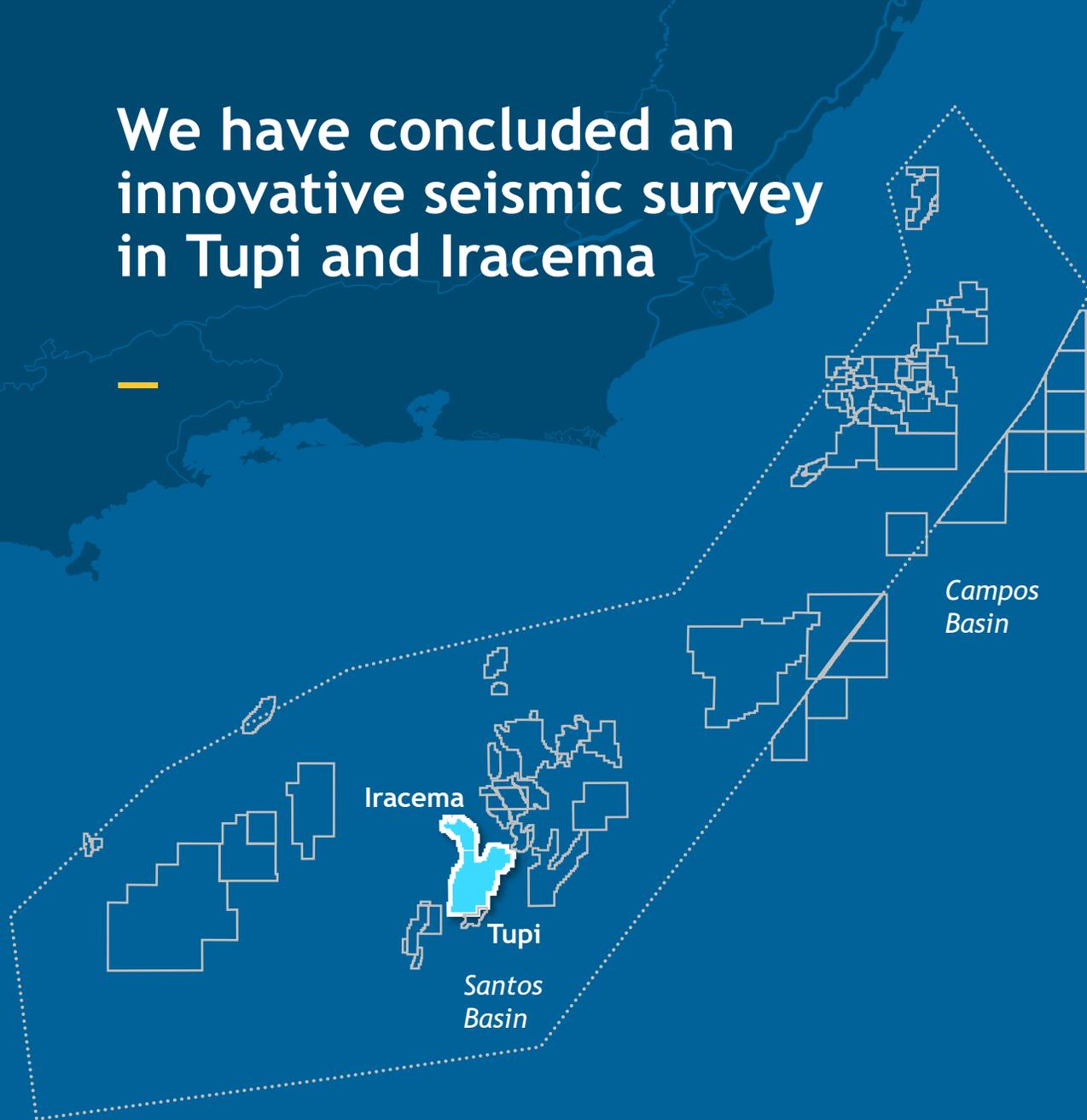
## Sudoeste de Sagitário (Santos Basin)

Petrobras 60% (OP) Shell Brasil 40%

Bonus (Petrobras share): R\$ 198.2 million

- Consolidation of our focus on the exploration and production of profitable assets
- Strengthening of our position as the leading global operator in deep and ultra-deep waters
- Establishment of new paths to incorporate reserves in the future
- The 3 blocks have exploratory wells planned for drilling as early as 2024

# We have concluded an innovative seismic survey in Tupi and Iracema



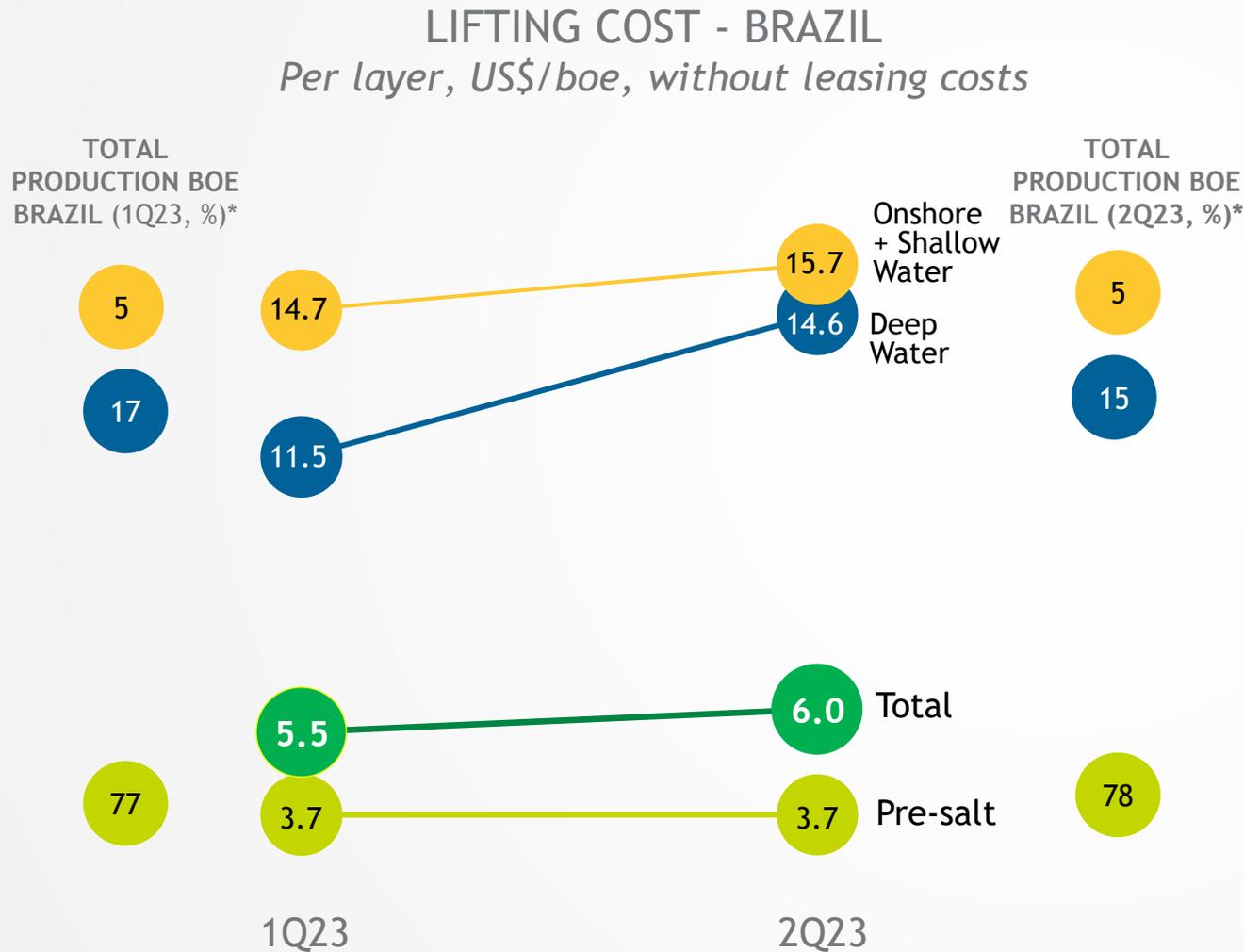
## TUPI AND IRACEMA *Seismic acquisition with nodes*

We have finished the world largest seismic acquisition with nodes in ultra deepwaters, in April/23

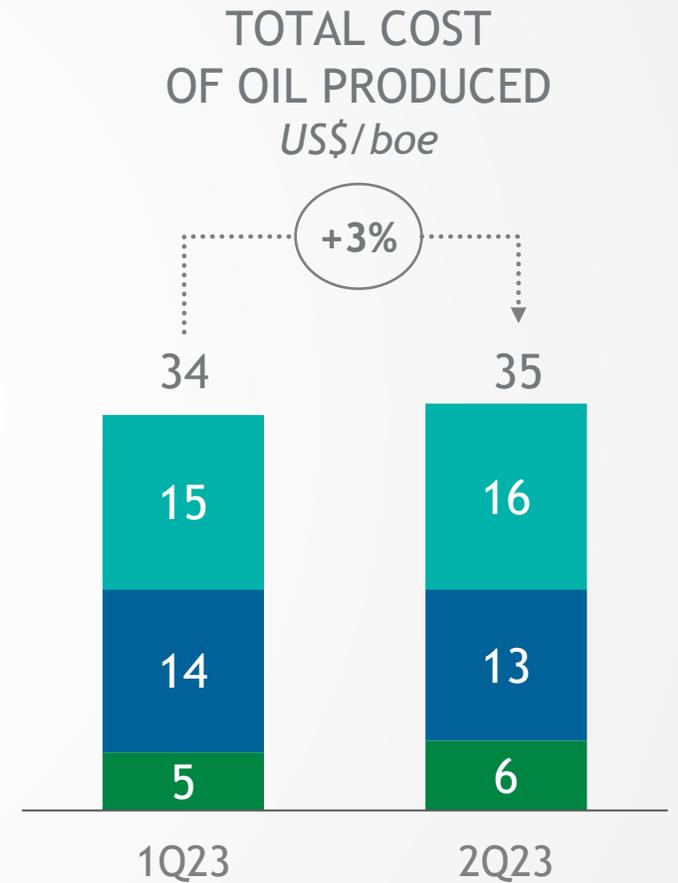
- 2,500 km<sup>2</sup> of nodes area
- 1.2 million shootings of seismic sources
- More than 10,000 nodes

High quality images of the reservoir will provide better management and identification of opportunities in the reservoir

# Increase on integrity activities and exchange rate variation are the main factors for higher lifting cost



\* Additionally, 1.3% of our total production comes from fields outside Brazil



- Depreciation,depletion,amortization and others
- Government Take
- Lifting Cost

A large FPSO (Floating Production Storage and Offloading) vessel, the Almirante Barroso, is shown in the ocean. The vessel is a dark-hulled ship with a complex steel structure on top, including a tall crane. The sky is blue with scattered white clouds. In the distance, another smaller FPSO is visible on the horizon.

# *Highlights in Engineering, Technology, and Innovation*

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*FPSO Almirante Barroso,  
in Búzios field  
1<sup>st</sup> oil in May, 31<sup>th</sup>*

# We continue to stand out in innovation theme



- Company with the highest number of active patents in Brazil
- 214 patents made available for licensing



*Valor Inovação award received in August*



- Valor Inovação<sup>1</sup> and MIT<sup>2</sup> Awards for being one of the most innovative companies in Brazil
- “Elite Awards”<sup>3</sup> international award for Petrobras Software of security studies



*MIT award received in June*



*Elite awards received in June*

## CONNECTIONS FOR INNOVATION

*Petrobras' open innovation program*



**READ MORE**



<sup>1</sup> Strategy Consulting & Valor Econômico · <sup>2</sup> MIT Technology Review Brasil · <sup>3</sup> Hexagon

# We made progress in the implementation of technologies



FPSO All Electric and FPSO with combined cycle



3D image of FPSO All Electric: under contracting



Progress in operations with subsea autonomous technologies



Conclusion of the well efficiency program (PEP-70)

With qualification of new technologies



DT (Drill Through) Wellhead - qualified technology



Agreement to test Petrobras Technology in biorefining



Riograndense Refinery - FCC<sup>3</sup>



Robotics in risky activities



Petrobot in tests at P-74



Fire fighting robot

<sup>1</sup> Autonomous underwater vehicle

<sup>2</sup> Remote operated vehicle - Operação de ROV com controle remota onshore pioneira na Am. do Sul

<sup>3</sup> Craqueamento catalítico fluido

# FPSO Anna Nery in production ramp-up after 1<sup>st</sup> oil

## Marlim FPSO Anna Nery

- 1<sup>st</sup> oil on May 5<sup>th</sup>
- 4 production wells in operation
- Current production\*: 25 kbpd



## Itapu P-71

- 3 production wells in operation
- Start of gas injection on March 22<sup>nd</sup>
- Current production\*: 92 kbpd



## Sépia FPSO Carioca

- 4 production wells in operation
- Start of gas exports on May 2<sup>nd</sup>
- Current production\*: 165 kbpd



\* Average production operated in Jul/23



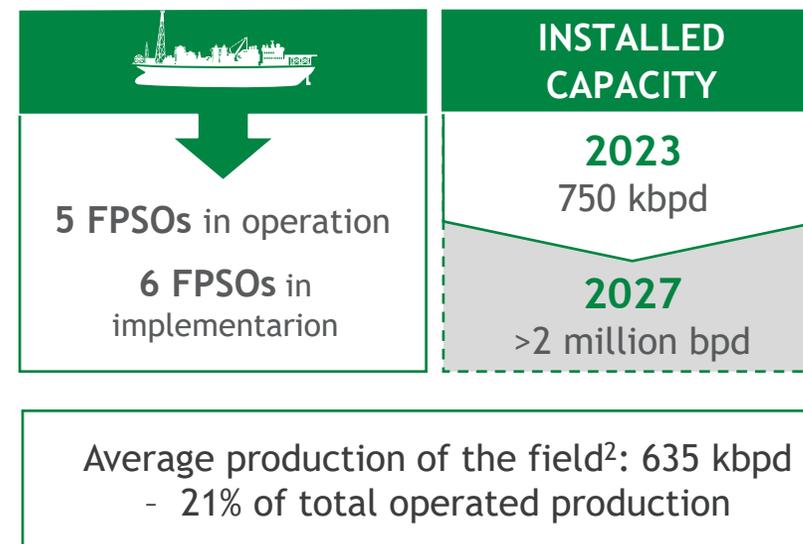
# FPSO Almirante Barroso starts operation in the Búzios field



FPSO Almirante Barroso - Production capacity 150 kbpd

- 1st oil on May 31<sup>st</sup>
- 5<sup>th</sup> FPSO operating in the Búzios field
- 1<sup>st</sup> gas injection on July 22<sup>nd</sup>
- Top of production expected for 2H23
- Current production<sup>1</sup>: 38 kbpd

## BÚZIOS FIELD



<sup>1</sup> Average production operated in Jul 23

<sup>2</sup> Average production operated in Jun 23



FPSO Almirante Tamandaré  
- lifting of modules



P-78 - modules under construction at Brasfels Shipyard



P-78- hull in an advanced stage of construction

# We made progress in the implementation of new projects in Búzios

## Búzios 7

FPSO Almirante Tamandaré:

- Conclusion of the hull construction
- Start of the module lifting campaign
- Delivery of the first modules built in Brazil

## Búzios 6

P-78: Start of hull's commissioning and functional tests

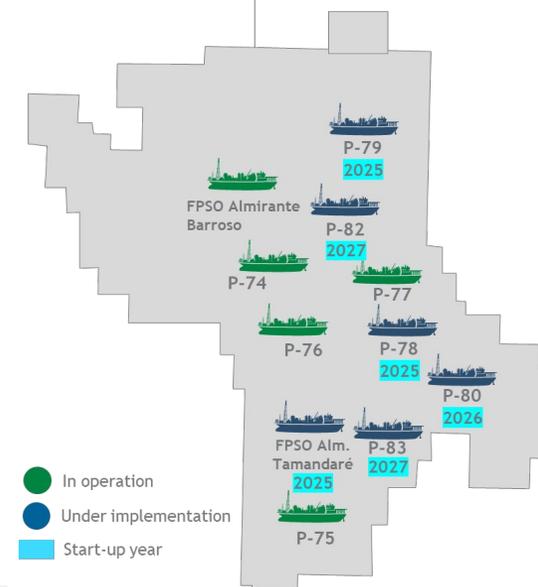
## Búzios 8, 9 e 10

P-79, P-80 and P-82: In progress the construction of the platforms' hulls and topside modules

## Búzios 11

P-83: Start of hull construction on August 1<sup>st</sup>

## Búzios Field



# Upcoming projects scheduled to start operating in 2023 and 2024

## REVIT DE MARLIM 1 FPSO A. Garibaldi

Mooring completed on May 31<sup>st</sup>. Connection of the first producing well in progress.



←----- 3Q 2023 ----->

## MERO 2 FPSO Sepetiba

Sailed away on June 15<sup>th</sup> from shipyard in China towards Mero's field.



←----- 4Q 2023 ----->

## MERO 3 FPSO Mal. Duque de Caxias

Conclusion of modules lifting campaign on May 4<sup>th</sup>. Currently in the integration and commissioning stage.



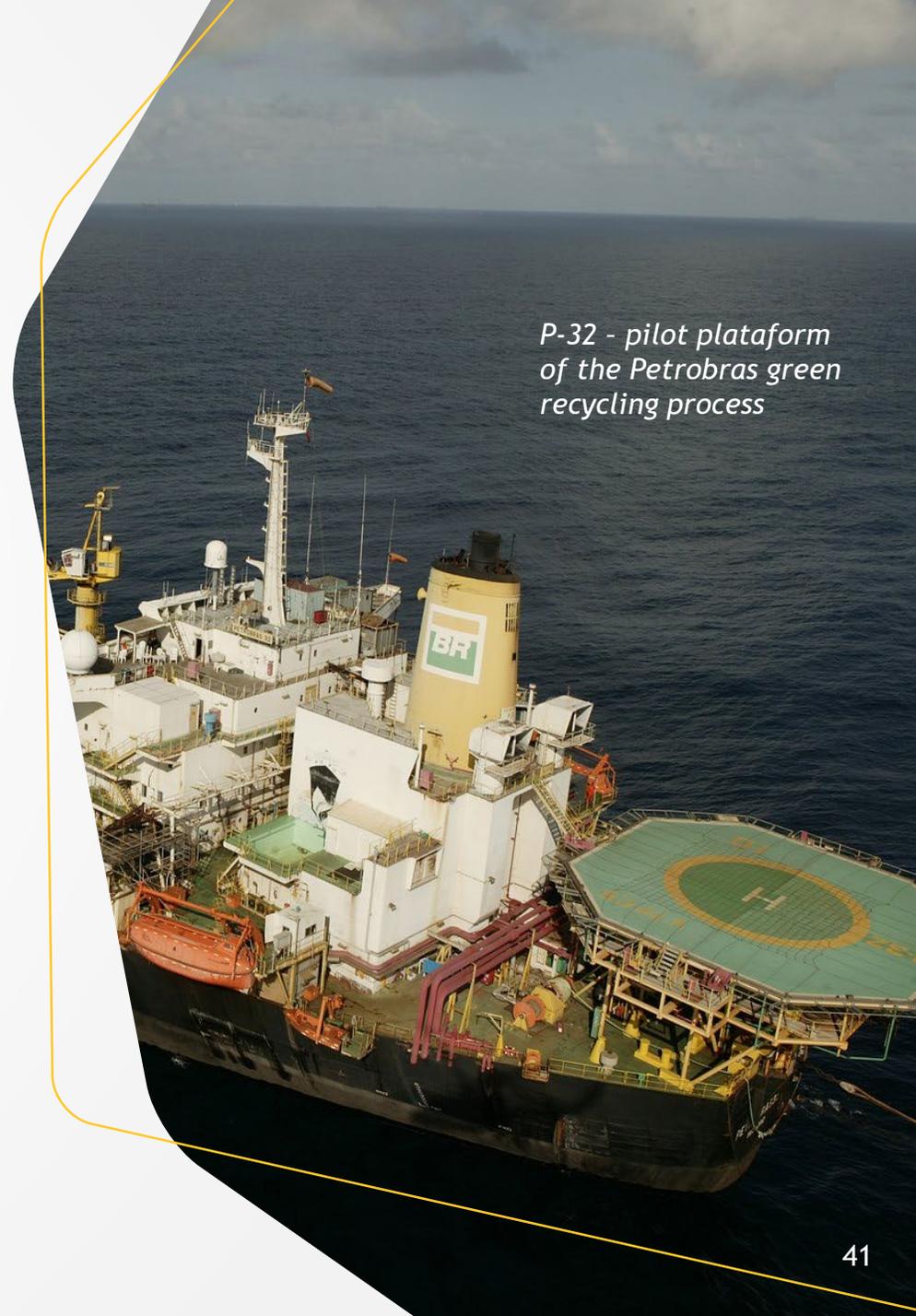
←----- 2024 ----->

# Sustainable destination of the P-32 platform in decommissioning



*Sustainable destination model focused on generating value and promoting the circular economy, safety and respect for people and the environment, in line with the best ESG practices in the global industry*

- The P-32 platform, replaced in the Marlim Revitalization Project, will be the first one to follow the new model
- The auction sales notice aimed the domestic market, launching a new stage for the decommissioning industry in Brazil
- GERDAU S.A as the winning company, in partnership with the ECOVIX shipyard

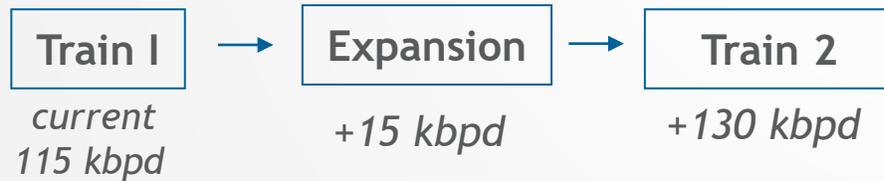


*P-32 - pilot platform of the Petrobras green recycling process*

# Expansion and modernization projects in Refining, Gas and Energy

## RNEST

- Expansion and modernization of train 1 in progress.
- Construction of the SNOx (Emissions Abatement Unit) in progress.
- Resumption of implementation of train 2



Abreu e Lima  
Refinery - RNEST

## POLO GASLUB

- Conclusion of the Natural Gas Processing Unit (UPGN) in progress.
- UTE Gaslub - contracting started in May 23tr<sup>1</sup>.
- HCC, HDT and HIDW2 (Production of 10 ppm Diesel, QAV and group II base oils) - basic design in progress.

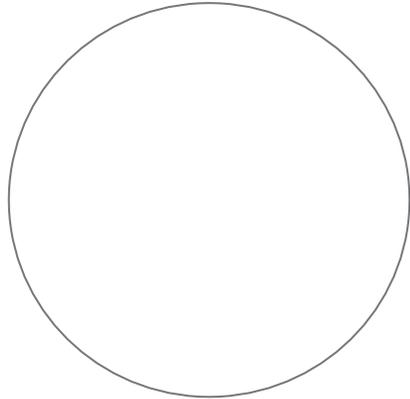
<sup>1</sup> Contracting signing subject to the result of the auction, scheduled for 2024

<sup>2</sup> Catalytic Hydrocracking, Hydrotreating and Hydroisodewaxing Units



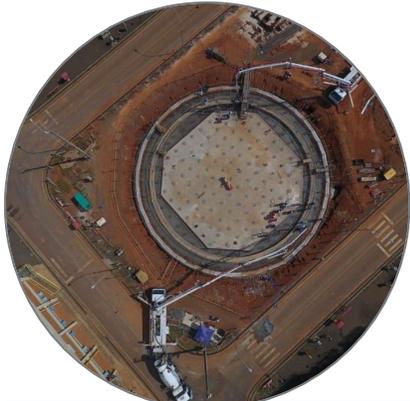
# Start-up of operating units at Reduc and RPBC

HDT Units for 10 ppm Diesel



## Adaptation at REDUC

Started operation on July 29<sup>th</sup>



REPLAN - acid water tank

## New unit at REPLAN

Under construction



## Adaptation at REVAP

New bidding process started on July 24<sup>th</sup>

RPBC Coke Drums



Implementation in May 23<sup>th</sup>, enhancing **safety**, **reliability** and **operational performance**.

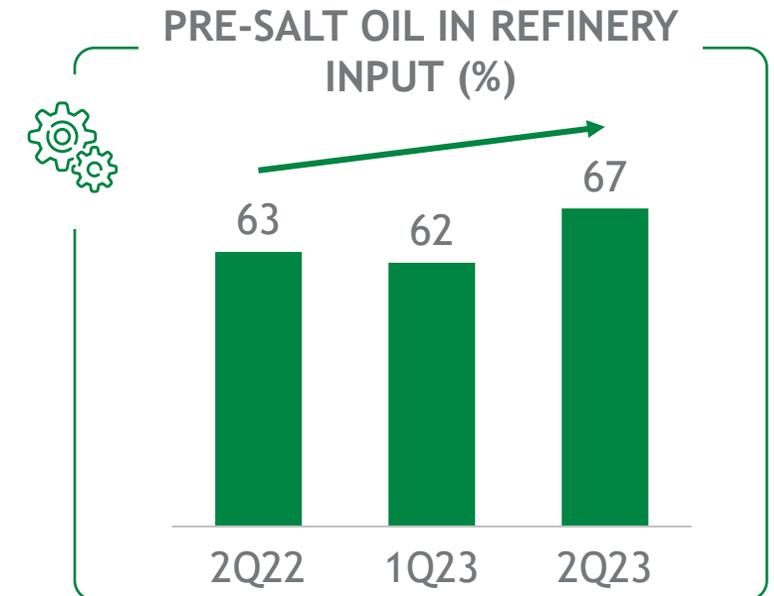
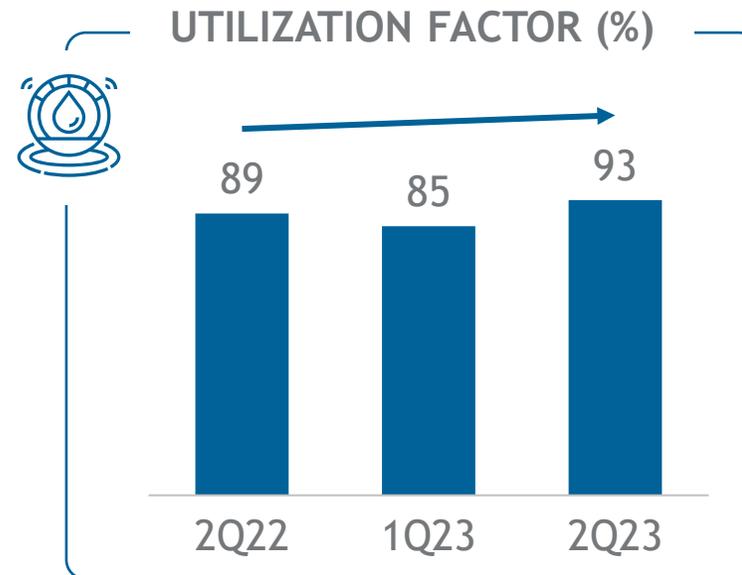
A photograph of an industrial facility, likely a refinery or chemical plant. In the foreground, two workers in bright orange safety suits and white hard hats are walking on a paved path. Behind them are several large, white, spherical storage tanks supported by yellow pillars. The tanks have the 'BR' logo and labels like 'CAT - I' and 'P-827-C'. The sky is blue with scattered white clouds. The overall scene is bright and clear.

# *Highlights in Industrial Processes and Products*

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# We reached 93% Utilization Factor in Refining, best level since 3Q15



- Diesel, gasoline and jet fuel production accounted for 67% of total production in 2Q23
- Result achieved even with scheduled turnarounds at RPBC, REFAP, REDUC and REPLAN.
- Record processing of pre-salt oils in the quarter, reaching 72% in June/23.



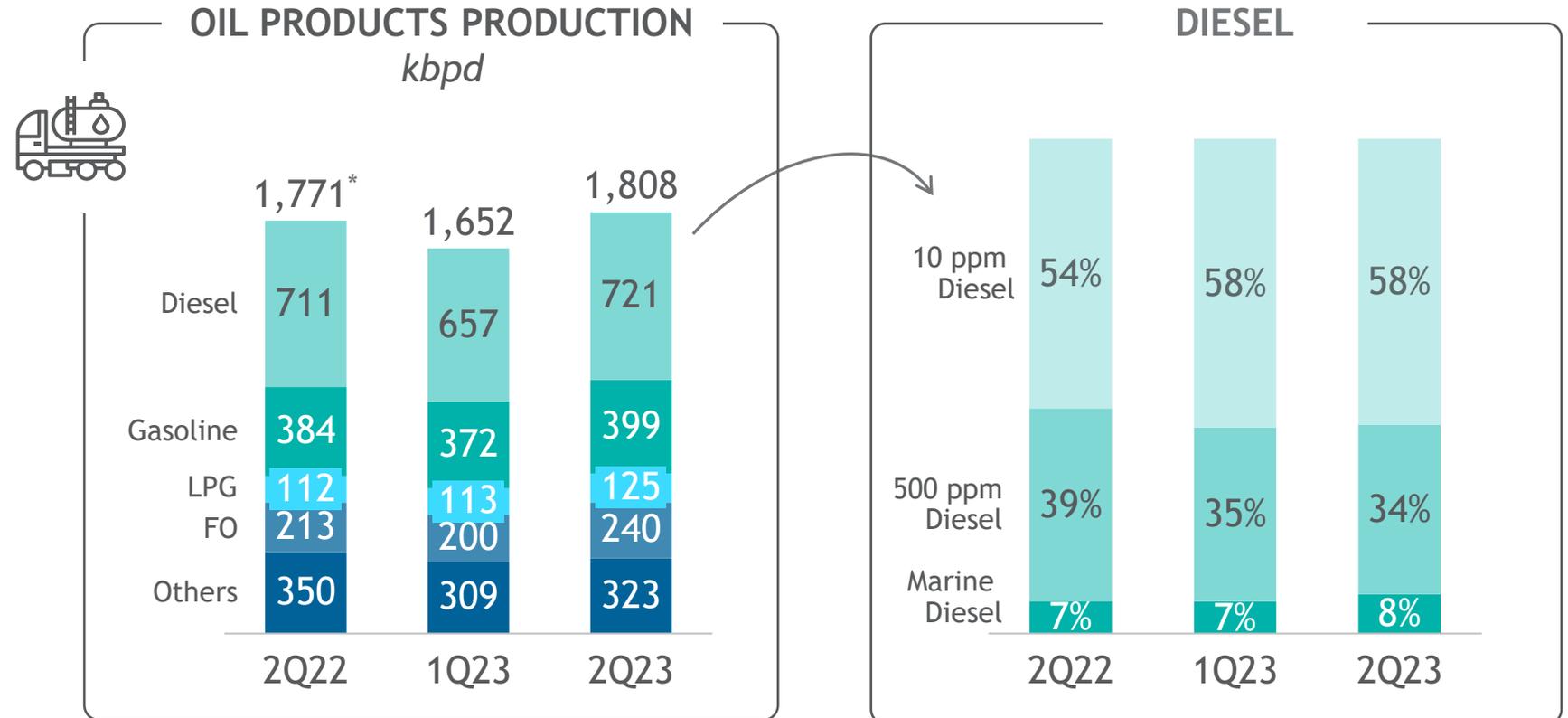
## PRODUCTION RECORDS FOR 10 ppm DIESEL:

May · 23  
REGAP (49 kbpd)

June · 23  
Refino (442 kbpd)

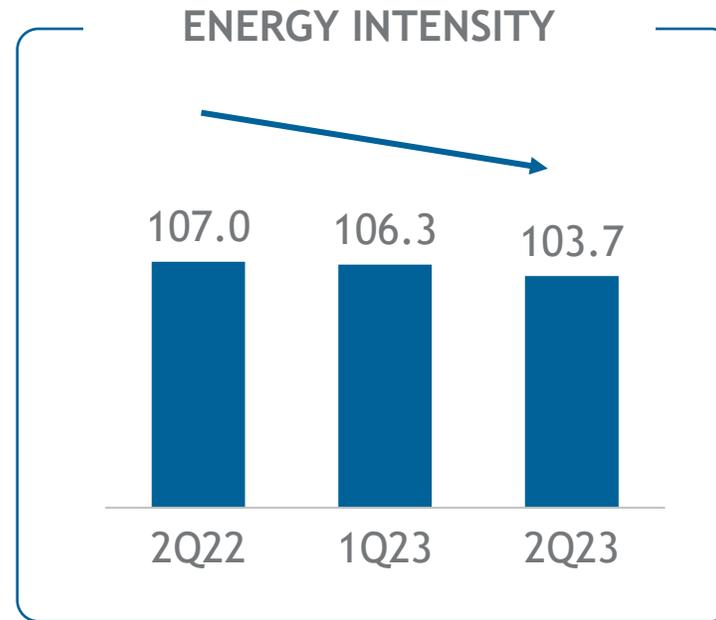
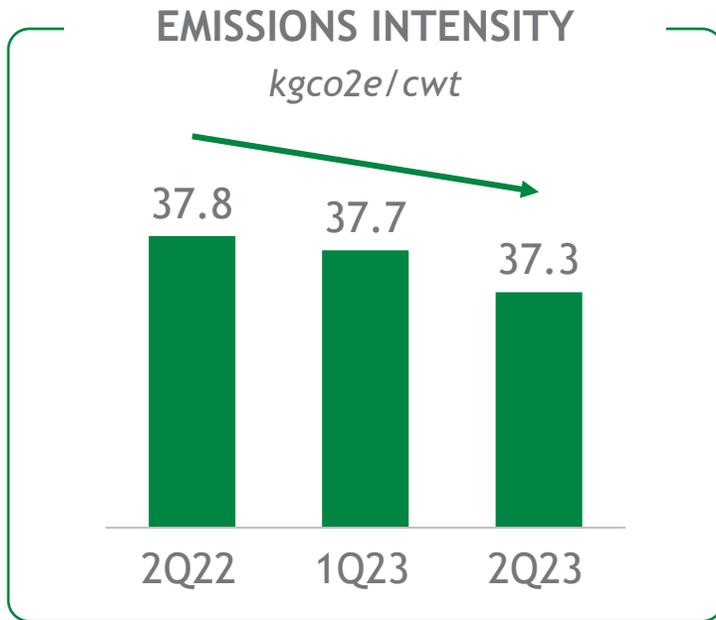
2Q23  
REGAP (48 kbpd)  
REPAR (44 kbpd)  
Refino (419 kbpd)

# We increased the Utilization Factor and kept yielding high value oil products



\* Excluding REMAN production in 2Q22: 1,740 kbpd

# The lowest greenhouse gas emissions intensity in the Refining segment since the beginning of monitoring



- Increased refinery reliability
- Implementation of RefTOP projects
- Increased efficiency of process heaters resulting in lower refineries' natural gas consumption
- Optimization of process units' energy consumption
- Digital transformation initiatives contributed to reducing greenhouse gas emissions

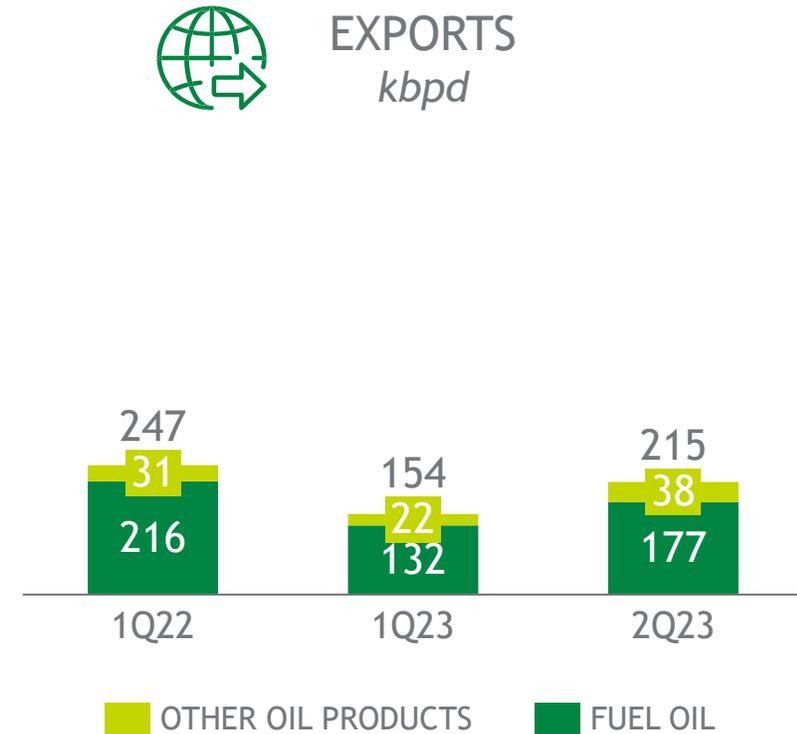
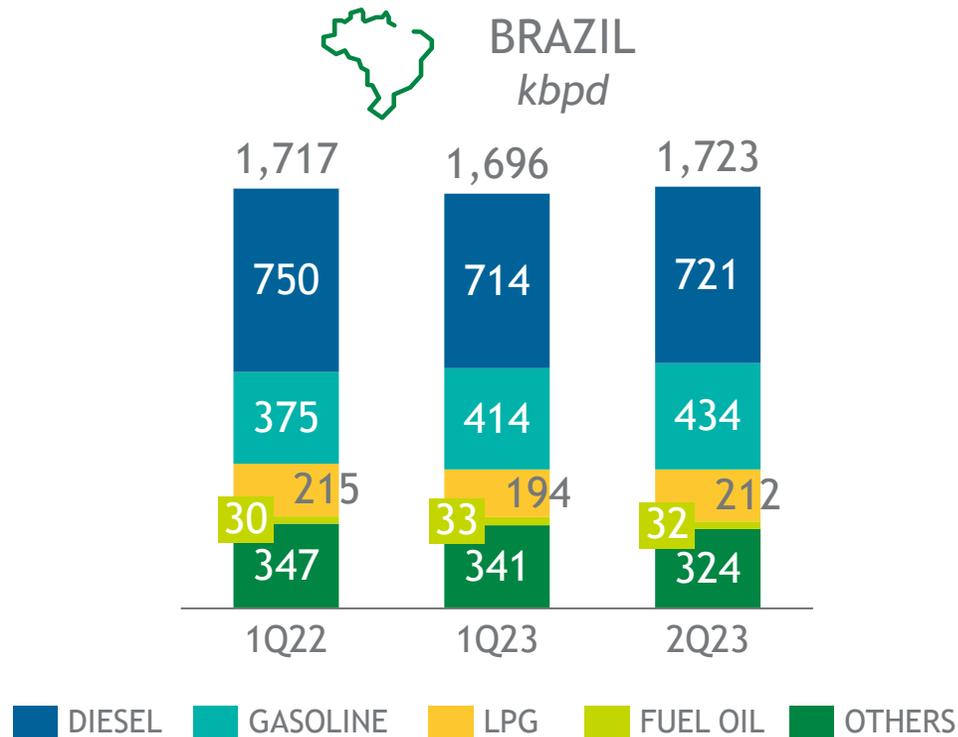


An aerial photograph of an industrial facility, likely a refinery or chemical plant, situated on a lush green peninsula. The facility features several large white storage tanks and various industrial buildings. A long pier extends from the shore into the deep blue water, where two large oil tankers are docked. The background shows rolling green hills and a hazy sky. The text 'Logistics, Commercialization and Markets Highlights' is overlaid in white, italicized font on the left side of the image.

*Logistics,  
Commercialization  
and Markets  
Highlights*

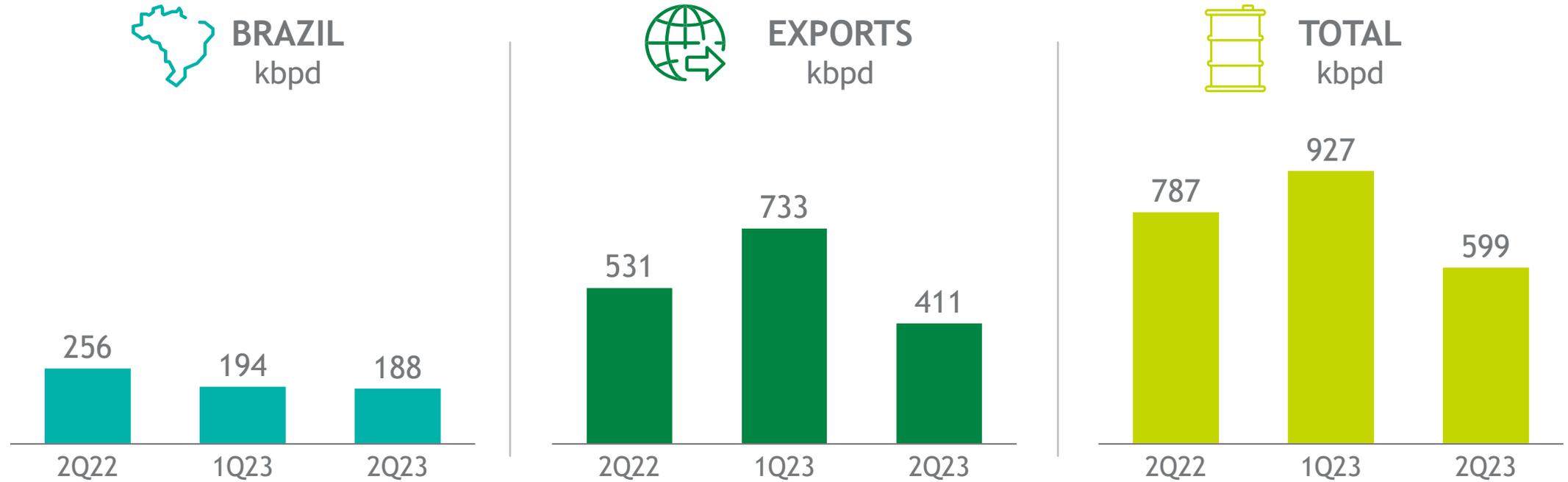


# Oil products sales



- › Gasoline sales in 2Q23 were 5% higher than in 1Q23 and 15.7% higher than in 2Q22 and the highest recorded in second quarters in the last 6 years, due to the gain in competitiveness against hydrated ethanol in flex-fuel vehicles.
- › Higher diesel sales due to market seasonality.
- › Higher fuel oil exports due to 1Q23 being impacted by scheduled refinery stoppages.

# Oil sales



- › Lower oil exports in 2Q23 due to increased refinery processing and lower oil imports. 1Q23 was impacted by the realization of inventories in progress from previous periods.

# Approval of the New Commercial Strategy



In May/23 the new Gasoline and Diesel Commercial Strategy was approved by the Executive Board, in line with Petrobras' Strategic Plan.



Petrobras acts in balance with the market, practicing competitive prices in relation to our customers' main supply alternatives, seeking the market share necessary to optimize refining assets and guarantee the Company's financial viability.



The new strategy helps to avoid passing through cyclical volatility in the international market and the exchange rate, preserving a healthy competitive environment.



# Sustainability highlights



## HYBRID VESSEL CONTRACT



First hybrid support vessel contract for Offshore Logistics operations, expected to reduce greenhouse gas emissions by 15% and lower fuel consumption



## NEW BUNKER TEST W/ RENEWABLE CONTENT



Bunker test using 24% Biodiesel produced from a blend of 30% animal fat (tallow) and 70% soybean oil. Reduction of greenhouse gas emissions by about 17%.



## GREEN RECYCLING OF P-32



Completion of the first sustainable platform disposal auction in a model aligned with global industry ESG best practices

[www.petrobras.com.br/ir](http://www.petrobras.com.br/ir)