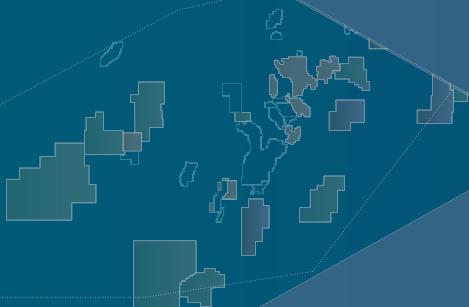


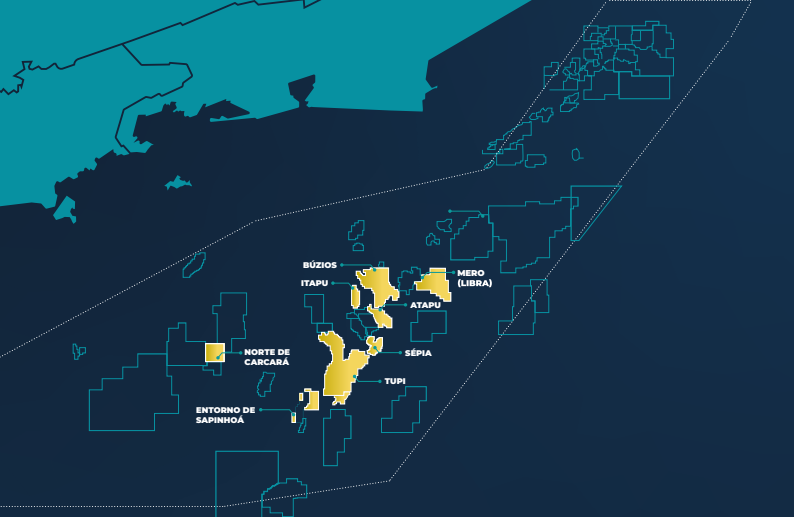


**PPSA**  
PRÉ-SAL PETRÓLEO S/A

# PPSA

# Oil Production





## **2. INTRODUCTION**

PPSA is a state-owned company responsible for commercializing Brazilian Government share of pre-salt oil and gas coming from production sharing contracts and from non-contracted participating interests in unitization agreements, reporting to the Ministry of Mines and Energy (MME). Since 2018, oil and gas marketing have been carried out through direct sales or public auctions.

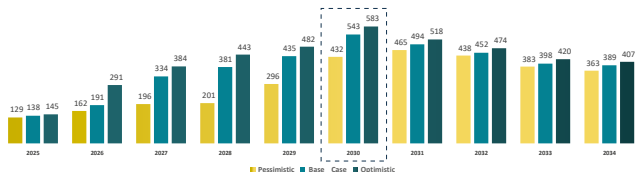
Currently, the Government has oil cargoes for sale in seven fields – Mero, Búzios, Atapu, Sépia, Itapu, Entorno de Sapinhoá and Tupi. Later this year, the company will also begin marketing oil from the Government's Bacalhau sharing contract.

### 3. PPSA PRODUCTION GROWTH

PPSA ended January 2025 producing 133 thousand barrels of oil per day, being Brazil's fourth largest producer. PPSA estimates continuous production growth for the upcoming five years or so, solely based on existing nine production sharing contracts already in commercial phase and three unitization agreements, hence not taking into account potential new discoveries or developments.

Depending on production sharing contract parameters, like cost recovery, oil price and exchange rate, PPSA production may reach a range of 550 thousand barrels of oil per day mid-2030.

Estimated Profit Oil of the Brazilian Government (Thousand Barrels per Day) – 9 Commercial Contracts and AIPs



PESSIMISTIC: USD 50/BBL

BASE CASE: USD 70/BBL

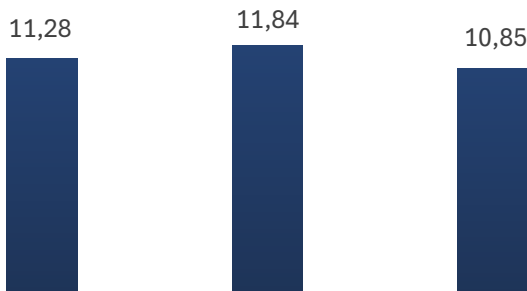
OPTIMISTIC: USD 90/BBL

## 4. OIL WITH LOWER EMISSIONS

The carbon intensity of pre-salt oil is significantly lower than the average oil produced around the world, because it contains less sulfur, is lighter, and has a lower density.

In 2024, the average carbon intensity of the portfolio of contracts under the sharing regime was 10.85 KgCO<sub>2</sub>e/boe, while the OGCI average is around 17/18kgCO<sub>2</sub>e/boe.

### GHG INTENSITY (kgCO<sub>2</sub>eq/boe)



## 5. MERO



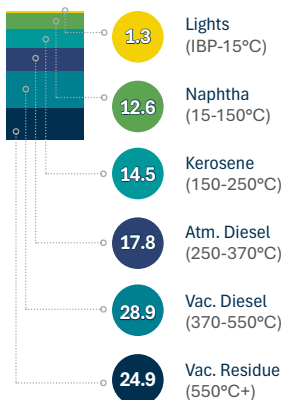
The Mero Field is located in the Santos Basin, 150 km off the coast of Rio de Janeiro, in a water depth of 1,930 meters.

The field is operated by Petrobras in a consortium with Shell, TotalEnergies, CNPC and CNOOC.

### Crude Oil Properties

Density (°API):	29.0
Sulfur (%wtg):	0,313
TAN (mgKOH/g):	0.21
Nitrogen (% wgt):	0,286
Viscosity @ 20.0°C (cSt):	43.16
Viscosity @ 50.0°C (cSt):	11.59
Nickel (ppm):	4.7
Vanadium (ppm):	6.0
Carbon Residue (%wtg):	3.17

### Yield (% Volume)



## 6. BÚZIOS



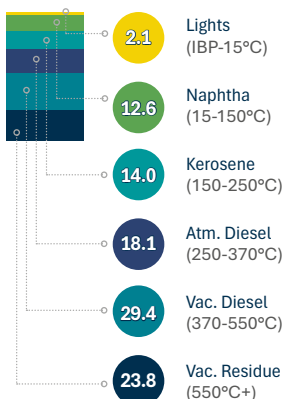
The Búzios Field is located in the Santos Basin, 180 km off the coast of Rio de Janeiro, on a 1,900-meter water depth.

The field is operated by Petrobras in a consortium with CNODC and CNOOC.

### Crude Oil Properties

Density (°API):	28.6
Sulfur (%wt):	0,322
TAN (mgKOH/g):	0.14
Nitrogen (% wgt):	0,324
Viscosity @ 20.0°C (cSt):	39.95
Viscosity @ 50.0°C (cSt):	12.34
Nickel (ppm):	8.2
Vanadium (ppm):	9.7
Carbon Residue (%wt):	4.23

### Yield (% Volume)



## 7. ENTORNO DE SAPINHOÁ



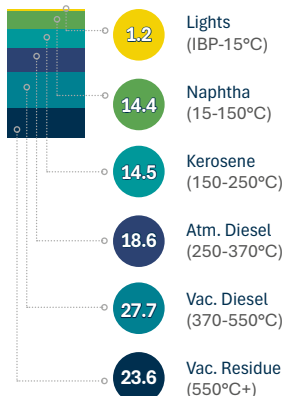
The Entorno de Sapinhoá Field is located in the Santos Basin, 300 km off the coast of Rio de Janeiro, on a 2,200-meter water depth.

The field is operated by Petrobras, in partnership with Shell and Repsol.

### Crude Oil Properties

Density (°API):	29.8
Sulfur (%wtg):	0,385
TAN (mgKOH/g):	0.29
Nitrogen (% wgt):	0,313
Viscosity @ 20.0°C (cSt):	30.93
Viscosity @ 50.0°C (cSt):	10.28
Nickel (ppm):	8.2
Vanadium (ppm):	8.1
Carbon Residue (%wtg):	3.83

### Yield (% Volume)





## 8. ATAPU



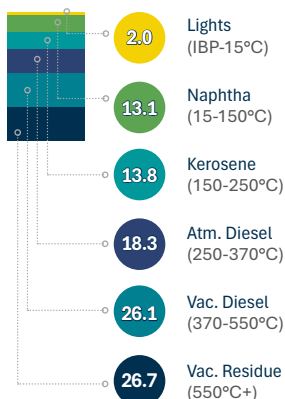
The Atapu Field is located in the Santos Basin, 200 km off the coast of Rio de Janeiro, in a water depth of 2,300 meters.

The field is operated by Petrobras, in consortium with Shell and TotalEnergies.

### Crude Oil Properties

Density (°API):	28.1
Sulfur (%wt):	0,404
TAN (mgKOH/g):	0.23
Nitrogen (% wgt):	0,360
Viscosity @ 20.0°C (cSt):	49.80
Viscosity @ 50.0°C (cSt):	14.80
Nickel (ppm):	11.6
Vanadium (ppm):	12.5
Carbon Residue (%wt):	4.35

### Yield (% Volume)



## 9. SÉPIA



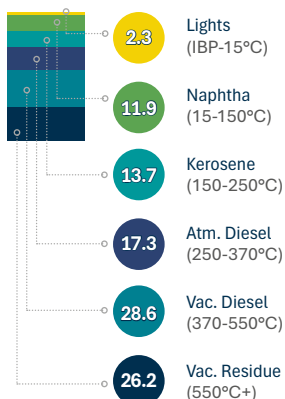
The Sépia Field is located in the Santos Basin, 280 km off the coast of Rio de Janeiro, on a 2,150-meter water surface.

The field is operated by Petrobras, in a consortium with TotalEnergies EP, Petronas and QP Brasil.

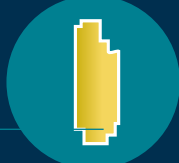
### Crude Oil Properties

Density (°API):	27.4
Sulfur (%wtg):	0,448
TAN (mgKOH/g):	0.30
Nitrogen (% wgt):	0,378
Viscosity @ 20.0°C (cSt):	61.56
Viscosity @ 50.0°C (cSt):	17.71
Nickel (ppm):	15.1
Vanadium (ppm):	14.8
Carbon Residue (%wtg):	4.81

### Yield (% Volume)



## 10. ITAPU



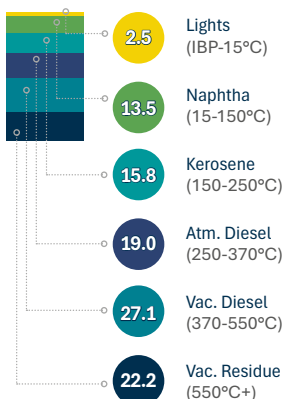
Itapu is located in the Santos Basin, 200 km off the coast of Rio de Janeiro, at a water depth of 2,010 meters.

The field is operated by Petrobras.

### Crude Oil Properties

Density (°API):	30.2
Sulfur (%wtg):	0,247
TAN (mgKOH/g):	0.04
Nitrogen (% wgt):	0,292
Viscosity @ 20.0°C (cSt):	27.89
Viscosity @ 50.0°C (cSt):	9.68
Nickel (ppm):	6.3
Vanadium (ppm):	5.6
Carbon Residue (%wtg):	4.06

### Yield (% Volume)



## 11. TUPI



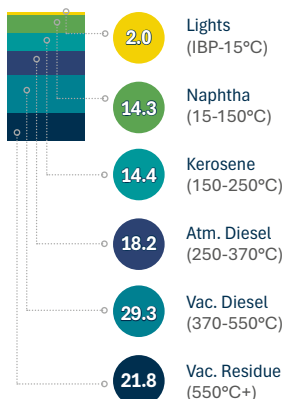
Tupi is located in the Santos Basin, 290 km off the coast of Rio de Janeiro, at a water depth of 2200 meters.

The field is operated by Petrobras, in a consortium with Shell and Petrogal. Tupi is a unitized deposit with an uncontracted area.

### Crude Oil Properties

Density (°API):	30.5
Sulfur (%wtg):	0,351
TAN (mgKOH/g):	0.26
Nitrogen (% wgt):	0,281
Viscosity @ 20.0°C (cSt):	26.88
Viscosity @ 50.0°C (cSt):	9.41
Nickel (ppm):	6.4
Vanadium (ppm):	6.6
Carbon Residue (%wtg):	3.36

### Yield (% Volume)



## 12. BACALHAU



The Bacalhau Field is located in the Santos Basin, 185 km off the coast of Ilhabela, in a water depth of 2,100 meters. Production from the field will begin in 2025.

The field is operated by Equinor, in partnership with ExxonMobil, Petrogal Brasil.

### Crude Oil Properties

Density (°API):	32.5
Specific Gravity (g/cc):	0,863
Sulfur (%wgt):	0.23
TAN (mgKOH/g):	0.30
Pour point max (°C):	+15*
Sulfur (wt%) in Atm Residue:	0.40
Viscosity at 40°C (cSt):	8.86

The figures for the North Carcará field may vary, as production from FPSO Bacalhau has not yet started.

## 13. 5TH FEDERAL GOVERNMENT OIL AUCTION

Lot	Oil/FPSO	Volume in 2025 in thousand barrels	Volume in 2026 in thousand barrels	Total volume in thousand barrels <sup>7</sup>	Final loading programs issued in	Loading in
1	Mero/ Guanabara <sup>1</sup>		13000	13000	Jan/26 to Dec/26	Mar/26 to Feb/27
2	Mero/ Sepetiba <sup>1</sup>		13000	13000	Jan/26 to Dec/26	Mar/26 to Feb/27
3	Mero D. de Caxias <sup>1</sup>		13000	13000	Jan/26 to Dec/26	Mar/26 to Feb/27
4	Mero/Alex. Gusmão <sup>2</sup> and	1000	12000	13000	Jul/27 to Dec/26	Sep/27 to Feb/27
	Mero/FR <sup>3</sup>		2500	2500	Jan/26 to Dec/26	Feb/26 to Feb/27
5	Búzios <sup>3</sup>		3500	3500	Jan/26 to Dec/26	Mar/26 to Feb/27
6	Itapu <sup>4</sup>	3000	2000	5000	Jul/27 to Dec/26	Sep/27 to Feb/27
7	Sépia <sup>5</sup>	1500	5000	6500	Jul/27 to Dec/26	Sep/27 to Feb/27
8	Bacalhau <sup>6</sup>	1000	3000	4000	Jul/25 to Mar/26	Sep/25 to May/26

<sup>1</sup> Usually shipments of one million barrels.

<sup>2</sup> It is expected that the first four Mero cargoes on the Alexandre de Gusmão FPSO will be 500,000 barrels, rising to one million after ramping up.

<sup>3</sup> Shipments of 500,000 barrels. The Búzios contract establishes one load per FPSO. If there is more than one cargo on a given FPSO over the course of the contract, this cargo is not part of the contract.

<sup>4</sup> In general, shipments of 500,000 barrels.

<sup>5</sup> Shipments of 500,000 barrels with the possibility of a million barrel shipment.

<sup>6</sup> Shipments in Bacalhau will amount to one million barrels.

<sup>7</sup> The volumes shown in table 1 are our best estimate, but are subject to operational variations

## **14. WHO PURCHASES THE FEDERAL GOVERNMENT'S OIL**

So far, the following companies have purchased oil from the Government: Petrobras, Petrochina, Mataripe Refinery, Galp, CNOOC, Equinor and Total.

Whoever purchases the oil from the Federal Government must have a DP (dynamic positioning) relief vessel to pick up the oil from the FPSO and take it to its destination (refinery) or carry out a transshipment operation. This means that the buyer covers the logistical costs, including the DP vessel, any tankage fees, and long-distance freight to the international market (Europe, China, etc.), for the most part.







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