

# Production & Sales Report 4Q24

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**FPSO Marechal Duque de Caxias**  
*First oil in October 2024*



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## DISCLAIMER

This report may contain forward-looking statements about future events. Such forecasts reflect only the expectations of the company's management about future economic conditions, as well as the company's industry, performance and financial results, among others. The terms "anticipates", "believes", "expects", "predicts", "intends", "plans", "projects", "aims", "should", as well as other similar terms, are intended to identify such forecasts, which, of course, involve risks and uncertainties foreseen or not foreseen by the company and, consequently, are not guarantees of the company's future results. Therefore, future results of the company's operations may differ from current expectations, and the reader should not rely solely on the information contained herein. The company undertakes no obligation to update the presentations and forecasts in the light of new information or future developments. The figures reported for 4Q24 onwards are estimates or targets. The operating data contained in this report has not been audited by the independent auditor.



## Highlights – 2024

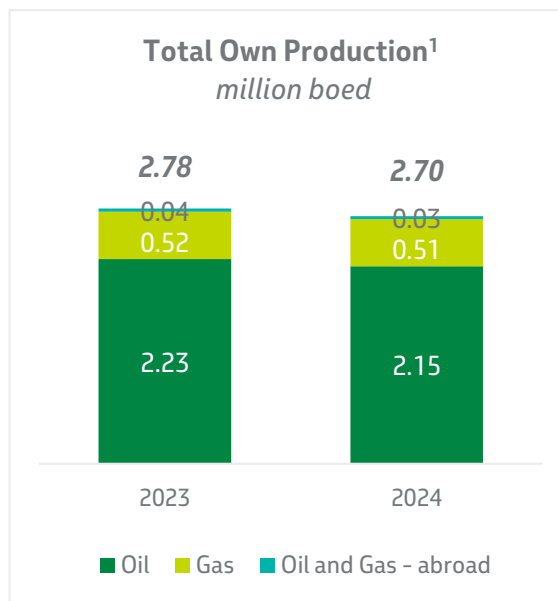
In 2024, Petrobras achieved all the production targets set out in its 2024-2028+ Strategic Plan, within the  $\pm 4\%$  range. Total oil and natural gas production reached 2.7 million barrels of oil equivalent per day (boed).

Commercial production of oil and natural gas in 2024 reached 2.4 million boed and oil production was 2.2 million barrels per day (bpd).

The company also set new annual records for total own production and operated production in pre-salt, with 2.2 million boed and 3.2 million boed, respectively. The production volume in pre-salt represents 81% of the total production in 2024.

We highlight the main events of the year:

- Production start-up of FPSO Maria Quitéria on October 15<sup>th</sup>: in Jubarte field, in the region known as Parque das Baleias, in the pre-salt region located in the Espírito Santo portion of the Campos Basin. The unit is designed to produce up to 100,000 bpd and process up to 5 million m<sup>3</sup> of natural gas daily. FPSO Maria Quitéria had its production start-up anticipated. According to the 2024-28+ Strategic Plan, its original schedule was 2025.
- Production start-up of FPSO Marechal Duque de Caxias, on October 30<sup>th</sup>: in Mero field, in pre-salt Santos Basin. The unit has the capacity to produce up to 180,000 bpd and compress up to 12 million m<sup>3</sup> of natural gas daily.
- FPSO Sepetiba, which operates in Mero field, reached its peak production of 180,000 bpd in August, after 8 months of operations.
- Start of commercial operations at the Natural Gas Processing Unit (UPGN), located at the Boaventura Energy Complex (Itaboraí, RJ). The first module, with processing capacity of 10.5 million m<sup>3</sup>/day of natural gas, began operations on November 10<sup>th</sup>, and its second module is scheduled to come on stream in the first quarter of 2025, reaching a total installed natural gas processing capacity of 21 million m<sup>3</sup>/day with the two modules.
- On December 16<sup>th</sup>, the FPSO Alexandre de Gusmão departed from the Cosco Qidong shipyard in China, heading to Mero field, in Santos Basin's pre-salt. The platform, which will be the fourth definitive production system for the field, is scheduled to start up in 2025 and has the capacity to produce 180,000 bpd of oil and compress 12 million m<sup>3</sup>/d of natural gas.



<sup>1</sup> Apparent differences in the sum of the installments are due to rounding.

The FPSO Almirante Tamandaré is on location in Búzios field, in pre-salt of Santos Basin, with the mooring and commissioning activities of the first well completed and is scheduled to start up later this quarter. The platform has capacity to produce up to 225,000 bpd of oil and 12 million m<sup>3</sup>/d of natural gas, making it the largest FPSO in South America in terms of oil and gas production capacity. This is the first of six systems contracted by Petrobras to operate with this capacity, and the next five units, which will be owned by the company, include Búzios 9 (P-80), Búzios 10 (P-82), Búzios 11 (P-83), Atapu 2 (P-84) and Sépia 2 (P-85).

### We achieved annual records in pre-salt production



**Total pre-salt operated production: 3.23 million boed**  
(previous record of 3.15 million boed in 2023).



**Total own pre-salt production: 2.19 million boed**  
(previous record of 2.17 million boed in 2023).

In the Refining, Transportation and Marketing (RTM) segment, total oil product output in 2024 was 1.78 million bpd, slightly higher than in 2023. Of this total, 69% corresponded to high value products (diesel, gasoline and jet fuel).

Main 2024 RTC highlights:

- Total utilization factor (FUT) in 2024 was 93%, which represents the highest utilization of the refining system since 2014, considering the current Petrobras refineries.
- We achieved a record of 70% share of pre-salt oil in the feedstock processed in 2024 (an increase of 4 p.p. compared to 2023), as a result of optimization in the application of these streams to produce higher value oil products and reduce atmospheric emissions.
- We recorded production records for gasoline (420,000 bpd) and S-10 diesel (452,000 bpd) in 2024. REPAR and REDUC refineries reached their best marks in gasoline production and RPBC, REGAP, REFAP, REVAP and REDUC recorded all-time records in S-10 diesel production in 2024 (considering the current facilities).
- During the year, sales of S-10 diesel accounted for 64% of total diesel oil sales, exceeding the record of 62% registered in 2023, and we reported a 5.8% increase in jet fuel sales in 2024.
- We have expanded our supply of sustainable products with lower carbon emissions. These products include Diesel R with renewable content, the CAP PRO asphalt, Bunker with renewable content and Podium Carbon Neutral Gasoline, contributing to our commitment to a just energy transition.



*The certification of the renewable fraction of VLS B24 (photo) is yet another indication of our strategy to lead a just energy transition, presenting economically viable solutions that meet society's demands for sustainability."*  
*Claudio Schlosser, Chief Logistics, Commercialization and Markets Officer*

- In 2024, we reached the milestone of 100,000 m<sup>3</sup> of Diesel R sales with renewable content (R5) and around 10,000 tons of CO<sub>2</sub> emissions avoided. We also posted a 27% increase in sales of Podium Carbon Neutral Gasoline compared to 2023, with 225,000 tons of CO<sub>2</sub> neutralized by carbon credits.
- We have been awarded the ISCC EU RED (International Sustainability & Carbon Certification – European Union – Renewable Energy Directive), one of the most prestigious certifications in the market, for the sale of bunker fuel with renewable content at the Rio Grande Terminal (TERIG). VLS (Very Low Sulfur) B24 is the result of blending mineral bunker with 24% biodiesel and has the potential to reduce greenhouse gas emissions by approximately 20%. This certification celebrates Petrobras pioneering spirit, as in July 2024, we became the first company in the country to receive authorization from the National Petroleum, Natural Gas, and Biofuels Agency (ANP) to sell marine fuel with renewable content.

#### Annual records in the RTM segment :



**A we achieved the highest total utilization factor (93%) of the refining system since 2014.**

**We achieved a record of 70% share of pre-salt oil in the feedstock processed in 2024.**

**In 2024, we posted production records for gasoline (420,000 bpd) and S-10 diesel (452,000 bpd).**



**During the year, sales of S-10 diesel accounted for 64% of total diesel sales, surpassing the 62% record set in 2023.**

*“The excellent refining performance in 2024, reaching historic annual production volumes gasoline and S-10 diesel, along with the highest utilization rate of the complex since 2014, demonstrate our focus on efficiency, safety and profitable operation our assets, as a result of the investments and integrated efforts of the entire RTC segment.”*

*William França, Chief Industrial Processes and Products Officer*



# Our Operating Results

## Exploration & Production

	4Q24	3Q24	4Q23	2024	2023	Variation (%)		
						4Q24 X 3Q24	4Q24 X 4Q23	2024 X 2023
<b>Crude oil, NGL and natural gas production - Brazil (Mboed)</b>	<b>2,597</b>	<b>2,654</b>	<b>2,901</b>	<b>2,664</b>	<b>2,748</b>	<b>(2.1)</b>	<b>(10.5)</b>	<b>(3.1)</b>
Crude oil and NGLs (Mbpd)	2,090	2,129	2,361	2,152	2,231	(1.8)	(11.5)	(3.5)
Onshore and Shallow water	35	32	36	34	43	9.4	(2.8)	(20.9)
Post-salt - deep and ultra deep	295	275	388	305	382	7.3	(24.0)	(20.2)
Pre-salt	1,760	1,822	1,937	1,813	1,806	(3.4)	(9.1)	0.4
Natural gas (Mboed)	507	525	540	512	516	(3.4)	(6.1)	(0.8)
<b>Crude oil, NGL and natural gas production - Abroad (Mboed)</b>	<b>31</b>	<b>35</b>	<b>34</b>	<b>34</b>	<b>35</b>	<b>(11.4)</b>	<b>(8.8)</b>	<b>(2.9)</b>
<b>Total production (Mboed)</b>	<b>2,628</b>	<b>2,689</b>	<b>2,935</b>	<b>2,698</b>	<b>2,782</b>	<b>(2.3)</b>	<b>(10.5)</b>	<b>(3.0)</b>
<b>Total commercial production (Mboed)</b>	<b>2,288</b>	<b>2,337</b>	<b>2,572</b>	<b>2,352</b>	<b>2,444</b>	<b>(2.1)</b>	<b>(11.0)</b>	<b>(3.8)</b>
<b>Total operated production (Mboed)</b>	<b>3,798</b>	<b>3,869</b>	<b>4,045</b>	<b>3,815</b>	<b>3,867</b>	<b>(1.8)</b>	<b>(6.1)</b>	<b>(1.3)</b>

Our pre-salt oil production in 4Q24 was 1,760 Mbpd, 3.4% lower than in the previous quarter, mainly due to a higher volume of maintenance stoppages in Búzios field, partially offset by the start-up of FPSO Sepetiba and the start-up of FPSOs Maria Quitéria and Marechal Duque de Caxias.

In 2024, oil production in pre-salt was 1,813 Mbpd, 0.4% higher than in 2023. During the year, we saw the ramp-up of the FPSOs Sepetiba, Almirante Barroso, Anita Garibaldi, Marechal Duque de Caxias and Maria Quitéria, which helped to sustain the production level, despite the maintenance stoppages in Búzios field in 4Q24.

Post-salt oil production in 4Q24 reached 295 Mbpd, representing an increase of 7.3% compared to 3Q24. This growth was mainly driven by the return to operation, over the quarter, of platforms in Campos Basin that had been on maintenance and by the ramp-up of the FPSOs Anita Garibaldi and Anna Nery, partially offset by the natural decline in production.

In the year-on-year comparative, production in post-salt in 2024 was 305 Mbpd, a decrease of 20% compared to 2023. This performance was mainly due to the restriction of production on platforms that returned to operation during 4Q24, along with the natural decline in production. In contrast, during the year we had the ramp-up of Anna Nery platform, as well as the start-up of 4 new wells in the Campos Basin.

Onshore and shallow water production in 4Q24 was 35 Mbpd, 3 Mbpd higher than in the previous quarter, due to lower losses from maintenance stoppages. Onshore and shallow water production in 2024 was 34 Mbpd, 9 Mbpd lower than in 2023, mainly due to divestments and the natural decline in production.



Production overseas this quarter was 31 Mboed, 4 Mboed lower than in 3Q24, due to higher losses from maintenance and natural decline in the fields in Bolivia, Argentina and the United States.

*“Pre-salt production was record in 2024. Since the first well in 2008, every year Petrobras has increased its production in this layer, and 2024 was no different. We anticipated the start-up of the Maria Quitéria FPSO, originally scheduled for 2025, and at the beginning of this year we have something new, the deployment of an FPSO with oil production capacity of 225 Mbpd, the FPSO Almirante Tamandaré (photo), with lower costs and emissions, which takes advantage of the geological characteristics of the Brazilian pre-salt. Finally, we would like to highlight the confirmation of a record volume of gas discoveries in Colombia, expanding important horizons for the company's future.”*

*Sylvia dos Anjos, Chief Exploration and Production Officer*





## Refining, Transportation & Marketing

	4Q24	3Q24	4Q23	2024	2023	Variation (%)		
						4Q24 X 3Q24	4Q24 X 4Q23	2024 X 2023
<b>Total sales volume in the domestic market (Mbpd)</b>	<b>1,758</b>	<b>1,771</b>	<b>1,733</b>	<b>1,719</b>	<b>1,744</b>	<b>(0.7)</b>	<b>1.4</b>	<b>(1.4)</b>
Diesel	731	760	748	725	746	(3.8)	(2.3)	(2.8)
Gasoline	432	396	407	401	418	9.1	6.1	(4.1)
Jet Fuel	117	110	105	110	104	6.4	11.4	5.8
Naphtha	75	70	70	70	68	7.1	7.1	2.9
Fuel Oil	24	24	35	28	33	-	(31.4)	(15.2)
Liquefied Petroleum Gas (LPG)	212	226	203	214	206	(6.2)	4.4	3.9
Others	167	185	165	171	169	(9.7)	1.2	1.2
<b>Total production volume (Mbpd)</b>	<b>1,818</b>	<b>1,818</b>	<b>1,798</b>	<b>1,783</b>	<b>1,772</b>	<b>-</b>	<b>1.1</b>	<b>0.6</b>
Diesel	737	723	730	715	715	1.9	1.0	-
Gasoline	434	438	414	420	403	(0.9)	4.8	4.2
Jet Fuel	92	83	88	87	84	10.8	4.5	3.6
Naphtha	70	77	71	73	70	(9.1)	(1.4)	4.3
Fuel Oil	195	185	204	191	207	5.4	(4.4)	(7.7)
Liquefied Petroleum Gas (LPG)	119	124	122	120	123	(4.0)	(2.5)	(2.4)
Others	171	188	169	177	172	(9.0)	1.2	2.9

## Other operating information

Mbpd	4Q24	3Q24	4Q23	2024	2023	Variation (%)		
						4Q24 X 3Q24	4Q24 X 4Q23	2024 X 2023
Reference feedstock	1,813	1,813	1,813	1,813	1,830	-	-	(0.9)
Total distillation feedstock	1,717	1,727	1,711	1,689	1,681	(0.6)	0.4	0.5
Total refining plants utilization factor (1)	95%	95%	94%	93%	92%	-	1.0	1.0
Fresh processed feedstock(2)	1,693	1,706	1,683	1,661	1,649	(0.7)	0.6	0.7
NGL processed feedstock	38	46	46	45	47	(17.4)	(17.4)	(4.3)
Domestic crude oil as % of total processed feedstock (1)	92%	92%	91%	92%	91%	-	1.0	1.0
Pre-salt crude oil as % of total processed feedstock (1) (3)	71%	73%	65%	70%	66%	(2.0)	6.0	4.0

(1) Variations in percentage points.

(2) Fresh processed feedstock: adjustment in the volumetric measurement for Q3 2024 (methodology).

(3) Share of pre-salt oil feedstock adjustment in the measurement of mixed oils in 2023 (methodology).





## Sales

The total sales volume of oil products in 4Q24 was similar to that of 3Q24. In the quarter under review, gasoline and jet fuel sales grew, while diesel and LPG sales decreased (all variations were influenced by the typical demand seasonality for these oil products).

Gasoline sales increased by 9.1% in 4Q24 compared to 3Q24 due to higher vehicle traffic during the year-end holidays and the injection of the 13<sup>th</sup> salary into the economy.

The increase in jet fuel sales also reflected higher passenger traffic during the holiday season, rising by 6.4% compared to 3Q24. It is worth noting that in 4Q24 we reached the highest volume of jet fuel sales since the beginning of the Covid-19 pandemic.

Naphtha sales grew by 7.1% in 4Q24 compared to 3Q24, primarily due to the resumption of operations at the petrochemical hub in São Paulo.

Diesel sales declined by 3.8% in 4Q24 compared to 3Q24 due to lower consumption following the summer grain crop planting and a reduction in industrial activity. The share of S-10 diesel sales was 65.2% of the total diesel sold by Petrobras in 4Q24, surpassing the previous record of 64.4% achieved in 3Q24.

LPG sales in 4Q24 were 6.2% lower than 3Q24 due to higher average temperatures in the main consumer centers and lower activity in the manufacturing industry.

## Production

Total oil products production in 4Q24 was in line with that of 3Q24, once again reflecting our strong performance and focus on profitability. This statement can be corroborated by the fact that the production of diesel, gasoline, and jet fuel reached 69.5% of the total production volume in 4Q24, 1 p.p. higher than in 3Q24.

In 4Q24 diesel production was 1.9% higher than 3Q24, reflecting inventory management in preparation for the RNEST' scheduled shutdown in 1Q25. Notably, the annual diesel production record was set in 2024 by REGAP (69 mbpd). Additionally, the volume of S-10 diesel produced in 4Q24 was a record (485 Mbpd), exceeding the previous record set in 3Q23 by 4.5%, with the REPLAN, REFAP, and REDUC refineries achieving record levels in the quarter.

Gasoline production in 4Q24 remained high (as it did in 3Q24), in line with market demand. We recorded the highest quarterly gasoline productions in 4Q24 and 3Q24. Notably, REPAR achieved a record quarterly production level in 4Q24.

Jet fuel production in 4Q24 increased 10.8% in relation to 3Q24, in line with a higher demand. In the annual comparison, production rose by 3.6%, also aligned with market variations. Additionally, we set a new annual production record for jet fuel at REVAP, reaching 37 mbpd, surpassing the previous record by 5.9% (2011).

Regarding asphalt production, we achieved annual records at REPAR (481 thousand tons) and REFAP (251 thousand tons).

These historical results demonstrate the reliability and high availability of the refining plants, as well as the integration of the entire Refining, Transportation, and Marketing segments.



We continued on our path to greater energy efficiency in the refining facilities with the RefTOP Program (World Class Refining). The projects and optimization initiatives of this program helped us reach 102.6 in Energy Intensity in 2024, the best result in history.



4Q24 marks the beginning of operations of the atmospheric emissions reduction unit (SNOX) at RNEST. This new unit brings significant environmental benefits and greater operational flexibility, with an increased load capacity and the ability to process crude oils with higher sulphur content, contributing to the expansion of S-10 diesel production.



We inaugurated the Boaventura Energy Complex, with the beginning of operations of the Natural Gas Processing Unit (UPGN). The natural gas delivered to the unit generates at least three subproducts after processing: Natural Gas (NG); Liquefied Petroleum Gas (LPG or cooking gas); and C5+ (raw material for the petrochemical industry and fuel production). Boaventura is part of the Integrated Rota 3 Project for the transportation of gas from the Santos Basin.



Beginning of diesel and gasoline rail transport from Paulínia (SP) to Rondonópolis (MT) and the beginning of sales in the SINOP (MT) hub, consolidating our strategy to advance towards the Midwest and bringing a significant reduction in CO<sub>2</sub> emissions compared to road transport. We also highlight the beginning of sales in the Santarém (PA) hub, expanding our operations in the Northern.



## Gas & Low Carbon Energies

	4Q24	3Q24	4Q23	2024	2023	Variation (%)		
						4Q24 X 3Q24	4Q24 X 4Q23	2024 X 2023
<b>Natural Gas (MM m<sup>3</sup>/day)</b>								
Sales volume of natural gas	48	50	50	47	49	(4.0)	(4.0)	(4.1)
<b>Natural Gas Supply</b>								
National gas delivery	29	31	32	30	33	(6.5)	(9.4)	(9.1)
Regasification of liquefied natural gas	5	6	3	4	2	(16.7)	66.7	100.0
Import of natural gas from Bolivia	13	13	16	13	16	-	(18.8)	(18.8)
<b>Power (average MW)</b>								
Sale of Thermal Availability at Auction	1,109	1,135	1,655	1,154	1,655	(2.3)	(33.0)	(30.3)
Sale of electricity	942	1,077	760	722	581	(12.5)	23.9	24.3

(1) For the current period, the figures for the Energy segment are subject to possible changes once the final report from the Electricity Trading Chamber (CCEE) is issued.

(2) Adjustment to electricity sales data in 2023.

Sales of natural gas in 4Q24 decreased by approximately 2 million m<sup>3</sup>/day compared to 3Q24, due to a growing participation of other agents in the market and lower demand from the non-thermoelectric segment.

In terms of supply, domestic gas production was 2 million m<sup>3</sup>/day lower than in 3Q24, reflecting interventions in operational units that took place in 4Q24. LNG imports were 1 million m<sup>3</sup>/day lower and imports from Bolivia remained stable.

The sale of electricity in 4Q24 fell by 12.5% due to the improvement in the inflow of hydrological reservoirs.

With regard to the annual figures, sales of natural gas fell by 2 million m<sup>3</sup>/day due to the same reasons explained in the quarterly comparison.

On the domestic gas supply, there was a reduction of 3 million m<sup>3</sup>/day due to the decrease in the volumes purchased by Petrobras from other domestic producers and the impact of interventions that took place throughout 2024, such as the scheduled stoppage of Route 1 (Mexilhão) in March 2024 and the interdiction of Manati starting in the same month. The volume imported from Bolivia was 3 million m<sup>3</sup>/day lower, following the contract curve. This reduction in supply was partially offset by higher LNG imports.

Finally, the sale of thermal availability at auction fell by 30.3% in 2024 compared to 2023, due to the termination of contracts. In contrast, the total sale of electricity increased by 24.3%, due to the worse hydrological conditions which resulted in a greater need for thermoelectric dispatch.



On November 10, the Natural Gas Processing Unit (UPGN), located at the Boaventura Energy Complex (Itaboraí, RJ), launched its first module, with the capacity to process up to 10.5 MMm<sup>3</sup>/d of natural gas. The second module, also with a processing capacity of 10.5 MMm<sup>3</sup>/d, is scheduled to start operating by the end of the first quarter of 2025. Boaventura is part of the Route 3 Integrated Project to transport gas from Santos Basin.

*"The start-up of such an important project for the natural gas market is essential for the country and for boosting Petrobras' competitiveness in the new dynamic and competitive environment of the national gas market. We are strengthening our asset portfolio, investing in Brazil and we will be able to reduce imports. With this, we will be able to provide new commercial conditions to Petrobras customers and increase our supply reliability, which is already practically 100%. Now, with all our energy and the new gas from the Boaventura Energy Complex (photo) we will be supplying distributors and industry clients interested in sustainable and competitive solutions."*  
Maurício Tolmasquim, Chief Energy Transition and Sustainability Officer

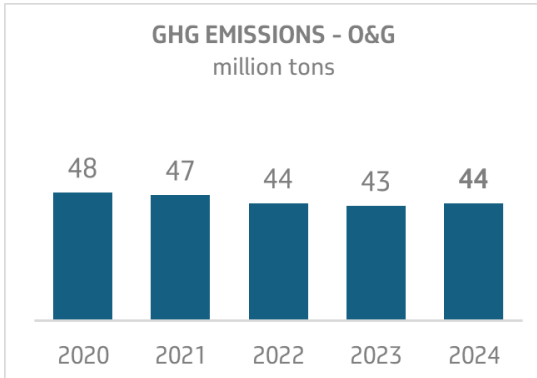




## Atmospheric Emissions

The monitoring of greenhouse gas (GHG) emissions indicators encourages the adoption of practices and the development of projects aimed at reducing the emissions of these gases by the company, in alignment with the climate commitments announced in the 2025-2029 Business Plan, while maximizing value creation in face of the risks and opportunities associated with a just energy transition to a low-carbon economy.

### Operational GHG emissions from oil and gas activities



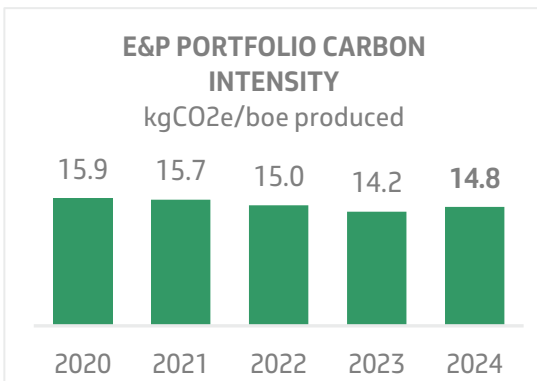
The GHG - O&G indicator measures operational emissions from oil and gas activities as an independent outcome, i.e. not including emissions from operations in the thermoelectricity market. The GHG - O&G emissions in 2024 were 44 million tons, 1 million tons higher than in 2023.

In E&P, there was an increase in emissions associated with the commissioning of FPSOs. Part of the increase was mitigated by the decarbonization actions implemented, such as the turbo generators optimization of the operation and the FGRUs (Flaring Gas Recovery Units)

operationalization, a unit that recovers part of the gas stream that would be sent to the flare, returning it to the process. In Refining, energy efficiency measures and equipment maintenance stand out, contributing to the increase of the operational efficiency.

### Greenhouse Gas Emissions Intensity (GHGI)

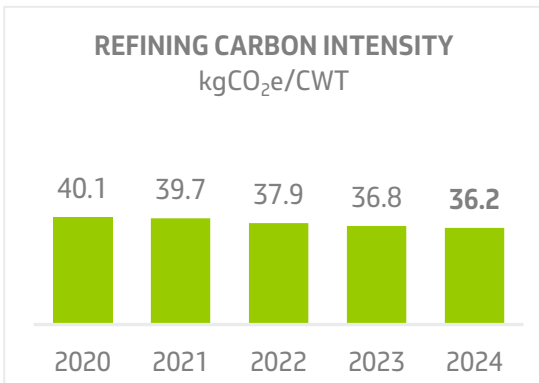
#### E&P



The result for 2024 represents an increase of 0.6 kgCO<sub>2</sub>e/boe compared to 2023, mainly impacted by the commissioning of FPSOs. During the commissioning phase, which precedes the full production capacity period, the emission intensity per boe produced tends to be higher due to the need for operational testing. This increase in emissions was mitigated by the decarbonization actions implemented, such as the turbo generators optimization of the operation of and the FGRUs operationalization.

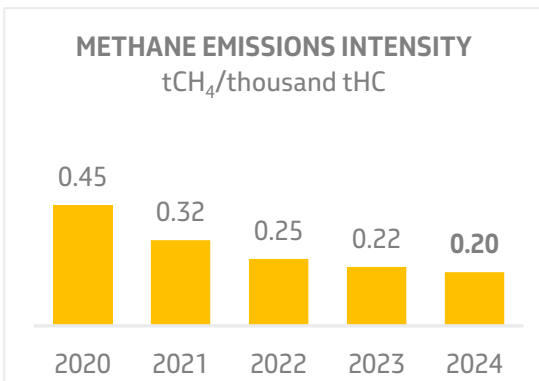


### Refining



The 2024 result was 0.6 kgCO<sub>2</sub>e/CWT lower than in 2023, reflecting greater energy efficiency in Refining and reinforcing the downward trend observed since 2020.

### Greenhouse Gas Emissions Intensity – Methane



Methane has a specific metric due to its high short-term global warming potential.

In 2024, there was a reduction of 0.02 tCH<sub>4</sub> per thousand tHC compared to 2023. This result was driven by actions to reduce gas losses in E&P.



# Exhibits

## EXHIBIT I - CONSOLIDATED SALES VOLUME

Sales volume (Mbpd)	4Q24	3Q24	4Q23	2024	2023	Variation (%)		
						4Q24 X 3Q24	4Q24 X 4Q23	2024 X 2023
Diesel	731	760	748	725	746	(3.8)	(2.3)	(2.8)
Gasoline	432	396	407	401	418	9.1	6.1	(4.1)
Jet Fuel	117	110	105	110	104	6.4	11.4	5.8
Naphtha	75	70	70	70	68	7.1	7.1	2.9
Fuel oil	24	24	35	28	33	-	(31.4)	(15.2)
LPG	212	226	203	214	206	(6.2)	4.4	3.9
Others	167	185	165	171	169	(9.7)	1.2	1.2
<b>Oil products</b>	<b>1,758</b>	<b>1,771</b>	<b>1,733</b>	<b>1,719</b>	<b>1,744</b>	<b>(0.7)</b>	<b>1.4</b>	<b>(1.4)</b>
Renewable, nitrogenous and others	8	8	5	7	4	-	60.0	75.0
Petroleum	134	150	183	147	181	(10.7)	(26.8)	(18.8)
Natural gas	205	209	230	206	226	(1.9)	(10.9)	(8.8)
<b>Total domestic market</b>	<b>2,105</b>	<b>2,138</b>	<b>2,151</b>	<b>2,079</b>	<b>2,155</b>	<b>(1.5)</b>	<b>(2.1)</b>	<b>(3.5)</b>
Exports of petroleum, oil products and others	692	804	885	798	806	(13.9)	(21.8)	(1.0)
Sales abroad	36	29	36	37	45	24.1	-	(17.8)
<b>Total external market</b>	<b>728</b>	<b>833</b>	<b>921</b>	<b>835</b>	<b>851</b>	<b>(12.6)</b>	<b>(21.0)</b>	<b>(1.9)</b>
<b>Grand total</b>	<b>2,833</b>	<b>2,971</b>	<b>3,072</b>	<b>2,914</b>	<b>3,006</b>	<b>(4.6)</b>	<b>(7.8)</b>	<b>(3.1)</b>

## EXHIBIT II - NET IMPORTS AND EXPORTS

Thousand barrels per day (Mbpd)	4Q24	3Q24	4Q23	2024	2023	Variation (%)		
						4Q24 X 3Q24	4Q24 X 4Q23	2024 X 2023
<b>Net export (import)</b>	<b>455</b>	<b>494</b>	<b>621</b>	<b>499</b>	<b>485</b>	<b>(7.9)</b>	<b>(26.7)</b>	<b>2.9</b>
<b>Import</b>	<b>237</b>	<b>310</b>	<b>264</b>	<b>299</b>	<b>321</b>	<b>(23.5)</b>	<b>(10.2)</b>	<b>(6.9)</b>
Petroleum	121	149	139	151	156	(18.8)	(12.9)	(3.2)
Diesel	34	81	43	60	63	(58.0)	(20.9)	(4.8)
Gasoline	7	-	24	11	39	-	(70.8)	(71.8)
Naphtha	-	-	-	-	-	-	-	-
LPG	51	62	40	59	45	(17.7)	27.5	31.1
Other oil products	24	18	18	18	18	33.3	33.3	-
<b>Export</b>	<b>692</b>	<b>804</b>	<b>885</b>	<b>798</b>	<b>806</b>	<b>(13.9)</b>	<b>(21.8)</b>	<b>(1.0)</b>
Petroleum	508	598	634	602	594	(15.1)	(19.9)	1.3
Fuel oil	140	161	161	150	161	(13.0)	(13.0)	(6.8)
Other oil products	44	45	90	46	51	(2.2)	(51.1)	(9.8)



Lower net exports due to the reduction in oil exports, mainly due to lower production; and of fuel oil, which was higher in Q3 2024 due to ongoing stockpiling.

In the annual comparison, there were higher net exports due to lower imports of derivatives, especially gasoline, as a result of increased production stemming from higher refinery utilization throughout the year.

In the fourth quarter of 2024, there was a reduction in China's share of Petrobras' oil exports, with the volume being directed to other regions that proved to be more economically attractive, such as Korea, India, and Europe. Europe increased its share of exports and remains the second largest market in the consolidated figures for the year 2024. We also emphasize the continuous effort in market development for pre-salt oils, whether through sales to new customers or by selling new oil streams to existing customers.

#### EXHIBIT III - OIL EXPORTS (\*)

Country	4Q24	3Q24	4Q23
China	30%	41%	44%
Europe	38%	32%	28%
Latam	6%	7%	7%
USA	9%	6%	13%
Asia (Ex China)	17%	14%	8%

#### EXHIBIT IV - OIL PRODUCTS EXPORTS (\*)

Country	4Q24	3Q24	4Q23
Singapore	57%	47%	35%
USA	35%	47%	50%
Others	8%	6%	15%





# Glossary

## D

**Diesel-R:** is an S-10 diesel with renewable content, an advanced biofuel. Diesel-R is produced from coprocessing of conventional diesel and vegetable oils using our proprietary HBIO™ technology. The renewable part of the resulting fuel (Hydrotreated Vegetable Oil or "HVO") has the same structure as conventional diesel oil and reduces greenhouse gas emissions when compared to mineral diesel oil.

**Diesel S-10:** is a medium oil product with a low sulphur content (10 ppm) used as fuel in vehicles with compression-ignites internal combustion engines (diesel cycle engines).

## E

**Exploration & Production (E&P):** The segment covers the exploration, development and production of crude oil, NGL and natural gas in Brazil and overseas, mainly aiming to supply our domestic refineries. This segment also operates through joint ventures with other companies, including interests in foreign companies.

**E&P Carbon Intensity:** GHG emissions, in terms of CO<sub>2e</sub>, from E&P activities in relation to the total operated oil and gas production (wellhead) recorded in the same period. Scope 1 and 2 GHG emissions are considered. This indicator represents the rate of greenhouse gas emissions per unit of barrel of oil equivalent produced and is used to analyze the carbon performance of the assets in our current and future portfolio.

## F

**Fresh processed feedstock:** the volume of oil processed in the distillation units, consisting of oil and C5+.

**FGRU:** Flare Gas Recovery Unit (FGRU). It allows this gas to be returned for processing in the unit, avoiding its burning and the consequent emission of greenhouse gases.

## G

**Gas & Low Carbon Energy (G&LCE):** The segment covers the logistics and commercialization of natural gas and electricity, the transportation and commercialization of LNG, the generation of electricity through thermoelectric plants, as well as the processing of natural gas. It also includes renewable energy businesses, low carbon services (carbon capture, utilization and storage) and the production of biodiesel and its products.

**GHG Emissions Intensity in E&P:** GHG emissions, in terms of CO<sub>2e</sub>, from E&P activities in relation to total operated oil and gas production (wellhead) recorded in the same period. Scope 1 and 2 GHG emissions are taken into account. This indicator represents the rate of GHG emissions per barrel of oil equivalent produced. It covers oil and gas exploration and production activities under operational control and is used to analyze the carbon performance of the assets in our current and future portfolio.

**GHG Emissions Intensity in Refining:** GHG Emissions Intensity in the Refinery. GHG emissions, in terms of CO<sub>2e</sub>, from refining activities in relation to the unit of activity called Complexity Weighted Tonne ("CWT"). CWT represents a measure of activity, similar to UEDC (Utilized Equivalent Distillation Capacity), which considers the potential for GHG emissions, equivalent to distillation, per process unit, allowing for better comparability between refineries of different complexities. This indicator covers refining activities with operational control and makes up the analysis of the carbon performance of the assets in our current and future portfolio.

**L**

**LNG regasification:** operational volume of LNG that has been regasified and made available by Petrobras to the market at the exit of the LNG terminals, converted to the reference PCS of 9400 kcal/m<sup>3</sup>. Volumes that have been transferred from methane ships to regasification ships but have not yet been regasified are not included in this measure.

**M**

**Mboed:** Thousand barrels of oil equivalent per day

**Mbpd:** Thousand barrels per day

**MM:** Million

**Methane Emissions Intensity:** The indicator uses the IOGP metric, which represents the ratio between methane emissions and total operated hydrocarbon production.

**N**

**National gas delivery:** operational volume of processed natural gas (dry), of national origin (onshore or offshore), made available by Petrobras to the market at the exit of the natural gas processing units, converted to the reference PCS of 9400 kcal/m<sup>3</sup>. It includes both gas from Petrobras' own production and gas purchased from partners. It does not include the volumes of gas belonging to agents who directly contract the processing service at the units.

**NGL:** Natural Gas Liquids, the liquid resulting from the processing of natural gas and containing the heaviest gaseous hydrocarbons.

**NGL processed feedstock:** the volume of NGL processed in refining units.

**R**

**Reference feedstock:** maximum sustainable feedstock of oil reached in the distillation units at the end of the period, respecting the design limits of the equipment and the requirements of safety, the environment and product quality. It is less than the capacity authorized by the ANP (including temporary authorizations) and environmental agencies.

**Refining Carbon Intensity:** GHG emissions, in terms of CO<sub>2</sub>e, from Refining activities in relation to the unit of activity called CWT (Complexity Weighted Tonne). The CWT represents a measure of activity, which takes into account both the effect of the load processed and the complexity of each refinery, allowing the potential for GHG emissions to be compared between refineries with different profiles and sizes. This indicator makes up the analysis of the carbon performance of the assets in our current and future portfolio.

**Refining, Transportation and Marketing (RTM):** The segment covers refining, logistics, transportation, acquisition and export of crude oil, as well as trading in oil products in Brazil and abroad. This segment also includes petrochemical operations (involving interests in petrochemical companies in Brazil) and fertilizer production.

**S**

**Sale of Thermal Availability at Auction (average MW):** the volume that the thermoelectric generating agent undertakes to make available to the electricity system to meet the plant's eventual needs, i.e. regardless of its effective generation. In contracts for the Commercialization of Energy in the Regulated Environment by Availability, the generating agent receives a fixed portion, associated with the capacity made available to the electrical system, and a variable portion, associated with the effective generation of energy from the plant.

**Summer Grain Crop:** agricultural crops that thrive best in conditions of high temperatures and greater water availability. In Brazil, this usually involves planting in the months of September to December, with harvesting taking place mainly in the months of January to April. The main crops of this season include soybeans, corn, rice, beans and cotton, and are crucial to the agricultural economy due to their influence on domestic supply and exports.

**T**

**Thermal Carbon Intensity:** GHG emissions, in terms of CO<sub>2e</sub>, from the processes of Thermal Power Plants in relation to the electricity generated. Scope 1 and 2 GHG emissions are considered. This indicator makes up the analysis of the carbon performance of the assets in our current and future portfolio.

**Total commercial production:** Production of oil, NGL and commercial natural gas (excluding the volume of natural gas reinjected and not marketed).

**Total distillation feedstock:** the feedstock of distillation units, consisting of oil, C5+, residues and reprocessing, including terminals.

**Total operated production:** Production from a gas or oil field, including Petrobras' interest and the interest of partners.

**Total production:** Production of oil, NGL and natural gas (takes into account the volume of natural gas reinjected and not sold).

**Total utilization factor of the refining park:** percentage utilization of the refining park in relation to its reference feedstock. It takes into account all the cargo in the distillation units, consisting of oil, C5+, residues, reprocessing, including terminals.

**Tupi Asset:** includes the area of the Tupi Shared Reservoir and the Iracema Area.



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