

Financial Performance 4Q23



*FPSO Sepetiba
First oil in
December 2023*

Petrobras financial performance in 4Q23

Rio de Janeiro, March 07, 2024

Dear shareholders and investors,

I am very proud to address you today, not only in light of the excellent economic and financial results we are disclosing, but especially because I am convinced that we are building a Petrobras which is more solid, more resilient and able to generate long-term value to its partners and to society at large, facing the countless challenges imposed by a world in transition.

Since present management took the helm, we have been underscoring the need to adapt Petrobras to a new energy context where the decarbonization of operations and energy sources is a must – and a result of society's legitimate demands – and requires strategic shifts and novel solutions that take into account the inevitable reduction in fossil fuel demand. Aware of this challenge, we have built a new strategic plan, which, besides consistency, was based on realism, responsibility and transparency. We acknowledge that the energy transition will unfold gradually and, therefore, we will continue to invest in oil and gas exploration, the segment where we generate the highest returns, and in the integration with the downstream. We will also generate value with the just and responsible transition, diversifying our operations into profitable low carbon businesses, always prioritizing partnerships. And we shall accomplish all this maintaining the focus on capital discipline, our solid governance and rationality in all decision-making processes. This rationality, I must insist, was part and parcel of the changes implemented in our commercial strategy – through which we increased our competitiveness, with more flexibility to the decision makers and more stability to consumers – and our dividend policy, enhanced to consider both higher investments and the absolute need to keep our financial health.

In this regard, it is worth highlighting the proposal of dividends relative to 2023 – R\$ 72.4 billion, an amount which mainly benefits the Brazilian society, through its 37% ownership of Petrobras, and, who, as a matter of fact, has also received R\$ 240 billion in taxes – and the successive records in market capitalization since we took over. Thus, in 2023, our total shareholder return, relative to our preferred shares in NYSE, reached 112%, outpacing the highest return delivered by the majors (20%), an evidence of how correct was the decision to keep dividends at reasonable levels, while increasing investments to deliver profitable growth, which is being reflected in higher market values.

These accomplishments were only possible because we have prioritized our most important asset: people. For them, we have approved our Diversity, Equity and Inclusion Policy and our Racial Equity Program. Because they are the ones who strive to build our future. They were responsible, when we celebrate 15 years of the pre-salt, for the record in oil and gas production: we produced more with less emissions; for the start-up of four new production platforms; for the daily records in refining, with high utilization factors and the best result ever in energy efficiency; for the higher thermoelectric generation, with reliability; for the progress in biorefining, either through capacity expansion, or for the historical landmark of processing 100% of soybean oil in an industrial refining unit; for the records in carbon efficiency, which allowed the reduction of 1.8 million tons of CO_{2e} in absolute emissions; for the main award of the global offshore industry: the OTC Distinguished Achievement Award 2024, in recognition of the contribution of Campos Basin Revitalization Program for the global industry; for the record in patents filings, among other countless accomplishments which would allow me to write a lengthy book instead of a brief letter.

This is why I always say, my dear shareholders and investors, that Petrobras is back. Back to prosperity, to generate long-term value and to help building a better world. We will face the challenges taking advantage the synergies with our businesses and leveraged in our expertises, and never neglecting economic value generation, as must be the case for a company that wishes to remain competitive and perpetuate value for future generations.

Jean Paul Prates, CEO

Main highlights for 2023:

- *Second highest annual EBITDA in history: US\$ 52.4 billion*
- *Cash generation: Operating Cash Flow (OCF) of US\$ 43.2 billion, the second highest in history*
- *Gross debt under control at US\$ 62.6 billion, even after the US\$ 10.0 billion increase in debt related to leases, including US\$ 8.7 billion related to the leasing of the four new production platforms that started production in 2023*
- *Financial debt reduced by US\$ 1.2 billion*
- *Return to society with payment of R\$ R\$ 240.2 billion in taxes in 2023*
- *Annual production records: Total own production in the pre-salt reaches 2.17 MMboed (10% more than in 2022), representing 78% of the total*
- *Start-up of 4 new production systems: FPSOs Anna Nery and Anita Garibaldi, in Marlim and Voador revitalization projects, FPSO Almirante Barroso, the fifth unit to start up in Búzios field, and FPSO Sepetiba, the second definitive production system in Mero.*
- *A new record in the pre-salt, the Almirante Barroso FPSO's peak production in less than 5 months*
- *OTC Distinguished Achievement Award 2024 for technologies for the renovation of Campos Basin*
- *Sustainable disposal: P-32 and P-33 will go through a recycling process in line with best ESG practices*
- *Equatorial Margin: Drilling of Pitu Oeste well, in Potiguar Basin, marking the resumption of oil and gas exploration in the region*
- *Proved Reserves: Maintenance of the trajectory of reserve replenishment (1.5 billion boe), with a focus on profitable assets*
- *High utilization of the refining facilities with value generation: annual FUT of 92%, 4p.p. higher than 2022, with a strong yield of diesel, gasoline and jetfuel in total production*
- *Lower environmental impact fuels: Expansion of Diesel R sales, new bunker + bio test and launch of Cap Pro W asphalt*
- *Record processing of Pre-Salt oils: Pre-Salt oils accounted for 65% of the feedstock processed in Refining, 3 p.p. above the volume in 2022*
- *Record annual production and sales of S-10 diesel: Production of 428 Mbpd and sales of 463 Mbpd*

Disclaimer

This report may contain forward-looking statements. Such forward-looking statements only reflect expectations of the Company's managers regarding future economic conditions, as well as the Company's performance, financial performance and results, among others. The terms "anticipates", "believes", "expects", "predicts", "intends", "plans", "projects", "objective", "should", and similar terms, which evidently involve risks and uncertainties that may or may not be anticipated by the Company and therefore are not guarantees of future results of the Company's operations that may differ from current expectations. The readers should not rely exclusively on any forward-looking statement contained herein. The Company does not undertake any responsibility to update the presentations and forecasts in the light of new information or its future developments, and the figures reported for 4Q23 onwards are estimates or targets. These indicators do not have standardized meanings and may not be comparable to indicators with a similar description used by others. We provide these indicators because we use them as measures of company performance; they should not be considered in isolation or as a substitute for other financial metrics that have been disclosed in accordance with BR GAAP or IFRS. See definitions of Free Cash Flow, Adjusted EBITDA and Net Indebtedness in the Glossary and their reconciliations in the Liquidity and Capital Resources sections, Reconciliation of Adjusted EBITDA and Net Indebtedness. Consolidated accounting information in accordance with International Accounting Standard IAS 34 - Interim Financial Reporting, issued by the International Accounting Standards Board (IASB) and revised by independent auditors.

Main items

Table 1 - Main items

R\$ million	4Q23	3Q23	4Q22	2023	2022	Variation (%)		
						4Q23 X 3Q23	4Q23 X 4Q22	2023 X 2022
Sales revenues	134,258	124,828	158,579	511,994	641,256	7.6	(15.3)	(20.2)
Gross profit	72,626	66,315	76,637	269,933	334,100	9.5	(5.2)	(19.2)
Operating expenses	(32,655)	(17,557)	(18,184)	(79,111)	(41,136)	86.0	79.6	92.3
Consolidated net income (loss) attributable to the shareholders of Petrobras	31,043	26,625	43,341	124,606	188,328	16.6	(28.4)	(33.8)
Recurring consolidated net income (loss) attributable to the shareholders of Petrobras *	40,986	27,226	43,746	136,034	179,452	50.5	(6.3)	(24.2)
Net cash provided by operating activities	57,658	56,528	67,575	215,696	255,410	2.0	(14.7)	(15.5)
Free cash flow	39,854	40,966	48,828	155,261	205,616	(2.7)	(18.4)	(24.5)
Adjusted EBITDA	66,852	66,188	73,091	262,227	340,482	1.0	(8.5)	(23.0)
Recurring adjusted EBITDA*	74,265	66,887	76,771	275,866	348,386	11.0	(3.3)	(20.8)
Gross debt (US\$ million)	62,600	60,997	53,799	62,600	53,799	2.6	16.4	16.4
Net debt (US\$ million)	44,698	43,725	41,516	44,698	41,516	2.2	7.7	7.7
Net debt/LTM Adjusted EBITDA ratio **	0.85	0.83	0.63	0.85	0.63	2.4	34.9	34.9
Average commercial selling rate for U.S. dollar	4.95	4.88	5.26	4.99	5.16	1.4	(5.9)	(3.3)
Brent crude (US\$/bbl)	84.05	86.76	88.71	82.62	101.19	(3.1)	(5.3)	(18.4)
Domestic basic oil by-products price (R\$/bbl)	516.70	464.08	621.25	505.20	632.22	11.3	(16.8)	(20.1)
TRI (total recordable injuries per million men-hour frequency rate)	-	-	-	0.80	0.68	-	-	17.6
ROCE (Return on Capital Employed)	11.2%	11.5%	15.8%	11.2%	15.8%	-0,3 p.p.	-4,6 p.p.	-4,6 p.p.

* See reconciliation of Recurring net income and Adjusted EBITDA in the Special Items section.

**Ratio calculated in USD.

Consolidated results

Net revenues

Table 2 – Net revenues by products

R\$ million	4Q23	3Q23	4Q22	2023	2022	Variation (%)		
						4Q23 X 3Q23	4Q23 X 4Q22	2023 X 2022
Diesel	43,042	39,988	54,139	161,279	206,960	7.6	(20.5)	(22.1)
Gasoline	16,970	16,660	21,188	71,519	83,354	1.9	(19.9)	(14.2)
Liquefied petroleum gas (LPG)	3,882	4,107	6,008	17,530	26,362	(5.5)	(35.4)	(33.5)
Jet fuel	6,626	5,706	7,874	25,095	28,007	16.1	(15.8)	(10.4)
Naphtha	2,376	2,194	2,270	9,187	12,312	8.3	4.7	(25.4)
Fuel oil (including bunker fuel)	1,607	1,401	1,639	5,788	7,287	14.7	(2.0)	(20.6)
Other oil products	5,271	5,621	6,114	22,109	28,493	(6.2)	(13.8)	(22.4)
Subtotal oil products	79,774	75,677	99,232	312,507	392,775	5.4	(19.6)	(20.4)
Natural gas	6,561	6,592	10,418	28,163	39,617	(0.5)	(37.0)	(28.9)
Crude oil	7,311	6,253	6,836	27,336	39,613	16.9	6.9	(31.0)
Renewables and nitrogen products	159	77	281	467	1,454	106.5	(43.4)	(67.9)
Revenues from non-exercised rights	1,066	1,010	1,087	4,290	3,448	5.5	(1.9)	24.4
Electricity	1,157	782	795	3,265	3,622	48.0	45.5	(9.9)
Services, agency and others	1,298	1,330	1,283	5,289	5,363	(2.4)	1.2	(1.4)
Total domestic market	97,326	91,721	119,932	381,317	485,892	6.1	(18.8)	(21.5)
Exports	35,952	32,222	36,151	125,138	141,521	11.6	(0.6)	(11.6)
Crude oil	25,773	23,478	27,811	92,476	99,474	9.8	(7.3)	(7.0)
Fuel oil (including bunker fuel)	6,813	6,687	7,858	25,452	38,129	1.9	(13.3)	(33.2)
Other oil products and other products	3,366	2,057	482	7,210	3,918	63.6	598.3	84.0
Sales abroad (*)	980	885	2,496	5,539	13,843	10.7	(60.7)	(60.0)
Total foreign market	36,932	33,107	38,647	130,677	155,364	11.6	(4.4)	(15.9)
Total	134,258	124,828	158,579	511,994	641,256	7.6	(15.3)	(20.2)

(*) Sales revenues from operations outside of Brazil, including trading and excluding exports

The global oil and gas market started 2023 in a downward trend, influenced by concerns about global economic dynamics and the recovery of oil demand in China. During the first half of the year, oil supply disruptions were observed, along with voluntary OPEC+ cuts. As of the 3Q23, despite persistent economic concerns, oil prices have recovered due to supply restrictions and robust demand.

In this context, net revenue in 2023 was lower compared to 2022, mainly due to the 18% drop in Brent prices and crack spreads, especially diesel.

Despite these challenges, it is worth noting that these negative impacts were partially mitigated by the increase in the volume of oil sold over the period, and the highlight was the growth in exports.

The lower natural gas revenue is the result of: (i) lower demand in the non-thermoelectric sector, reflecting the effect of the natural gas market opening and lower consumption in industrial segments; (ii) lower demand in thermoelectric sector, due to lower dispatches, reflecting better hydrological conditions in Brazil; and (iii) lower prices, especially for the non-thermoelectric sector, largely influenced by the depreciation of Brent. The fall in oil revenues on the domestic market was due to lower sales volumes to Acelen, associated with the aforementioned decline in Brent prices.

In 2023, the main products sold continued to be diesel and gasoline, equivalent to approximately 74% of revenue from the sale of oil products in the domestic market.

In 4Q23, despite lower sales volumes in the domestic market, impacted by the seasonality of diesel, whose demand is usually higher in the third quarter, revenues were up compared to 3Q23, which can be explained by the higher average prices of oil products during 4Q23.

The increase in electricity revenues in 4Q23 compared to 3Q23 was due to higher thermoelectric dispatch in the quarter.

In 4Q23, the increase in the volume of exports, mainly oil, also contributed to the growth in revenues between the quarters.

Cost of goods sold *

Table 3 – Cost of goods sold

R\$ million	4Q23	3Q23	4Q22	2023	2022	Variation (%)		
						4Q23 X 3Q23	4Q23 X 4Q22	2023 X 2022
Acquisitions	(20,019)	(20,080)	(36,216)	(87,078)	(122,975)	(0.3)	(44.7)	(29.2)
Crude oil imports	(11,525)	(10,893)	(15,723)	(46,613)	(54,185)	5.8	(26.7)	(14.0)
Oil products imports	(5,946)	(7,646)	(15,954)	(30,765)	(46,639)	(22.2)	(62.7)	(34.0)
Natural gas imports	(2,548)	(1,541)	(4,539)	(9,700)	(22,151)	65.3	(43.9)	(56.2)
Production	(39,397)	(36,277)	(40,973)	(144,934)	(165,434)	8.6	(3.8)	(12.4)
Crude oil	(32,504)	(29,946)	(33,443)	(121,726)	(136,860)	8.5	(2.8)	(11.1)
Production taxes	(16,525)	(13,365)	(16,536)	(56,248)	(71,198)	23.6	(0.1)	(21.0)
Other costs	(15,979)	(16,581)	(16,907)	(65,478)	(65,662)	(3.6)	(5.5)	(0.3)
Oil products	(4,118)	(3,583)	(3,919)	(12,771)	(13,778)	14.9	5.1	(7.3)
Natural gas	(2,775)	(2,748)	(3,611)	(10,437)	(14,796)	1.0	(23.2)	(29.5)
Production taxes	(599)	(542)	(901)	(2,073)	(4,542)	10.5	(33.5)	(54.4)
Other costs	(2,176)	(2,206)	(2,710)	(8,364)	(10,254)	(1.4)	(19.7)	(18.4)
Services, electricity, operations abroad and others	(2,216)	(2,156)	(4,753)	(10,049)	(18,747)	2.8	(53.4)	(46.4)
Total	(61,632)	(58,513)	(81,942)	(242,061)	(307,156)	5.3	(24.8)	(21.2)

In 2023, cost of goods sold decreased compared to 2022, mainly reflecting the reduction in the cost of importing oil, natural gas and oil products, due to the decrease in both prices and volumes imported. In addition, government take also reduced due to the depreciation of Brent and natural gas prices. Also contributing to this reduction were lower volumes sold on the domestic market, the lower costs of operations overseas and the lower volumes of electricity sales.

In 4Q23, the increase in the cost of goods sold compared to 3Q23 reflects the higher costs of government take, the increase in volumes of oil and oil products exported, the higher volume of oil sold in the domestic market, as well as the higher share of Bolivian gas and LNG in the sales mix. These factors were partially offset by the lower sales volume of oil products in the domestic market, especially diesel.

* Managerial information (non-revised).

Operating expenses

Table 4 – Operating expenses

R\$ million	4Q23	3Q23	4Q22	2023	2022	Variation (%)		
						4Q23 X 3Q23	4Q23 X 4Q22	2023 X 2022
Selling, General and Administrative Expenses	(8,832)	(8,216)	(8,772)	(33,115)	(32,325)	7.5	0.7	2.4
Selling expenses	(6,583)	(6,289)	(6,795)	(25,163)	(25,448)	4.7	(3.1)	(1.1)
Materials, third-party services, freight, rent and other related costs	(5,678)	(5,382)	(5,601)	(21,459)	(20,592)	5.5	1.4	4.2
Depreciation, depletion and amortization	(709)	(788)	(938)	(3,038)	(4,062)	(10.0)	(24.4)	(25.2)
Allowance for expected credit losses	(38)	14	(127)	(110)	(304)	-	(70.1)	(63.8)
Employee compensation	(158)	(133)	(129)	(556)	(490)	18.8	22.5	13.5
General and administrative expenses	(2,249)	(1,927)	(1,977)	(7,952)	(6,877)	16.7	13.8	15.6
Employee compensation	(1,431)	(1,337)	(1,197)	(5,166)	(4,464)	7.0	19.5	15.7
Materials, third-party services, rent and other related costs	(639)	(447)	(611)	(2,170)	(1,871)	43.0	4.6	16.0
Depreciation, depletion and amortization	(179)	(143)	(169)	(616)	(542)	25.2	5.9	13.7
Exploration costs	(766)	(2,364)	(3,447)	(4,892)	(4,616)	(67.6)	(77.8)	6.0
Research and Development	(1,061)	(908)	(942)	(3,619)	(4,087)	16.9	12.6	(11.5)
Other taxes	(1,216)	(557)	(1,017)	(4,444)	(2,272)	118.3	19.6	95.6
Impairment (losses) reversals, net	(10,763)	(386)	(4,680)	(13,111)	(6,859)	2688.3	130.0	91.2
Other income and expenses, net	(10,017)	(5,126)	674	(19,930)	9,023	95.4	-	-
Total	(32,655)	(17,557)	(18,184)	(79,111)	(41,136)	86.0	79.6	92.3

In 2023 there was an increase in operating expenses compared to 2022, mainly due to the increase in tax expenses, impairment and other operating expenses.

The decrease in sales expenses is due to lower logistics costs related to the transportation of natural gas due to the reduction in the volume sold. These effects were partially offset by higher logistics costs associated with the growth in exports of oil and oil products and higher freight rates.

The growth in general and administrative expenses is largely due to higher personnel costs as a result of wage increases and the hiring of new employees and third-party services.

Exploration expenses increased in 2023 due to higher spending on geology and geophysics, mainly in the Equatorial Margin and the Aram Block. These increases were partially offset by a reduction in expenses for projects that are not economically viable.

The increase in tax expenses is explained by the effect of the oil export tax from March to June 2023.

The higher impairment expenses in 2023 reflect the update of the economic assumptions, as well as the portfolio of projects and estimates of reserves. Further details can be found in note 26 of our Financial Statements.

The increase in other operating expenses in 2023 is mainly due to lower capital gains related to the co-participation agreements in S epia and Atapu fields and an additional 5% stake in Buzios Surplus Transfer of Rights in 2022. In addition there was an increase in expenses with abandonment of areas due to higher provisions in fields relinquished in 2023, mainly in SEAL, Campos and RNCE basins. Lower expenses with legal contingencies partially offset the growth in operating expenses.

In 4Q23, the increase in operating expenses compared to 3Q23 is mainly due to higher impairment expenses, especially losses in oil and gas production fields in Brazil, notably the Roncador field, due to the revision of the production curve. In addition, there was an increase in expenses with the abandonment provision in fields in return, mainly in SEAL, Campos and RNCE basins.

The increase observed in 4Q23 compared to 3Q23 was partly offset by lower exploration costs, gains from earnouts at S epia and Atapu and gains related to price adjustments provided for in contractual clauses, especially related to the variation in Brent on sales related to E&P assets.

Adjusted EBITDA

In 2023, Adjusted EBITDA reached R\$ 262.2 billion, 23% lower compared to 2022, mainly influenced by the depreciation of Brent (-18%) and lower oil products margins, partly offset by the higher volume of oil exported.

In 4Q23, Adjusted EBITDA reached R\$ 66.9 billion, higher 1% compared to 3Q23, influenced by higher abandonment expenses, offset by higher oil products margins and higher oil volumes in the result.

Financial results

Table 5 – Financial results

R\$ million	4Q23	3Q23	4Q22	2023	2022	Variation (%)		
						4Q23 X 3Q23	4Q23 X 4Q22	2023 X 2022
Finance income	2,915	2,934	2,293	10,821	9,420	(0.6)	27.1	14.9
Income from investments and marketable securities (Government Bonds)	2,207	2,218	1,507	8,258	5,955	(0.5)	46.4	38.7
Other finance income	708	716	786	2,563	3,465	(1.1)	(9.9)	(26.0)
Finance expenses	(5,180)	(5,680)	(5,223)	(19,542)	(18,040)	(8.8)	(0.8)	8.3
Interest on finance debt	(2,724)	(3,236)	(3,030)	(11,309)	(12,173)	(15.8)	(10.1)	(7.1)
Unwinding of discount on lease liability	(2,633)	(2,418)	(1,993)	(8,886)	(6,936)	8.9	32.1	28.1
Discount and premium on repurchase of debt securities	(11)	(11)	(4)	(22)	(596)	-	175.0	(96.3)
Capitalized borrowing costs	1,799	1,651	1,247	6,431	5,319	9.0	44.3	20.9
Unwinding of discount on the provision for decommissioning costs	(1,042)	(1,056)	(655)	(4,282)	(2,680)	(1.3)	59.1	59.8
Other finance expenses	(569)	(610)	(788)	(1,474)	(974)	(6.7)	(27.8)	51.3
Foreign exchange gains (losses) and indexation charges	3,633	(7,014)	4,420	(3,140)	(10,637)	-	(17.8)	(70.5)
Foreign exchange gains (losses)	4,272	(4,632)	5,359	11,212	5,637	-	(20.3)	98.9
Reclassification of hedge accounting to the Statement of Income	(3,826)	(3,691)	(6,698)	(18,846)	(25,174)	3.7	(42.9)	(25.1)
Inflation indexation of anticipated dividends and dividends payable (*)	639	6	4,602	(1,506)	5,351	10550.0	(86.1)	-
Legal agreement with Eletrobras - compulsory loans	1,156	-	-	1,156	-	-	-	-
Recoverable taxes inflation indexation income	447	84	61	1,016	443	432.1	632.8	129.3
Other foreign exchange gains (losses) and indexation charges, net	945	1,219	1,096	3,828	3,106	(22.5)	(13.8)	23.2
Total	1,368	(9,760)	1,490	(11,861)	(19,257)	-	(8.2)	(38.4)

(*) In 2023, it refers to the income on the monetary restatement of paid anticipated dividends, in the amount of R\$ 1,063 (R\$ 6,782 in 2022), and to the expense on the indexation charges on dividends payable, in the amount of R\$ 2,569 (R\$ 1,431 in 2022).

In 2023, the improvement in the financial result compared to 2022 is mainly attributable to the gain from the FX variation of the BRL against the USD, driven by the 7.2% appreciation of the BRL in 2023 (from R\$5.22/US\$ on 12/31/22

to R\$4.84/US\$ on 12/31/23), compared to 6.5% in 2022. Other factors include lower realization of hedge accounting, higher gains on financial investments and securities due to the increase in the Selic and CDI rates and the higher average volume invested, as well as income from monetary restatement of the legal settlement with Eletrobras. These gains were partially offset by higher interest expenses on financing and leases, and by lower results from monetary restatement by the Selic rate of anticipated dividends.

In 3Q23, the financial result was mainly impacted by the gain from the FX variation of the BRL against the USD, which depreciated 3.9% in 3Q23 (from R\$ 4.82/US\$ on 06/30/23 to R\$ 5.01/US\$ on 09/30/23) and appreciated 3.3% in 4Q23 (from R\$ 5.01/US\$ on 09/30/23 to R\$ 4.84/US\$ on 12/31/23). In addition, we recorded higher revenues from monetary restatement, both related to the legal agreement with Eletrobras and to the anticipated dividends, while interest expenses on financing decreased.

Net profit (loss) attributable to Petrobras shareholders

In 2023, net profit reached R\$ 124.6 billion, compared to R\$ 188.3 billion in 2022. This variation is mainly attributed to the depreciation of Brent (-18%) and lower oil products margins, although partially offset by the increase in the volume of oil exported. In addition, the result was impacted by the increase in operating expenses, including lower capital gains from the co-participation agreements in the S epia and Atapu fields, higher impairment, abandonment and tax expenses. These effects were partially offset by improved financial results and lower income tax.

Net income in 4Q23 was R\$ 31,0 billion, compared to R\$ 26.6 billion in 3Q23. This result is mainly explained by the increase in oil products margins and oil volumes. On the other hand, operating expenses increased, mainly due to higher impairment and abandonment charges. We also observed a more favorable financial result, mainly due to the appreciation of the BRL against the USD. In addition, income tax was lower.

Recurring net income attributable to Petrobras shareholders and recurring Adjusted EBITDA

In 2023, net income was R\$ 124.6 billion, impacted by non-recurring items, mainly impairment expenses, abandonment of areas and legal contingencies. Excluding the non-recurring effects, net income would have been R\$ 136,0 billion. Adjusted EBITDA was negatively impacted by R\$ 13.6 billion, mainly due to the abandonment of areas, legal contingencies, compensation for the termination of vessel leasing contracts, oil export tax, and would have amounted to R\$ 275.9 billion without the effect of non-recurring items in 2022.

In 4Q23, net income was negatively impacted by R\$ 9.9 billion, mainly due to impairment expenses and abandonment of areas, although partially offset by the net effect on income tax calculation. Excluding non-recurring items, net income would have been R\$ 41,0 billion. Meanwhile, Adjusted EBITDA suffered a negative impact of R\$ 7.4 billion, mainly due to area abandonment expenses. Excluding this effect, it would have reached R\$ 74.3 billion in 4Q23.

Special items

Table 6 – Special items

R\$ million	4Q23	3Q23	4Q22	2023	2022	Variation (%)		
						4Q23 X 3Q23	4Q23 X 4Q22	2023 X 2022
Net income	31,163	26,760	43,502	125,166	189,005	16.5	(28.4)	(33.8)
Non-recurring items	(15,037)	(930)	(620)	(17,310)	13,465	1516.9	2325.3	-
Non-recurring items that do not affect Adjusted EBITDA	(7,624)	(231)	3,060	(3,671)	21,369	3200.4	-	-
Impairment of assets and investments	(10,817)	(349)	(4,667)	(13,120)	(6,891)	2999.4	131.8	90.4
Reclassification of comprehensive income (loss) due to the disposal of equity-accounted investments	-	-	-	-	(1)	-	-	-
Gains and losses on disposal / write-offs of assets	700	(182)	34	6,511	5,884	-	1958.8	10.7
Results from co-participation agreements in bid areas	1,163	93	7,467	1,399	21,660	1150.5	(84.4)	(93.5)
Discount and premium on repurchase of debt securities	174	207	226	383	717	(15.9)	(23.0)	(46.6)
Legal agreement with Eletrobras - compulsory loans	1,156	-	-	1,156	-	-	-	-
Other non-recurring items	(7,413)	(699)	(3,680)	(13,639)	(7,904)	960.5	101.4	72.6
Voluntary Separation Plan	12	4	(59)	43	(92)	200.0	-	-
Collective bargaining agreement	(1,031)	-	-	(1,061)	-	-	-	-
Amounts recovered from Lava Jato investigation	50	29	324	562	499	72.4	(84.6)	12.6
Gains / (losses) on decommissioning of returned/abandoned areas	(5,776)	(13)	(1,031)	(5,850)	(1,178)	44330.8	460.2	396.6
Gains / (losses) related to legal proceedings	(613)	(689)	(2,842)	(3,982)	(7,011)	(11.0)	(78.4)	(43.2)
Equalization of expenses - Production Individualization Agreements	(55)	(76)	(72)	(251)	(122)	(27.6)	(23.6)	105.7
Compensation for the termination of a vessel charter agreement	-	-	-	(1,654)	-	-	-	-
Export tax on crude oil	-	46	-	(1,446)	-	-	-	-
Net effect of non-recurring items on IR / CSLL	5,094	329	215	5,882	(4,589)	1448.3	2269.3	-
Recurring net income	41,106	27,361	43,907	136,594	180,129	50.2	(6.4)	(24.2)
Shareholders of Petrobras	40,986	27,226	43,746	136,034	179,452	50.5	(6.3)	(24.2)
Non-controlling interests	120	135	161	560	677	(11.1)	(25.5)	(17.3)
Adjusted EBITDA	66,852	66,188	73,091	262,227	340,482	1.0	(8.5)	(23.0)
Non-recurring items	(7,413)	(699)	(3,680)	(13,639)	(7,904)	960.5	101.4	72.6
Recurring Adjusted EBITDA	74,265	66,887	76,771	275,866	348,386	11.0	(3.3)	(20.8)

In management's opinion, the special items presented above, although related to the Company's business, were highlighted as complementary information for a better understanding and evaluation of the result. Such items do not necessarily occur in all periods and are disclosed when relevant.

Capex

Table 7 - Capex

US\$ million	4Q23	3Q23	4Q22	2023	2022	Variation (%)		
						4Q23 X 3Q23	4Q23 X 4Q22	2023 X 2022
Exploration and Production	2,752	2,892	2,218	10,283	6,952	(4.8)	24.1	47.9
Refining, Transportation and Marketing	530	322	372	1,559	1,193	64.4	42.3	30.6
Gas and Low Carbon Energies	134	67	99	277	350	99.7	35.7	(20.8)
Others	142	111	187	413	461	27.8	(24.1)	(10.4)
Subtotal	3,558	3,392	2,876	12,532	8,956	4.9	23.7	39.9
Signature bonus	-	-	-	141	892	-	-	(84.2)
Total	3,558	3,392	2,876	12,673	9,848	4.9	23.7	28.7

In 2023, investments totaled US\$12.7 billion, representing an increase of 29% compared to 2022, mainly due to the increase in investments in major pre-salt projects, especially the new production systems at the Búzios field and the revitalization of the Marlim field, as well as higher investments in scheduled refining stoppages.

Capex for 2023 was 21% lower than planned for the year in the 2023-27 Strategic Plan, in line with the guidance revision announced in November 2023, influenced by the following factors: (a) postponement of well activities due to lower availability of rigs and materials, (b) replanning of project milestones for new production units; and (c) postponement of exploratory wells due to environmental licensing.

In 4Q23, capex totaled US\$ 3.6 billion, 5% higher than in 3Q23, mainly due to higher investments in scheduled refining stoppages.

In the Exploration and Production segment, capex totaled US\$ 2.8 billion in 4Q23, 5% lower than in 3Q23, mainly as a result of postponements of milestones for the new owned production units in Búzios. Investments in 4Q23 remained focused on large pre-salt projects, concentrated mainly in: (a) the development of pre-salt production in the Santos Basin (US\$ 1.4 billion); (b) the development of deep-water production in the post-salt (US\$ 0.4 billion); and (c) exploratory investments (US\$ 0.2 billion).

In the Refining, Transportation and Marketing segment, capex totaled US\$ 0.5 billion in 4Q23, an increase of 64% compared to 3Q23. This increase was mainly due to higher investments in scheduled refining stoppages, especially the Lubricants unit at REDUC; Cracking, Distillation and HDTs at REGAP; as well as pre-stoppage expenses at REPAR and REPLAN, scheduled for February and March 2024, respectively.

In the Gas and Low Carbon Energies segment, capex totaled US\$ 0.1 billion in 4Q23, a 100% increase compared to 3Q23. The increase was mainly due to higher investments in scheduled stoppages of thermal units and progress on the Route 3 Natural Gas Processing Unit project, in line with the schedule for commercial start-up.

In addition, it is worth highlighting the entry into operation in 4Q23 of the leased FPSO Sepetiba (Mero 2), whose lease contract amount totaled US\$ 1.1 billion (Petrobras' stake). In 2023, the start-up of the leased FPSOs Sepetiba (Mero 2), Anna Nery (Marlim 2,) Almirante Barroso (Búzios 5) and Anita Garibaldi (Marlim 1) resulted in total lease amounts of US\$ 8.7 billion. Just like owned units, leased FPSOs are recognized in the Company's assets and constitute an investment effort to expand production capacity with new units, but are not considered under Capex.

The following table presents the main information about the new oil and gas production systems, already contracted.

Table 8 – Main projects

Unit	Start-up	FPSO capacity (bbl/day)	Petrobras Actual Investment US\$ bn	Petrobras Total Investment US\$ bn ¹	Petrobras Stake	Status
Mero 3 FPSO Marechal Duque de Caxias (Chartered unit)	2024	180,000	0.28	0.9	38.6%	Project in phase of execution with production system in transit to Brazil. 10 wells drilled and 8 completed.
Integrado Parque das Baleias (IPB) FPSO Maria Quitéria (Chartered unit)	2025	100,000	0.55	1.9	100%	Project in phase of execution with production system under construction. 3 wells drilled and 2 completed. ²
Búzios 7 FPSO Almirante Tamandaré (Chartered unit)	2025	225,000	0.48	2.1	88.99%	Project in phase of execution with production system under construction. 6 wells drilled and 3 completed.
Búzios 6 P-78 (Owned unit)	2025	180,000	1.30	4.8	88.99%	Project in phase of execution with production system under construction. 4 wells drilled and 2 completed.
Mero 4 FPSO Alexandre de Gusmão (Chartered unit)	2025	180,000	0.06	1.3	38.60%	Project in phase of execution with production system under construction. 6 wells drilled and 2 completed.
Búzios 8 P-79 (Owned unit)	2026	180,000	1.17	5.1	88.99%	Project in phase of execution with production system under construction. 7 wells drilled and 2 completed.
Búzios 9 P-80 (Owned unit)	2026	225,000	0.51	5.4	88.99%	Project in phase of execution with production system under construction. 2 wells drilled and 2 completed.
Búzios 10 P-82 (Owned unit)	2027	225,000	0.33	6.1	88.99%	Project in phase of execution with production system under construction. 1 well drilled.
Búzios 11 P-83 (Owned unit)	2027	225,000	0.29	5.5	88.99%	Project in phase of execution with production system under construction. 2 wells drilled.
Raia Manta e Raia Pintada BM-C-33 (Non-operated project)	2028	126,000	0.29	2,5 ³	30%	Project in phase of execution.

¹ Total investment with the Strategic Plan 2024-28 assumptions and Petrobras work interest (WI). Chartered units leases are not included.

² Production Unit for revitalization project. Refers only to new wells. The scope of the project also includes the relocation of some wells of the units being decommissioned.

³ It is included investment in the FPSO, contracted on a lump sum turnkey modality, which includes engineering, procurement, construction and installation for the unit. The contractor will also provide FPSO operation and maintenance services during the first year from the start of production.

Liquidity and capital resources

Table 9 - Liquidity and capital resources

R\$ million	4Q23	3Q23	4Q22	2023	2022
Adjusted cash and cash equivalents at the beginning of period	86,493	76,115	36,688	64,092	62,040
Government bonds, bank deposit certificates and time deposits with maturities of more than 3 months at the beginning of period *	(25,851)	(26,233)	(13,038)	(22,369)	(3,630)
Cash and cash equivalents in companies classified as held for sale at the beginning of the period	-	-	-	-	72
Cash and cash equivalents at the beginning of period	60,642	49,882	23,650	41,723	58,482
Net cash provided by operating activities	57,658	56,528	67,575	215,696	255,410
Net cash (used in) provided by investing activities	(15,977)	(13,777)	(12,298)	(39,495)	(4,377)
Acquisition of PP&E and intangible assets	(17,794)	(15,540)	(18,710)	(60,315)	(49,656)
Acquisition of equity interests	(10)	(22)	(37)	(120)	(138)
Proceeds from disposal of assets - Divestment	207	504	4,888	18,232	24,815
Financial compensation from co-participation agreements	-	-	10,288	2,032	35,769
Divestment (investment) in marketable securities	1,556	1,250	(9,017)	237	(17,072)
Dividends received	64	31	290	439	1,905
(=) Net cash provided by operating and investing activities	41,681	42,751	55,277	176,201	251,033
Net cash used in financing activities	(38,928)	(34,742)	(36,983)	(153,435)	(264,156)
Changes in non-controlling interest	502	(252)	106	(14)	347
Net financings	(6,172)	(1,738)	(8,413)	(20,264)	(41,845)
Proceeds from finance debt	4,459	5,942	1,834	10,716	15,156
Repayments	(10,631)	(7,680)	(10,247)	(30,980)	(57,001)
Repayment of lease liability	(8,861)	(7,974)	(7,482)	(31,335)	(28,049)
Dividends paid to shareholders of Petrobras	(21,724)	(23,803)	(21,125)	(97,925)	(194,200)
Share repurchase program	(2,669)	(975)	-	(3,644)	-
Dividends paid to non-controlling interests	(4)	-	(69)	(253)	(409)
Effect of exchange rate changes on cash and cash equivalents	(1,782)	2,751	(221)	(2,876)	(3,636)
Cash and cash equivalents at the end of period	61,613	60,642	41,723	61,613	41,723
Government bonds, bank deposit certificates and time deposits with maturities of more than 3 months at the end of period *	25,057	25,851	22,369	25,057	22,369
Cash and cash equivalents in companies classified as held for sale at the end of the period	-	-	-	-	-
Adjusted cash and cash equivalents at the end of period	86,670	86,493	64,092	86,670	64,092
Reconciliation of Free Cash Flow					
Net cash provided by operating activities	57,658	56,528	67,575	215,696	255,410
Acquisition of PP&E and intangible assets	(17,794)	(15,540)	(18,710)	(60,315)	(49,656)
Acquisition of equity interests	(10)	(22)	(37)	(120)	(138)
Free cash flow**	39,854	40,966	48,828	155,261	205,616

As of December 31, 2023, cash and cash equivalents totaled R\$ 61.6 billion and adjusted cash and cash equivalents totaled R\$ 86.7 billion.

In 2023, cash generated from operating activities reached R\$ 215.7 billion and positive free cash flow totaled R\$ 155.3 billion. This level of cash generation was used to: (a) shareholders remuneration (R\$ 101.6 billion), (b) investments (R\$ 60.3 billion), (c) lease liabilities amortization (R\$ 31.3 billion), and (d) principal and interest due in the period amortization (R\$ 31.0 billion).

In 2023, the company raised R\$ 10.7 billion, including (i) a R\$ 5.9 billion bond offering on the international capital market (Global Notes) maturing in 2033 and (ii) R\$ 4.4 billion raised on the domestic banking market.

* Includes government bonds, bank deposit certificates and time deposits of companies classified as held for sale.

** Free cash flow (FCF) is in accordance with the new Shareholder Remuneration Policy ("Policy") approved on 07/28/2023 and corresponds to operating cash flow minus acquisitions of property, plant and equipment, intangible assets and equity interests. For comparative purposes, figures prior to 2Q23 have been adjusted in accordance with the new Policy.

Debt indicators

As of 12/31/2023, gross debt reached US\$ 62.6 billion, an increase of 16.4% compared to 12/31/2022, mainly due to the increase in leases in the period with the start-up of the chartered FPSOs Anna Nery and Almirante Barroso (2Q23), Anita Garibaldi (3Q23) and Sepetiba (4Q23), which added US\$ 8.7 billion to the company's lease liabilities compared to 12/31/2022. On the other hand, financial debt fell by 3.8% compared to 12/31/2022, reaching US\$ 28.8 billion on 12/31/2023.

Average maturity went from 12.07 years on 31/12/2022 to 11.38 years on 31/12/2023 and its average cost varied from 6.5% p.a. to 6.4% p.a. over the same period.

The gross debt/adjusted EBITDA ratio reached 1.19x on 12/31/2023 compared to 0.81x on 12/31/2022.

On 12/31/2023, net debt reached US\$44.7 billion, an increase of 7.7% compared to 12/31/2022, mainly due to the increase in leases in the period.

Table 10 – Debt indicators

US\$ million	12.31.2023	09.30.2023	Δ %	12.31.2022
Financial Debt	28,801	29,462	(2.2)	29,954
Capital Markets	17,514	17,769	(1.4)	16,957
Banking Market	8,565	8,863	(3.4)	9,672
Development banks	698	690	1.2	723
Export Credit Agencies	1,870	1,978	(5.5)	2,443
Others	154	162	(4.9)	159
Finance leases	33,799	31,535	7.2	23,845
Gross debt	62,600	60,997	2.6	53,799
Adjusted cash and cash equivalents	17,902	17,272	3.6	12,283
Net debt	44,698	43,725	2.2	41,516
Net Debt/(Net Debt + Market Cap) - Leverage	30%	32%	(6.3)	39%
Average interest rate (% p.a.)	6.4	6.5	(1.5)	6.5
Weighted average maturity of outstanding debt (years)	11.38	11.43	(0.4)	12.07
Net debt/LTM Adjusted EBITDA ratio	0.85	0.83	2.4	0.63
Gross debt/LTM Adjusted EBITDA ratio	1.19	1.15	3.5	0.81
R\$ million				
Financial Debt	139,431	147,538	(5.5)	156,286
Finance Lease	163,631	157,913	3.6	124,417
Adjusted cash and cash equivalents	86,670	86,493	0.2	64,092
Net Debt	216,392	218,958	(1.2)	216,611

Results by segment

Exploration and Production

Table 11 – E&P results

R\$ million	4Q23	3Q23	4Q22	2023	2022	Variation (%)		
						4Q23 X 3Q23	4Q23 X 4Q22	2023 X 2022
Sales revenues	91,760	87,530	89,205	333,934	401,204	4.8	2.9	(16.8)
Gross profit	54,160	52,619	51,448	198,004	244,058	2.9	5.3	(18.9)
Operating expenses	(18,550)	(5,691)	(5,771)	(27,586)	3,994	226.0	221.4	-
Operating income	35,610	46,928	45,677	170,418	248,052	(24.1)	(22.0)	(31.3)
Net income (loss) attributable to the shareholders of Petrobras	23,638	30,644	30,240	112,480	164,600	(22.9)	(21.8)	(31.7)
Adjusted EBITDA of the segment	57,533	60,351	57,644	223,426	282,087	(4.7)	(0.2)	(20.8)
EBITDA margin of the segment (%)*	63	69	65	67	70	(6)	(2)	(3)
ROCE (Return on Capital Employed) (%)*	14.5	14.5	19.8	14.5	19.8	-	(5.3)	(5.3)
Average Brent crude (US\$/bbl)	84.05	86.76	88.71	82.62	101.19	(3.1)	(5.3)	(18.4)
Production taxes Brazil	16,140	16,498	16,220	60,445	76,158	(2.2)	(0.5)	(20.6)
Royalties	9,628	9,675	9,207	35,356	42,112	(0.5)	4.6	(16.0)
Special participation	6,466	6,771	6,951	24,871	33,797	(4.5)	(7.0)	(26.4)
Retention of areas	46	52	62	218	249	(11.5)	(25.8)	(12.4)
Lifting cost Brazil (US\$/boe)	5.52	5.39	6.07	5.59	5.78	2.6	(9.0)	(3.3)
Pre-salt	3.78	3.49	3.89	3.67	3.47	8.4	(2.8)	5.8
Deep and ultra-deep post-salt	12.12	12.18	11.94	12.52	11.74	(0.5)	1.5	6.7
Onshore and shallow waters	16.15	16.22	18.77	15.67	16.96	(0.4)	(14.0)	(7.6)
Lifting cost + Leases	7.79	7.64	7.81	7.66	7.49	2.0	(0.2)	2.2
Pre-salt	6.13	5.61	5.70	5.77	5.35	9.3	7.5	8.0
Deep and ultra-deep post-salt	14.37	15.35	13.72	14.84	13.25	(6.4)	4.7	12.0
Onshore and shallow waters	16.15	16.22	18.77	15.67	16.96	(0.4)	(14.0)	(7.6)
Lifting cost + Production taxes	19.78	20.40	21.12	19.69	23.73	(3.0)	(6.3)	(17.0)
Lifting cost + Production taxes + Leases	22.05	22.65	22.85	21.76	25.44	(2.6)	(3.5)	(14.5)

(*) EBITDA margin and ROCE variations in percentage points.

In 2023, E&P gross profit was R\$ 198 billion, 19% lower than in 2022. This reduction was mainly due to lower Brent prices, which were partially offset by higher production.

Operating income was R\$ 170.4 billion, 31% lower when compared to 2022, due to the receipt, in 2022, of the compensation related to co-participation agreements in Búzios, Sépia and Atapu, and, in 2023, higher impairment losses, abandonment provisions and an increase in tax expenses, due to the export tax on oil operations.

In 4Q23, E&P gross profit was R\$ 54.2 billion, slightly higher than the R\$ 52.6 billion in 3Q23. This increase was mainly due to higher production in the period.

Operating income in 4Q23 was R\$ 35.6 billion, 24% lower than in 3Q23, reflecting higher impairment losses and provisions for abandonment.

Regarding government take, there was a reduction both in the annual comparison (2023 x 2022) and in the quarterly comparison (4Q23 x 3Q23), explained mainly by the lower Brent prices.

Lifting costs in 2023, without government take and leasing, were US\$ 5.59/boe, 3.3% lower when compared to 2022 (US\$ 5.78/boe). This reduction was the result of active portfolio management, including divestments and the production start-up of new platforms in 2022 and 2023 (FPSO Guanabara, P-71, FPSO Almirante Barroso, FPSO Anna Nery and FPSO Anita Garibaldi). Also contributed to this reduction the continuity of P-68 ramp-up (Berbigão-Sururu) and the start-up

of new wells in complementary projects in the Campos and Santos Basins, associated with better operational performance and a reduction in the volume of losses due to downtime and maintenance. These effects were partially offset by higher integrity costs, such as platform maintenance and subsea inspections, as well as the appreciation of the BRL against the USD.

In 4Q23, there was a 2.6% increase in lifting costs when compared to 3Q23, mainly due to the intensification of pre-salt well interventions in the Campos Basin.

In the pre-salt lifting costs of 4Q23 there was an increase of 8.4%, impacted mainly by the intensification of interventions in the Campos Basin pre-salt, as previously mentioned.

In the post-salt and onshore and shallow water assets, lifting costs remained stable in relation to 3Q23.

Refining, Transportation and Marketing

Table 12 - RTM results

R\$ million	4Q23	3Q23	4Q22	2023	2,022	Variation (%) (*)		
						4Q23 X 3Q23	4Q23 X 4Q22	2023 X 2022
Sales revenues	125,208	115,750	144,757	474,338	584,697	8.2	(13.5)	(18.9)
Gross profit (loss)	10,777	11,235	17,493	46,080	73,764	(4.1)	(38.4)	(37.5)
Operating expenses	(4,773)	(3,850)	(4,561)	(20,446)	(16,030)	24.0	4.6	27.5
Operating Income	6,004	7,385	12,932	25,634	57,734	(18.7)	(53.6)	(55.6)
Net income (loss) attributable to the shareholders of Petrobras	3,531	4,017	7,750	15,356	38,142	(12.1)	(54.4)	(59.7)
Adjusted EBITDA of the segment	9,730	10,363	14,793	40,384	69,279	(6.1)	(34.2)	(41.7)
EBITDA margin of the segment (%)	8	9	10	9	12	(1)	(2)	(3)
ROCE (Return on Capital Employed) (%)	5.6	6.7	12.6	5.6	12.6	(1.1)	(7.0)	(7.0)
Refining cost (US\$/barrel) - Brazil	2.75	2.38	1.98	2.38	1.94	15.5	38.9	22.7
Refining cost (R\$/barrel) - Brazil	13.52	11.62	10.55	11.83	10.10	16.4	28.2	17.1
Domestic basic oil by-products price (R\$/bbl)	516.70	464.08	621.25	505.20	632.22	11.3	(16.8)	(20.1)

(*) EBITDA margin and ROCE variations in percentage points.

In 2023, gross profit was R\$ 46.1 billion, R\$ 27.7 billion lower than 2022, mainly due to the reduction in international margins, especially diesel, which were atypically high throughout 2022. In 2023 there was a negative inventory turnover effect, as opposed to the positive effect in 2022. Excluding this effect (- R\$ 2.5 billion in 2023 and R\$ 1.8 billion in 2022), gross profit would have been R\$ 48.6 billion in 2023 and R\$ 72.0 billion in 2022.

There were lower margins on oil products in the domestic market, mainly diesel, due to the reduction in international margins, which were higher in 2022 because of geopolitical conflicts. These effects also affected fuel oil and oil export margins, which were lower in 2023 when compared to 2022.

Operating income in 2023 was lower than in 2022, as a result of lower gross profit and higher sales and impairment expenses.

In 4Q23, RTM's gross profit was lower than in 3Q23, mainly due to inventory turnover: while in 3Q23 there was a positive variation in Brent (US\$ 87/bbl against US\$ 78/bbl in 2Q23), in 4Q23 there was a negative variation in Brent (US\$ 84/bbl against US\$ 87/bbl in 3Q23). This effect in 4Q23 was - R\$ 1 billion versus R\$ 6.7 billion in 3Q23. Excluding this effect, gross profit would have been US\$ 2.24 billion in 4Q23 versus US\$ 0.94 billion in 3Q23.

In addition, there were lower sales volumes of oil products on the domestic market, mainly diesel, due to demand seasonality, and gasoline, due to the competition with ethanol in the quarter. There was also a higher volume of oil exports as a result of higher production.

In 4Q23, operating income was lower than in 3Q23, reflecting lower gross profit and higher operating expenses, mainly due to higher impairment expenses.

The refining cost per barrel in USD in 2023 was 22.7% higher than in 2022, mainly due to the increase in scope in maintenance and upkeep of refining utilities, as well as higher personnel costs. The higher FX in 2023 had an additional contribution to the higher cost per barrel. These effects were partially offset by the higher utilization of the refining park in 2023.

In 4Q23, the refining cost per barrel in USD was 15.5% higher than in 3Q23, mainly due to the increase in absolute costs for personnel and materials and services for the upkeep and maintenance of refining utilities. The feedstock was 1.5% lower in 4Q23 when compared to 3Q23, contributing to the increase on this indicator.

Gas and Low Carbon Energies

Table 13 – G&LCE results

R\$ million	4Q23	3Q23	4Q22	2023	2,022	Variation (%) (*)		
						4Q23 X 3Q23	4Q23 X 4Q22	2023 X 2022
Sales revenues	14,139	12,813	20,075	55,476	77,867	10.3	(29.6)	(28.8)
Gross profit	7,093	7,119	6,303	27,064	23,297	(0.4)	12.5	16.2
Operating expenses	(4,623)	(4,429)	(3,718)	(16,898)	(15,233)	4.4	24.3	10.9
Operating income	2,470	2,690	2,585	10,166	8,064	(8.2)	(4.4)	26.1
Net income (loss) attributable to the shareholders of Petrobras	1,523	1,664	1,671	6,409	5,277	(8.5)	(8.9)	21.5
Adjusted EBITDA of the segment	3,532	3,591	3,143	13,423	9,489	(1.6)	12.4	41.5
EBITDA margin of the segment (%)	25	28	16	24	12	(3)	9	12
ROCE (Return on Capital Employed) (%)	10.4	9.5	5.6	10.4	5.6	0.9	4.8	4.8
Natural gas sales price - Brazil (US\$/bbl)	62.60	66.20	76.83	68.22	69.26	(5.4)	(18.5)	(1.5)
Natural gas sales price - Brazil (US\$/MMBtu)	10.56	11.16	12.95	11.50	11.68	(5.4)	(18.5)	(1.5)
Fixed revenues from power auctions (**)	441	435	544	1,730	2,091	1.4	(18.9)	(17.3)
Average price of electricity (R\$/MWh)	328.96	91.24	69.82	171.93	223.77	260.5	371.2	(23.2)

(*) EBITDA margin and ROCE variations in percentage points.

(**) The fixed revenue from auctions takes into account the remuneration for thermal availability and inflexible electricity committed in auctions.

In 2023, gross profit was 16.2% higher than in 2022, mainly due to the reduction in the average cost of natural gas purchases.

Operating income increased 26.1% when compared to 2022 due to the higher gross profit, which was partially offset by higher operating expenses with impairment and contractual charges.

In 4Q23, gross profit was 0.4% lower than in 3Q23, due to the greater regasification of LNG in the period, due to operational issues and the higher energy generation to supply peak demand, complementary to generation from renewable sources.

Operating income was impacted by the lower gross profit and the increase in expenses in 4Q23, due to the accounting of impairment expenses as a result of the termination of operations at the Pecém LNG regasification terminal.

Reconciliation of Adjusted EBITDA

EBITDA is an indicator calculated as the net income for the period plus taxes on profit, net financial result, depreciation and amortization. Petrobras announces EBITDA, as authorized by CVM Resolution 156 of June 2022.

In order to reflect the management view regarding the formation of the company's current business results, EBITDA is also presented adjusted (Adjusted EBITDA) as a result of: results in equity-accounted investments; impairment, reclassification of comprehensive income (loss) due to the disposal of equity-accounted investments, results with co-participation agreement in production fields and gains/losses on disposal/write-offs of assets.

Adjusted EBITDA, reflecting the sum of the last twelve months (Last Twelve Months), also represents an alternative to the company's operating cash generation. This measure is used to calculate the Gross Debt and Net Debt to Adjusted EBITDA metric, helping to evaluate the company's leverage and liquidity.

EBITDA and adjusted EBITDA are not provided for in International Financial Reporting Standards (IFRS) and should not serve as a basis for comparison with those disclosed by other companies and should not be considered as a substitute for any other measure calculated in accordance with IFRS. These measures should be considered in conjunction with other measures and indicators for a better understanding of the company's performance and financial condition.

Table 14 - Reconciliation of Adjusted EBITDA

R\$ million	4Q23	3Q23	4Q22	2023	2022	Variation (%) (*)		
						4Q23 X 3Q23	4Q23 X 4Q22	2023 X 2022
Net income	31,163	26,760	43,502	125,166	189,005	16.5	(28.4)	(33.8)
Net finance (expense) income	(1,368)	9,760	(1,490)	11,861	19,257	-	(8.2)	(38.4)
Income taxes	9,833	11,026	15,799	52,315	85,993	(10.8)	(37.8)	(39.2)
Depreciation, depletion and amortization	17,981	16,955	17,459	66,204	68,202	6.1	3.0	(2.9)
EBITDA	57,609	64,501	75,270	255,546	362,457	(10.7)	(23.5)	(29.5)
Results in equity-accounted investments	343	1,212	642	1,480	(1,291)	(71.7)	(46.6)	-
Impairment of assets (reversals)	10,763	386	4,680	13,111	6,859	2688.3	130.0	91.2
Reclassification of comprehensive income (loss) due to the disposal of equity-accounted investments	-	-	-	-	1	-	-	-
Results from co-participation agreements in bid areas	(1,163)	(93)	(7,467)	(1,399)	(21,660)	1150.5	(84.4)	(93.5)
Results on disposal/write-offs of assets	(700)	182	(34)	(6,511)	(5,884)	-	1958.8	10.7
Adjusted EBITDA	66,852	66,188	73,091	262,227	340,482	1.0	(8.5)	(23.0)
Adjusted EBITDA margin (%)	50	53	46	51	53	(3.0)	3.9	(2.0)

(*) EBITDA Margin variations in percentage points.

Financial statements

Table 15 - Income statement - Consolidated

R\$ million	4Q23	3Q23	4Q22	2023	2022
Sales revenues	134,258	124,828	158,579	511,994	641,256
Cost of sales	(61,632)	(58,513)	(81,942)	(242,061)	(307,156)
Gross profit	72,626	66,315	76,637	269,933	334,100
Selling expenses	(6,583)	(6,289)	(6,795)	(25,163)	(25,448)
General and administrative expenses	(2,249)	(1,927)	(1,977)	(7,952)	(6,877)
Exploration costs	(766)	(2,364)	(3,447)	(4,892)	(4,616)
Research and development expenses	(1,061)	(908)	(942)	(3,619)	(4,087)
Other taxes	(1,216)	(557)	(1,017)	(4,444)	(2,272)
Impairment (losses) reversals, net	(10,763)	(386)	(4,680)	(13,111)	(6,859)
Other income and expenses, net	(10,017)	(5,126)	674	(19,930)	9,023
	(32,655)	(17,557)	(18,184)	(79,111)	(41,136)
Operating income	39,971	48,758	58,453	190,822	292,964
Finance income	2,915	2,934	2,293	10,821	9,420
Finance expenses	(5,180)	(5,680)	(5,223)	(19,542)	(18,040)
Foreign exchange gains (losses) and inflation indexation charges	3,633	(7,014)	4,420	(3,140)	(10,637)
Net finance income (expense)	1,368	(9,760)	1,490	(11,861)	(19,257)
Results of equity-accounted investments	(343)	(1,212)	(642)	(1,480)	1,291
Income before income taxes	40,996	37,786	59,301	177,481	274,998
Income taxes	(9,833)	(11,026)	(15,799)	(52,315)	(85,993)
Net Income	31,163	26,760	43,502	125,166	189,005
Net income attributable to:					
Shareholders of Petrobras	31,043	26,625	43,341	124,606	188,328
Non-controlling interests	120	135	161	560	677

Table 16 - Statement of financial position – Consolidated

ASSETS - R\$ million	12.31.2023	12.31.2022
Current assets	157,079	163,052
Cash and cash equivalents	61,613	41,723
Marketable securities	13,650	14,470
Trade and other receivables, net	29,702	26,142
Inventories	37,184	45,804
Recoverable taxes	5,703	6,819
Assets classified as held for sale	1,624	18,823
Other current assets	7,603	9,271
Non-current assets	893,809	813,657
Long-term receivables	129,735	110,722
Trade and other receivables, net	8,942	12,729
Marketable securities	11,661	8,159
Judicial deposits	71,390	57,671
Deferred taxes	4,672	4,342
Other tax assets	21,861	19,715
Other non-current assets	11,209	8,106
Investments	6,574	8,172
Property, plant and equipment	742,774	679,182
Intangible assets	14,726	15,581
Total assets	1,050,888	976,709
LIABILITIES - R\$ million	12.31.2023	12.31.2022
Current liabilities	163,928	163,731
Trade payables	23,302	28,507
Finance debt	20,923	18,656
Lease liability	34,858	28,994
Taxes payable	26,463	30,951
Dividends payable	17,134	21,762
Provision for decommissioning costs	9,837	-
Short-term employee benefits	14,194	11,555
Liabilities related to assets classified as held for sale	2,621	7,646
Other current liabilities	14,596	15,660
Non-current liabilities	504,620	448,593
Finance debt	118,508	137,630
Lease liability	128,773	95,423
Income taxes payable	1,446	1,578
Deferred taxes	52,820	35,220
Employee benefits	75,421	55,701
Provision for legal and administrative proceedings	16,000	15,703
Provision for decommissioning costs	102,493	97,048
Other non-current liabilities	9,159	10,290
Shareholders' equity	382,340	364,385
Share capital (net of share issuance costs)	205,432	205,432
Capital reserve and capital transactions	(538)	3,102
Profit reserves	159,171	128,562
Accumulated other comprehensive deficit	16,376	25,498
Non-controlling interests	1,899	1,791
Total liabilities and shareholders' equity	1,050,888	976,709

Table 17 - Statement of cash flow – Consolidated

R\$ million	4Q23	3Q23	4Q22	2023	2022
Cash flows from operating activities					
Net income for the period	31,163	26,760	43,502	125,166	189,005
Adjustments for:					
Pension and medical benefits - actuarial losses	1,925	1,922	1,518	7,695	6,333
Results of equity-accounted investments	343	1,212	642	1,480	(1,291)
Depreciation, depletion and amortization	17,981	16,955	17,459	66,204	68,202
Impairment of assets (reversals)	10,763	386	4,680	13,111	6,859
Inventory write down (write-back) to net realizable value	(14)	(48)	23	(40)	57
Allowance for credit loss on trade and other receivables	(42)	73	118	205	331
Exploratory expenditure write-offs	56	1,834	2,952	2,087	3,584
Gain on disposal/write-offs of assets	(700)	182	(33)	(6,511)	(5,883)
Foreign exchange, indexation and finance charges	(1,450)	9,674	(920)	12,707	22,956
Income taxes	9,833	11,026	15,799	52,315	85,993
Revision and unwinding of discount on the provision for decommissioning costs	6,818	1,069	1,686	10,132	3,858
Results from co-participation agreements in bid areas	(1,163)	(93)	(7,467)	(1,399)	(21,660)
Early termination and cash outflows revision of lease agreements	(264)	(509)	(369)	(2,086)	(3,217)
Losses with legal, administrative and arbitration proceedings, net	613	689	2,842	3,982	7,011
Decrease (Increase) in assets					
Trade and other receivables	(2,366)	(2,902)	(1,932)	672	1,891
Inventories	2,060	237	7,230	7,926	(6,029)
Judicial deposits	(3,138)	(1,544)	(2,084)	(8,663)	(8,844)
Other assets	754	(506)	1,808	1,619	(1,675)
Increase (Decrease) in liabilities					
Trade payables	309	(3,509)	(83)	(4,741)	(2,223)
Other taxes payable	(229)	2,724	(224)	(2,363)	(12,903)
Pension and medical benefits	(1,212)	(1,132)	(1,369)	(4,617)	(11,035)
Provisions for legal proceedings	(1,105)	(711)	(664)	(2,927)	(1,956)
Other employee benefits	959	1,859	(624)	1,726	(808)
Provision for decommissioning costs	(1,511)	(1,266)	(838)	(4,491)	(3,123)
Other liabilities	(968)	(1,176)	(1,791)	(2,781)	(876)
Income taxes paid	(11,757)	(6,678)	(14,286)	(50,712)	(59,147)
Net cash provided by operating activities	57,658	56,528	67,575	215,696	255,410
Cash flows from investing activities					
Acquisition of PP&E and intangible assets	(17,794)	(15,540)	(18,710)	(60,315)	(49,656)
Acquisition of equity interests	(10)	(22)	(37)	(120)	(138)
Proceeds from disposal of assets - Divestment	207	504	4,888	18,232	24,815
Financial compensation from co-participation agreements	-	-	10,288	2,032	35,769
Investment in marketable securities	1,556	1,250	(9,017)	237	(17,072)
Dividends received	64	31	290	439	1,905
Net cash (used in) provided by investing activities	(15,977)	(13,777)	(12,298)	(39,495)	(4,377)
Cash flows from financing activities					
Changes in non-controlling interest	502	(252)	106	(14)	347
Financing and loans, net:					
Proceeds from finance debt	4,459	5,942	1,834	10,716	15,156
Repayment of principal - finance debt	(8,613)	(4,913)	(8,082)	(21,080)	(47,337)
Repayment of interest - finance debt	(2,018)	(2,767)	(2,165)	(9,900)	(9,664)
Repayment of lease liability	(8,861)	(7,974)	(7,482)	(31,335)	(28,049)
Dividends paid to Shareholders of Petrobras	(21,724)	(23,803)	(21,125)	(97,925)	(194,200)
Share repurchase program	(2,669)	(975)	-	(3,644)	-
Dividends paid to non-controlling interests	(4)	-	(69)	(253)	(409)
Net cash used in financing activities	(38,928)	(34,742)	(36,983)	(153,435)	(264,156)
Effect of exchange rate changes on cash and cash equivalents	(1,782)	2,751	(221)	(2,876)	(3,636)
Net change in cash and cash equivalents	971	10,760	18,073	19,890	(16,759)
Cash and cash equivalents at the beginning of the period	60,642	49,882	23,650	41,723	58,482
Cash and cash equivalents at the end of the period	61,613	60,642	41,723	61,613	41,723

Financial information by business areas

Table 18 - Consolidated income by segment – 2023

R\$ million	E&P	RTM	Gas & Low Carbon Energies (G&LCE)	CORP.	ELIMIN.	TOTAL
Sales revenues	333,934	474,338	55,476	1,819	(353,573)	511,994
Intersegments	330,075	7,065	16,388	45	(353,573)	-
Third parties	3,859	467,273	39,088	1,774	-	511,994
Cost of sales	(135,930)	(428,258)	(28,412)	(1,842)	352,381	(242,061)
Gross profit	198,004	46,080	27,064	(23)	(1,192)	269,933
Expenses	(27,586)	(20,446)	(16,898)	(14,181)	-	(79,111)
Selling expenses	(58)	(10,763)	(14,168)	(174)	-	(25,163)
General and administrative expenses	(364)	(1,639)	(403)	(5,546)	-	(7,952)
Exploration costs	(4,892)	-	-	-	-	(4,892)
Research and development expenses	(2,829)	(82)	(28)	(680)	-	(3,619)
Other taxes	(2,218)	(202)	(233)	(1,791)	-	(4,444)
Impairment (losses) reversals, net	(10,301)	(2,559)	(397)	146	-	(13,111)
Other income and expenses, net	(6,924)	(5,201)	(1,669)	(6,136)	-	(19,930)
Operating income (loss)	170,418	25,634	10,166	(14,204)	(1,192)	190,822
Net finance income (expense)	-	-	-	(11,861)	-	(11,861)
Results of equity-accounted investments	(18)	(1,562)	52	48	-	(1,480)
Income (loss) before income taxes	170,400	24,072	10,218	(26,017)	(1,192)	177,481
Income taxes	(57,942)	(8,716)	(3,456)	17,394	405	(52,315)
Net income (loss)	112,458	15,356	6,762	(8,623)	(787)	125,166
Net income (loss) attributable to:						
Shareholders of Petrobras	112,480	15,356	6,409	(8,852)	(787)	124,606
Non-controlling interests	(22)	-	353	229	-	560

Table 19 - Consolidated income by segment – 2022

R\$ million	E&P	RTM	Gas & Low Carbon Energies (G&LCE)	CORP.	ELIMIN.	TOTAL
Sales revenues	401,204	584,697	77,867	2,636	(425,148)	641,256
Intersegments	394,457	10,050	20,600	41	(425,148)	-
Third parties	6,747	574,647	57,267	2,595	-	641,256
Cost of sales	(157,146)	(510,933)	(54,570)	(2,689)	418,182	(307,156)
Gross profit	244,058	73,764	23,297	(53)	(6,966)	334,100
Expenses	3,994	(16,030)	(15,233)	(13,787)	(80)	(41,136)
Selling expenses	(111)	(9,503)	(15,369)	(385)	(80)	(25,448)
General and administrative expenses	(248)	(1,425)	(317)	(4,887)	-	(6,877)
Exploration costs	(4,616)	-	-	-	-	(4,616)
Research and development expenses	(3,483)	(26)	(30)	(548)	-	(4,087)
Other taxes	(410)	(160)	(223)	(1,479)	-	(2,272)
Impairment (losses) reversals, net	(6,361)	(495)	4	(7)	-	(6,859)
Other income and expenses, net	19,223	(4,421)	702	(6,481)	-	9,023
Operating income (loss)	248,052	57,734	8,064	(13,840)	(7,046)	292,964
Net finance income (expense)	-	-	-	(19,257)	-	(19,257)
Results of equity-accounted investments	863	38	417	(27)	-	1,291
Income (loss) before income taxes	248,915	57,772	8,481	(33,124)	(7,046)	274,998
Income taxes	(84,338)	(19,630)	(2,742)	18,321	2,396	(85,993)
Net income (loss)	164,577	38,142	5,739	(14,803)	(4,650)	189,005
Net income (loss) attributable to:						
Shareholders of Petrobras	164,600	38,142	5,277	(15,041)	(4,650)	188,328
Non-controlling interests	(23)	-	462	238	-	677

Table 20 – Quarterly consolidated income by segment – 4Q23

R\$ million	E&P	RTM	Gas & Low Carbon Energies (G&LCE)	CORP.	ELIMIN.	TOTAL
Sales revenues	91,760	125,208	14,139	549	(97,398)	134,258
Intersegments	91,140	1,682	4,561	15	(97,398)	-
Third parties	620	123,526	9,578	534	-	134,258
Cost of sales	(37,600)	(114,431)	(7,046)	(568)	98,013	(61,632)
Gross profit	54,160	10,777	7,093	(19)	615	72,626
Expenses	(18,550)	(4,773)	(4,623)	(4,709)	-	(32,655)
Selling expenses	(2)	(2,857)	(3,663)	(61)	-	(6,583)
General and administrative expenses	(169)	(424)	(140)	(1,516)	-	(2,249)
Exploration costs	(766)	-	-	-	-	(766)
Research and development expenses	(830)	(4)	(9)	(218)	-	(1,061)
Other taxes	(413)	(75)	(92)	(636)	-	(1,216)
Impairment (losses) reversals, net	(9,839)	(528)	(397)	1	-	(10,763)
Other income and expenses, net	(6,531)	(885)	(322)	(2,279)	-	(10,017)
Operating income (loss)	35,610	6,004	2,470	(4,728)	615	39,971
Net finance income (expense)	-	-	-	1,368	-	1,368
Results of equity-accounted investments	130	(431)	(34)	(8)	-	(343)
Income (loss) before income taxes	35,740	5,573	2,436	(3,368)	615	40,996
Income taxes	(12,107)	(2,042)	(839)	5,364	(209)	(9,833)
Net income (loss)	23,633	3,531	1,597	1,996	406	31,163
Net income (loss) attributable to:						
Shareholders of Petrobras	23,638	3,531	1,523	1,945	406	31,043
Non-controlling interests	(5)	-	74	51	-	120

Table 21 – Quarterly consolidated income by segment – 3Q23

R\$ million	E&P	RTM	Gas & Low Carbon Energies (G&LCE)	CORP.	ELIMIN.	TOTAL
Sales revenues	87,530	115,750	12,813	452	(91,717)	124,828
Intersegments	86,898	1,098	3,708	13	(91,717)	-
Third parties	632	114,652	9,105	439	-	124,828
Cost of sales	(34,911)	(104,515)	(5,694)	(445)	87,052	(58,513)
Gross profit	52,619	11,235	7,119	7	(4,665)	66,315
Expenses	(5,691)	(3,850)	(4,429)	(3,631)	44	(17,557)
Selling expenses	(1)	(2,606)	(3,727)	1	44	(6,289)
General and administrative expenses	(23)	(393)	(99)	(1,412)	-	(1,927)
Exploration costs	(2,364)	-	-	-	-	(2,364)
Research and development expenses	(729)	(9)	(9)	(161)	-	(908)
Other taxes	(81)	(51)	(51)	(374)	-	(557)
Impairment (losses) reversals, net	(384)	(2)	-	-	-	(386)
Other income and expenses, net	(2,109)	(789)	(543)	(1,685)	-	(5,126)
Operating income (loss)	46,928	7,385	2,690	(3,624)	(4,621)	48,758
Net finance income (expense)	-	-	-	(9,760)	-	(9,760)
Results of equity-accounted investments	(334)	(857)	(20)	(1)	-	(1,212)
Income (loss) before income taxes	46,594	6,528	2,670	(13,385)	(4,621)	37,786
Income taxes	(15,956)	(2,511)	(915)	6,785	1,571	(11,026)
Net income (loss)	30,638	4,017	1,755	(6,600)	(3,050)	26,760
Net income (loss) attributable to:						
Shareholders of Petrobras	30,644	4,017	1,664	(6,650)	(3,050)	26,625
Non-controlling interests	(6)	-	91	50	-	135

Table 22 - Other income and expenses by segment – 2023

R\$ million	E&P	RTM	Gas & Low Carbon Energies (G&LCE)	CORP.	ELIMIN.	TOTAL
Unscheduled stoppages and pre-operating expenses	(10,489)	(107)	(259)	(144)	-	(10,999)
Losses on decommissioning of returned/abandoned areas	(5,850)	-	-	-	-	(5,850)
Pension and medical benefits - retirees	-	-	-	(5,848)	-	(5,848)
Losses with legal, administrative and arbitration proceedings	(1,496)	(1,970)	(43)	(473)	-	(3,982)
Profit sharing	(1,322)	(635)	(162)	(805)	-	(2,924)
Variable compensation programs	(744)	(698)	(98)	(556)	-	(2,096)
Compensation for the termination of vessel charter agreements (*)	-	(1,705)	(19)	-	-	(1,724)
Collective bargaining agreement	(460)	(206)	(39)	(356)	-	(1,061)
Expenses with contractual fines received	(91)	(5)	(900)	(4)	-	(1,000)
Operating expenses with thermoelectric power plants	-	-	(944)	-	-	(944)
Institutional relations and cultural projects	-	(17)	-	(758)	-	(775)
Gains/(losses) with Commodities Derivatives	-	88	(1)	(3)	-	84
Amounts recovered from Lava Jato investigation	49	-	-	513	-	562
(Losses)/gains of non-core activities	745	(465)	420	145	-	845
Ship/take or pay agreements and fines imposed to suppliers	14	200	957	10	-	1,181
Fines imposed on suppliers	909	142	29	112	-	1,192
Results from co-participation agreements in bid areas	1,399	-	-	-	-	1,399
Government grants	70	2	-	1,507	-	1,579
Early termination and changes to cash flow estimates of leases	1,595	503	4	(16)	-	2,086
Reimbursements from E&P partnership operations	2,858	-	-	-	-	2,858
Results on disposal/write-offs of assets	6,876	(169)	(243)	47	-	6,511
Others	(987)	(159)	(371)	493	-	(1,024)
	(6,924)	(5,201)	(1,669)	(6,136)	-	(19,930)

(*) It includes, in 2023, expenses with compensation for the termination of a vessel charter agreement in the amount of R\$ 1,654.

Table 23 - Other income and expenses by segment – 2022

R\$ million	E&P	RTM	Gas & Low Carbon Energies (G&LCE)	CORP.	ELIMIN.	TOTAL
Unscheduled stoppages and pre-operating expenses	(8,970)	(116)	(160)	(194)	-	(9,440)
Losses on decommissioning of returned/abandoned areas	(1,178)	-	-	-	-	(1,178)
Pension and medical benefits - retirees (*)	-	-	-	(5,240)	-	(5,240)
Losses with legal, administrative and arbitration proceedings	(2,385)	(2,189)	(364)	(2,073)	-	(7,011)
Profit sharing	(293)	(145)	(34)	(206)	-	(678)
Variable compensation programs	(1,154)	(597)	(142)	(943)	-	(2,836)
Compensation for the termination of vessel charter agreements	-	(43)	(15)	-	-	(58)
Collective bargaining agreement	-	-	-	-	-	-
Expenses with contractual fines received	(120)	(22)	(332)	-	-	(474)
Operating expenses with thermoelectric power plants	-	-	(774)	-	-	(774)
Institutional relations and cultural projects	-	(10)	-	(525)	-	(535)
Gains/(losses) with Commodities Derivatives	-	(1,236)	-	(25)	-	(1,261)
Amounts recovered from Lava Jato investigation	90	-	-	409	-	499
(Losses)/gains of non-core activities	604	(310)	475	113	-	882
Ship/take or pay agreements and fines imposed to suppliers	9	165	369	4	-	547
Fines imposed on suppliers	915	109	105	55	-	1,184
Results from co-participation agreements in bid areas (**)	21,660	-	-	-	-	21,660
Government grants	23	-	-	2,404	-	2,427
Early termination and changes to cash flow estimates of leases	2,944	323	39	(89)	-	3,217
Reimbursements from E&P partnership operations	3,545	-	-	-	-	3,545
Results on disposal/write-offs of assets	4,391	554	881	58	-	5,884
Others	(858)	(904)	654	(229)	-	(1,337)
	19,223	(4,421)	702	(6,481)	-	9,023

(*) In 2022, it includes R\$ 352 referring to the payment of a contribution as provided for in the Pre-70 Term of Financial Commitment (TFC) for the administrative funding of the PPSP-R pre-70 and PPSP-NR pre-70 plans.

(**) In 2022, it mainly refers to capital gains with the results of the co-participation agreements related to the transfer of rights surplus of S3epia and Atapu.

Table 24 - Other income and expenses by segment – 4Q23

R\$ million	E&P	RTM	Gas & Low Carbon Energies (G&LCE)	CORP.	ELIMIN.	TOTAL
Unscheduled stoppages and pre-operating expenses	(2,559)	(28)	(75)	(27)	-	(2,689)
Losses on decommissioning of returned/abandoned areas	(5,776)	-	-	-	-	(5,776)
Pension and medical benefits - retirees	-	-	-	(1,460)	-	(1,460)
Losses with legal, administrative and arbitration proceedings	(201)	(304)	(42)	(66)	-	(613)
Profit sharing	(1,082)	(506)	(134)	(666)	-	(2,388)
Variable compensation programs	161	(7)	25	80	-	259
Compensation for the termination of vessel charter agreements	-	(14)	(5)	-	-	(19)
Collective bargaining agreement	(460)	(176)	(39)	(356)	-	(1,031)
Expenses with contractual fines received	(19)	(8)	(173)	-	-	(200)
Operating expenses with thermoelectric power plants	-	-	(273)	-	-	(273)
Institutional relations and cultural projects	-	(6)	-	(330)	-	(336)
Gains/(losses) with Commodities Derivatives	-	155	-	(2)	-	153
Amounts recovered from Lava Jato investigation	49	-	-	1	-	50
(Losses)/gains of non-core activities	242	(75)	47	23	-	237
Ship/take or pay agreements and fines imposed to suppliers	4	48	435	3	-	490
Fines imposed on suppliers	216	36	15	36	-	303
Results from co-participation agreements in bid areas	1,163	-	-	-	-	1,163
Government grants	4	1	-	282	-	287
Early termination and changes to cash flow estimates of leases	226	34	5	(1)	-	264
Reimbursements from E&P partnership operations	705	-	-	-	-	705
Results on disposal/write-offs	803	(116)	22	(9)	-	700
Others	(7)	81	(130)	213	-	157
	(6,531)	(885)	(322)	(2,279)	-	(10,017)

Table 25 - Other income and expenses by segment – 3Q23

R\$ million	E&P	RTM	Gas & Low Carbon Energies (G&LCE)	CORP.	ELIMIN.	TOTAL
Unscheduled stoppages and pre-operating expenses	(2,610)	(25)	(71)	(39)	-	(2,745)
Losses on decommissioning of returned/abandoned areas	(13)	-	-	-	-	(13)
Pension and medical benefits - retirees	-	-	-	(1,463)	-	(1,463)
Losses with legal, administrative and arbitration proceedings	(460)	(33)	(18)	(178)	-	(689)
Profit sharing	(87)	(64)	(10)	(37)	-	(198)
Variable compensation programs	(357)	(371)	(54)	(199)	-	(981)
Compensation for the termination of vessel charter agreements	-	(13)	(5)	-	-	(18)
Collective bargaining agreement	-	(3)	-	3	-	-
Expenses with contractual fines received	(36)	(1)	(153)	1	-	(189)
Operating expenses with thermoelectric power plants	-	-	(239)	-	-	(239)
Institutional relations and cultural projects	-	(4)	-	(196)	-	(200)
Gains/(losses) with Commodities Derivatives	-	(430)	-	(2)	-	(432)
Amounts recovered from Lava Jato investigation	-	-	-	29	-	29
(Losses)/gains of non-core activities	243	(142)	51	52	-	204
Ship/take or pay agreements and fines imposed to suppliers	4	45	282	1	-	332
Fines imposed on suppliers	256	43	4	35	-	338
Results from co-participation agreements in bid areas	93	-	-	-	-	93
Government grants	3	1	-	392	-	396
Early termination and changes to cash flow estimates of leases	435	76	1	(3)	-	509
Reimbursements from E&P partnership operations	730	-	-	-	-	730
Results on disposal/write-offs	(21)	93	(259)	5	-	(182)
Others	(289)	39	(72)	(86)	-	(408)
	(2,109)	(789)	(543)	(1,685)	-	(5,126)

Table 26 - Consolidated assets by segment – 12.31.2023

R\$ million	E&P	RTM	Gas & Low Carbon Energies (G&LCE)	CORP. AND OTHERS	ELIMIN.	TOTAL
Total assets	672,303	168,489	32,806	202,840	(25,550)	1,050,888
Current assets	13,574	53,265	1,793	113,997	(25,550)	157,079
Non-current assets	658,729	115,224	31,013	88,843	-	893,809
Long-term receivables	43,705	10,014	400	75,616	-	129,735
Investments	1,667	3,926	703	278	-	6,574
Property, plant and equipment	601,553	100,629	29,539	11,053	-	742,774
Operating assets	524,822	87,762	17,454	8,570	-	638,608
Assets under construction	76,731	12,867	12,085	2,483	-	104,166
Intangible assets	11,804	655	371	1,896	-	14,726

Table 27 - Consolidated assets by segment – 12.31.2022

R\$ million	E&P	RTM	Gas & Low Carbon Energies (G&LCE)	CORP. AND OTHERS	ELIMIN.	TOTAL
Total assets	606,994	179,652	39,574	177,953	(27,464)	976,709
Current assets	27,259	62,794	2,041	98,422	(27,464)	163,052
Non-current assets	579,735	116,858	37,533	79,531	-	813,657
Long-term receivables	33,140	9,450	492	67,640	-	110,722
Investments	1,976	5,098	905	193	-	8,172
Property, plant and equipment	531,550	101,728	35,747	10,157	-	679,182
Operating assets	480,481	87,925	25,085	8,267	-	601,758
Assets under construction	51,069	13,803	10,662	1,890	-	77,424
Intangible assets	13,069	582	389	1,541	-	15,581

Table 28 - Reconciliation of Adjusted EBITDA by segment – 2023

R\$ million	E&P	RTM	Gas & Low Carbon Energies (G&LCE)	CORP. AND OTHERS	ELIMIN.	TOTAL
Net income (loss)	112,458	15,356	6,762	(8,623)	(787)	125,166
Net finance income (expense)	-	-	-	11,861	-	11,861
Income taxes	57,942	8,716	3,456	(17,394)	(405)	52,315
Depreciation, depletion and amortization	50,982	12,022	2,617	583	-	66,204
EBITDA	221,382	36,094	12,835	(13,573)	(1,192)	255,546
Results in equity-accounted investments	18	1,562	(52)	(48)	-	1,480
Impairment of assets (reversals), net	10,301	2,559	397	(146)	-	13,111
Reclassification of comprehensive income (loss) due to the disposal of equity-accounted investments	-	-	-	-	-	-
Results from co-participation agreements in bid areas	(1,399)	-	-	-	-	(1,399)
Results on disposal/write-offs of assets	(6,876)	169	243	(47)	-	(6,511)
Adjusted EBITDA	223,426	40,384	13,423	(13,814)	(1,192)	262,227

Table 29 - Reconciliation of Adjusted EBITDA by segment – 2022

R\$ million	E&P	RTM	Gas & Low Carbon Energies (G&LCE)	CORP. AND OTHERS	ELIMIN.	TOTAL
Net income (loss)	164,577	38,142	5,739	(14,803)	(4,650)	189,005
Net finance income (expense)	-	-	-	19,257	-	19,257
Income taxes	84,338	19,630	2,742	(18,321)	(2,396)	85,993
Depreciation, depletion and amortization	53,725	11,603	2,310	564	-	68,202
EBITDA	302,640	69,375	10,791	(13,303)	(7,046)	362,457
Results in equity-accounted investments	(863)	(38)	(417)	27	-	(1,291)
Impairment of assets (reversals), net	6,361	495	(4)	7	-	6,859
Reclassification of comprehensive income (loss) due to the disposal of equity-accounted investments	-	1	-	-	-	1
Results from co-participation agreements in bid areas	(21,660)	-	-	-	-	(21,660)
Results on disposal/write-offs of assets	(4,391)	(554)	(881)	(58)	-	(5,884)
Adjusted EBITDA	282,087	69,279	9,489	(13,327)	(7,046)	340,482

Table 30 - Reconciliation of Adjusted EBITDA by segment – 4Q23

R\$ million	E&P	RTM	Gas & Low Carbon Energies (G&LCE)	CORP. AND OTHERS	ELIMIN.	TOTAL
Net income (loss)	23,633	3,531	1,597	1,996	406	31,163
Net finance income (expense)	-	-	-	(1,368)	-	(1,368)
Income taxes	12,107	2,042	839	(5,364)	209	9,833
Depreciation, depletion and amortization	14,050	3,082	687	162	-	17,981
EBITDA	49,790	8,655	3,123	(4,574)	615	57,609
Results in equity-accounted investments	(130)	431	34	8	-	343
Impairment of assets (reversals), net	9,839	528	397	(1)	-	10,763
Reclassification of comprehensive income (loss) due to the disposal of equity-accounted investments	-	-	-	-	-	-
Results from co-participation agreements in bid areas	(1,163)	-	-	-	-	(1,163)
Results on disposal/write-offs of assets	(803)	116	(22)	9	-	(700)
Adjusted EBITDA	57,533	9,730	3,532	(4,558)	615	66,852

Table 31 - Reconciliation of Adjusted EBITDA by segment – 3Q23

R\$ million	E&P	RTM	Gas & Low Carbon Energies (G&LCE)	CORP. AND OTHERS	ELIMIN.	TOTAL
Net income (loss)	30,638	4,017	1,755	(6,600)	(3,050)	26,760
Net finance income (expense)	-	-	-	9,760	-	9,760
Income taxes	15,956	2,511	915	(6,785)	(1,571)	11,026
Depreciation, depletion and amortization	13,111	3,069	642	133	-	16,955
EBITDA	59,705	9,597	3,312	(3,492)	(4,621)	64,501
Results in equity-accounted investments	334	857	20	1	-	1,212
Impairment of assets (reversals), net	384	2	-	-	-	386
Reclassification of comprehensive income (loss) due to the disposal of equity-accounted investments	-	-	-	-	-	-
Results from co-participation agreements in bid areas	(93)	-	-	-	-	(93)
Results on disposal/write-offs of assets	21	(93)	259	(5)	-	182
Adjusted EBITDA	60,351	10,363	3,591	(3,496)	(4,621)	66,188

Glossary

ACL - *Ambiente de Contratação Livre* (Free contracting market) in the electricity system.

ACR - *Ambiente de Contratação Regulada* (Regulated contracting market) in the electricity system.

Adjusted cash and cash equivalents - Sum of cash and cash equivalents and investments in securities in domestic and international markets that have high liquidity, i.e., convertible into cash within 3 months, even if maturity is longer than 12 months, held for the purpose of complying with cash commitments. This measure is not defined under the International Financial Reporting Standards - IFRS and should not be considered in isolation or as a substitute for cash and cash equivalents computed in accordance with IFRS. It may not be comparable to adjusted cash and cash equivalents of other companies, however management believes that it is an appropriate supplemental measure to assess our liquidity and supports leverage management.

Adjusted EBITDA - Adjusted EBITDA (a non-GAAP measure defined as net income plus net finance income (expense); income taxes; depreciation, depletion and amortization; results in equity-accounted investments; impairment of assets (reversals); results on disposal/write-offs of assets, remeasurement of investment retained with loss of control and reclassification of CTA; and results from co-participation agreements in bid areas).

Adjusted EBITDA margin - Adjusted EBITDA divided by sales revenues.

Basic and diluted earnings (losses) per share - Calculated based on the weighted average number of shares.

CAPEX - Capital Expenditure - investments that encompasses acquisition of property, plant, and equipment, including costs with leasing, intangible assets, investments in subsidiaries and affiliates, costs with geology and geophysics and pre-operating costs.

Consolidated Structured Entities - Entities that have been designated so that voting rights or the like are not the determining factor in deciding who controls the entity. Petrobras has no equity interest in certain structured entities that are consolidated in the Company's financial statements, but control is determined by the power it has over its relevant operating activities. As there is no equity interest, the income from certain consolidated structured entities is attributable to non-controlling shareholders in the income statement, and disregarding the profit or loss attributable to Petrobras shareholders.

CTA - Cumulative translation adjustment - The cumulative amount of exchange variation arising on translation of foreign operations that is recognized in Shareholders' Equity and will be transferred to profit or loss on the disposal of the investment.

Effect of average cost in the Cost of Sales - In view of the average inventory term of 60 days, the crude oil and oil products international prices movement, as well as foreign exchange effect over imports, production taxes and other factors that impact costs, do not entirely influence the cost of sales in the current period, having their total effects only in the following period.

Free cash flow - Corresponds to operating cash flow minus acquisitions of property, plant and equipment, intangible assets and equity interests. Free cash flow is not defined under the IFRS and should not be considered in isolation or as a substitute for cash and cash equivalents calculated in accordance with IFRS. It may not be comparable to free cash flow of other companies, however management believes that it is an appropriate supplemental measure to assess our liquidity and supports leverage management.

Investments - Capital expenditures based on the cost assumptions and financial methodology adopted in our Business and Management Plan, which include acquisition of PP&E, including expenses with leasing, intangibles assets, investment in investees and other items that do not necessarily qualify as cash flows used in investing activities, primarily geological and geophysical expenses, pre-operating charges, purchase

of property, plant and equipment on credit and borrowing costs directly attributable to works in progress.

Leverage - Ratio between the Net Debt and the sum of Net Debt and Shareholders' Equity. Leverage is not a measure defined in the IFRS and it is possible that it may not be comparable to similar measures reported by other companies, however management believes that it is an appropriate supplemental measure to assess our liquidity.

Lifting Cost - An indicator that represents the lifting cost per barrel of oil equivalent, considering the ratio between production and costs. It includes expenses for the execution and maintenance of production. Costs related to the leasing of third-party platforms, production taxes, and depreciation, depletion, and amortization are not considered in this indicator.

Lifting Cost + Leases - An indicator that includes costs related to the leasing of third-party platforms in the calculation of Lifting Cost. Costs related to production taxes and depreciation, depletion, and amortization are not considered.

Lifting Cost + Production Taxes - An indicator that includes costs related to production taxes in the calculation of Lifting Cost. Costs related to the leasing of third-party platforms and depreciation, depletion, and amortization are not considered.

Lifting Cost + Production Taxes + Leases - An indicator that includes costs related to the leasing of third-party platforms and production taxes in the calculation of Lifting Cost. Costs related to depreciation, depletion, and amortization are not considered.

LTM Adjusted EBITDA - Sum of the last 12 months (Last Twelve Months) of Adjusted EBITDA. This metric is not foreseen in the international accounting standards - IFRS and it is possible that it is not comparable with similar indexes reported by other companies, however Management believes that it is supplementary information to assess liquidity and helps manage leverage. Adjusted EBITDA should be considered in conjunction with other metrics to better understand the Company's liquidity.

OCF - Net Cash provided by (used in) operating activities (operating cash flow), presented in the consolidated cash flow statement.

Net Debt - Gross debt less adjusted cash and cash equivalents. Net debt is not a measure defined in the IFRS and should not be considered in isolation or as a substitute for total long-term debt calculated in accordance with IFRS. Our calculation of net debt may not be comparable to the calculation of net debt by other companies, however our management believes that net debt is an appropriate supplemental measure that helps investors assess our liquidity and supports leverage management.

Net Income by Business Segment - The information by the company's business segment is prepared based on available financial information that is directly attributable to the segment or that can be allocated on a reasonable basis, being presented by business activities used by the Executive Board to make resource allocation decisions and performance evaluation. When calculating segmented results, transactions with third parties, including jointly controlled and associated companies, and transfers between business segments are considered. Transactions between business segments are valued at internal transfer prices calculated based on methodologies that take into account market parameters, and these transactions are eliminated, outside the business segments, for the purpose of reconciling the segmented information with the consolidated financial statements of the company.

PLD (differences settlement price) - Electricity price in the spot market. Weekly weighed prices per output level (light, medium and heavy), number of hours and related market capacity.

Refining - includes crude oil refining, logistics, transportation, acquisition and export activities, as well as the purchase and sale of petroleum and ethanol products in Brazil and abroad. Additionally, this segment includes the petrochemical area, which includes investments in

companies in the petrochemical sector, shale exploration and processing.

ROCE - operating profit after taxes / average capital employed, both measured in US\$ on a LTM basis

Operating profit after taxes: Adjusted EBITDA, minus DD&A of assets booked at historical exchange rates and 34% income tax rate.

Average capital employed: quarterly average considering inventories, intangibles and fixed assets at historical exchange rates.

Sales Price of Petroleum in Brazil - Average internal transfer prices from the E&P segment to the Refining segment.

Total net liabilities - Total liability less adjusted cash and cash equivalents.