

FINANCIAL PERFORMANCE

4Q22



P-71
Itapu Field

Petrobras financial performance in 4Q22

Rio de Janeiro, March 01, 2023

Message from the CFO

Dear shareholders and investors,

With a strong sense of accomplishment, we are very proud to share 2022 results. They are the synthesis of a long trajectory of huge challenges which were overcome, efficient management, consistent strategic choices which were vindicated and the focus on value generation, all of which are today reflected in excellent economic and financial results and a solid balance sheet.

We have reached superlative records: recurring net income and EBITDA of, respectively, US\$ 34 billion and US\$ 67 billion, which, notwithstanding the positive external backdrop, represent the result of several relevant management decisions taken over the past years, as oil prices had previously been at levels similar to those of 2022, without equivalent results. And we have generated those results while investing in 2022 US\$ 10 billion in our businesses and delivering an oil and gas production of 2.7 million boed, 3% above the center of the target and with 73% of pre-salt oil in the mix, demonstrating how serious and effective is the execution of our robust and resilient strategic planning. We continue to break production records. FPSO Carioca, in Sêpia field, reached in November the average monthly production of 174 kbpd and the ATP-6 well in Atapu reached in the same period 56.5 kbpd. In 2022 reserves incorporation was the highest ever (2.0 billion boe), for the second year in a row, reflecting the excellent performance of our assets. The reserves to production metric (R/P) went up to 12.2 years.

We started up 2 new production platforms, in the Mero and Itapu fields, the latter brought forward relative to the initial schedule. We shall have 17 additional ones coming online over the next 5 years.

We delivered world-class results in refining and trading and logistics. We continue with our plans to modernize our refining facilities, with works in the Sulfur Recovery Unit at REGAP, procurement of the new HDT for REPLAN and the system for reduction of emissions into the atmosphere (blowdown closure at RPBC). We have kept the utilization factor in our refineries at high and efficient levels, despite relevant maintenance stoppages, and we also increased energy efficiency and reduced emissions.

The year 2022 was challenging with global supply limitations caused by the conflict in Ukraine. Our global market coverage and development of new customers were instrumental for the shift in our exports flow aimed at generating value and seizing new arbitrage opportunities. We have been able to diversify the destinations of our exports and practice competitive prices, while reducing volatility to our customers.

In regard to innovation and technological development, it is worth noting that for the second year in a row we have reached the record of 1,100 active patents filed only in 2022. For the fourth consecutive year we were in the top position in high performance and ecoefficient computers in Latin America, with the Pegasus supercomputer, which happens to be the 5th most powerful on the global oil industry. Processing more data enables us to generate ever-sharper images

for the areas mapped for oil and gas exploration and production, besides reducing processing time. This contributes to production optimization, increase in recovery factor of the existing reserves and the maximization of the efficiency of our exploratory projects.

These results and the countless other efforts and processes, it is always worth remembering, were carried out with the utmost respect for the highest governance and compliance standards. Consistent with the continuous improvement of our governance and transparency, in 2022 we approved our Tax Policy and improved the governance of our Pricing Policy with the approval by our Board of Directors of the guideline for prices in the domestic market. Our Governance efforts have been rewarded and for the 6th consecutive year we have received the Level 1 Governance Certification from the Secretariat of Coordination and Governance of State-Owned Companies (SEST). We also stand in the top position in the ranking for active transparency of the General Federal Inspector's Office (*Controladoria Geral da União*).

We have accomplished all this always prioritizing the safety of our employees – captured in the total recordable injuries metric of 0.68 per million men-hour – and respecting the environment and society. We have today the largest program for offshore CO₂ capture worldwide. In 2022 we injected 10.6 million tCO₂, the most we injected in a single year. In light of the cumulative results our reinjection commitment was revised up to 80 million tCO₂ by 2025 in CCUS (carbon capture usage and storage) projects. CO₂ reinjection will continue to have a relevant role in the reduction of the intensity of GHG emissions on oil and gas production. Besides, as can be witnessed in the evolution of our strategic plans, we are seeking to expand even further our environmental initiatives, developing capabilities also for the offshore wind, hydrogen and biorefining businesses. For the second year in a row, Petrobras has joined the Dow Jones Sustainability Index World and we have reached the maximum score in the Environmental Report, Water-related Risks and Social Report criteria. The company also stood out in terms of Operating Eco-efficiency, Labor Practices and Human Rights. It is also noteworthy that we are implementing a green recycling policy for platforms to be decommissioned, in line with the market's best ESG practices.

All those efforts were translated into huge wealth for Brazilian society. In 2022, we have paid the record amount of R\$ 279 billion in taxes and government take and we have surpassed the mark of R\$ 1 trillion over the last 5 years. Our strong results have also been translated into returns to our shareholders. Our Board of Directors approved dividends of R\$ 2.75¹ per common and preferred share, relative to 4Q22 results. And we can continue to deliver even more. With the perspectives on oil and gas production growth, with higher profitability due to the pre-salt, and the capacity of our company to face the challenges imposed by the inevitable energy transition we shall be in a unique position to continue to generate long term value. It is obviously worth nothing that we cannot ignore the cyclical nature of our industry: who can forget negative oil prices during the height of the pandemic? In 2022 our return on capital employed was 16%. In 2020 it was only 3%. Therefore, we need to focus on our portfolio's resilience, ensuring long term financial sustainability.

¹ For more information and details please access the material fact released today.

All that has been constructed was only possible due to the efforts, capacity and commitment of thousands of people, who, infused with collaborative spirit and working for a common good, are capable of generating so much wealth for society.

Lastly, we are confident that Petrobras will keep moving forward to a bright future, overcoming challenges, developing technologies to the energy transition and, in the meantime, generating value to society and to our shareholders and investors.

Rodrigo Araujo Alves

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 4Q22 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 audited by independent auditors in accordance with international accounting standards (IFRS).

Main items

Table 1 – Main items

US\$ million	4Q22	3Q22	4Q21	2022	2021	Variation (%)		
						4Q22 / 3Q22	4Q22 / 4Q21	2022 / 2021
Sales revenues	30,171	32,411	24,031	124,474	83,966	(6.9)	25.6	48.2
Gross profit	14,579	16,536	10,579	64,988	40,802	(11.8)	37.8	59.3
Operating expenses	(3,460)	(2,366)	(257)	(7,874)	(3,218)	46.2	1,246.3	144.7
Consolidated net income (loss) attributable to the shareholders of Petrobras	8,245	8,763	5,636	36,623	19,875	(5.9)	46.3	84.3
Recurring consolidated net income (loss) attributable to the shareholders of Petrobras *	8,163	8,803	4,266	34,440	15,539	(7.3)	91.4	121.6
Net cash provided by operating activities	12,848	12,064	9,196	49,717	37,791	6.5	39.7	31.6
Free cash flow	9,287	10,117	7,511	40,136	31,466	(8.2)	23.6	27.6
Adjusted EBITDA	13,903	17,410	11,276	66,217	43,555	(20.1)	23.3	52.0
Recurring adjusted EBITDA *	14,362	17,570	11,190	67,152	43,482	(18.3)	28.3	54.4
Gross debt (US\$ million)	53,799	54,268	58,743	53,799	58,743	(0.9)	(8.4)	(8.4)
Net debt (US\$ million)	41,516	47,483	47,626	41,516	47,626	(12.6)	(12.8)	(12.8)
Net debt/LTM Adjusted EBITDA ratio	0.63	0.75	1.09	0.63	1.09	(16.0)	(42.2)	(42.2)
Average commercial selling rate for U.S. dollar	5.26	5.25	5.58	5.16	5.40	0.2	(5.7)	(4.4)
Brent crude (US\$/bbl)	88.71	100.85	79.73	101.19	70.73	(12.0)	11.3	43.1
Domestic basic oil by-products price (US\$/bbl)	118.20	131.99	87.00	122.66	77.28	(10.4)	35.9	58.7
TRI (total recordable injuries per million men-hour frequency rate)	-	-	-	0.68	0.56	-	-	21.4
ROCE (Return on Capital Employed)	15.9%	14.8%	7.8%	15.9%	7.8%	1.1 p.p.	8.1 p.p.	8.1 p.p.

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

Consolidated results

Net revenues

Table 2 – Net revenues by products

US\$ million	4Q22	3Q22	4Q21	2022	2021	Variation (%)		
						4Q22 / 3Q22	4Q22 / 4Q21	2022 / 2021
Diesel	10,300	11,685	6,756	40,149	24,236	(11.9)	52.5	65.7
Gasoline	4,032	4,109	3,762	16,175	11,910	(1.9)	7.2	35.8
Liquefied petroleum gas (LPG)	1,143	1,355	1,164	5,121	4,491	(15.6)	(1.8)	14.0
Jet fuel	1,498	1,534	815	5,423	2,271	(2.3)	83.8	138.8
Naphtha	432	629	480	2,396	1,699	(31.3)	(10.0)	41.0
Fuel oil (including bunker fuel)	312	381	507	1,411	1,775	(18.1)	(38.5)	(20.5)
Other oil products	1,163	1,484	1,181	5,536	4,261	(21.6)	(1.5)	29.9
Subtotal oil products	18,880	21,177	14,665	76,211	50,643	(10.8)	28.7	50.5
Natural gas	1,982	2,007	1,798	7,673	5,884	(1.2)	10.2	30.4
Crude oil	1,301	1,975	591	7,719	671	(34.1)	120.1	1050.4
Renewables and nitrogen products	53	69	6	283	40	(23.2)	783.3	607.5
Revenues from non-exercised rights	207	188	43	669	243	10.1	381.4	175.3
Electricity	151	141	730	694	2,902	7.1	(79.3)	(76.1)
Services, agency and others	244	254	240	1,043	808	(3.9)	1.7	29.1
Total domestic market	22,818	25,811	18,073	94,292	61,191	(11.6)	26.3	54.1
Exports	6,877	5,696	5,388	27,497	21,491	20.7	27.6	27.9
Crude oil	5,290	3,638	3,300	19,332	14,942	45.4	60.3	29.4
Fuel oil (including bunker fuel)	1,495	1,743	1,856	7,399	5,480	(14.2)	(19.5)	35.0
Other oil products and other products	92	315	232	766	1,069	(70.8)	(60.3)	(28.3)
Sales abroad (*)	476	904	570	2,685	1,284	(47.3)	(16.5)	109.1
Total foreign market	7,353	6,600	5,958	30,182	22,775	11.4	23.4	32.5
Total	30,171	32,411	24,031	124,474	83,966	(6.9)	25.6	48.2

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

In 2022, net revenues increased 48%, driven mainly by the 43% rise in Brent prices compared to 2021 and higher oil product and natural gas prices in a year of continuing recovery in global demand and with supply impacted by the war in Ukraine. The strong growth of oil sales in the domestic market in 2022 is explained by sales to Acelen (Mataripe Refinery), after the divestment concluded on November 30, 2021.

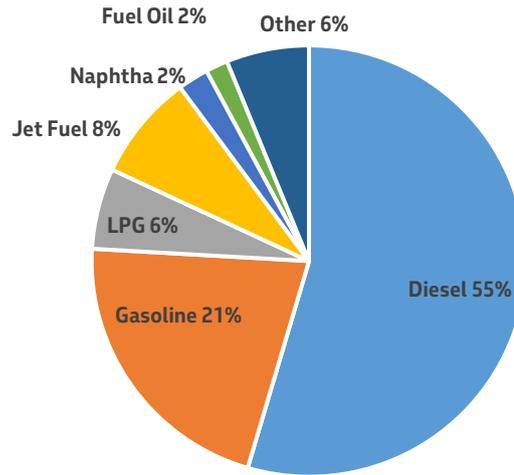
In 2022, export revenues grew 28% due to higher Brent prices, despite a 12% drop in volumes compared to 2021.

In 4Q22, revenues decreased 7% compared to 3Q22 mainly due to the 12% depreciation of Brent in the quarter. Revenues from oil products in the domestic market fell 11% compared to 3Q22, influenced by the reduction in oil product prices, which were more aligned to international prices. Oil revenues in the domestic market fell 34% in 4Q22 due to lower sales to Acelen and the drop in Brent prices.

Export revenues, despite the depreciation in Brent prices, increased 21% in 4Q22 compared to 3Q22. This result mainly reflected the realization in 4Q22 of ongoing exports from 3Q22.

Diesel and gasoline remained the main products, together accounting for 76% of oil products revenues in 4Q22.

Graph 1 – Oil products sales revenues 4Q22 – domestic market



As the war in Ukraine continued, we maintained our strategy of diversifying oil flows in 2022 and market development of pre-salt oil streams in order to maximize the value of Petrobras exports.

Búzios remains the main export stream, representing almost 50% of the volume exported in 2022. The global market coverage allowed the best use of arbitrage throughout the year, which was characterized by high volatility and change in flows due to the war in Ukraine.

Over the years Petrobras has been implementing a constant search for global opportunities and the development of new clients, which was decisive for the company to also change the flow of its exports, taking advantage of new arbitrage opportunities and maximizing value generation. In 4Q22 we made our first export of Mero, opening a new market in Thailand.

In 4Q22, we had the following distribution of export destinations by volume:

Table 3 – Destination of oil exports

Country	4Q22	3Q22	4Q21
China	45%	29%	38%
Europe	29%	27%	16%
Latam	10%	21%	23%
USA	7%	10%	8%
Asia (Ex China)	7%	11%	13%
Caribbean	2%	2%	2%

Table 4 – Destination of exports of oil products

Country	4Q22	3Q22	4Q21
Singapore	70%	59%	84%
USA	16%	20%	10%
Caribbean	8%	14%	4%
Europe	6%	7%	0%
Others	-	-	2%

Cost of goods sold

Table 5 – Cost of goods sold

US\$ million	4Q22	3Q22	4Q21	2022	2021	Variation (%)		
						4Q22 / 3Q22	4Q22 / 4Q21	2022 / 2021
Acquisitions	(6,891)	(6,848)	(5,562)	(23,771)	(16,103)	0.6	23.9	47.6
Crude oil imports	(2,991)	(3,190)	(1,594)	(10,483)	(5,651)	(6.2)	87.6	85.5
Oil products imports	(3,036)	(2,818)	(1,862)	(9,019)	(5,629)	7.7	63.1	60.2
Natural gas imports	(864)	(840)	(2,106)	(4,269)	(4,823)	2.9	(59.0)	(11.5)
Production	(7,796)	(7,857)	(6,311)	(32,093)	(23,880)	(0.8)	23.5	34.4
Crude oil	(6,363)	(6,493)	(5,287)	(26,553)	(19,527)	(2.0)	20.4	36.0
Production taxes	(3,146)	(3,388)	(2,811)	(13,840)	(9,464)	(7.1)	11.9	46.2
Other costs	(3,217)	(3,105)	(2,476)	(12,713)	(10,063)	3.6	29.9	26.3
Oil products	(746)	(657)	(544)	(2,668)	(2,496)	13.5	37.1	6.9
Natural gas	(687)	(707)	(480)	(2,872)	(1,857)	(2.8)	43.1	54.7
Production taxes	(171)	(219)	(177)	(883)	(592)	(21.9)	(3.4)	49.2
Other costs	(516)	(488)	(303)	(1,989)	(1,265)	5.7	70.3	57.2
Services, electricity, operations abroad and others	(905)	(1,170)	(1,579)	(3,622)	(3,181)	(22.6)	(42.7)	13.9
Total	(15,592)	(15,875)	(13,452)	(59,486)	(43,164)	(1.8)	15.9	37.8

In 2022, cost of goods sold increased 38% compared to 2021 reflecting mainly higher expenses with imports, as a result of higher prices of oil and oil products, and with government take, as a consequence of the appreciation of Brent and natural gas prices. The reduction in the volume of LNG and Bolivian gas imports partially offset this effect. In 2022 there was a 15% reduction in Bolivian gas imports and a 74% reduction in the volume of regasified LNG, which is mainly explained by the lower natural gas thermoelectric dispatch due to the favorable hydrological scenario.

In 4Q22, the cost of goods sold dropped 2% compared to 3Q22, due to the devaluation of Brent, which contributed to the drop in government take.

Operating expenses

Table 6 – Operating expenses

US\$ million	4Q22	3Q22	4Q21	2022	2021	Variation (%)		
						4Q22 / 3Q22	4Q22 / 4Q21	2022 / 2021
Selling, General and Administrative Expenses	(1,669)	(1,547)	(1,398)	(6,263)	(5,405)	7.9	19.4	15.9
Selling expenses	(1,293)	(1,213)	(1,092)	(4,931)	(4,229)	6.6	18.4	16.6
Materials, third-party services, freight, rent and other related costs	(1,066)	(973)	(909)	(3,987)	(3,542)	9.6	17.3	12.6
Depreciation, depletion and amortization	(178)	(194)	(162)	(789)	(610)	(8.2)	9.9	29.3
Allowance for expected credit losses	(24)	(20)	(1)	(58)	12	20.0	2300.0	-
Employee compensation	(25)	(26)	(20)	(97)	(89)	(3.8)	25.0	9.0
General and administrative expenses	(376)	(334)	(306)	(1,332)	(1,176)	12.6	22.9	13.3
Employee compensation	(228)	(223)	(197)	(865)	(834)	2.2	15.7	3.7
Materials, third-party services, rent and other related costs	(116)	(85)	(88)	(362)	(256)	36.5	31.8	41.4
Depreciation, depletion and amortization	(32)	(26)	(21)	(105)	(86)	23.1	52.4	22.1
Exploration costs	(657)	(107)	(149)	(887)	(687)	514.0	340.9	29.1
Research and Development	(179)	(187)	(148)	(792)	(563)	(4.3)	20.9	40.7
Other taxes	(194)	(93)	(37)	(439)	(406)	108.6	424.3	8.1
Impairment of assets	(893)	(255)	272	(1,315)	3,190	250.2	-	-
Other income and expenses, net	132	(177)	1,203	1,822	653	-	(89.0)	179.0
Total	(3,460)	(2,366)	(257)	(7,874)	(3,218)	46.2	1246.3	144.7

In 2022, operating expenses increased 145%, mostly reflecting the absence of gains in 2022 from the impairment reversals (-US\$ 4.5 billion), the complementary gain from the exclusion of ICMS from the PIS/COFINS tax base (-US\$ 0.5 billion), higher expenses with legal contingencies (-US\$ 0.6 billion), and lower gains with the disposal and write-off of assets (-US\$ 0.8 billion), partially offset by higher gains with co-participation agreements in the Sepia, Atapu, and Buzios fields (+US\$ 3.7 billion).

The 17% growth in selling expenses in 2022 is explained by higher freight costs for exports, higher logistics expenses with natural gas transportation and higher oil sales in the domestic market, mainly to Acelen.

In 2022, general and administrative expenses increased by 13% compared to 2021, which is explained by the increase in services expenses, mainly related to digital transformation, and the resumption of activities post-pandemic.

Exploration expenses grew in 2022 mainly due to higher spending on the write-off of exploratory wells, partly offset by the reversal of local content fines with the National Agency of Petroleum, Natural Gas and Biofuels (ANP) after the execution of the Conduct Adjustment Agreement (TAC), related to investment commitments in Exploration and Production with local content.

The growth in expenses with research and technological development in 2022 is explained by the increase in the regulatory obligation to invest in research, development and innovation (RD&I), mainly due to the increase in revenues from pre-salt fields.

In 4Q22, operating expenses grew 46% compared to 3Q22, impacted mainly by higher impairment expenses (-US\$ 0.6 billion) and exploratory expenses due mainly to the write-off of 8 exploratory wells in the Sergipe-Alagoas area (SEAL) (-US\$ 0,5 billion), as well as higher expenses with judicial contingencies (-US\$ 0.3 billion) and lower gains with the sale and write-off of assets (-US\$ 0.3 billion), partly offset by the gain with co-participation agreements in the S epia, Atapu, and B uzios fields (+US\$ 1.4 billion).

Adjusted EBITDA

In 2022, Adjusted EBITDA grew 52% compared to 2021, reaching US\$ 66.2 billion mainly influenced by the 43% appreciation of average Brent for the year and higher oil products prices in 2022.

In 4Q22, Adjusted EBITDA reached US\$ 13.9 billion, a 20% decline compared to 3Q22, due to the 12% depreciation of Brent and lower oil products margins in the period, as well as higher exploration expenses and legal contingencies.

Financial results

Table 7 – Financial results

US\$ million	4Q22	3Q22	4Q21	2022	2021	Variation (%)		
						4Q22 / 3Q22	4Q22 / 4Q21	2022 / 2021
Finance income	436	515	266	1,832	821	(15.3)	63.9	123.1
Income from investments and marketable securities (Government Bonds)	287	340	141	1,159	315	(15.6)	103.5	267.9
Other income, net	149	175	125	673	506	(14.9)	19.2	33.0
Finance expenses	(994)	(790)	(880)	(3,500)	(5,150)	25.8	13.0	(32.0)
Interest on finance debt	(577)	(563)	(545)	(2,363)	(2,870)	2.5	5.9	(17.7)
Unwinding of discount on lease liabilities	(379)	(337)	(325)	(1,340)	(1,220)	12.5	16.6	9.8
Discount and premium on repurchase of debt securities	(1)	(10)	(4)	(121)	(1,102)	(90.0)	(75.0)	(89.0)
Capitalized borrowing costs	237	260	229	1,032	976	(8.8)	3.5	5.7
Unwinding of discount on the provision for decommissioning costs	(125)	(127)	(182)	(519)	(761)	(1.6)	(31.3)	(31.8)
Other finance expenses, net	(149)	(13)	(53)	(189)	(173)	1046.2	181.1	9.2
Foreign exchange gains (losses) and indexation charges	844	(1,249)	(1,870)	(2,172)	(6,637)	-	-	(67.3)
Foreign exchange gains (losses)	1,023	(782)	(781)	1,022	(2,737)	-	-	-
Reclassification of hedge accounting to the Statement of Income	(1,274)	(1,109)	(1,246)	(4,871)	(4,585)	14.9	2.2	6.2
Monetary restatement of anticipated dividends and dividends payable (*)	876	398	101	994	108	120.2	767.6	820.4
Recoverable taxes inflation indexation income (**)	12	29	29	86	518	(58.6)	(58.6)	(83.4)
Other foreign exchange gains (losses) and indexation charges, net	207	215	27	597	59	(3.8)	665.8	911.9
Total	286	(1,524)	(2,484)	(3,840)	(10,966)	-	-	(65.0)

(*) In 2022, it refers to the income on the monetary restatement of paid anticipated dividends, in the amount of US\$ 1,293 (US\$ 121 in 2021), and to the expense on the indexation charges on dividends payable, in the amount of US\$ 299 (US\$ 13 in 2021).

(**) In 2021, it includes inflation indexation income related to the exclusion of ICMS (VAT tax) from the basis of calculation of PIS and COFINS.

In 2022, the financial result was negative by US\$ 3.8 billion, a 65% improvement compared to 2021, mostly explained by the gain with the BRL variation against the USD (R\$/US\$ 5.22 in Dec/2022 against R\$/US\$ 5.58 in Dec/2021). Additionally, the monetary restatement of anticipated dividends, lower transaction costs and goodwill on the repurchase of securities, lower interest expenses, gains on financial investments and discount on the repurchase of securities contributed to this result in 2022.

On the other hand, the financial result for 4Q22 was positive by US\$ 0.3 billion, compared to a negative result of US\$ 1.5 billion in 3Q22, reflecting the appreciation of the BRL against the USD (R\$/US\$ 5.22 in Dec/2022 versus R\$/US\$ 5.41 in Sep/2022) and gains in monetary restatement of anticipated dividends.

Net profit (loss) attributable to Petrobras shareholders

Net income in 2022 was \$36.6 billion, compared to \$19.9 billion in 2021. This increase is mainly due to the 43% appreciation of Brent, higher margins on oil products, improved financial results and gains from co-participation agreements in the Transfer of Rights fields, partially offset by higher tax collection and the absence of gains from the impairment reversals.

In 4Q22 net income was US\$ 8.2 billion, compared to US\$ 8.8 billion in 3Q22. This result is mainly explained by the depreciation of Brent, lower margins on oil products, higher impairment expenses, partially offset by gains from co-

participation agreements in the Sepia, Atapu and Búzios fields and by the appreciation of the BRL against the USD, generating a positive financial result for Petrobras.

Recurring net income attributable to Petrobras shareholders and recurring Adjusted EBITDA

In 2022, the net income was US\$ 36.6 billion benefited from non-recurring items, especially the gains with co-participation agreements and asset sales, partially offset by expenses with impairment, legal contingencies and dismantling of areas, in addition to the net effect on income tax and social contribution on the sale of assets. Excluding the non-recurring effects, net income would have been US\$ 34.4 billion. Adjusted EBITDA was negatively impacted by US\$ 1.0 billion and would have totaled US\$ 67.2 billion without the effect of non-recurring items in 2022.

In 4Q22, net income also benefited from non-recurring items by US\$ 0.1 billion and would have been US\$ 8.2 billion excluding these items. Adjusted EBITDA was negatively impacted by US\$ 0.5 billion and would have totaled US\$ 14.4 billion excluding the non-recurring items.

Special items

Table 8 – Special items

US\$ million	4Q22	3Q22	4Q21	2022	2021	Variation (%)		
						4Q22 / 3Q22	4Q22 / 4Q21	2022 / 2021
Net income	8,276	8,790	5,676	36,755	19,986	(5.8)	45.8	83.9
Non-recurring items	125	(63)	2,077	3,311	6,593	-	(94.0)	(49.8)
Non-recurring items that do not affect Adjusted EBITDA	584	97	1,991	4,246	6,520	502.1	(70.7)	(34.9)
Impairment of assets and investments	(890)	(253)	272	(1,321)	3,573	251.8	-	-
Reclassification of comprehensive income (loss) due to the disposal of equity-accounted investments	-	-	-	-	(41)	-	-	-
Gains and losses on disposal / write-offs of assets	7	291	1,718	1,146	1,942	(97.6)	(99.6)	(41.0)
Results from co-participation agreements in bid areas	1,424	(10)	(36)	4,286	631	-	-	579.2
Agreements signed for the electricity sector	-	-	29	-	107	-	-	-
Pis and Cofins inflation indexation charges - exclusion of ICMS (VAT tax) from the basis of calculation	-	-	1	-	456	-	-	-
Discount and premium on repurchase of debt securities	43	69	5	135	(1,090)	(37.7)	760.0	-
Non-occurrence of income taxes on indexation charges (SELIC interest rate) over undue paid taxes	-	-	-	-	903	-	-	-
Financial updating on state amnesty programs	-	-	2	-	39	-	-	-
Other non-recurring items	(459)	(160)	86	(935)	73	186.9	-	-
Voluntary Separation Plan	(11)	-	3	(18)	11	-	-	-
Amounts recovered from Lava Jato investigation	62	22	13	96	235	181.8	376.9	(59.1)
Gains / (losses) on decommissioning of returned/abandoned areas	(196)	(1)	109	(225)	99	19500.0	-	-
State amnesty programs	-	-	1	-	144	-	-	-
Gains / (losses) related to legal proceedings	(300)	(181)	(64)	(765)	(312)	65.7	368.8	145.2
Equalization of expenses - Production Individualization Agreements	(14)	-	(41)	(23)	(74)	-	(65.9)	(68.9)
PIS and COFINS over inflation indexation charges - exclusion of ICMS (VAT tax) from the basis of calculation	-	-	-	-	(21)	-	-	-
PIS and COFINS recovered - exclusion of ICMS (VAT tax) from the basis of calculation	-	-	-	-	483	-	-	-
Gains/(losses) arising from actuarial review of health care plan	-	-	-	-	(856)	-	-	-
Gains/(losses) with the transfer of rights on concession agreements	-	-	65	-	364	-	-	-
Net effect of non-recurring items on IR / CSLL	(42)	24	(707)	(1,127)	(2,255)	-	(94.1)	(50.0)
Recurring net income	8,193	8,829	4,306	34,571	15,648	(7.2)	90.3	120.9
Shareholders of Petrobras	8,163	8,803	4,266	34,440	15,539	(7.3)	91.4	121.6
Non-controlling interests	30	26	40	131	109	15.4	(25.0)	20.2
Adjusted EBITDA	13,903	17,410	11,276	66,217	43,555	(20.1)	23.3	52.0
Non-recurring items	(459)	(160)	86	(935)	73	186.9	-	-
Recurring Adjusted EBITDA	14,362	17,570	11,190	67,152	43,482	(18.3)	28.3	54.4

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

Investment (Capex) 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.

Table 9 - Capex

US\$ million	4Q22	3Q22	4Q21	2022	2021	Variation (%)		
						4Q22 / 3Q22	4Q22 / 4Q21	2022 / 2021
Exploration and Production	2,218	1,685	2,100	6,952	7,129	31.6	5.6	(2.5)
Refining, Transportation and Marketing	372	295	258	1,193	932	26.2	44.0	28.1
Gas and Power	99	65	161	350	412	52.0	(38.6)	(15.2)
Others	187	86	112	461	298	117.5	66.2	54.7
Subtotal	2,876	2,131	2,631	8,956	8,772	35.0	9.3	2.1
Signature bonus	-	-	-	892	-	-	-	-
Total	2,876	2,131	2,631	9,848	8,772	35.0	9.3	12.3

In 4Q22, capex totaled US\$ 9.8 billion, an increase of 12% compared to 2021, as a result of the payment of the signature bonus related to the S epia and Atapu fields and higher investments in modernization and adaptation of refineries, in addition to expenses with maintenance of logistical assets. In the year 2022, investments in growth corresponded to approximately 55% of the total.

Capex for 2022 was 17% lower than planned for the year in the 2022-26 Strategic Plan, mainly due to: (a) schedule adjustments postponing activities to the following year, (b) optimization of exploratory expenses and (c) non-replacement of pipelines affected by SCC-CO2 in B uzios and Tupi, which when inspected indicated a longer useful life.

In relation to the procurement of P-80 and P-82 FPSOs, which will operate in the B uzios field, due to contractual issues, we had a supplier down payment, with the respective cash outflow, of around US\$0.5 billion in 2022. Although these values were estimated as Capex in 2022, they will only be accounted for the Capex of the projects, during the execution of the works in the coming years.

In 4Q22, capex totaled US\$ 2.9 billion, 35% above 3Q22, due to the intensification of well interconnection activities, construction and integration of platforms, in addition to drilling and completion of wells, with emphasis on the P-71 in Itapu field, which started operating in December. Investments in growth corresponded to approximately 53% of the total in 4Q22 and the increase compared to 3Q22 is in line with the ramp-up of projects expected for the year 2023.

Growth capex are those with the primary objective of increasing the capacity of existing assets, deploying new production, offloading, and storage assets, increasing asset efficiency or profitability, and deploying essential infrastructure to enable other growth projects. It includes acquisitions of assets/companies and remaining investments in systems that started up as of 2020 and exploratory investments.

Sustaining capex, on the other hand, has the main objective of maintaining the operation of existing assets. It does not aim at increasing the capacity of the facilities. It includes investments in safety and reliability of facilities, replacement well projects, complementary development, remaining investments in systems that started up before 2020, scheduled

stoppages and revitalizations (without new systems), 4D seismic, health, environment, and safety (HSE) projects, subsea line exchanges, operational infrastructure and information technology (IT).

In 4Q22, capex in the Exploration and & Production segment totaled US\$ 2.2 billion, 32% higher when compared to 3Q22, with approximately 67% in growth. This increase was mainly due to activities related to the implementation of platforms P-71 and P-80 for the Itapu and Búzios fields and the increase in construction activities and well interconnections in Itapu, Revitalization of Marlim 2 and Búzios 8. Investments in 4Q22 were mainly focused on: (a) the development of ultra-deepwater production in the Santos Basin pre-salt (US\$ 1.0 billion); (b) exploratory investments (US\$ 0.1 billion); and (c) development of new deepwater projects (US\$ 0.1 billion).

In the Refining, Transport and Marketing segment, capex totaled US\$ 372 million in 4Q22, an increase of 26% when compared to 3Q22, of which approximately 85% were sustaining. This increase was mainly due to the scheduled stoppage of REPAR, in addition to expenses with the pre-stoppage of REFAP and RPBC, scheduled for the beginning of 2023. Additionally, there were expenses with the implementation of Train 2 of RNEST, mainly due to the implementation of the SNOx unit.

In the Gas and Power segment, capex totaled US\$ 99 million in 4Q22, 52% higher when compared to 3Q22, of which approximately 88% were sustaining. The increase was mainly due to scheduled stoppages and corrective maintenance of thermal plants.

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

Table 10 – Main projects

Unit	Start-up	FPSO capacity (bbl/day)	CAPEX Petrobras Actual US\$ bn	CAPEX Petrobras Total US\$ bn ¹	Petrobras Stake	Status
Búzios 5 FPSO Alm. Barroso (Chartered unit)	2023	150,000	0.95	2.0	88.99% ²	Project in phase of execution. Production system arrived at the Buzios field. 10 wells drilled and 7 completed.
Marlim 1 FPSO Anita Garibaldi (Chartered unit)	2023	80,000	0.17	1.8	100%	Project in phase of execution with production system in Brazil in final construction stage. ⁴
Marlim 2 FPSO Anna Nery (Chartered unit)	2023	70,000	0.32	1.4	100%	Project in phase of execution. Production system arrived at the Marlim field. 4 wells drilled and 3 completed. ⁴
Mero 2 FPSO Sepetiba (Chartered unit)	2023	180,000	0.28	0.8	38.6% ³	Project in phase of execution with production system under construction. 12 wells drilled and 6 completed
Mero 3 FPSO Marechal Duque de Caxias (Chartered unit)	2024	180,000	0.09	0.8	38.6% ³	Project in phase of execution with production system under construction. 6 wells drilled and 1 completed
Integrado Parque das Baleias (IPB) FPSO Maria Quitéria (Chartered unit)	2024	100,000	0.36	1.7	100%	Project in phase of execution with production system under construction. 3 wells drilled and 1 completed ⁴
Búzios 7 FPSO Almirante Tamandaré (Chartered unit)	2024	225,000	0.16	2.0	88.99% ²	Project in phase of execution with production system under construction. 3 wells drilled and 1 completed
Búzios 6 P-78 (Owned unit)	2025	180,000	0.48	4.2	88.99% ²	Project in phase of execution with production system under construction. 1 well drilled.
Búzios 8 P-79 (Owned unit)	2025	180,000	0.40	4.3	88.99% ²	Project in phase of execution with production system under construction. 4 wells drilled and 1 completed
Mero 4 FPSO Alexandre de Gusmão (Chartered unit)	2025	180,000	0.05	0.8	38.6% ³	Project in phase of execution with production system under construction. 6 wells drilled and 2 completed
Búzios 9 P-80 (Owned unit)	2026	225,000	0.10	5.0	88.99% ²	Project in phase of execution. Production system construction contract signed on August 2022. 2 wells drilled and completed
Búzios 10 P-82 (Owned unit)	2026	225,000	0.03	5.5	88.99% ²	Project in phase of execution. Production system construction contract signed on October 2022. 1 well drilled
Búzios 11 P-83 (Owned unit)	2027	225,000	0.04	4.8	88.99% ²	Project in phase of execution. Production system construction contract signed on September 2022. 2 wells drilled

¹ Total CAPEX with the Strategic Plan 2023-27 assumptions and Petrobras work interest (WI). Chartered units leases are not included.

² In November 2022, Petrobras concluded the assignment of 5% of its interest in the Production Sharing Contract of the Surplus Volume of the Transfer of Rights, for the Búzios field, in the pre-salt of Santos Basin, to the partner CNOOC. Petrobras stake was adjusted.

³ Petrobras stake updated after the approval of the Production Individualization Agreement (AIP) of the Mero accumulation. As the compensation relative to the non-contracted area expenses will be paid in oil to the consortium, the work interest (WI) of the CAPEX reported will not change.

⁴ 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.

Portfolio management

In 2022, we received US\$ 4.8 billion from assets sales, including deferred payments from the sales of NTS (US\$ 1.0 billion), in 2Q22, and Bacalhau (US\$ 950 million), in 1Q22. In 4Q22, cash inflows related to divestments totaled US\$ 931 million, including the receipt of payment for the sale of Polo Carmópolis (US\$ 548 million) and Reman (US\$ 257.2 million).

From January 1, 2022, to March 01, 2023, we concluded the sale of the Alagoas, Recôncavo, Peroá and Fazenda Belém Clusters, Albacora East field, exploratory blocks in Parana and Potiguar Basins, our equity interests in Deten Química and Gaspetro, and SIX and REMAN Refineries. We also signed the contracts for the sale of the Potiguar, Norte Capixaba, Golfinho and Camarupim Clusters and LUBNOR Refinery.

Table 11 – Main transactions by March 01st, 2023 and respective transaction amounts (excluding deferred payments)

Assets	Amount received (US\$ million)	Transaction amount ¹ (US\$ million)
Bloco PAR-T-198_Paraná Basin	0.031	0.031 ⁶
Bloco PAR-T-218_Paraná Basin	0.032	0.032 ⁶
Bloco POT-T-794_Potiguar Basin	0.525	0.525 ⁶
East Albacora field	1,928	2,201
Papa-Terra field	24.2	105.6 ⁶
Deten Química	101.2 ²	117 ²
Gaspetro	392.3 ²	394 ⁶
Alagoas cluster	300	300 ⁶
Carmópolis cluster	823	1,100 ⁶
Fazenda Belém cluster	13.4	35 ⁵
Golfinho e Camarupim clusters	3	75
Norte cluster	35.85	544
Peroá cluster	13.07	55 ⁶
Pescada cluster	-	2 ⁵
Potiguar cluster	110	1,380
Recôncavo cluster	256	250 ⁵
LUBNOR refinery	3.4	34
REMAN refinery	257.2	189.5 ⁶
SIX	44.6	33 ⁶
Total amount	4,306	6,816

¹ Amounts agreed in the signing date, subject to adjustments upon closing

² Original amounts in BRL, converted to US\$ at the PTAX rate on the day of the SPA signing or of the cash inflow

³Transaction signed in 2018 ⁴Transaction signed in 2019 ⁵Transaction signed in 2020 ⁶Transaction signed in 2021

Liquidity and capital resources

Table 12 - Liquidity and capital resources

US\$ million	4Q22	3Q22	4Q21	2022	2021
Adjusted cash and cash equivalents at the beginning of period	6,785	19,142	11,456	11,117	12,370
Government bonds and time deposits with maturities of more than 3 months at the beginning of period *	(2,411)	(2,855)	(537)	(650)	(659)
Cash and cash equivalents in companies classified as held for sale at the beginning of the period	-	7	6	13	14
Cash and cash equivalents at the beginning of period	4,374	16,294	10,925	10,480	11,725
Net cash provided by operating activities	12,848	12,064	9,196	49,717	37,791
Net cash provided by (used in) investing activities	(2,345)	(720)	557	(432)	2,157
Acquisition of PP&E and intangibles assets	(3,561)	(1,947)	(1,685)	(9,581)	(6,325)
Investments in investees	(7)	(1)	(9)	(27)	(24)
Proceeds from disposal of assets - Divestment	931	537	1,877	4,846	4,783
Financial compensation from co-participation agreements	1,950	121	-	7,284	2,938
Dividends received	55	77	487	374	781
Divestment (Investment) in marketable securities	(1,713)	493	(113)	(3,328)	4
(=) Net cash provided by operating and investing activities	10,503	11,344	9,753	49,285	39,948
Net cash used in financing activities	(7,047)	(23,157)	(9,890)	(51,453)	(40,791)
Net financings	(1,600)	(641)	(1,151)	(8,304)	(21,757)
Proceeds from finance debt	350	2,200	131	2,880	1,885
Repayments	(1,950)	(2,841)	(1,282)	(11,184)	(23,642)
Repayment of lease liability	(1,424)	(1,324)	(1,446)	(5,430)	(5,827)
Dividends paid to shareholders of Petrobras	(4,030)	(21,242)	(7,250)	(37,701)	(13,078)
Dividends paid to non-controlling interest	(13)	(10)	(30)	(81)	(105)
Investments by non-controlling interest	20	60	(13)	63	(24)
Effect of exchange rate changes on cash and cash equivalents	166	(107)	(308)	(316)	(402)
Cash and cash equivalents at the end of period	7,996	4,374	10,480	7,996	10,480
Government bonds and time deposits with maturities of more than 3 months at the end of period *	4,287	2,411	650	4,287	650
Cash and cash equivalents in companies classified as held for sale at the end of the period	-	-	(13)	-	(13)
Adjusted cash and cash equivalents at the end of period	12,283	6,785	11,117	12,283	11,117
Reconciliation of Free Cash Flow					
Net cash provided by operating activities	12,848	12,064	9,196	49,717	37,791
Acquisition of PP&E and intangibles assets	(3,561)	(1,947)	(1,685)	(9,581)	(6,325)
Free cash flow**	9,287	10,117	7,511	40,136	31,466

As of December 31, 2022, cash and cash equivalents totaled US\$ 8.0 billion and adjusted cash and cash equivalents totaled US\$ 12.3 billion.

In 2022, cash generated from operating activities reached US\$ 49.7 billion and positive free cash flow totaled US\$ 40.1 billion. This level of cash generation, along with the inflow of funds from the divestments of US\$ 4.8 billion and the inflow of US\$ 7.3 billion referring to financial compensation for co-participation agreements in Sepia and Atapu were used to: (a) pay remuneration to shareholders (US\$ 37.7 billion), (b) prepay debt and amortize principal

* Includes short-term government bonds and time deposits and cash and cash equivalents of companies classified as held for sale.

** Free cash flow (FCF) is in accordance with the Shareholder Remuneration Policy, which is the result of the equation: FCF = net cash provided by operating activities less acquisitions of PP&E and intangible assets.

and interest due in the period (US\$ 11.2 billion), (c) make investments (US\$ 9.6 billion), and (d) amortize lease liabilities (US\$ 5.4 billion).

In 2022, the company settled several loans and financial debt, in the amount of US\$ 11.2 billion, notably the repurchase of US\$ 5.4 billion of securities in the international capital market. The company raised US\$ 2.9 billion, of which (i) US\$ 1.25 billion through a credit line with sustainability commitments (Sustainability-Linked Loan) in the international banking market due in 2027, and (ii) US\$ 0.6 billion through the issuance of commercial notes in the domestic capital market due in 2030 and 2032; and (iii) US\$ 0.3 billion through the issuance of private placement commercial notes that backed the issuance of real estate receivables certificates, with maturities in 2030, 2032 and 2037. The real estate receivables certificates were issued by a securitization company that fully subscribed the Commercial Notes issued by Petrobras.

Debt

As of 12/31/2022, gross debt reached US\$ 53.8 billion, a decrease of 8.4% compared to 12/31/2021.

Average maturity shifted from 13.39 years on 12/31/2021, to 12.07 years on 12/31/2022, mainly because of the repurchase of long-term bonds in the international market.

The gross debt/EBITDA ratio reached 0.81x on 12/31/2022, compared to 1.35x on 12/31/2021.

On 12/31/2022, net debt reached US\$ 41.5 billion, an annual decrease of 12.6%.

Table 13 – Debt indicators

US\$ million	12.31.2022	09.30.2022	Δ %	12.31.2021
Financial Debt	29,954	30,855	(2.9)	35,700
Capital Markets	16,957	16,800	0.9	22,031
Banking Market	9,672	10,713	(9.7)	9,762
Development banks	723	721	0.3	769
Export Credit Agencies	2,443	2,452	(0.4)	2,951
Others	159	169	(5.9)	187
Finance leases	23,845	23,413	1.8	23,043
Gross debt	53,799	54,268	(0.9)	58,743
Adjusted cash and cash equivalents	12,283	6,785	81.0	11,117
Net debt	41,516	47,483	(12.6)	47,626
Net Debt/(Net Debt + Market Cap) - Leverage	39%	38%	2.6	41%
Average interest rate (% p.a.)	6.5	6.4	1.6	6.2
Weighted average maturity of outstanding debt (years)	12.07	12.04	0.2	13.39
Net debt/LTM Adjusted EBITDA ratio	0.63	0.75	(16.0)	1.09
Gross debt/LTM Adjusted EBITDA ratio	0.81	0.85	(4.8)	1.35

Results by segment

Exploration and Production

Table 14 – E&P results

US\$ million	4Q22	3Q22	4Q21	2022	2021	Variation (%) (*)		
						4Q22 / 3Q22	4Q22 / 4Q21	2022 / 2021
Sales revenues	16,973	19,293	15,781	77,890	55,584	(12.0)	7.6	40.1
Gross profit	9,787	11,866	9,250	47,425	31,911	(17.5)	5.8	48.6
Operating expenses	(1,099)	(474)	520	907	3,240	131.9	-	(72.0)
Operating income	8,688	11,392	9,770	48,332	35,151	(23.7)	(11.1)	37.5
Net income (loss) attributable to the shareholders of Petrobras	5,751	7,566	6,483	32,073	23,324	(24.0)	(11.3)	37.5
Adjusted EBITDA of the segment	10,964	13,892	10,951	54,811	39,108	(21.1)	0.1	40.2
EBITDA margin of the segment (%)	65	72	69	70	70	(7)	(5)	-
ROCE (Return on Capital Employed) (%)	19.8	19.4	11.1	19.8	11.1	0.4	8.7	8.7
Average Brent crude (US\$/bbl)	88.71	100.85	79.73	101.19	70.73	(12.0)	11.3	43.1
Internal Transfer Price to RTM - Crude oil (US\$/bbl)	83.99	98.81	77.56	95.91	67.48	(15.0)	8.3	42.1
Lifting cost - Brazil (US\$/boe)								
excluding production taxes and leases	6.07	5.85	5.15	5.78	5.00	3.8	18.0	15.6
excluding production taxes	7.81	7.53	6.93	7.49	6.65	3.7	12.7	12.7
Onshore and shallow waters								
with leases	18.77	15.44	14.78	16.96	13.69	21.6	27.0	23.9
excluding leases	18.77	15.44	14.78	16.96	13.69	21.6	27.0	23.9
Deep and ultra-deep post-salt								
with leases	13.72	13.66	10.50	13.25	11.25	0.4	30.6	17.7
excluding leases	11.94	12.52	9.10	11.74	9.84	(4.6)	31.3	19.3
Pre-salt								
with leases	5.70	5.36	5.26	5.35	4.61	6.4	8.4	15.9
excluding leases	3.89	3.44	3.24	3.47	2.75	13.2	20.1	26.2
including production taxes and excluding leases	21.12	23.48	20.19	23.73	17.97	(10.1)	4.6	32.0
including production taxes and leases	22.85	25.16	21.96	25.44	19.62	(9.2)	4.1	29.7
Production taxes - Brazil	3,085	3,604	3,178	14,789	11,151	(14.4)	(2.9)	32.6
Royalties	1,751	2,036	1,669	8,175	5,749	(14.0)	4.9	42.2
Special participation	1,322	1,556	1,498	6,566	5,362	(15.0)	(11.8)	22.5
Retention of areas	12	12	11	49	40	(2.8)	4.6	20.6

(*) EBITDA margin and ROCE variations in percentage points

In 2022, E&P gross profit was US\$ 47.4 billion, a 49% increase when compared to 2021. This increase was due to higher Brent prices, which led to higher revenues, partially offset by higher government take.

Operating income for 2022 was US\$ 48.3 billion, a 38% increase when compared to 2021. Besides the increase in gross profit, the results of Buzios, Sepia and Atapu co-participation agreements also had a positive contribution. These results were partially offset by impairments, lower revenue from the sale of assets when compared to 2021 and higher abandonment and R&D expenses.

In 4Q22, E&P gross profit was US\$ 9.8 billion, an 18% reduction when compared to 3Q22, mainly due to lower Brent prices. Operating income was also 24% lower, reflecting the drop in gross profit, in addition to the results from impairments, higher exploratory and abandonment expenses, partially offset by the Buzios, Sepia and Atapu co-participation agreements.

Lifting costs in 2022, excluding production taxes and leases, were US\$ 5.78/boe, 16% higher when compared to 2021 (US\$ 5.00/boe). The increase was due to higher expenses with integrity, such as interventions in wells, subsea inspections and FPSOs maintenance after the critical period of the pandemic, associated with the BRL appreciation against the USD. These effects were partially offset by active portfolio management and the production start up of new platforms (FPSO Carioca, FPSO Guanabara, and P-71).

In 4Q22, we recorded a 4% increase in lifting costs excluding production taxes and leases when compared to 3Q22, mainly due to the resumption of production from the Sergipe-Alagoas onshore fields, after a stoppage for operational safety measures carried out in 3Q22. These fields have higher costs per barrel.

In the pre-salt, there was a 13% increase in lifting costs, mainly driven by the higher concentration of integrity expenditures in 4Q22, such as well interventions, subsea inspections and platforms maintenance.

In the post-salt, there was a 5% reduction in the cost per barrel when compared to 3Q22, due to lower expenditures on well interventions and to the decommissioning of P-18, P-19 and P-20 production units, which have higher costs per barrel.

In onshore and shallow water assets, as aforementioned, there was an increase due to the resumption of production from the Sergipe-Alagoas onshore fields after the stoppage for operational safety adjustments in 3Q22. These fields have higher costs per barrel.

The increase in government take in 2022 reflects higher Brent prices when compared to 2021. On the other hand, in 4Q22, the reduction in government take per barrel when compared to 3Q22 reflects lower Brent prices in the period.

Refining, Transportation and Marketing

Table 15 – RTM results

US\$ million	4Q22	3Q22	4Q21	2022	2021	Variation (%) (*)		
						4Q22 / 3Q22	4Q22 / 4Q21	2022 / 2021
Sales revenues	27,542	29,348	21,044	113,531	74,524	(6.2)	30.9	52.3
Gross profit (loss)	3,329	2,741	2,272	14,377	8,904	21.5	46.5	61.5
Operating expenses	(869)	(611)	295	(3,132)	(1,805)	42.2	-	73.5
Operating Income	2,460	2,130	2,567	11,245	7,099	15.5	(4.2)	58.4
Net income (loss) attributable to the shareholders of Petrobras	1,474	1,383	1,751	7,426	5,625	6.6	(15.8)	32.0
Adjusted EBITDA of the segment	2,816	2,905	2,203	13,491	8,386	(3.1)	27.8	60.9
EBITDA margin of the segment (%)	10	10	10	12	11	-	-	1
ROCE (Return on Capital Employed) (%)	12.6	11.8	6.0	12.6	6.0	0.8	6.6	6.6
Refining cost (US\$ / barrel) - Brazil	1.98	2.17	1.70	1.94	1.66	(8.8)	16.4	16.9
Domestic basic oil by-products price (US\$/bbl)	118.20	131.99	87.00	122.66	77.28	(10.4)	35.9	58.7

(*) EBITDA margin and ROCE variations in percentage points

In 2022, gross profit was US\$ 14.4 billion, US\$5.5 billion higher than in 2021. The positive effect from inventories turnover was lower in 2022 when compared to 2021. Excluding this effect (US\$ 0.4 billion in 2022 and US\$ 4.6 billion in 2021) the gross profit would have been US\$ 14 billion in 2022 and US\$ 4.3 billion in 2021.

There were higher margins for oil products in the domestic market, mainly diesel, jet fuel and gasoline, due to the increase in international margins, strengthened by global oil products supply restrictions and the embargo on Russian oil, as a consequence of the geopolitical conflicts going on since march 2022. These effects had also a positive impact on fuel oil margins and oil exports in 2022.

The operating income in 2022 was 58.4% higher than 2021, due to the higher gross profit, partially offset by higher expenses, due to the gain with the sale of the RLAM refinery in 2021 and to lower impairment reversal related to the 2nd RNEST train in 2022 when compared to 2021.

The refining cost per barrel in 2022 was 16.9% higher than in 2021, mainly due to higher expenses with the maintenance of the refining facilities, in order to achieve greater reliability and keep the high utilization factor, besides the inflationary effects on materials and services and readjustments on personnel costs. The appreciation of the BRL against the USD in 2022 also contributed to higher refining costs per barrel. These effects, on the other hand, were partially offset by the higher utilization of the refining facilities in 2022.

In 4Q22, gross profit was US\$ 3.3 billion, 21.5% above 3Q22, due to the lower effect of inventories turnover in 4Q22 when compared to 3Q22. Excluding this effect (-US\$ 0.7 billion in 4Q22 and -US\$ 1.4 billion in 3Q22) gross profit would have been US\$ 4.1 billion in 4Q22 and US\$ 4.2 billion in 3Q22.

There were higher margins on gasoline sales in the domestic market, associated with the higher volume sold in 4Q22, due to seasonality and greater competitiveness against ethanol, as well as higher margins on LPG sales, partially offsetting the lower volume of diesel sold, due to seasonality. There was also a higher margin on oil exports due to the higher volume exported in 4Q22, influenced by the additional volume of ongoing exports of 3Q22.

In 4Q22, the operating income was 15.5% higher than 3Q22 due to the higher gross profit, partially offset by higher expenses with lawsuits related to Comperj.

In 4Q22, refining cost per barrel dropped 8.8% when compared to 3Q22, due to lower expenditures with inputs (catalysts and chemicals) and lower expenses with personnel due to provision adjustments made in September 2022. The feedstock was slightly lower when compared to 3Q22, partially offsetting the lower cost.

Gas and Power

Table 16 – G&P results

US\$ million	4Q22	3Q22	4Q21	2022	2021	Variation (%) (*)		
						4Q22 / 3Q22	4Q22 / 4Q21	2022 / 2021
Sales revenues	3,821	4,148	3,745	15,068	12,051	(7.9)	2.0	25.0
Gross profit	1,200	1,502	(91)	4,550	2,557	(20.1)	-	77.9
Operating expenses	(707)	(568)	(686)	(2,965)	(2,890)	24.5	3.1	2.6
Operating income	493	934	(777)	1,585	(333)	(47.2)	-	-
Net income (loss) attributable to the shareholders of Petrobras	319	609	(537)	1,038	(219)	(47.6)	-	-
Adjusted EBITDA of the segment	599	898	(645)	1,868	239	(33.3)	-	681.6
EBITDA margin of the segment (%)	16	22	(17)	12	2	(6)	33	10
ROCE (Return on Capital Employed) (%)	5.6	(0.5)	(2.5)	5.6	(2.5)	6.1	8.1	8.1
Natural gas sales price - Brazil (US\$/bbl)	76.83	75.74	53.53	69.26	45.65	1.4	43.5	51.7
Fixed revenues from power auctions	103.00	102.00	102.00	404.97	419.80	1.0	1.0	(3.5)
Average price for power generation(US\$/MWh)	11.30	13.77	83.46	35.24	82.47	(17.9)	(86.5)	(57.3)

(*) EBITDA margin and ROCE variations in percentage points

In 2022, gross profit was US\$ 4.6 billion, an improvement of US\$ 2 billion when compared to 2021, mainly due to the recovery of trading margins as an effect of the improvement in portfolio management of natural gas contracts, alongside the appreciation of Brent prices and lower LNG imports.

In 2022, operating income was US\$ 1.6 billion, an increase of US\$ 1.9 billion over 2021, mainly due to higher gross profit, as operating expenses were only 2.6% higher in 2022.

In 4Q22, gross profit was US\$ 1.2 billion, 20% lower when compared to 3Q22, due to non-recurring operations, despite stable gas and power margins. Operating income reached US\$ 0.5 billion in 4Q22, 47% lower than 3Q22, due to the lower gross profit and to the positive effect of the Gaspetro divestment on 3Q22 operating expenses.

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 17 - Reconciliation of Adjusted EBITDA

US\$ million	4Q22	3Q22	4Q21	2022	2021	Variation (%) (*)		
						4Q22 / 3Q22	4Q22 / 4Q21	2022 / 2021
Net income	8,276	8,790	5,676	36,755	19,986	(5.8)	45.8	83.9
Net finance (expense) income	(286)	1,524	2,484	3,840	10,966	-	-	(65.0)
Income taxes	3,007	3,888	2,269	16,770	8,239	(22.7)	32.5	103.5
Depreciation, depletion and amortization	3,321	3,267	2,909	13,218	11,695	1.7	14.2	13.0
EBITDA	14,318	17,469	13,338	70,583	50,886	(18.0)	7.3	38.7
Results in equity-accounted investments	122	(32)	(107)	(251)	(1,607)	-	-	(84.4)
Impairment of assets (reversals)	893	255	(272)	1,315	(3,190)	250.2	-	-
Reclassification of comprehensive income (loss) due to the disposal of equity-accounted investments	-	-	-	-	41	-	-	-
Results on disposal/write-offs of assets and on remeasurement of investment retained with loss of control	(6)	(292)	(1,719)	(1,144)	(1,944)	(97.9)	(99.7)	(41.2)
Results from co-participation agreements in bid areas	(1,424)	10	36	(4,286)	(631)	-	-	579.2
Adjusted EBITDA	13,903	17,410	11,276	66,217	43,555	(20.1)	23.3	52.0
Adjusted EBITDA margin (%)	46	54	47	53	52	(8.0)	(1.0)	1.0

(*) EBITDA Margin variations in percentage points

Financial statements

Table 18 - Income statement - Consolidated

US\$ million	4Q22	3Q22	4Q21	2022	2021
Sales revenues	30,171	32,411	24,031	124,474	83,966
Cost of sales	(15,592)	(15,875)	(13,452)	(59,486)	(43,164)
Gross profit	14,579	16,536	10,579	64,988	40,802
Selling expenses	(1,293)	(1,213)	(1,092)	(4,931)	(4,229)
General and administrative expenses	(376)	(334)	(306)	(1,332)	(1,176)
Exploration costs	(657)	(107)	(149)	(887)	(687)
Research and development expenses	(179)	(187)	(148)	(792)	(563)
Other taxes	(194)	(93)	(37)	(439)	(406)
Impairment (losses) reversals	(893)	(255)	272	(1,315)	3,190
Other income and expenses, net	132	(177)	1,203	1,822	653
	(3,460)	(2,366)	(257)	(7,874)	(3,218)
Operating income	11,119	14,170	10,322	57,114	37,584
Finance income	436	515	266	1,832	821
Finance expenses	(994)	(790)	(880)	(3,500)	(5,150)
Foreign exchange gains (losses) and inflation indexation charges	844	(1,249)	(1,870)	(2,172)	(6,637)
Net finance income (expense)	286	(1,524)	(2,484)	(3,840)	(10,966)
Results of equity-accounted investments	(122)	32	107	251	1,607
Income before income taxes	11,283	12,678	7,945	53,525	28,225
Income taxes	(3,007)	(3,888)	(2,269)	(16,770)	(8,239)
Net Income	8,276	8,790	5,676	36,755	19,986
Net income attributable to:					
Shareholders of Petrobras	8,245	8,763	5,636	36,623	19,875
Non-controlling interests	31	27	40	132	111

Table 19 - Statement of financial position – Consolidated

ASSETS - US\$ million	12.31.2022	12.31.2021
Current assets	31,250	30,149
Cash and cash equivalents	7,996	10,467
Marketable securities	2,773	650
Trade and other receivables, net	5,010	6,368
Inventories	8,779	7,255
Recoverable taxes	1,307	1,346
Assets classified as held for sale	3,608	2,490
Other current assets	1,777	1,573
Non-current assets	155,941	144,199
Long-term receivables	21,220	14,334
Trade and other receivables, net	2,440	1,900
Marketable securities	1,564	44
Judicial deposits	11,053	8,038
Deferred taxes	832	604
Other tax assets	3,778	3,261
Other non-current assets	1,553	487
Investments	1,566	1,510
Property, plant and equipment	130,169	125,330
Intangible assets	2,986	3,025
Total assets	187,191	174,348
LIABILITIES - US\$ million	12.31.2022	12.31.2021
Current liabilities	31,380	24,176
Trade payables	5,464	5,483
Finance debt	3,576	3,641
Lease liability	5,557	5,432
Taxes payable	5,931	4,734
Dividends payable	4,171	-
Short-term employee benefits	2,215	2,144
Liabilities related to assets classified as held for sale	1,465	867
Other current liabilities	3,001	1,875
Non-current liabilities	85,975	80,360
Finance debt	26,378	32,059
Lease liability	18,288	17,611
Income taxes payable	302	300
Deferred taxes	6,750	1,229
Employee benefits	10,675	9,374
Provision for legal and administrative proceedings	3,010	2,018
Provision for decommissioning costs	18,600	15,619
Other non-current liabilities	1,972	2,150
Shareholders' equity	69,836	69,812
Share capital (net of share issuance costs)	107,101	107,101
Profit reserves and others	(37,609)	(37,694)
Non-controlling interests	344	405
Total liabilities and shareholders' equity	187,191	174,348

Table 20 - Statement of cash flow – Consolidated

US\$ million	4Q22	3Q22	4Q21	2022	2021
Cash flows from operating activities					
Net income for the period	8,276	8,790	5,676	36,755	19,986
Adjustments for:					
Pension and medical benefits - actuarial gains (expense)	289	306	292	1,228	2,098
Results of equity-accounted investments	122	(32)	(107)	(251)	(1,607)
Depreciation, depletion and amortization	3,321	3,267	2,909	13,218	11,695
Impairment of assets (reversals)	893	255	(272)	1,315	(3,190)
Inventory write-down (write-back) to net realizable value	4	4	2	11	(1)
Allowance (reversals) for credit loss on trade and other receivables	23	3	(16)	65	(30)
Exploratory expenditure write-offs	563	34	34	691	248
Disposal/write-offs of assets, remeasurement of investment retained with loss of control and reclassification of CTA	(6)	(292)	(1,718)	(1,144)	(1,900)
Foreign exchange, indexation and finance charges	(178)	1,853	2,563	4,557	10,795
Income taxes	3,007	3,888	2,269	16,770	8,239
Revision and unwinding of discount on the provision for decommissioning costs	321	129	74	745	661
PIS and COFINS recovery - exclusion of ICMS (VAT tax) from the basis of calculation	-	3	(3)	(1)	(986)
Results from co-participation agreements in bid areas	(1,424)	10	36	(4,286)	(631)
Assumption of interest in concessions	-	-	(66)	-	(164)
Early termination and cash outflows revision of lease agreements	(71)	(157)	(197)	(629)	(545)
(Gains) losses with legal, administrative and arbitration proceedings, net	541	264	195	1,362	740
Decrease (Increase) in assets					
Trade and other receivables	(374)	672	(588)	355	(2,075)
Inventories	1,378	(561)	(170)	(1,217)	(2,334)
Judicial deposits	(397)	(453)	(306)	(1,709)	(1,141)
Other assets	343	(104)	(164)	(413)	(289)
Increase (Decrease) in liabilities					
Trade payables	(18)	(200)	223	(359)	1,073
Other taxes payable	(46)	(1,414)	356	(2,441)	2,835
Pension and medical benefits	(261)	(180)	(184)	(2,130)	(2,239)
Provisions for legal proceedings	(126)	(77)	(288)	(380)	(643)
Short-term benefits	(119)	303	(173)	(182)	(312)
Provision for decommissioning costs	(160)	(164)	(204)	(602)	(730)
Other liabilities	(338)	(384)	215	(95)	376
Income taxes paid	(2,715)	(3,699)	(1,192)	(11,516)	(2,138)
Net cash provided by operating activities	12,848	12,064	9,196	49,717	37,791
Cash flows from investing activities					
Acquisition of PP&E and intangible assets	(3,561)	(1,947)	(1,685)	(9,581)	(6,325)
Investments in investees	(7)	(1)	(9)	(27)	(24)
Proceeds from disposal of assets - Divestment	931	537	1,877	4,846	4,783
Financial compensation from co-participation agreements	1,950	121	-	7,284	2,938
Divestment (Investment) in marketable securities	(1,713)	493	(113)	(3,328)	4
Dividends received	55	77	487	374	781
Net cash provided by (used in) investing activities	(2,345)	(720)	557	(432)	2,157
Cash flows from financing activities					
Changes in non-controlling interest	20	60	(13)	63	(24)
Financing and loans, net:					
Proceeds from finance debt	350	2,200	131	2,880	1,885
Repayment of principal - finance debt	(1,538)	(2,319)	(923)	(9,334)	(21,413)
Repayment of interest - finance debt	(412)	(522)	(359)	(1,850)	(2,229)
Repayment of lease liability	(1,424)	(1,324)	(1,446)	(5,430)	(5,827)
Dividends paid to Shareholders of Petrobras	(4,030)	(21,242)	(7,250)	(37,701)	(13,078)
Dividends paid to non-controlling interests	(13)	(10)	(30)	(81)	(105)
Net cash (used in) financing activities	(7,047)	(23,157)	(9,890)	(51,453)	(40,791)
Effect of exchange rate changes on cash and cash equivalents	166	(107)	(308)	(316)	(402)
Net change in cash and cash equivalents	3,622	(11,920)	(445)	(2,484)	(1,245)
Cash and cash equivalents at the beginning of the period	4,374	16,294	10,925	10,480	11,725
Cash and cash equivalents at the end of the period	7,996	4,374	10,480	7,996	10,480

Financial information by business areas

Table 21 - Consolidated income by segment – 2022

US\$ million	E&P	RTM	GAS & POWER	CORP.	ELIMIN.	TOTAL
Sales revenues	77,890	113,531	15,068	511	(82,526)	124,474
Intersegments	76,579	1,950	3,991	6	(82,526)	-
Third parties	1,311	111,581	11,077	505	-	124,474
Cost of sales	(30,465)	(99,154)	(10,518)	(522)	81,173	(59,486)
Gross profit	47,425	14,377	4,550	(11)	(1,353)	64,988
Expenses	907	(3,132)	(2,965)	(2,671)	(13)	(7,874)
Selling expenses	(22)	(1,841)	(2,979)	(76)	(13)	(4,931)
General and administrative expenses	(46)	(275)	(62)	(949)	-	(1,332)
Exploration costs	(887)	-	-	-	-	(887)
Research and development expenses	(678)	(6)	(5)	(103)	-	(792)
Other taxes	(79)	(31)	(44)	(285)	-	(439)
Impairment (losses) reversals	(1,218)	(97)	1	(1)	-	(1,315)
Other income and expenses, net	3,837	(882)	124	(1,257)	-	1,822
Operating income (loss)	48,332	11,245	1,585	(2,682)	(1,366)	57,114
Net finance income (expense)	-	-	-	(3,840)	-	(3,840)
Results of equity-accounted investments	170	3	83	(5)	-	251
Income (loss) before income taxes	48,502	11,248	1,668	(6,527)	(1,366)	53,525
Income taxes	(16,433)	(3,822)	(540)	3,559	466	(16,770)
Net Income (Loss)	32,069	7,426	1,128	(2,968)	(900)	36,755
Net income (loss) attributable to:						
Shareholders of Petrobras	32,073	7,426	1,038	(3,014)	(900)	36,623
Non-controlling interests	(4)	-	90	46	-	132

Table 22 - Consolidated income by segment – 2021

US\$ million	E&P	RTM	GAS & POWER	CORP.	ELIMIN.	TOTAL
Sales revenues	55,584	74,524	12,051	504	(58,697)	83,966
Intersegments	54,479	1,416	2,564	238	(58,697)	-
Third parties	1,105	73,108	9,487	266	-	83,966
Cost of sales	(23,673)	(65,620)	(9,494)	(503)	56,126	(43,164)
Gross profit	31,911	8,904	2,557	1	(2,571)	40,802
Expenses	3,240	(1,805)	(2,890)	(1,741)	(22)	(3,218)
Selling expenses	-	(1,539)	(2,668)	-	(22)	(4,229)
General and administrative expenses	(152)	(245)	(73)	(706)	-	(1,176)
Exploration costs	(687)	-	-	-	-	(687)
Research and development expenses	(415)	(11)	(25)	(112)	-	(563)
Other taxes	(192)	(122)	(38)	(54)	-	(406)
Impairment (losses) reversals	3,107	289	(208)	2	-	3,190
Other income and expenses, net	1,579	(177)	122	(871)	-	653
Operating income (loss)	35,151	7,099	(333)	(1,740)	(2,593)	37,584
Net finance income (expense)	-	-	-	(10,966)	-	(10,966)
Results of equity-accounted investments	119	941	98	449	-	1,607
Income (loss) before income taxes	35,270	8,040	(235)	(12,257)	(2,593)	28,225
Income taxes	(11,949)	(2,415)	113	5,129	883	(8,239)
Net Income (Loss)	23,321	5,625	(122)	(7,128)	(1,710)	19,986
Net income (loss) attributable to:						
Shareholders of Petrobras	23,324	5,625	(219)	(7,145)	(1,710)	19,875
Non-controlling interests	(3)	-	97	17	-	111

Table 23 - Quarterly consolidated income by segment – 4Q22

US\$ million	E&P	RTM	GAS & POWER	CORP.	ELIMIN.	TOTAL
Sales revenues	16,973	27,542	3,821	109	(18,274)	30,171
Intersegments	16,661	490	1,119	4	(18,274)	-
Third parties	312	27,052	2,702	105	-	30,171
Cost of sales	(7,186)	(24,213)	(2,621)	(113)	18,541	(15,592)
Gross profit	9,787	3,329	1,200	(4)	267	14,579
Expenses	(1,099)	(869)	(707)	(782)	(3)	(3,460)
Selling expenses	(10)	(531)	(719)	(30)	(3)	(1,293)
General and administrative expenses	(16)	(71)	(13)	(276)	-	(376)
Exploration costs	(657)	-	-	-	-	(657)
Research and development expenses	(154)	1	(1)	(25)	-	(179)
Other taxes	(32)	(16)	(9)	(137)	-	(194)
Impairment (losses) reversals	(1,091)	198	-	-	-	(893)
Other income and expenses, net	861	(450)	35	(314)	-	132
Operating income (loss)	8,688	2,460	493	(786)	264	11,119
Net finance income (expense)	-	-	-	286	-	286
Results of equity-accounted investments	16	(150)	12	-	-	(122)
Income (loss) before income taxes	8,704	2,310	505	(500)	264	11,283
Income taxes	(2,954)	(836)	(167)	1,040	(90)	(3,007)
Net income (loss)	5,750	1,474	338	540	174	8,276
Net income (loss) attributable to:						
Shareholders of Petrobras	5,751	1,474	319	527	174	8,245
Non-controlling interests	(1)	-	19	13	-	31

Table 24 - Quarterly consolidated income by segment – 3Q22

US\$ million	E&P	RTM	GAS & POWER	CORP.	ELIMIN.	TOTAL
Sales revenues	19,293	29,348	4,148	126	(20,504)	32,411
Intersegments	18,972	529	1,002	1	(20,504)	-
Third parties	321	28,819	3,146	125	-	32,411
Cost of sales	(7,427)	(26,607)	(2,646)	(137)	20,942	(15,875)
Gross profit	11,866	2,741	1,502	(11)	438	16,536
Expenses	(474)	(611)	(568)	(710)	(3)	(2,366)
Selling expenses	(7)	(440)	(739)	(24)	(3)	(1,213)
General and administrative expenses	(6)	(73)	(15)	(240)	-	(334)
Exploration costs	(107)	-	-	-	-	(107)
Research and development expenses	(159)	(1)	(1)	(26)	-	(187)
Other taxes	(8)	10	(16)	(79)	-	(93)
Impairment (losses) reversals	(4)	(251)	-	-	-	(255)
Other income and expenses, net	(183)	144	203	(341)	-	(177)
Operating income (loss)	11,392	2,130	934	(721)	435	14,170
Net finance income (expense)	-	-	-	(1,524)	-	(1,524)
Results of equity-accounted investments	46	(23)	12	(3)	-	32
Income (loss) before income taxes	11,438	2,107	946	(2,248)	435	12,678
Income taxes	(3,873)	(724)	(318)	1,175	(148)	(3,888)
Net income (loss)	7,565	1,383	628	(1,073)	287	8,790
Net income (loss) attributable to:						
Shareholders of Petrobras	7,566	1,383	609	(1,082)	287	8,763
Non-controlling interests	(1)	-	19	9	-	27

Table 25 - Other income and expenses by segment – 2022

US\$ million	E&P	RTM	GAS & POWER	CORP.	ELIMIN.	TOTAL
Unscheduled stoppages and pre-operating expenses	(1,743)	(23)	(31)	(37)	-	(1,834)
Losses with legal, administrative and arbitration proceedings	(461)	(428)	(72)	(401)	-	(1,362)
Pension and medical benefits - retirees (*)	-	-	-	(1,015)	-	(1,015)
Performance award program	(223)	(115)	(28)	(181)	-	(547)
Losses with Commodities Derivatives	-	(251)	-	(5)	-	(256)
Losses on decommissioning of returned/abandoned areas	(225)	-	-	-	-	(225)
Operating expenses with thermoelectric power plants	-	-	(150)	-	-	(150)
Profit sharing	(56)	(29)	(8)	(38)	-	(131)
Institutional relations and cultural projects	-	(2)	-	(101)	-	(103)
Health, safety and environment	(21)	(10)	-	(49)	-	(80)
Transfer of rights on concession agreements	-	-	-	-	-	-
Recovery of taxes	-	12	-	56	-	68
Amounts recovered from Lava Jato investigation	17	-	-	79	-	96
Results of non-core activities	116	(61)	91	22	-	168
Fines imposed on suppliers	178	21	18	11	-	228
Government grants	5	-	-	466	-	471
Early termination and changes to cash flow estimates of leases	577	63	7	(18)	-	629
Reimbursements from E&P partnership operations	683	-	-	-	-	683
Results on disposal/write-offs of assets and on remeasurement of investment retained with loss of control	868	100	164	12	-	1,144
Results from co-participation agreements in bid areas (**)	4,286	-	-	-	-	4,286
Others	(164)	(159)	133	(58)	-	(248)
	3,837	(882)	124	(1,257)	-	1,822

(*) In 2022, it includes US\$ 67 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.

(**) For 2022, it mainly refers to the gain related to the agreements of Atapu and S epia fields .

Table 26 - Other income and expenses by segment – 2021

US\$ million	E&P	RTM	GAS & POWER	CORP.	ELIMIN.	TOTAL
Unscheduled stoppages and pre-operating expenses	(1,294)	(20)	(27)	(21)	-	(1,362)
Gains/ (losses) with legal, administrative and arbitration proceedings	(326)	(488)	(4)	78	-	(740)
Pension and medical benefits - retirees	-	-	-	(1,467)	-	(1,467)
Performance award program	(189)	(104)	(22)	(154)	-	(469)
Losses with Commodities Derivatives	-	(79)	-	-	-	(79)
Gains on decommissioning of returned/abandoned areas	99	-	-	-	-	99
Operating expenses with thermoelectric power plants	-	-	(88)	-	-	(88)
Profit sharing	(51)	(34)	(3)	(37)	-	(125)
Institutional relations and cultural projects	-	-	-	(96)	-	(96)
Health, safety and environment	(31)	(8)	-	(40)	-	(79)
Transfer of rights on concession agreements	363	-	-	-	-	363
Recovery of taxes (*)	-	11	31	519	-	561
Amounts recovered from Lava Jato investigation	17	-	-	218	-	235
Results of non-core activities	70	(1)	82	19	-	170
Fines imposed on suppliers	128	21	9	5	-	163
Government grants	8	25	-	121	-	154
Early termination and changes to cash flow estimates of leases	518	50	(21)	(2)	-	545
Reimbursements from E&P partnership operations	485	-	-	-	-	485
Results on disposal/write-offs of assets and on remeasurement of investment retained with loss of control	1,310	590	66	(25)	-	1,941
Results from co-participation agreements in bid areas (**)	631	-	-	-	-	631
Others	(159)	(140)	99	11	-	(189)
	1,579	(177)	122	(871)	-	653

(*) In 2021, it includes the effects of the exclusion of ICMS (VAT tax) from the basis of calculation of sales taxes PIS and COFINS, except for the effects of inflation indexation.

(**) For 2021, it refers to the agreement of Buzios field.

Table 27 - Other income and expenses by segment – 4Q22

US\$ million	E&P	RTM	GAS & POWER	CORP.	ELIMIN.	TOTAL
Losses with legal, administrative and arbitration proceedings	(77)	(236)	(12)	(216)	-	(541)
Unscheduled stoppages and pre-operating expenses	(468)	(5)	(9)	(8)	-	(490)
Pension and medical benefits - retirees (*)	-	-	-	(220)	-	(220)
Losses on decommissioning of returned/abandoned areas	(197)	-	-	-	-	(197)
Performance award program	(60)	(30)	(8)	(49)	-	(147)
Losses with Commodities Derivatives	-	(116)	-	(5)	-	(121)
Operating expenses with thermoelectric power plants	-	-	(42)	-	-	(42)
Institutional relations and cultural projects	-	(1)	-	(36)	-	(37)
Profit sharing	(14)	(3)	(2)	(9)	-	(28)
Health, safety and environment	(5)	(3)	-	(11)	-	(19)
Transfer of rights on concession agreements	-	-	-	-	-	-
Results on disposal/write-offs of assets and on remeasurement of investment retained with loss of control	(13)	2	8	9	-	6
Recovery of taxes	-	3	-	12	-	15
Results of non-core activities	21	(21)	42	24	-	66
Fines imposed on suppliers	53	6	(13)	7	-	53
Amounts recovered from Lava Jato investigation	-	-	-	62	-	62
Early termination and changes to cash flow estimates of leases	66	15	(9)	(1)	-	71
Government grants	1	-	-	140	-	141
Reimbursements from E&P partnership operations	235	-	-	-	-	235
Results from co-participation agreements in bid areas (**)	1,424	-	-	-	-	1,424
Others	(105)	(61)	80	(13)	-	(99)
	861	(450)	35	(314)	-	132

(*) In 2022, it includes US\$ 67 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.

(**) For 2022, it mainly refers to the gain related to the agreement of Atapu and S epia fields.

Table 28 - Other income and expenses by segment – 3Q22

US\$ million	E&P	RTM	GAS & POWER	CORP.	ELIMIN.	TOTAL
Gains (losses) with legal, administrative and arbitration proceedings	(248)	55	(1)	(70)	-	(264)
Unscheduled stoppages and pre-operating expenses	(423)	(6)	(12)	(14)	-	(455)
Pension and medical benefits - retirees (*)	-	-	-	(304)	-	(304)
Losses on decommissioning of returned/abandoned areas	(1)	-	-	-	-	(1)
Performance award program	(61)	(34)	(7)	(51)	-	(153)
Gains with Commodities Derivatives	-	87	-	-	-	87
Operating expenses with thermoelectric power plants	-	-	(37)	-	-	(37)
Institutional relations and cultural projects	-	-	-	(22)	-	(22)
Profit sharing	(16)	(10)	(2)	(10)	-	(38)
Health, safety and environment	(5)	(2)	-	(11)	-	(18)
Transfer of rights on concession agreements	-	-	-	-	-	-
Results on disposal/write-offs of assets and on remeasurement of investment retained with loss of control	75	54	163	-	-	292
Recovery of taxes	-	2	-	10	-	12
Results of non-core activities	39	(13)	22	(4)	-	44
Fines imposed on suppliers	37	3	22	(3)	-	59
Amounts recovered from Lava Jato investigation	17	-	-	5	-	22
Early termination and changes to cash flow estimates of leases	136	18	13	(10)	-	157
Government grants	2	-	-	122	-	124
Reimbursements from E&P partnership operations	294	-	-	-	-	294
Results from co-participation agreements in bid areas (**)	(10)	-	-	-	-	(10)
Others	(19)	(10)	42	21	-	34
	(183)	144	203	(341)	-	(177)

(*) In 2022, it includes US\$ 67 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.

(**) For 2022, it mainly refers to the gain related to the agreement of Atapu and S epia fields.

Table 29 - Consolidated assets by segment – 12.31.2022

US\$ million	E&P	RTM	GAS & POWER	CORP. AND OTHERS	ELIMIN.	TOTAL
Total assets	116,334	34,431	7,584	34,106	(5,264)	187,191
Current assets	5,224	12,035	391	18,864	(5,264)	31,250
Non-current assets	111,110	22,396	7,193	15,242	-	155,941
Long-term receivables	6,351	1,811	94	12,964	-	21,220
Investments	379	977	173	37	-	1,566
Property, plant and equipment	101,875	19,496	6,851	1,947	-	130,169
Operating assets	92,087	16,851	4,808	1,585	-	115,331
Assets under construction	9,788	2,645	2,043	362	-	14,838
Intangible assets	2,505	112	75	294	-	2,986

Table 30 - Consolidated assets by segment – 12.31.2021

US\$ million	E&P	RTM	GAS & POWER	CORP. AND OTHERS	ELIMIN.	TOTAL
Total assets	109,475	30,606	7,780	30,918	(4,431)	174,348
Current assets	3,770	9,632	1,256	19,922	(4,431)	30,149
Non-current assets	105,705	20,974	6,524	10,996	-	144,199
Long-term receivables	3,635	1,489	95	9,115	-	14,334
Investments	393	970	119	28	-	1,510
Property, plant and equipment	99,033	18,419	6,241	1,637	-	125,330
Operating assets	87,210	16,086	3,739	1,373	-	108,408
Assets under construction	11,823	2,333	2,502	264	-	16,922
Intangible assets	2,644	96	69	216	-	3,025

Table 31 - Reconciliation of Adjusted EBITDA by segment – 2022

US\$ million	E&P	RTM	GAS & POWER	CORP. AND OTHERS	ELIMIN.	TOTAL
Net income (loss)	32,069	7,426	1,128	(2,968)	(900)	36,755
Net finance income (expense)	-	-	-	3,840	-	3,840
Income taxes	16,433	3,822	540	(3,559)	(466)	16,770
Depreciation, depletion and amortization	10,415	2,248	448	107	-	13,218
EBITDA	58,917	13,496	2,116	(2,580)	(1,366)	70,583
Results in equity-accounted investments	(170)	(3)	(83)	5	-	(251)
Impairment of assets (reversals)	1,218	97	(1)	1	-	1,315
Reclassification of comprehensive income (loss) due to the disposal of equity-accounted investments	-	-	-	-	-	-
Results on disposal/write-offs of assets and on remeasurement of investment retained with loss of control	(868)	(99)	(164)	(13)	-	(1,144)
Results from co-participation agreements in bid areas	(4,286)	-	-	-	-	(4,286)
Adjusted EBITDA	54,811	13,491	1,868	(2,587)	(1,366)	66,217

Table 32 - Reconciliation of Adjusted EBITDA by segment – 2021

US\$ million	E&P	RTM	GAS & POWER	CORP. AND OTHERS	ELIMIN.	TOTAL
Net income (loss)	23,321	5,625	(122)	(7,128)	(1,710)	19,986
Net finance income (expense)	-	-	-	10,966	-	10,966
Income taxes	11,949	2,415	(113)	(5,129)	(883)	8,239
Depreciation, depletion and amortization	9,005	2,167	430	93	-	11,695
EBITDA	44,275	10,207	195	(1,198)	(2,593)	50,886
Results in equity-accounted investments	(119)	(941)	(98)	(449)	-	(1,607)
Impairment of assets (reversals)	(3,107)	(289)	208	(2)	-	(3,190)
Reclassification of comprehensive income (loss) due to the disposal of equity-accounted investments	-	-	-	41	-	41
Results on disposal/write-offs of assets and on remeasurement of investment retained with loss of control	(1,310)	(591)	(66)	23	-	(1,944)
Results from co-participation agreements in bid areas	(631)	-	-	-	-	(631)
Adjusted EBITDA	39,108	8,386	239	(1,585)	(2,593)	43,555

Table 33 - Reconciliation of Adjusted EBITDA by segment – 4Q22

US\$ million	E&P	RTM	GAS & POWER	CORP. AND OTHERS	ELIMIN.	TOTAL
Net income (loss)	5,750	1,474	338	540	174	8,276
Net finance income (expense)	-	-	-	(286)	-	(286)
Income taxes	2,954	836	167	(1,040)	90	3,007
Depreciation, depletion and amortization	2,596	556	114	55	-	3,321
EBITDA	11,300	2,866	619	(731)	264	14,318
Results in equity-accounted investments	(16)	150	(12)	-	-	122
Impairment of assets (reversals)	1,091	(198)	-	-	-	893
Reclassification of comprehensive income (loss) due to the disposal of equity-accounted investments	-	-	-	-	-	-
Results on disposal/write-offs of assets and on remeasurement of investment retained with loss of control	13	(2)	(8)	(9)	-	(6)
Results from co-participation agreements in bid areas	(1,424)	-	-	-	-	(1,424)
Adjusted EBITDA	10,964	2,816	599	(740)	264	13,903

Table 34 - Reconciliation of Adjusted EBITDA by segment – 3Q22

US\$ million	E&P	RTM	GAS & POWER	CORP. AND OTHERS	ELIMIN.	TOTAL
Net income (loss)	7,565	1,383	628	(1,073)	287	8,790
Net finance income (expense)	-	-	-	1,524	-	1,524
Income taxes	3,873	724	318	(1,175)	148	3,888
Depreciation, depletion and amortization	2,561	578	127	1	-	3,267
EBITDA	13,999	2,685	1,073	(723)	435	17,469
Results in equity-accounted investments	(46)	23	(12)	3	-	(32)
Impairment of assets (reversals)	4	251	-	-	-	255
Reclassification of comprehensive income (loss) due to the disposal of equity-accounted investments	-	-	-	-	-	-
Results on disposal/write-offs of assets and on remeasurement of investment retained with loss of control	(75)	(54)	(163)	-	-	(292)
Results from co-participation agreements in bid areas	10	-	-	-	-	10
Adjusted EBITDA	13,892	2,905	898	(720)	435	17,410

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.

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 - Net cash provided by operating activities less acquisition of PP&E and intangibles assets. 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 - Crude oil and natural gas lifting cost indicator, which considers expenditures occurred in the period.

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.