

Financial Statements 2023

PETRÓLEO BRASILEIRO S.A. - PETROBRAS

*December 31, 2023, 2022 and 2021 with the
report of independent auditors*



Consolidated Statements of Financial Position	3
Consolidated Statements of Income	4
Consolidated Statements of Comprehensive Income	5
Consolidated Statements of Cash Flows	6
Consolidated Statements of Changes In Shareholders' Equity	7
1. The Company and its operations	8
2. Basis of preparation	8
3. Material accounting policies	9
4. Judgments and sources of estimation uncertainty	9
5. Climate Change	17
6. New standards and interpretations	23
7. Capital Management	23
8. Cash and cash equivalents and marketable securities	24
9. Sales revenues	25
10. Costs and expenses by nature	28
11. Other income and expenses, net	29
12. Net finance income (expense)	30
13. Information by operating segment	30
14. Trade and other receivables	36
15. Inventories	38
16. Trade payables	39
17. Taxes	39
18. Employee benefits	44
19. Provisions for legal proceedings, judicial deposits and contingent liabilities	60
20. Provision for decommissioning costs	71
21. Other assets and liabilities	73
22. The "Lava Jato (Car Wash) Operation" and its effects on the Company	74
23. Commitment to purchase natural gas	74
24. Property, plant and equipment	75
25. Intangible assets	78
26. Impairment	81
27. Exploration and evaluation of oil and gas reserves	87
28. Collateral for crude oil exploration concession agreements	90
29. Consortia (partnerships) in E&P activities	90
30. Investments	93
31. Disposal of assets and other transactions	96
32. Finance debt	99
33. Lease liability	103
34. Equity	106
35. Risk management	111
36. Related-party transactions	120
37. Supplemental information on statement of cash flows	125
38. Subsequent events	125
Supplementary information on Oil and Gas Exploration and Production (unaudited)	127
Independent auditor's report on the consolidated financial statements	139

Consolidated Statements of Financial Position

PETROBRAS

As of December 31, 2023 and December 31, 2022 (Expressed in millions of US Dollars, unless otherwise indicated)

Assets	Note	12.31.2023	12.31.2022
Cash and cash equivalents	8	12,727	7,996
Marketable securities	8	2,819	2,773
Trade and other receivables	14	6,135	5,010
Inventories	15	7,681	8,779
Recoverable income taxes	17	218	165
Other recoverable taxes	17	960	1,142
Others	21	1,570	1,777
		32,110	27,642
Assets classified as held for sale	31	335	3,608
Current assets		32,445	31,250
Trade and other receivables	14	1,847	2,440
Marketable securities	8	2,409	1,564
Judicial deposits	19	14,746	11,053
Deferred income taxes	17	965	832
Other recoverable taxes	17	4,516	3,778
Others	21	2,315	1,553
Long-term receivables		26,798	21,220
Investments	30	1,358	1,566
Property, plant and equipment - PP&E	24	153,424	130,169
Intangible assets	25	3,042	2,986
Non-current assets		184,622	155,941
Total assets		217,067	187,191
Liabilities	Note	12.31.2023	12.31.2022
Trade payables	16	4,813	5,464
Finance debt	32	4,322	3,576
Lease liability	33	7,200	5,557
Income taxes payable	17	1,300	2,883
Other taxes payable	17	4,166	3,048
Dividends payable	34	3,539	4,171
Provision for decommissioning costs	20	2,032	-
Employee benefits	18	2,932	2,215
Others	21	3,015	3,001
		33,319	29,915
Liabilities related to assets classified as held for sale	31	541	1,465
Current liabilities		33,860	31,380
Finance debt	32	24,479	26,378
Lease liability	33	26,599	18,288
Income taxes payable	17	299	302
Deferred income taxes	17	10,910	6,750
Employee benefits	18	15,579	10,675
Provisions for legal proceedings	19	3,305	3,010
Provision for decommissioning costs	20	21,171	18,600
Others	21	1,890	1,972
Non-current liabilities		104,232	85,975
Current and non-current liabilities		138,092	117,355
Share capital (net of share issuance costs)	34	107,101	107,101
Capital reserve and capital transactions		410	1,144
Profit reserves	34	72,641	66,434
Accumulated other comprehensive deficit		(101,569)	(105,187)
Attributable to the shareholders of Petrobras		78,583	69,492
Non-controlling interests	30	392	344
Equity		78,975	69,836
Total liabilities and equity		217,067	187,191

The notes form an integral part of these financial statements.

Consolidated Statements of Income

PETROBRAS

Years ended December 31, 2023, 2022 and 2021 (Expressed in millions of US Dollars, unless otherwise indicated)

	Note	2023	2022	2021
Sales revenues	9	102,409	124,474	83,966
Cost of sales	10	(48,435)	(59,486)	(43,164)
Gross profit		53,974	64,988	40,802
Income (expenses)				
Selling expenses	10	(5,038)	(4,931)	(4,229)
General and administrative expenses	10	(1,594)	(1,332)	(1,176)
Exploration costs	27	(982)	(887)	(687)
Research and development expenses		(726)	(792)	(563)
Other taxes		(890)	(439)	(406)
Impairment (losses) reversals, net	26	(2,680)	(1,315)	3,190
Other income and expenses, net	11	(4,031)	1,822	653
		(15,941)	(7,874)	(3,218)
Income before net finance expense, results of equity-accounted investments and income taxes		38,033	57,114	37,584
Finance income		2,169	1,832	821
Finance expenses		(3,922)	(3,500)	(5,150)
Foreign exchange gains (losses) and inflation indexation charges		(580)	(2,172)	(6,637)
Net finance expense	12	(2,333)	(3,840)	(10,966)
Results of equity-accounted investments	30	(304)	251	1,607
Net income before income taxes		35,396	53,525	28,225
Income taxes	17	(10,401)	(16,770)	(8,239)
Net income for the year		24,995	36,755	19,986
Net income attributable to shareholders of Petrobras		24,884	36,623	19,875
Net income attributable to non-controlling interests		111	132	111
Basic and diluted earnings per common and preferred share - in U.S. dollars	34	1.91	2.81	1.52

The notes form an integral part of these financial statements.

Consolidated Statements of Comprehensive Income

PETROBRAS

Years ended December 31, 2023, 2022 and 2021 (Expressed in millions of US Dollars, unless otherwise indicated)

	Note	2023	2022	2021
Net income for the year		24,995	36,755	19,986
Items that will not be reclassified to the statement of income:				
Actuarial gains (losses) on post-employment defined benefit plans	18			
Recognized in equity		(3,574)	(1,583)	5,169
Deferred income tax		271	212	(1,340)
		(3,303)	(1,371)	3,829
Items that may be reclassified subsequently to the statement of income:				
Unrealized gains (losses) on cash flow hedge - highly probable future exports	35			
Recognized in equity		4,554	5,223	(3,949)
Reclassified to the statement of income		3,763	4,871	4,585
Deferred income tax		(2,830)	(3,432)	(215)
		5,487	6,662	421
Translation adjustments ⁽¹⁾				
Recognized in equity		1,186	975	(1,314)
Reclassified to the statement of income		-	-	41
		1,186	975	(1,273)
Share of other comprehensive income (loss) in equity-accounted investments	30			
Recognized in equity		267	219	22
Other comprehensive income (loss)		3,637	6,485	2,999
Total comprehensive income		28,632	43,240	22,985
Comprehensive income attributable to shareholders of Petrobras		28,502	43,084	22,961
Comprehensive income attributable to non-controlling interests		130	156	24

(1) It includes cumulative translation adjustments in associates and joint ventures.

The notes form an integral part of these financial statements.

Consolidated Statements of Cash Flows

PETROBRAS

Years ended December 31, 2023, 2022 and 2021 (Expressed in millions of US Dollars, unless otherwise indicated)

	Note	2023	2022	2021
Cash flows from operating activities				
Net income for the year		24,995	36,755	19,986
Adjustments for:				
Pension and medical benefits	18	1,542	1,228	2,098
Results of equity-accounted investments	30	304	(251)	(1,607)
Depreciation, depletion and amortization	37	13,280	13,218	11,695
Impairment of assets (reversals), net	26	2,680	1,315	(3,190)
Inventory write down (write-back) to net realizable value	15	(7)	11	(1)
Allowance (reversals) for credit loss on trade and other receivables, net		40	65	(30)
Exploratory expenditure write-offs	27	421	691	248
Gain on disposal/write-offs of assets	11	(1,295)	(1,144)	(1,900)
Foreign exchange, indexation and finance charges		2,498	4,557	10,795
Income taxes	17	10,401	16,770	8,239
Revision and unwinding of discount on the provision for decommissioning costs		2,052	745	661
PIS and COFINS recovery - exclusion of ICMS (VAT tax) from the basis of calculation		-	(1)	(986)
Results from co-participation agreements in bid areas	11	(284)	(4,286)	(631)
Assumption of interest in concessions		-	-	(164)
Early termination and cash outflows revision of lease agreements		(415)	(629)	(545)
Losses with legal, administrative and arbitration proceedings, net	11	797	1,362	740
Decrease (Increase) in assets				
Trade and other receivables		88	355	(2,075)
Inventories		1,564	(1,217)	(2,334)
Judicial deposits		(1,723)	(1,709)	(1,141)
Other assets		324	(413)	(289)
Increase (Decrease) in liabilities				
Trade payables		(954)	(359)	1,073
Other taxes payable		(431)	(2,441)	2,835
Pension and medical benefits		(927)	(2,130)	(2,239)
Provisions for legal proceedings		(591)	(380)	(643)
Other employee benefits		356	(182)	(312)
Provision for decommissioning costs		(902)	(602)	(730)
Other liabilities		(569)	(95)	376
Income taxes paid		(10,032)	(11,516)	(2,138)
Net cash provided by operating activities		43,212	49,717	37,791
Cash flows from investing activities				
Acquisition of PP&E and intangible assets		(12,114)	(9,581)	(6,325)
Acquisition of equity interests		(24)	(27)	(24)
Proceeds from disposal of assets - Divestment		3,606	4,846	4,783
Financial compensation from co-participation agreements		391	7,284	2,938
Divestment (Investment) in marketable securities		98	(3,328)	4
Dividends received		88	374	781
Net cash (used in) provided by investing activities		(7,955)	(432)	2,157
Cash flows from financing activities				
Changes in non-controlling interest		1	63	(24)
Proceeds from finance debt	32	2,210	2,880	1,885
Repayment of principal - finance debt	32	(4,193)	(9,334)	(21,413)
Repayment of interest - finance debt	32	(1,978)	(1,850)	(2,229)
Repayment of lease liability	33	(6,286)	(5,430)	(5,827)
Dividends paid to Shareholders of Petrobras	34	(19,670)	(37,701)	(13,078)
Share repurchase program	34	(735)	-	-
Dividends paid to non-controlling interests		(49)	(81)	(105)
Net cash used in financing activities		(30,700)	(51,453)	(40,791)
Effect of exchange rate changes on cash and cash equivalents		174	(316)	(402)
Net change in cash and cash equivalents		4,731	(2,484)	(1,245)
Cash and cash equivalents at the beginning of the year		7,996	10,480	11,725
Cash and cash equivalents at the end of the year		12,727	7,996	10,480

The notes form an integral part of these financial statements.

Consolidated Statements of Changes In Shareholders' Equity

PETROBRAS

Years ended December 31, 2023, 2022 and 2021 (Expressed in millions of US Dollars, unless otherwise indicated)

	Share capital (net of share issuance costs)		Accumulated other comprehensive income (deficit) and deemed cost					Profit Reserves								
	Share Capital	Share issuance costs	Capital reserve, Capital Transactions and Treasury shares	Cumulative translation adjustments	Cash flow hedge - highly probable future exports	Actuarial gains (losses) on defined benefit pension plans	Other comprehensive income (loss) and deemed cost	Legal	Statutory	Tax incentives	Profit retention	Additional dividends proposed	Retained earnings (losses)	Equity attributable to shareholders of Petrobras	Non-controlling interests	Total consolidated equity
Balance at January 1, 2021	107,380	(279)	1,064	(73,936)	(24,590)	(15,034)	(1,174)	8,813	2,900	1,102	51,974	1,128	-	59,348	528	59,876
		107,101	1,064				(114,734)					65,917	-	59,348	528	59,876
Capital increase with reserves	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2
Capital transactions	-	-	79	-	-	-	-	-	-	-	-	-	-	79	(40)	39
Net income	-	-	-	-	-	-	-	-	-	-	-	-	19,875	19,875	111	19,986
Other comprehensive income (loss)	-	-	-	(1,186)	421	3,829	22	-	-	-	-	-	-	3,086	(87)	2,999
Appropriations:																
Additional dividends proposed last year approved this year	-	-	-	-	-	-	-	-	-	-	-	(1,128)	-	(1,128)	-	(1,128)
Transfer to reserves	-	-	-	-	-	-	-	956	184	118	388	-	(1,646)	-	-	-
Dividends	-	-	-	-	-	-	-	-	-	-	(312)	6,688	(18,229)	(11,853)	(109)	(11,962)
Balance at December 31, 2021	107,380	(279)	1,143	(75,122)	(24,169)	(11,205)	(1,152)	9,769	3,084	1,220	52,050	6,688	-	69,407	405	69,812
		107,101	1,143				(111,648)					72,811	-	69,407	405	69,812
Capital transactions	-	-	1	-	-	-	-	-	-	-	-	-	-	1	(146)	(145)
Net income	-	-	-	-	-	-	-	-	-	-	-	-	36,623	36,623	132	36,755
Other comprehensive income (loss)	-	-	-	951	6,662	(1,371)	219	-	-	-	-	-	-	6,461	24	6,485
Expired unclaimed dividends	-	-	-	-	-	-	-	-	-	-	-	-	11	11	-	11
Appropriations:																
Additional dividends proposed last year approved this year	-	-	-	-	-	-	-	-	-	-	-	(6,688)	-	(6,688)	-	(6,688)
Transfer to reserves	-	-	-	-	-	-	-	1,805	197	457	71	-	(2,530)	-	-	-
Dividends	-	-	-	-	-	-	-	-	-	-	(9,083)	6,864	(34,104)	(36,323)	(71)	(36,394)
Balance at December 31, 2022	107,380	(279)	1,144	(74,171)	(17,507)	(12,576)	(933)	11,574	3,281	1,677	43,038	6,864	-	69,492	344	69,836
		107,101	1,144				(105,187)					66,434	-	69,492	344	69,836
Treasury shares	-	-	(735)	-	-	-	-	-	-	-	-	-	-	(735)	-	(735)
Capital transactions	-	-	1	-	-	-	-	-	-	-	-	-	-	1	1	2
Net income	-	-	-	-	-	-	-	-	-	-	-	-	24,884	24,884	111	24,995
Other comprehensive income (loss)	-	-	-	1,167	5,487	(3,303)	267	-	-	-	-	-	-	3,618	19	3,637
Expired unclaimed dividends	-	-	-	-	-	-	-	-	-	-	-	-	7	7	-	7
Appropriations:																
Additional dividends proposed last year approved this year	-	-	-	-	-	-	-	-	-	-	-	(6,864)	-	(6,864)	-	(6,864)
Transfer to reserves	-	-	-	-	-	-	-	1,272	8,544	321	-	-	(10,137)	-	-	-
Dividends	-	-	-	-	-	-	-	-	-	-	-	2,934	(14,754)	(11,820)	(83)	(11,903)
Balance at December 31, 2023	107,380	(279)	410	(73,004)	(12,020)	(15,879)	(666)	12,846	11,825	1,998	43,038	2,934	-	78,583	392	78,975
		107,101	410				(101,569)					72,641	-	78,583	392	78,975

The notes form an integral part of these financial statements.

1. The Company and its operations

Petróleo Brasileiro S.A. (Petrobras), hereinafter referred to as “Petrobras” or “Company,” is a partially state-owned enterprise, controlled by the Brazilian Federal Government, of indefinite duration, governed by the terms and conditions under the Brazilian Corporate Law (Law 6,404 of December 15, 1976), Law 13,303 of June 30, 2016 and its Bylaws.

Petrobras’ shares are listed on the Brazilian stock exchange (B3) in the Level 2 of Corporate Governance special listing segment and, therefore, the Company, its shareholders, its managers and fiscal council members are subject to provisions under its regulation (Level 2 Regulation - *Regulamento de Listagem do Nível 2 de Governança Corporativa da Brasil Bolsa Balcão* – B3). The provisions of the Level 2 Regulation shall prevail over statutory provisions in the event of harm to the rights of public offers investors provided for in the Company’s Bylaws, except when otherwise determined by other regulation.

The Company is dedicated to prospecting, drilling, refining, processing, trading and transporting crude oil from producing onshore and offshore oil fields and from shale or other rocks, as well as oil products, natural gas and other liquid hydrocarbons. In addition, Petrobras carries out energy related activities, such as research, development, production, transport, distribution and trading of all forms of energy, as well as other related or similar activities.

Petrobras may perform any of the activities related to its corporate purpose, directly, through its wholly-owned subsidiaries, controlled companies, alone or through joint ventures with third parties, in Brazil or abroad.

The economic activities linked to its business purpose shall be undertaken by the Company in free competition with other companies according to market conditions, in compliance with the other principles and guidelines of Laws no. 9,478/97 and 14,134/21 (oil and gas regulations, respectively). However, Petrobras may have its activities, provided they are in compliance with its corporate purpose, guided by the Brazilian Federal Government to contribute to the public interest that justified its creation, aiming to meet national energy policy objectives when:

I – established by law or regulation, as well as under agreements provisions with a public entity that is competent to establish such obligation, abiding with the broad publicly stated of such instruments; and

II – the cost and revenues thereof have been broken down and disseminated in a transparent manner.

In this case, the Company’s Investment Committee and Minority Shareholders Committee, exercising their advisory role to the Board of Directors, shall assess and measure the difference between such market conditions and the operating result or economic return of the transaction, based on technical and economic criteria for investment valuation and specific operating costs and results under the Company’s operations. In case a difference is identified, for every financial year, the Brazilian Federal Government shall compensate the Company.

2. Basis of preparation

2.1. Statement of compliance and authorization of consolidated financial statements

These consolidated financial statements have been prepared and are being presented in accordance with the International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

The consolidated financial statements have been prepared under the historical cost convention, except when otherwise indicated. The significant accounting policies used in the preparation of these financial statements are set out in their respective explanatory notes.

The preparation of the financial statements requires the use of estimates based on assumptions and judgements, which may affect the application of accounting policies and reported amounts of assets, liabilities, revenues and

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

expenses. Actual results may differ from these estimates. Relevant estimates and judgments with a higher level of complexity are disclosed in explanatory note 4.

These consolidated financial statements were approved and authorized for issue by the Company's Board of Directors in a meeting held on March 7, 2024.

2.2. Functional and presentation currency

The functional currency of Petrobras and all of its Brazilian subsidiaries is the Brazilian Real. The functional currency of the Petrobras direct subsidiaries that operate outside Brazil is the U.S. dollar.

Petrobras has selected the U.S. dollar as its presentation currency to facilitate a more direct comparison to other oil and gas companies. The financial statements have been translated from the functional currency (Brazilian real) into the presentation currency (U.S. dollar). All assets and liabilities are translated into U.S. dollars at the closing exchange rate at the date of the financial statements; income and expenses, as well as cash flows are translated into U.S. dollars using the average exchange rates prevailing during the period. All exchange differences arising from the translation of the consolidated financial statements from the functional currency into the presentation currency are recognized as cumulative translation adjustments (CTA) within accumulated other comprehensive income in the consolidated statements of changes in shareholders' equity.

Brazilian Real x U.S. Dollar	Dec/23	Sep/23	Jun/23	Mar/23	Dec/22	Sep/22	Jun/22	Mar/22	Dec/21	Sep/21	Jun/21	Mar/21
Quarterly average exchange rate	4.96	4.88	4.95	5.20	5.26	5.25	4.93	5.23	5.59	5.23	5.29	5.48
Period-end exchange rate	4.84	5.01	4.82	5.08	5.22	5.41	5.24	4.74	5.58	5.44	5.00	5.70

3. Material accounting policies

To aid cohesion and comprehension, the significant accounting policies are set out at the end of each explanatory note to which they relate.

4. Judgments and sources of estimation uncertainty

The preparation of the consolidated financial information requires the use of estimates and judgments for certain transactions. Next is presented key judgments and the main sources of estimation uncertainty with a significant risk of causing material adjustments to the Company's key accounting estimates over the next fiscal year.

4.1. Recognition of exploration costs and oil and natural gas reserves estimates

After obtaining the legal rights to explore a specific area, the Company uses the successful efforts method to recognize costs incurred in connection with the exploration and evaluation of mineral resources, before demonstrating technical and commercial feasibility of extracting those resources. This method requires a direct relationship between costs incurred and mineral resources for these costs to be characterized as assets. The types of exploration costs and their respective recognition are presented in note 27.

The moment in which the technical and commercial feasibility of extracting a mineral resource is determined requires management judgments. An internal commission of technical executives of the Company periodically reviews the conditions of each well, by analysis of geological, geophysical and engineering data, as well as economic conditions, operating methods and government regulations.

The Company considers that the technical and commercial feasibility of a mineral resource can be demonstrated when the project has all the necessary information to characterize the reservoir as a proved reserve. Costs associated with non-commercial mineral resources are recognized as expenses in the period when identified.

According to the definitions prescribed by the SEC, proved oil and natural gas reserves are those quantities of oil and gas which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically feasible from a given date, from known reservoirs and under existing economic conditions, operating methods and government regulation.

The Company also determines reserves according to the criteria of the ANP/SPE (National Agency for Petroleum, Natural Gas and Biofuels / Society of Petroleum Engineers). The main differences between these criteria and the SEC criterion are related to the use of different economic assumptions and the possibility of considering as reserves, in the ANP/SPE criteria, the volumes expected to be produced beyond the concession contract expiration date in fields in Brazil, according to the ANP technical reserves regulations.

4.2. Impairment testing

4.2.1. Sources of estimation uncertainty related to impairment testing

Impairment testing involves uncertainties mainly related to: (a) the average Brent prices and to the Brazilian real/U.S. dollar average exchange rate, whose estimates are relevant to virtually all of the Company's operating segments; (b) discount rates; and (c) estimated proved and probable reserves (according to the criteria established by the ANP/SPE, as described in note 4.1). A significant number of interdependent variables are derived from these key assumptions and there is a high degree of complexity in their application in determining value in use for impairment testing.

A sensitivity analysis for assets or CGUs most sensitive to future impairment losses or reversals in the next year is presented in note 26.

Average Brent prices and average exchange rate

The markets for crude oil and natural gas have a history of significant price volatility and, although prices can drop or increase precipitously, industry prices over the long term tends to continue being driven by market supply and demand fundamentals.

Brent prices and exchange rate projections are derived from the Strategic Plan and are consistent with market evidence, such as independent macro-economic forecasts, industry analysts and experts. Backtesting analysis and feedback processes in order to continually improve forecast techniques are also performed.

The Company's oil price forecast model is based on a nonlinear relationship between variables reflecting market supply and demand fundamentals. This model also takes into account other relevant factors, such as the effects of the Organization of the Petroleum Exporting Countries (OPEC) decisions on the oil market, industry costs, idle capacity, oil and gas production forecasted by specialized firms, and the relationship between the oil price and the Brazilian Real/U.S. dollar exchange rate.

The process of projecting Brazilian Real/U.S. dollar exchange rate is based on econometric models that consider long-term assumptions involving observable inputs, such as commodity prices, country risk, interest rates in the U.S. and the value of the U.S. dollar relative to a basket of foreign currencies (U.S. Dollar Index – USDIX).

Changes in the economic environment may result in changing assumptions and, consequently, the recognition of impairment losses or reversals on certain assets or CGUs. For example, the Company's sales revenues and refining margins are directly impacted by Brent price variations, as well as Brazilian Real/U.S. dollar exchange rate variations, which also impacts our capital and operating expenditures.

Note 26 presents Brent prices and exchange rate estimates.

Discount rates

The discount rates used in impairment tests reflect specific risks associated with the estimated cash flows of the assets or CGUs. For example, changes in the economic and political environment may result in higher country risk projections, causing increases in the discount rates used in impairment tests, as well as investment decisions that result in the postponement or interruption of projects considering specific risks related to non-completion or delayed start of operations.

Note 26 presents the main discount rates applied in impairment tests.

Estimated proved and probable reserves

Reserves estimates, according to the criteria established by the ANP/SPE (as set out in note 4.1) are revised at least annually, based on updated geological and production data of reservoirs, as well as on changes in prices and costs used in these estimates. Revisions may also result from significant changes in the Company's strategy for development projects or in the production capacity.

Although the Company is reasonably certain that proved reserves will be produced, the timing and amount recovered can be affected by a sort of factors including completion of development projects, reservoir performance, regulatory aspects and significant changes in long-term oil and gas price levels.

4.2.2. Identifying cash-generating units for impairment testing

A cash-generating unit (CGU) represents the smaller identifiable group of assets that generate cash inflows, which are largely independent of the cash inflows of other assets or groups of assets. Identifying CGUs requires management assumptions and judgment, based on the Company's business and management model. The level of asset disaggregation in CGUs can reach the limit of assets being tested individually.

Changes in CGUs resulting from the review of investment, strategic or operational factors, may result in changes in the interdependencies of assets and, consequently, alter the aggregation or breakdown of assets that were part of certain CGUs, which may influence their ability to generate cash and cause additional losses or reversals in the recovery of such assets. If the approval for the sale of a CGU's component occurs between the reporting date and the date of the issuance of the consolidated financial statements, the Company reassesses whether the value in use of this component, estimated with the information existing at the reporting date, reasonably represents its fair value, net of disposal expenses. Such information must include evidence of the stage at which management was committed to the sale of the CGU's component.

The primary considerations in identifying the CGUs are set out as follows:

a) Exploration and Production CGUs:

- i) Crude oil and natural gas producing properties - individual CGUs: comprise assets related to exploration and production development of a field or a cluster (group of two or more fields) in Brazil and abroad. At December 31, 2023, there are 33 fields and 15 clusters representing different Exploration and Production CGUs in Brazil.
- ii) Equipment not related to crude oil and natural gas producing properties: comprise platforms, drilling rigs and other assets which are not part of any CGU and are assessed for impairment separately.

b) Refining, transportation and marketing CGUs:

- i) Downstream CGU: comprises refineries and associated assets, terminals and pipelines, as well as logistics assets operated by Transpetro, with a combined and centralized operation of such assets in Brazil. These assets are managed with a common goal of serving the market at the lowest overall cost, preserving the strategic value of the whole set of assets in the long term. The operational planning is made in a centralized manner and these assets are

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

not managed, measured or evaluated by their individual results. Refineries do not have autonomy to choose the oil to be processed, the mix of oil products to produce, the markets in which these products will be traded, which amounts will be exported, which intermediaries will be received and to decide the sale prices of oil products. Operational decisions are analyzed through an integrated model of operational planning for market supply, considering all the options for production, imports, exports, logistics and inventories, seeking to maximize the Company's global performance. The decision on new investments is not based on the profitability of the project where the asset will be installed, but on the additional result for the CGU as a whole. The model that supports the entire planning, used in technical and economic feasibility studies of new investments in refining and logistics, seeks to allocate a certain type of oil, or a mix of oil products, define market supply (area of influence), aiming at achieving the best integrated results. Pipelines and terminals are a complementary and interdependent portion of the refining assets, required to supply the market.

ii) CGU Itaboraí Utilities: composed of assets that will support the natural gas processing plant (UPGN) of the route 3 integrated project;

iii) CGU GasLub: set of assets that remain in hibernation and are being evaluated for use in other projects.

iv) CGU Second Refining Unit of RNEST: comprises assets of the second refining unit of Abreu e Lima refinery;

v) Transportation CGU: comprises assets relating to Transpetro's fleet of vessels;

vi) Hidrovia CGU: comprises the fleet of vessels under construction of the Hidrovia project (transportation of ethanol along the Tietê River);

vii) CGU nitrogen fertilizer plants: formed by hibernated nitrogen fertilizer plants; and

viii) Other operations abroad defined as the smallest group of assets that generates independent cash flows.

c) Gas and Low Carbon Energies CGUs:

i) CGU Integrated Processing System: set of assets formed by natural gas processing plants in Itaboraí, Cabiúnas and Caraguatatuba, grouped together due to the contractual characteristics of the Integrated Processing System and the Integrated Transportation System;

ii) CGUs of Natural Gas Processing Plants: each remaining natural gas processing plant represents a separate CGU.

iii) CGU Power: comprises the thermoelectric power generation plants (UTES). The operation and trade of energy of this CGU are carried out and coordinated in an integrated manner. The economic results of each of the plants in the integrated portfolio are highly dependent on each other, due to operational optimization aimed at maximizing the overall result.

iv) Other CGUs: operations abroad defined as the smallest group of assets that generates largely independent cash flows.

v) Biodiesel CGU: an integrated unit of biodiesel plants defined based on the production planning and operation process, that takes into consideration domestic market conditions, the production capacity of each plant, as well as the results of biofuels auctions and raw materials supply.

vi) Quixadá CGU: comprises the assets of Quixadá Biofuel Plant.

Further information on impairment testing is set out in note 26.

4.3. Sources of estimation uncertainty related to depreciation, depletion and amortization

As presented in note 24, assets directly related to the oil and gas production are depleted using the units of production method, based on monthly production in relation to the respective developed proved reserves, except for the signature bonuses, where total proved reserves are used.

Proved developed reserves are those for which recovery can be expected: (i) through existing wells, equipment and operating methods, or in which the cost of the required equipment is relatively minor compared to the cost of a new well; and (ii) through extraction equipment and operational infrastructure installed at the time of the reserves estimate, if the extraction is carried out by means that do not involve a well.

Estimates of proved reserves volumes used in the unit-of-production method are prepared by Company's technicians according to the SEC definitions (as described in note 4.1). Revisions to the Company's proved developed and undeveloped reserves impact prospectively the amounts of depreciation, depletion and amortization recognized in the statement of income and the carrying amounts of oil and gas properties assets. Information on uncertainties related to reserve volume estimates are presented in note 4.1.

Therefore, considering all other variables being constant, a decrease in estimated proved reserves would increase, prospectively, depreciation, depletion and amortization expense, while an increase in reserves would reduce depreciation, depletion and amortization.

4.4. Sources of estimation uncertainty related to pension plan and other post-employment benefits

The net actuarial liability represents the Company's actuarial obligations, net of fair value of plan assets (when applicable), at present value, as described in note 18.3.2.

The actuarial obligations and net expenses related to defined benefit pension and health care post-employment plans are computed based on several financial and demographic assumptions, of which the most significant are:

a) Discount rate: comprises the projected future inflation in addition to an equivalent discounted interest rate that matches the duration of the pension and health care obligations with the future yield curve of long-term Brazilian Government Bonds; and

b) Medical costs: comprise the projected growth rates based on per capita health care benefits paid over the last five years, which are used as a basis for projections, converged to the general price inflation index within 30 years.

These and other assumptions are revised at least annually and may differ materially from actual results due to changing market and financial conditions, as well as actual results of actuarial assumptions.

The measurement uncertainties associated with the defined benefit obligation and a sensitivity analysis of discount rates and changes in medical costs are disclosed in notes 18.3.6 and 18.3.7, respectively.

4.5. Sources of estimation uncertainty related to provisions for legal proceedings and contingencies

The Company is part in arbitrations and in legal and administrative proceedings involving civil, tax, labor and environmental issues arising from the normal course of its business and makes use of estimates to recognize the amounts and the probability of outflow of resources, based on reports and technical assessments from legal advisors and on management's assessment.

These estimates are performed individually, or aggregated if there are cases with similar characteristics, primarily considering factors such as assessment of the plaintiff's demands, consistency of the existing evidence, jurisprudence

on similar cases and doctrine on the subject. Specifically for lawsuits by outsourced employees, the Company estimates the expected loss based on a statistical procedure, due to the number of actions with similar characteristics.

Arbitral, legal and administrative decisions against the Company, new jurisprudence and changes of existing evidence can result in changes on the probability of outflow of resources and on the estimated amounts, according to the assessment of the legal basis.

Note 19 provides further detailed information about contingencies and legal proceedings.

4.6. Sources of estimation uncertainty related to decommissioning costs

The Company has legal obligations to remove equipment and restore onshore and offshore areas at the end of operations. Its most significant asset removal obligations relate to offshore areas. Estimates of costs for future environmental cleanup and remediation activities are based on current information about costs and expected plans for remediation. The timing of abandonment and dismantling of areas is based on the length of reserves depletion, in accordance with the ANP/SPE definitions (as described in note 4.1). Therefore, revisions to reserves estimates that result in changes in the timing of reserves depletion may impact the provision for decommissioning cost. For additional information about revisions to the Company's reserves estimates, see note 4.1.

These obligations are recognized at present value, using a risk-free discount rate, adjusted to the Company's credit risk. Changes in the discount rate can cause significant variations in the recognized amount, due to the long-term nature until abandonment. A sensitivity analysis of discount rates used in the calculation of the provision for decommissioning costs is presented in note 20.

The calculation to determine the amounts to be provisioned are complex, since: i) the obligations are long-term; ii) the contracts and regulations contain subjective definitions of the removal and remediation practices and criteria involved when the events occur; and iii) asset removal technologies and costs are constantly changing, along with regulations, environmental, safety and public relations considerations.

The Company constantly conducts studies to incorporate technologies and procedures to optimize the process of abandonment, considering industry best practices. However, the timing and amounts of future cash flows are subject to significant uncertainty.

Note 20 provides further information about provision for decommissioning costs.

4.7. Sources of estimation uncertainty related to leases

The Company uses incremental borrowing rates to determine the present value of the lease payments, when the interest rate implicit in the lease cannot be readily determined.

The determination of incremental rates requires estimates based on corporate funding rates (obtained from the yields on bonds issued by Petrobras), which take into account the risk-free rate and the Company's credit risk premium, adjusted to also reflect the specific conditions and characteristics of the lease, such as the risk of the country's economic environment, guarantees, currency and duration of the payment flow.

The present value of lease liabilities is determined based on the incremental rates estimated at the start date of each lease. Therefore, even in cases where lease agreements have similar characteristics, their cash flows may be discounted at significantly different incremental rates depending on the Company's corporate funding rates on the start date of each lease.

Note 33 presents information on lease arrangements by class of underlying assets.

4.8. Sources of estimation uncertainty related to cash flow hedge accounting involving the Company's future exports

The Company determines its future exports as "highly probable future exports" based on its current Strategic Plan and on short-term estimates on a monthly basis. The highly probable future exports are determined by a percentage of projected exports revenues.

The estimate of the amount of highly probable future exports considers future uncertainty regarding the Brent oil prices, oil production and demand for products in a model which optimizes the Company's operations and investments, in addition to considering the historical profile of exported volume in relation to total oil production.

As described in note 35.2.2, foreign exchange gains and losses relating to the effective portion of hedging instrument are recognized in other comprehensive income and reclassified to the statement of income within finance income (expense) in the periods when the hedged item affects the statement of income. However, if future exports for which foreign exchange gains and losses hedging relationship has been designated is no longer expected to occur, any related cumulative foreign exchange gains or losses that have been recognized in other comprehensive income from the date the hedging relationship was designated to the date the Company revoked the designation is immediately recycled from other comprehensive income to the statement of income.

For the long-term, future exports forecasts are reviewed whenever the Company reviews its Strategic Plan assumptions, while for the short-term future exports are reviewed monthly. The approach for determining exports as highly probable future exports is reviewed annually, at least.

See note 35.2.2 for more detailed information about cash flow hedge accounting and a sensitivity analysis of the cash flow hedge involving future exports.

4.9. Sources of estimation uncertainty related to income taxes

Income taxes rules and regulations may be interpreted differently by tax authorities, and situations may arise in which the tax authorities' interpretations differ from the Company's understanding.

Uncertainties over income taxes treatments represent the risks that the tax authority does not accept a certain tax treatment applied by the Company, mainly related to different interpretations of deductions and additions to the income taxes (*Imposto de Renda sobre Pessoa Jurídica* - IRPJ and *Contribuição Social sobre Lucro Líquido* - CSLL calculation basis). The Company evaluates each uncertain tax treatment separately or in a group where there is interdependence in relation to the expected result.

The Company estimates the probability of acceptance of an uncertain tax treatment by the tax authority based on technical assessments by its legal advisors, considering precedent jurisprudence applicable to current tax legislation, which may be impacted mainly by changes in tax rules or court decisions which may affect the analysis of the fundamentals of uncertainty. The tax risks identified are evaluated, treated and, when applicable, follows a pre-determined tax risk management methodology.

If it is probable that the tax authorities will accept an uncertain tax treatment, the amounts recorded in the financial statements are consistent with the tax records and, therefore, no uncertainty is reflected in the measurement of current or deferred income taxes. If it is not probable that the tax authorities will accept an uncertain tax treatment, the uncertainty is reflected in the measurement of current or deferred income taxes in the financial statements.

The effect of uncertainty for each uncertain tax treatment is estimated by using the method that provides the best prediction of the resolution of the uncertainty. The most probable amount method provides as an estimate the single most probable amount in a set of possible outcomes, while the expected amount method represents the sum of the amounts weighted by the probability in relation to a range of possible outcomes.

Additional information on uncertainty over income taxes treatments is disclosed in Note 17.1.

4.10. Sources of estimation uncertainty related to expected credit losses

Credit losses correspond to the difference between all contractual cash flows owed to the Company and all cash flows that the entity expects to receive, discounted at the original effective interest rate. The expected credit loss of a financial asset corresponds to the average of expected credit losses weighted by the respective default risks.

Expected credit losses on financial assets are based on assumptions relating to risk of default, the determination of whether or not there has been a significant increase in credit risk, expectation of recovery, among others. The Company uses judgment for such assumptions in addition to information from credit rating agencies and inputs based on collection delays.

Notes 14.2 and 14.3 provide details on the expected credit losses recognized by the Company.

4.11. Sources of estimation uncertainty related to the compensation for the surplus volume for the Transfer of Rights Agreement

As a result of the Second Bidding Round for the Surplus Volume of the Transfer of Rights Agreement under the Production Sharing regime, the Company signed amendments and new agreements in 2022 with partners in the Atapu and Sépia fields. Such agreements provide, in addition to the compensation already received upon signature, supplementary amounts that may be owed to the Company, according to the conditions described in note 25.2.

Additionally, over the last few years the Company has sold assets considered non-strategic and established partnerships in E&P assets aiming, among other objectives, at sharing risks and developing new technologies. Such transactions were carried out through partnerships (note 29) and divestments, with procedures aligned with current legislation and regulatory bodies. In some of these transactions, contingent receipts are also provided for, subject to contractual clauses (note 31.4).

5. Climate Change

Climate change may result in both negative and positive effects for the Company. Potential negative effects of climate change for the Company are referred to as climate-related risks (climate risks). Conversely, potential positive effects arising from climate change for the Company are referred to as climate-related opportunities.

Climate risks are categorized as: (i) climate-related transition risks (transition risks); and (ii) climate-related physical risks (physical risks).

Transition risks arise from efforts to the transition to a low-carbon economy. In this category, the Company has identified the following risks that can reasonably be expected to affect its cash flows, access to financing or cost of capital:

Risk	Description	Time length ⁽²⁾
Market	Worldwide: increasing demand for energy and products with lower carbon intensity leading to a reduction in oil demand, a consequent decline in prices of fossil fuel products. Preference for fossil fuel products with lower Greenhouse Gas (GHG) intensity in production processes. In Brazil: the demand for our products may be affected, especially by the increase in demand for alternative fuels, also stimulated by public policies such as the RENOVBIO ⁽¹⁾ program, among others.	Medium to long-term
Technological	Loss of competitiveness due to the non-implementation or implementation of inefficient or non-effective technologies to reduce emissions from our operations and products.	Medium to long-term
Regulatory	Increased requirements for controls over GHG emissions in licensing processes, which may cause operational restrictions and financial penalties for our activities. Supplementing regulation for the adoption of a carbon pricing instrument in Brazil, considering its various aspects and possible formats.	Medium to long-term
Legal and Reputational	Litigation and/or reputational damage due to non-compliance with climate commitments.	Medium-term

(1) National Policy for Biofuels, aiming at increasing the production and use of biofuels in the Brazilian energy chain.

(2) Criteria adopted for the time horizon: short term (1 year), medium term (between 1 and 5 years), and long term (more than 5 years).

Physical risks result from climate change that can be event-driven (acute physical risk) or from long-term shifts in climate patterns (chronic physical risk). In this category, the Company has identified the following risks that can reasonably be expected to affect its cash flows, access to financing, or cost of capital:

Risk	Description	Time length ⁽¹⁾
Water shortage	Reduction in water availability affecting onshore facilities.	Medium to long-term
Meteoceanografic changes	Changes in patterns of wind, waves and currents may alter the operational conditions of our assets.	Long-term

(1) Criteria adopted for the time horizon: short term (1 year), medium term (between 1 and 5 years), and long term (more than 5 years).

5.1. Potential effects of climate risks on accounting estimates

Accounting estimates are monetary amounts in financial statements that are subject to measurement uncertainty.

The following information used in relevant accounting estimates of the Company is largely determined based on the assumptions and projections of the Petrobras Strategic Plan (Strategic Plan):

- value in use for impairment of assets testing purposes (note 4.2.1);
- timing and costs used in measuring the provision for decommissioning costs (note 4.6);
- highly probable future exports used in cash flow hedge accounting involving the Company's future exports (note 4.8); and
- useful life of PP&E and intangible assets used in measuring depreciation, depletion and amortization expenses (notes 24 and 25).

As presented in the following topic, the Company considered the effects related to climate risks in its Strategic Plan approved by the Board of Directors, which is updated annually, including actions to achieve its climate commitments and its long-term ambition to neutralize GHG emissions in activities under its control (scopes 1 and 2) by 2050.

The aforementioned ambition and commitments are not guarantees of future performance by the Company and are subject to assumptions that may prove incorrect and to risks and uncertainties that are difficult to predict.

a) Transition risk to low carbon economy

The transition to a low-carbon economy brings market, technological, regulatory, legal and reputational risks, which were considered in the development of the Company's Strategic Plan. Such consideration was based on the following external environment assumptions that reflect the dynamics of the energy sector:

- Moderate economic growth compared to the recent past;
- Shifts in consumption habits and behaviors;
- Public policies focusing on mobility, air quality and adaptation of urban infrastructure to climate change;
- International coordination in efforts to reduce GHG emissions;
- Reduction in the GHG emissions;
- Reduction in the consumption of fossil fuels; and
- Diffusion of end-use technologies that reduce the need for fossil fuel consumption.

As a result of this, demand and prices, both domestic and international, of the main products considered in the Strategic Plan are negatively affected.

In 2023, the Company adopted three distinct scenarios that are used for different purposes in its planning activities. These scenarios are called Adaptation, Negotiation, and Commitment. In all of them, there is a slowdown and subsequent contraction of fossil fuel sources. The Negotiation scenario, which is used as reference scenario for quantifying the Company's Strategic Plan, considers that fossil fuels, which currently represent approximately 80% of primary energy sources, will represent around 55% by 2050. The share of oil will decrease from the current 29% to around 21%.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

The Brent price considered in the reference scenario of the Strategic Plan decreases from US\$80 per barrel in 2024 to US\$65 per barrel in 2050. For additional information about the behavior of the Brent price, considered in the Company's Strategic Plan reference scenario, please see note 26. The following table compares the oil price used in the reference scenario of the Strategic Plan for the years 2030 and 2050 with those projected in the Announced Pledges Scenario (APS) and Net Zero Emission (NZE) scenarios by the International Energy Agency (IEA):

Brent price US\$/Barrel	2030	2050
Strategic Plan	65	65
APS	74	60
NZE	42	25

According to the IEA, the APS scenario considers that all climate commitments made by governments around the world, including Nationally Determined Contributions (NDCs), as well as long-term net-zero targets, will be met in full and on time, with an increase of approximately 1.7°C in temperature by 2100 (with a 50% probability of occurrence). As for the NZE scenario, according to the IEA, it presents a pathway for the global energy sector to achieve net-zero CO₂ emissions by 2050, consistent with limiting the temperature increase to 1.5 °C (with at least a 50% probability of occurrence).

The Strategic Plan also includes Company's actions to achieve the carbon sustainability commitments, such as low-carbon Research and Development (R&D) projects and decarbonization projects for operations. These actions aim to address transition risks as well as reflect climate opportunities.

The Company's accounting estimates did not incorporate the effect of carbon price. Currently, there are uncertainties regarding the structure and dynamics of a future carbon market in Brazil, and there is no sufficient and reliable information available to assess the effects of carbon price.

a.1) Potential effects on the value in use in impairment tests

When measuring the value in use of its assets, the Company bases its cash flow projections on reasonable and supportable assumptions that represent management's best estimate of the range of economic conditions.

A faster transition to a low-carbon economy than projected in the Strategic Plan could result in Brent prices and demand for the Company's products that are lower than the ones considered to estimate the value in use of the Company's assets for impairment testing purposes.

Additionally, progress in the establishment of a regulated carbon market in Brazil may lead to the inclusion of the carbon price in calculations of the value in use of the Company's assets for impairment testing purposes.

The reduction in the value in use of the Company's assets may result in the recognition of losses due to the non-recoverability of the carrying amounts of these assets.

Given that the oil price is a variable that decisively influences the recoverable amount of assets, the Company carried out a sensitivity analysis of the effect of using the Brent prices considered in the APS and NZE scenarios, for the impairment test of the Company's E&P assets in Brazil.

Using the prices in the APS and NZE scenarios to perform a sensitivity analysis on projected gross revenues deducted of production taxes, net of income taxes, and keeping unchanged all other components, variables, assumptions and data for calculating the recoverable amount, the Company's E&P segment, regarding the impairment loss recognized by the Company, as disclosed in note 26, would have additional impairment reversal of US\$ 696 in the APS scenario and additional impairment losses US\$ 6,611 in the NZE scenario, concentrated in the Campos basin fields.

The Company does not consider this sensitivity analysis, based on APS and NZE Brent price scenarios, to be the best estimates to determine expected effects on the recoverable amount of assets, sales revenues or net income.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Considering that the Company did not incorporate in its accounting estimates the carbon price effects, the Company carried out a sensitivity analysis of the effect of GHG emissions pricing costs on the impairment test of assets in the E&P segment in Brazil, considering a monetary charge per ton of CO₂ emission starting from 2028, and the existence of free emission allowances.

In this context, using a base price of US\$ 10/CO₂ from 2024 to 2030, US\$ 31/CO₂ in 2035, US\$ 52/CO₂ in 2040, US\$ 73/CO₂ in 2045, and US\$ 95/CO₂ in 2050, including gradual emission exemptions, to simulate additional cash outflows (net of income taxes), and keeping all other components, variables, assumptions and data for the calculation of recoverable amount unchanged, the E&P segment would have an additional US\$ 182 impairment loss.

The Company does not consider this sensitivity analysis of the effect of greenhouse gas emissions pricing costs on the impairment test of assets to be the best estimate to determine expected effects on the recoverable amount, neither the estimated effects on expenses nor net income.

a.2) Potential effects on decommissioning costs

Due to its operations, the Company has legal obligations to remove equipment and restore onshore and offshore areas. On December 31, 2023, the provision for decommissioning costs recognized by the Company totaled US\$ 23,202, as set out in Note 20. On an undiscounted basis the nominal amount would be US\$ 48,787.

The estimated timing used by the Company to account for decommissioning costs are consistent with the useful lives of the related assets. The average decommissioning period of oil and gas assets weighted by the carrying amounts of such assets is 14 years.

During 2023, there were no issuance of government regulations related to climate matters that changed or had potential to change the period for decommissioning the Company's assets, as well as not identifying any triggers that would accelerate the expected dates for decommissioning the Company's assets due to the Company's climate goals and ambition to neutralize GHG emissions in activities under its control (scopes 1 and 2) by 2050.

A transition to a low-carbon economy that is faster than it was anticipated by the Company may accelerate the timing to remove equipment and restore onshore or offshore areas. Such acceleration would increase the present value of the decommissioning obligations recognized by the Company.

To illustrate the effect of a possible acceleration of the transition to a low-carbon economy, the Company estimates that the provision for decommissioning costs would increase by US\$ 1,101, US\$ 3,385 and US\$ 5,478 if the timing currently used were brought forward by one, three and five years, respectively. This sensitivity analysis assumed that all other components, variables, assumptions and data for calculating the provision remained unchanged. The year ranges used are not intended to be predictions of likely future events or outcomes.

a.3) Potential effects on "highly probable future exports" used in cash flow hedge accounting involving the Company's future exports

A transition to a low-carbon economy that is faster than it was anticipated by the Company may negatively effect the Company's future exports. Such effect may result in certain exports, whose foreign exchange gains or losses were designated for hedge accounting, no longer be considered highly probable, but remain forecasted, or, depending on the magnitude of the transition and its speed, cease to be considered forecasted. Further details on the consequences of such effects are described in note 35.2.2 (a) involving the Company's future exports (accounting policy).

The calculation of "highly probable future exports" is based on the projected exports in the Strategic Plan, as set out in note 4.8. The Company considers only a portion of its projected exports as "highly probable future exports". When determining future exports as highly probable, and therefore eligible as a hedged item for application of cash flow hedge accounting, the Company considers the effects related to the transition to a low-carbon economy. Carbon prices were not incorporated in such estimates.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Using the prices in the APS and NZE scenarios we carried out a sensitivity analysis to simulate the need to reclassify the foreign exchange gains or losses recorded in equity to the statement of income. Such sensitivity simulated a new future cash flow from exports, changing only the oil price, keeping all other components, variables, assumptions and data unchanged. In such sensitivity, there is no need to reclassify the foreign exchange (gains or losses) recorded in equity to the statement of income in any of the simulated scenarios.

The simulations used to perform such sensitivity analysis, based on Brent prices of the scenarios APS and NZE, are not considered by the Company as the best estimates to determine expected effects of the reclassification of foreign exchange variation recorded in equity to the statement of income.

a.4) Potential effects on the useful lives of PP&E

A transition to a low-carbon economy that is faster than the Company anticipates may reduce the useful life of its assets, which could lead to an increase in annual depreciation, depletion and amortization expenses.

Assets directly related to the production of oil and gas in a contracted area are depleted using the units of production method and depreciated or amortized using the straight-line method. As of December 31, 2023, the carrying amount of these assets in operation in Brazil is US\$ 105,498. Out of such assets, the ones that are depreciated or amortized by the straight-line method do not have a useful life ending in or after 2050. As for assets depleted using the units of production method, it is estimated that 4 fields in the State of Bahia, with carrying amount of US\$ 234 as of December 31, 2023, have production curves used to estimate its useful lives extending beyond 2050 (based on its proved developed reserves).

As mentioned in item "Transition risk to low carbon economy", the reference scenario of the Strategic Plan indicates that there will be persistent global demand for oil in the coming decades. Additionally, calculations of expected production and oil and gas reserves in this scenario consider the effects of the transition to a low-carbon economy.

The Company's refining plants consist of 10 refineries in Brazil. Based on the current depreciation rates of the assets in operation applied to the respective carrying amounts at December 31, 2023, which amounts to US\$ 11,055, and assuming no additional investment, all refineries would be fully depreciated prior to 2050.

The Company estimates persistent demand for oil products in the coming decades, although decreasing, which should be progressively supplied by models with lower carbon intensity. Thus, the depreciation rates used by the Company for the refining plants are in line with the transition to a low-carbon economy.

The Gas and Energy assets in Brazil, including thermoelectric power plants, are depreciated using the linear method. Based on the current depreciation rates of the assets in operation applied to their respective carrying amounts as of December 31, 2023, totaling US\$ 3,004, and assuming no additional investment, these assets would be fully depreciated prior to 2050.

In this context, based on available information, the Company does not foresee significant changes in the useful life of its refineries, assets directly related to oil and gas production and those related to the Gas and Energy arising from the transition to a low-carbon economy. Such assets represent 91% of the Company's total assets in operation.

b) Physical Risks

The operating conditions of the Company's assets are subject to physical risks associated with climate change. The variables considered most susceptible to these changes include the patterns of waves, winds and ocean currents in the areas in which the Company operates offshore, as well as the availability of freshwater for our onshore operations.

The Company estimates that the offshore structures in the Brazilian Southeastern basins, which account for the highest percentage of Petrobras' production (96%), are adequately sized to the expected changes in the patterns of waves, winds and ocean currents in that region.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Regarding the availability of freshwater for the operations of our facilities, the risks related to this subject are monitored, managed and mitigated by the Company. Such risks may arise from various factors that collectively put pressure on water availability, such as population growth, intensification of consumption patterns, inadequate infrastructure, pollution, resource misallocation and climate change.

As a result, the Company's water risk management covers both climatic and non-climatic risks and, based on the Company's assessment, the potential impacts of climate change on the availability of fresh water for our facilities are not representative of all the risks involved.

Consequently, regarding physical risks, as of December 31, 2023, the Company does not foresee that changes caused by climate change will have a material effect on accounting estimates, either from the perspective of meteoceanographic variables or the reduction in freshwater availability.

However, the circumstances that served as the basis for the Company's analyses of climate change scenarios may change, so the approaches used by the Company to conduct these analyses may also be improved over time.

6. New standards and interpretations

6.1. New International Financial Reporting Standards not yet adopted

Standard	Description	Effective on
Lease Liability in a Sale and Leaseback - Amendments to IFRS 16	The amendments add requirements that specify that the seller-lessee must subsequently measure the lease liability arising from the transfer of an asset - which meets the requirements of IFRS 15 to be accounted for as a sale - and sale and leaseback, so that no gain or loss is recognized related to the right of use retained in the transaction.	January 1, 2024, retrospective application.
Classification of Liabilities as Current or Non-current / Non-current Liabilities with Covenants- Amendments to IAS 1	<p>The amendments establish that the liability should be classified as current when the entity does not have the right, at the end of the reporting period, to defer the settlement of the liability for at least twelve months after the reporting period.</p> <p>Among other guidelines, the amendments provide that the classification of a liability is not affected by the likelihood of exercising the right to defer the settlement of the liability. Additionally, according to the amendments, only covenants whose compliance is mandatory before or at the end of the reporting period should affect the classification of a liability as current or non-current.</p> <p>Additional disclosures are also required by the amendments, including information on non-current liabilities with covenants, whose compliance is mandatory within 12 months after the reporting date</p>	January 1, 2024, retrospective application.
Supplier Finance Arrangements - Amendments to IAS 7 and IFRS 7	The amendments establish the characteristics of finance arrangements involving suppliers and that certain information related to such arrangements must be disclosed in order to enable the assessment of their effects on liabilities, cash flows and exposure to liquidity risk.	January 1, 2024, with specific transition rules.
Lack of Exchangeability - Amendments to IAS 21	<p>The amendments establish that when one currency is not exchangeable for another on the measurement date, the spot exchange rate must be estimated. In addition, they provide guidance on how to assess interchangeability between currencies and how to determine the spot exchange rate when interchangeability is absent.</p> <p>When the spot exchange rate is estimated because a currency is not exchangeable for another currency, information must be disclosed to allow the understanding of how the currency not exchangeable for another currency affects, or is expected to affect, the statements of income, the statement of financial position and the statements of cash flows.</p>	January 1, 2025, with specific transition rules.

Regarding the amendments to IFRS 16 and to IAS 1, effective as of January 1, 2024, according to the assessment made, the Company estimates that there will be no significant impact with the initial application on its consolidated financial statements. In relation to the amendments to IAS 7 and IFRS 7, the Company expects additional disclosure.

As for the amendment that will be effective as of January 1, 2025, the Company is assessing the impacts that it will have on the financial statements.

7. Capital Management

The Company's objective in its capital management is to maintain its capital structure at an adequate level in order to continue as a going concern, maximizing value to shareholders and investors. In 2023 and 2022, its main source of funding was cash provided by its operating activities.

The financial strategy of the Strategic Plan 2024-2028 is focused on:

- indebtedness control;
- investments and business decisions respecting the ideal capital structure;
- solid governance in decision-making processes ensuring profitability, rationality and value creation for all stakeholders; and

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

- distribution of value created through dividends and share repurchase.

The target for the gross debt (composed of current and non-current finance debt and lease liability) is to be maintained below US\$ 65,000 and the reference level for Adjusted Cash and cash equivalents is US\$ 8,000 (which is composed 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).

As of December 31, 2023, gross debt increased to US\$ 62,600, from US\$ 53,799 as of December 31, 2022, remaining within the range defined in the Company's Strategic Plan.

8. Cash and cash equivalents and marketable securities

8.1. Cash and cash equivalents

They include cash, available bank deposits and short-term financial investments with high liquidity, which meet the definition of cash equivalents.

	12.31.2023	12.31.2022
Cash at bank and in hand	103	216
Short-term financial investments		
- In Brazil		
Brazilian interbank deposit rate investment funds and other short-term deposits	1,742	2,763
Other investment funds	279	244
	2,021	3,007
- Abroad		
Time deposits	7,737	2,388
Automatic investing accounts and interest checking accounts	2,852	2,365
Other financial investments	14	20
	10,603	4,773
Total short-term financial investments	12,624	7,780
Total cash and cash equivalents	12,727	7,996

Short-term financial investments in Brazil primarily consist of investments in funds holding Brazilian Federal Government Bonds that can be redeemed immediately, as well as reverse repurchase agreements that mature within three months as of the date of their acquisition. Short-term financial investments abroad comprise time deposits that mature in three months or less from the date of their acquisition, highly-liquid automatic investment accounts, interest checking accounts and other short-term fixed income instruments.

The main resources constituted were substantially provided by cash provided by operating activities of US\$ 43,212, proceeds from disposal of assets - divestment of US\$ 3,606, proceeds from finance debt of US\$ 2,210 and financial compensation from co-participation agreements of US\$ 391.

The main use of these funds in 2023 were for payment of dividends and share repurchase program of US\$ 20,454, repayment of principal and interests related to finance debt and repayment of lease liability, amounting US\$ 12,457, as well as for acquisition of PP&E and intangible assets in the amount of US\$ 12,114.

Accounting policy for cash and cash equivalents

Cash and cash equivalents comprise cash on hand, term deposits with banks and short-term highly-liquid financial investments that are readily convertible to known amounts of cash, are subject to insignificant risk of changes in value and have a maturity of three months or less from the date of acquisition.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

8.2. Marketable securities

	12.31.2023			12.31.2022		
	In Brazil	Abroad	Total	In Brazil	Abroad	Total
Fair value through profit or loss	926	-	926	713	-	713
Amortized cost - Bank Deposit Certificates and time deposits	4,249	-	4,249	2,548	1,026	3,574
Amortized cost - Others	53	-	53	50	-	50
Total	5,228	-	5,228	3,311	1,026	4,337
Current	2,819	-	2,819	1,747	1,026	2,773
Non-current	2,409	-	2,409	1,564	-	1,564

Marketable securities classified as fair value through profit or loss refer mainly to investments in Brazilian Federal Government Bonds (amounts determined by level 1 of the fair value hierarchy). These financial investments have maturities of more than three months.

Securities classified as amortized cost refer to investments in Brazil in post-fixed Bank Deposit Certificates with daily liquidity, with maturities between one and two years, and to investments abroad in time deposits with maturities of more than three months from the contracting date.

Accounting policy for marketable securities

The amounts invested in operations with terms of more than three months, as from the date of the agreement, are initially measured at fair value and subsequently according to their respective classifications, which are based on the way in which these funds are managed and their features of contractual cash flows:

- Amortized cost – financial assets that give rise, on specified dates, to cash flows represented exclusively by payments of principal and interest on the outstanding principal amount, the purpose of which is to receive its contractual cash flows. They are presented in current and in non-current asset according to their maturity term. Interest income from these investments is calculated using the effective interest rate method.
- Fair value through profit or loss – financial assets whose purpose is to receive from its sale. They are presented in current assets due to the expectation of realization within 12 months of the reporting date.

9. Sales revenues

9.1. Revenues from contracts with customers

As an integrated energy company, revenues from contracts with customers derive from different products sold by the Company's operating segments, taking into consideration specific characteristics of the markets where they operate. For additional information about the operating segments of the Company, its activities and its respective products sold, see note 13.

The determination of transaction prices derives from methodologies and policies based on the parameters of these markets, reflecting operating risks, level of market share, changes in exchange rates and international commodity prices, including Brent oil prices, oil products such as diesel and gasoline, and the Henry Hub Index.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

	2023	2022	2021
Diesel	32,260	40,149	24,236
Gasoline	14,309	16,175	11,910
Liquefied petroleum gas	3,506	5,121	4,491
Jet fuel	5,015	5,423	2,271
Naphtha	1,837	2,396	1,699
Fuel oil (including bunker fuel)	1,158	1,411	1,775
Other oil products	4,428	5,536	4,261
Subtotal oil products	62,513	76,211	50,643
Natural gas	5,632	7,673	5,884
Crude oil	5,475	7,719	671
Renewables and nitrogen products	94	283	40
Breakage	860	669	243
Electricity	657	694	2,902
Services, agency and others	1,059	1,043	808
Domestic market	76,290	94,292	61,191
Exports	25,012	27,497	21,491
Crude oil	18,447	19,332	14,942
Fuel oil (including bunker fuel)	5,114	7,399	5,480
Other oil products and other products	1,451	766	1,069
Sales abroad ⁽¹⁾	1,107	2,685	1,284
Foreign market	26,119	30,182	22,775
Sales revenues	102,409	124,474	83,966

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

As of December 31, 2023, the composition of sales revenues by shipping destination is presented as follows:

	2023	2022	2021
Domestic market	76,290	94,292	61,191
China	7,232	6,389	7,053
Americas (except United States)	4,846	7,166	4,702
Europe	5,534	5,932	3,110
Asia (except China and Singapore)	1,447	1,505	1,671
United States	3,924	4,914	2,162
Singapore	3,063	4,271	3,913
Others	73	5	164
Foreign market	26,119	30,182	22,775
Sales revenues	102,409	124,474	83,966

In 2023, sales to two clients of the refining, transportation and marketing segment represented individually 16% and 11% of the Company's sales revenues; in 2022, sales to two clients of the same segment individually represented 15% and 11% of the Company's sales revenues; and in 2021 one client of the same segment individually represented 10% of the Company's sales revenues.

9.2. Remaining performance obligations

The Company is party to sales contracts signed until December 31, 2023 with original expected duration of more than 1 year, which define the volume and timing of goods or services to be delivered during the term of the contract, and the payment terms for these future sales.

The estimated remaining values of these contracts in 2023 presented below are based on the contractually agreed future sales volumes, as well as prices prevailing at December 31, 2023 or practiced in recent sales reflecting more directly observable information:

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

	Expected recognition within 1 year	Expected recognition after 1 year	Total
Domestic market			
Gasoline	12,161	178	12,339
Diesel	27,325	-	27,325
Natural gas	7,715	38,986	46,701
Liquefied petroleum gas	3,120	-	3,120
Services and others	740	3,607	4,347
Naphtha	1,497	1,497	2,994
Electricity	529	4,919	5,448
Other oil products	3,013	3,756	6,769
Jet fuel	1,335	-	1,335
Foreign market			
Exports	2,732	5,337	8,069
Total	60,167	58,280	118,447

Revenues are recognized once goods are transferred and services are provided to the customers and their measurement and timing of recognition will be subject to future demands, changes in commodities prices, exchange rates and other market factors.

The table above does not include information on contracts with original expected duration of less than one year, such as spot-market contracts, variable considerations which are constrained, and information on contracts only establishing general terms and conditions (Master Agreements), for which volumes and prices will only be defined in subsequent contracts.

In addition, electricity sales are mainly driven by demands to generate electricity from thermoelectric power plants, as and when requested by the Brazilian National Electric System Operator (ONS). These requests are substantially affected by Brazilian hydrological conditions. Thus, the table above presents mainly fixed amounts for the electricity to be available to customers in these operations.

9.3. Contract liabilities

The balance of contract liabilities carried on the statement of financial position in 2023 amounted to US\$ 115 (US\$ 48 in 2022). This amount is classified as other current liabilities and primarily comprises advances from customers in ship and take or pay contracts to be recognized as revenue based on future sales of natural gas or following the non-exercise of the right by the customer.

Accounting policy for revenues

The Company evaluates contracts with customers for the sale of oil and oil products, natural gas, electricity, services and other products, which will be subject to revenue recognition, and identifies the distinct goods and services promised in each of them.

Sales revenues are recognized when control is transferred to the client, which usually occurs upon delivery of the product or when the service is provided. At this moment, the company satisfies the performance obligation.

Performance obligations are considered to be promises to transfer to the client: (i) good or service (or group of goods or services) that is distinct; and (ii) a series of distinct goods or services that have the same characteristics or are substantially the same and that have the same pattern of transfer to the client.

Revenue is measured based on the amount of consideration to which the Company expects to be entitled in exchange for transfers of promised goods or services to the customer, excluding amounts collected on behalf of third parties. Transaction prices are based on contractually stated prices, which reflect the Company's pricing methodologies and policies based on market parameters.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Invoicing occurs in periods very close to deliveries and rendering of services, therefore, significant changes in transaction prices are not expected to be recognized in revenues for periods subsequent to satisfaction of the performance obligation, except for some exports in which final price formation occurs after the transfer of control of the products and are subject to the variation in the value of the commodity.

Sales are carried out in short terms of receipt, thus there are no significant financing components.

10. Costs and expenses by nature

10.1. Cost of sales

	2023	2022	2021
Raw material, products for resale, materials and third-party services ⁽¹⁾	(23,858)	(32,354)	(20,869)
Depreciation, depletion and amortization	(10,779)	(10,514)	(9,277)
Production taxes	(12,108)	(14,953)	(11,136)
Employee compensation	(1,690)	(1,665)	(1,882)
Total	(48,435)	(59,486)	(43,164)

(1) It Includes short-term leases and inventory turnover.

10.2. Selling expenses

	2023	2022	2021
Materials, third-party services, freight, rent and other related costs	(4,296)	(3,987)	(3,542)
Depreciation, depletion and amortization	(609)	(789)	(610)
Allowance for expected credit losses	(22)	(58)	12
Employee compensation	(111)	(97)	(89)
Total	(5,038)	(4,931)	(4,229)

10.3. General and administrative expenses

	2023	2022	2021
Employee compensation	(1,036)	(865)	(834)
Materials, third-party services, rent and other related costs	(435)	(362)	(256)
Depreciation, depletion and amortization	(123)	(105)	(86)
Total	(1,594)	(1,332)	(1,176)

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

11. Other income and expenses, net

	2023	2022	2021
Stoppages for asset maintenance and pre-operating expenses	(2,205)	(1,834)	(1,362)
Gains (losses) on decommissioning of returned/abandoned areas	(1,195)	(225)	99
Pension and medical benefits - retirees ⁽¹⁾	(1,172)	(1,015)	(1,467)
Losses with legal, administrative and arbitration proceedings	(797)	(1,362)	(740)
Profit sharing	(595)	(131)	(125)
Variable compensation programs	(416)	(547)	(469)
Compensation for the termination of vessel charter agreements ⁽²⁾	(331)	(13)	(9)
Collective bargaining agreement	(217)	-	-
Expenses with contractual fines received	(199)	(91)	(57)
Operating expenses with thermoelectric power plants	(189)	(150)	(88)
Institutional relations and cultural projects	(156)	(103)	(96)
Gains (losses) with commodities derivatives	11	(256)	(79)
Amounts recovered from Lava Jato investigation	109	96	235
Results of non-core activities	170	168	170
Ship/take or pay agreements and fines imposed to suppliers	238	105	96
Fines imposed on suppliers	239	228	163
Results from co-participation agreements in bid areas ⁽³⁾	284	4,286	631
Government grants	315	471	154
Early termination and changes to cash flow estimates of leases	415	629	545
Reimbursements from E&P partnership operations	571	683	485
Results on disposal/write-offs of assets	1,295	1,144	1,941
Others	(206)	(261)	626
Total	(4,031)	1,822	653

(1) In 2022, this 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 pension plans.

(2) It includes, in 2023, expenses with compensation for the termination of a vessel charter agreement in the amount of US\$ 317.

(3) In 2022, it mainly refers to income with the results of the co-participation agreements related to the transfer of rights surplus of Sépia and Atapu fields. In 2021, it refers to the agreement of the Búzios field.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

12. Net finance income (expense)

	2023	2022	2021
Finance income	2,169	1,832	821
Income from investments and marketable securities (Government Bonds)	1,657	1,159	315
Other finance income	512	673	506
Finance expenses	(3,922)	(3,500)	(5,150)
Interest on finance debt	(2,264)	(2,363)	(2,870)
Unwinding of discount on lease liability	(1,785)	(1,340)	(1,220)
Discount and premium on repurchase of debt securities	(4)	(121)	(1,102)
Capitalized borrowing costs	1,290	1,032	976
Unwinding of discount on the provision for decommissioning costs	(857)	(519)	(761)
Other finance expenses	(302)	(189)	(173)
Foreign exchange gains (losses) and indexation charges	(580)	(2,172)	(6,637)
Foreign exchange gains (losses) ⁽¹⁾	2,268	1,022	(2,737)
Reclassification of hedge accounting to the Statement of Income ⁽¹⁾	(3,763)	(4,871)	(4,585)
Indexation to the Selic interest rate of anticipated dividends and dividends payable ⁽²⁾	(299)	994	108
Legal agreement with Eletrobras - compulsory loans ⁽³⁾	236	-	-
Recoverable taxes inflation indexation income	204	86	518
Other foreign exchange gains and indexation charges, net	774	597	59
Total	(2,333)	(3,840)	(10,966)

(1) For more information, see notes 35.2a and 35.2c.

(2) In 2023, it refers to the income on the indexation to the Selic interest rate of paid anticipated dividends, in the amount of US\$ 215 (US\$ 1,293 in 2022 and US\$ 121 in 2021), and to the expense on the indexation to the Selic interest rate on dividends payable, in the amount of US\$ 514 (US\$ 299 in 2022 and US\$ 13 in 2021).

(3) For more information, see note 19.6.

13. Information by operating segment

On November 23, 2023, the Board of Directors approved, in the context of the Strategic Plan 2024-2028, a new approach in relation to capital expenditures that will be made by the Company, changing the vision of the segment from "Gas & Power" to "Gas and Low Carbon Energies", in addition to new strategic business drivers for:

- Biofuels: previously presented in Corporate and other businesses, they are now integrated in the Gas and Low Carbon Energies (G&LCE) segment;
- Fertilizers: previously presented in Gas & Power, they are now integrated in the Refining, Transportation and Marketing segment.

As of December 31, 2023, the presentation of information by operation segment reflects the updated management model used by the Board of Executive Officers (Chief Operating Decision Maker - CODM) to make decisions regarding resource allocation and performance evaluation.

In this context, the information by segment for the years 2022 and 2021 were not reclassified for comparability purposes due to the fact that the total of assets and statement of income balances involved are immaterial.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

13.1. Net income by operating segment

Consolidated statement of income by operating segment

						2023
	Exploration and Production (E&P)	Refining, Transportation & Marketing (RT&M)	Gas and Low Carbon Energies (G&LCE)	Corporate and other businesses	Eliminations	Total
Sales revenues	66,880	94,868	11,109	365	(70,813)	102,409
Intersegments	66,113	1,404	3,285	11	(70,813)	-
Third parties	767	93,464	7,824	354	-	102,409
Cost of sales	(27,239)	(85,699)	(5,685)	(370)	70,558	(48,435)
Gross profit (loss)	39,641	9,169	5,424	(5)	(255)	53,974
Income (expenses)	(5,615)	(4,086)	(3,384)	(2,857)	1	(15,941)
Selling expenses	(12)	(2,156)	(2,838)	(33)	1	(5,038)
General and administrative expenses	(74)	(327)	(80)	(1,113)	-	(1,594)
Exploration costs	(982)	-	-	-	-	(982)
Research and development expenses	(569)	(16)	(3)	(138)	-	(726)
Other taxes	(454)	(27)	(49)	(360)	-	(890)
Impairment (losses) reversals, net	(2,105)	(524)	(81)	30	-	(2,680)
Other income and expenses, net	(1,419)	(1,036)	(333)	(1,243)	-	(4,031)
Income (loss) before net finance income (expense), results of equity-accounted investments and income taxes	34,026	5,083	2,040	(2,862)	(254)	38,033
Net finance income (expense)	-	-	-	(2,333)	-	(2,333)
Results of equity-accounted investments	(7)	(318)	10	11	-	(304)
Net income / (loss) before income taxes	34,019	4,765	2,050	(5,184)	(254)	35,396
Income taxes	(11,571)	(1,729)	(693)	3,506	86	(10,401)
Net income (loss) for the year	22,448	3,036	1,357	(1,678)	(168)	24,995
Attributable to:						
Shareholders of Petrobras	22,453	3,036	1,286	(1,723)	(168)	24,884
Non-controlling interests	(5)	-	71	45	-	111

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

	2022					
	Exploration and Production (E&P)	Refining, Transportation & Marketing (RT&M)	Gas and Low Carbon Energies (G&LCE)	Corporate and other businesses	Eliminations	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 (loss)	47,425	14,377	4,550	(11)	(1,353)	64,988
Income (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, net	(1,218)	(97)	1	(1)	-	(1,315)
Other income and expenses, net	3,837	(882)	124	(1,257)	-	1,822
Income (loss) before net finance income (expense), results of equity-accounted investments and income taxes	48,332	11,245	1,585	(2,682)	(1,366)	57,114
Net finance expense	-	-	-	(3,840)	-	(3,840)
Results of equity-accounted investments	170	3	83	(5)	-	251
Net 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) for the year	32,069	7,426	1,128	(2,968)	(900)	36,755
Attributable to:						
Shareholders of Petrobras	32,073	7,426	1,038	(3,014)	(900)	36,623
Non-controlling interests	(4)	-	90	46	-	132

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

						2021
	Exploration and Production (E&P)	Refining, Transportation & Marketing (RT&M)	Gas and Low Carbon Energies (G&LCE)	Corporate and other businesses	Eliminations	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 (loss)	31,911	8,904	2,557	1	(2,571)	40,802
Income (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, net	3,107	289	(208)	2	-	3,190
Other income and expenses, net	1,579	(177)	122	(871)	-	653
Income (loss) before net finance income (expense), results of equity-accounted investments and income taxes	35,151	7,099	(333)	(1,740)	(2,593)	37,584
Net finance expense	-	-	-	(10,966)	-	(10,966)
Results of equity-accounted investments	119	941	98	449	-	1,607
Net 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) for the year	23,321	5,625	(122)	(7,128)	(1,710)	19,986
Attributable to:						
Shareholders of Petrobras	23,324	5,625	(219)	(7,145)	(1,710)	19,875
Non-controlling interests	(3)	-	97	17	-	111

The amount of depreciation, depletion and amortization by segment is set forth as follows:

	Exploration and Production (E&P)	Refining, Transportation & Marketing (RT&M)	Gas and Low Carbon Energies (G&LCE)	Corporate and other businesses	Total
2023	10,230	2,410	525	115	13,280
2022	10,415	2,248	448	107	13,218
2021	9,005	2,167	430	93	11,695

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

13.2. Assets by operating segment

	Exploration and Production (E&P)	Refining, Transportation & Marketing (RT&M)	Gas and Low Carbon Energies (G&LCE)	Corporate and other business	Elimina- tions	Total
Consolidated assets by operating segment - 12.31.2023						
Current assets	2,804	11,002	370	23,547	(5,278)	32,445
Non-current assets	136,064	23,800	6,406	18,352	-	184,622
Long-term receivables	9,028	2,068	83	15,619	-	26,798
Investments	344	811	145	58	-	1,358
Property, plant and equipment	124,254	20,786	6,101	2,283	-	153,424
Operating assets	108,405	18,128	3,605	1,770	-	131,908
Under construction	15,849	2,658	2,496	513	-	21,516
Intangible assets	2,438	135	77	392	-	3,042
Total Assets	138,868	34,802	6,776	41,899	(5,278)	217,067

Consolidated assets by operating segment - 12.31.2022						
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
Under construction	9,788	2,645	2,043	362	-	14,838
Intangible assets	2,505	112	75	294	-	2,986
Total Assets	116,334	34,431	7,584	34,106	(5,264)	187,191

Accounting policy for operating segments

The information related to the Company's operating segments is prepared based on available financial information directly attributable to each segment, or items that can be allocated to each segment on a reasonable basis. This information is presented by business activity, as used by the Company's Board of Executive Officers (Chief Operating Decision Maker – CODM) in the decision-making process of resource allocation and performance evaluation.

The measurement of segment results includes transactions carried out with third parties, including associates and joint ventures, as well as transactions between operating segments. Transfers between operating segments are recognized at internal transfer prices derived from methodologies that considers market parameters and are eliminated only to provide reconciliations to the consolidated financial statements.

The Company's business segments disclosed separately are:

Exploration and Production (E&P): this segment covers the activities of exploration, development and production of crude oil, NGL (natural gas liquid) and natural gas in Brazil and abroad, for the primary purpose of supplying its domestic refineries. The E&P segment also operates through partnerships with other companies and includes holding interest in foreign entities operating in this segment.

As an energy Company with a focus on oil and gas, intersegment sales revenue refers mainly to oil transfers to the Refining, Transportation and Marketing segment, aiming to supply the Company's refineries and meet the domestic demand for oil products. These transactions are measured by internal transfer prices based on international oil prices and their respective exchange rate impacts, taking into account the specific characteristics of the transferred oil stream.

In addition, the E&P segment revenues include transfers of natural gas to the natural gas processing plants within Gas and Low Carbon Energies segment. These transactions are measured at internal transfer prices based on the international prices of this commodity.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Revenue from sales to third parties mainly reflects services rendered relating to E&P activities, sales of the E&P's natural gas processing plants, as well as the oil and natural gas operations carried out by subsidiaries abroad.

Refining, Transportation and Marketing (RT&M): this segment covers the refining, logistics, transport, acquisition and exports of crude oil, as well as trading of oil products, in Brazil and abroad. This segment also includes the petrochemical operations (which comprehends holding interests in petrochemical companies in Brazil), and fertilizer production.

This segment carries out the acquisition of crude oil from the E&P segment, imports oil for refinery slate, and acquires oil products in international markets taking advantage of the existing price differentials between the cost of processing domestic oil and that of importing oil products. This segment also performs the acquisition of natural gas from the G&LCE segment.

Intersegment revenues primarily reflect the sale of oil products to the distribution business at market prices and the operations for the G&LCE and E&P segments at internal transfer price.

Revenues from sales to third parties primarily reflect the trading of oil products in Brazil and the export and trade of oil and oil products by foreign subsidiaries.

Gas and Low Carbon Energies (G&LCE): this segment covers the activities of logistic and trading of natural gas and electricity, the transportation and trading of liquefied natural gas (LNG), the generation of electricity by means of thermoelectric power plants, as well as natural gas processing. It also includes renewable energy businesses, low carbon services (carbon capture, utilization and storage) and the production of biodiesel and its co-products.

Intersegment revenues primarily reflect the transfers of natural gas processed, liquefied petroleum gas (LPG) and NGL to the RT&M segment. These transactions are measured at internal transfer prices.

This segment purchases national natural gas from the E&P segment, from partners and third parties, imports natural gas from Bolivia and LNG to meet national demand.

Revenues from sales to third parties primarily reflect natural gas processed to distributors and to free consumers, as well as generation and trading of electricity.

Corporate and other businesses: comprise items that cannot be attributed to business segments, including those with corporate characteristics, in addition to distribution business. Corporate items mainly include those related to corporate financial management, trade and other receivables, allowance for credit losses, gains (losses) with derivatives (except those with commodity derivatives included in their respective segments), corporate overhead and other expenses, including actuarial expenses related to pension and health care plans for beneficiaries. Other businesses include the distribution of oil products abroad (South America). In 2021, the results of other businesses included the equity interest in the associate Vibra Energia, formerly Petrobras Distribuidora, until the date of sale of the remaining interest in this associate, which took place in July 2021.

NOTES TO THE FINANCIAL STATEMENTS**PETROBRAS***(Expressed in millions of US Dollars, unless otherwise indicated)***14. Trade and other receivables****14.1. Trade and other receivables**

	12.31.2023	12.31.2022
Receivables from contracts with customers		
Third parties	6,038	5,210
Related parties		
Investees (note 36.1)	140	93
Subtotal	6,178	5,303
Other trade receivables		
Third parties		
Receivables from divestments and Transfer of Rights Agreement	2,162	1,922
Lease receivables	352	394
Other receivables	627	765
Related parties		
Petroleum and alcohol accounts - receivables from Brazilian Federal Government	278	602
Subtotal	3,419	3,683
Total trade and other receivables, before ECL	9,597	8,986
Expected credit losses (ECL) - Third parties	(1,613)	(1,533)
Expected credit losses (ECL) - Related parties	(2)	(3)
Total trade and other receivables	7,982	7,450
Current	6,135	5,010
Non-current	1,847	2,440

Trade and other receivables are generally classified as measured at amortized cost, except for receivables with final prices linked to changes in commodity price after their transfer of control, which are classified as measured at fair value through profit or loss, amounting to US\$ 503 as of December 31, 2023 (US\$ 470 as of December 31, 2022).

The balance of receivables from divestments is mainly related to the Earn Out of the Atapu and Sépia fields, totaling US\$ 611 (US\$ 693 in 2022), from the sale of the Roncador field for US\$ 360 (US\$ 393 in 2022), the Carmópolis group of fields for US\$ 296 (US\$ 275 in 2022), and the Potiguar group of fields for US\$ 265.

On September 8, 2023, the Company received US\$ 362, net of withholding income taxes, relating to the first installment of Petroleum and Alcohol Accounts. The second and final installment in the amount of US\$ 278 is still in a judicial account and awaits court clearance to work as a guarantee in a tax enforcement proceeding in the 11th Execution Court.

In 2023, the average term for trade receivables from third parties in the domestic market is approximately 2 days (same term in 2022) for the sale of derivatives and 20 to 27 days for the sale of crude oil (same term as in 2022). Fuel oil exports have an average receipt term between 11 and 14 days, while oil exports have a term between 8 and 12 days (in 2022, exports have average terms ranging from 12 days to 26 days for fuel oil and from 7 to 16 days for oil).

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

14.2. Aging of trade and other receivables – third parties

		12.31.2023		12.31.2022
	Trade and other receivables	Expected credit losses	Trade and other receivables	Expected credit losses
Current	6,948	(34)	6,474	(39)
Overdue:				
1-90 days ⁽¹⁾	472	(43)	189	(48)
91-180 days	19	(10)	30	(27)
181-365 days	63	(57)	63	(51)
More than 365 days	1,677	(1,469)	1,535	(1,368)
Total	9,179	(1,613)	8,291	(1,533)

(1) On January 10, 2024, Petrobras received US\$ 298 from Carmo Energy as the last installment relating to the sale of the Carmópolis cluster, due on December 20, 2023.

14.3. Changes in provision for expected credit losses – third parties and related parties

	31.12.2023	31.12.2022
Opening balance	1,536	1,448
Additions	170	136
Write-offs	(66)	(21)
Reversals	(94)	(81)
Translation adjustment	69	54
Closing balance	1,615	1,536
Current	285	245
Non-current	1,330	1,291

Accounting policy for trade and other receivables

Trade and other receivables are generally classified at amortized cost, except for certain receivables classified at fair value through profit or loss, whose cash flows are distinct from the receipt of principal and interest, including receivables with final prices linked to changes in commodity price after their transfer of control.

When the Company is the lessor in a finance lease, a receivable is recognized at the amount of the net investment in the lease, consisting of the lease payments receivable and any unguaranteed residual value accruing to the Company, discounted at the interest rate implicit in the lease.

The Company measures expected credit losses (ECL) for short-term trade receivables using a provision matrix which is based on historical observed default rates adjusted by current and forward-looking information when applicable and available without undue cost or effort.

ECL is the weighted average of historical credit losses with the respective default risks, which may occur according to the weightings. The credit loss on a financial asset is measured by the difference between all contractual cash flows due to the Company and all cash flows the Company expects to receive, discounted at the original effective interest rate.

The Company measures the allowance for ECL of other trade receivables based on their 12-month expected credit losses unless their credit risk increases significantly since their initial recognition, in which case the allowance is based on their lifetime ECL.

When determining whether there has been a significant increase in credit risk, the Company compares the risk of default on initial recognition and at the reporting date.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Regardless of the assessment of significant increase in credit risk, a delinquency period of 30 days past due triggers the definition of significant increase in credit risk on a financial asset, unless otherwise demonstrated by reasonable and supportable information.

The Company assumes that the credit risk on the trade receivable has not increased significantly since initial recognition if the receivable is considered to have low credit risk at the reporting date. Low credit risk is determined based on external credit ratings or internal methodologies.

In the absence of controversy or other issues that may result in the suspension of collection, the Company assumes that a default occurs whenever the counterparty does not comply with the legal obligation to pay its debts when due or, depending on the instrument, when it is at least 90 days past due.

15. Inventories

	12.31.2023	12.31.2022
Crude oil	3,375	3,738
Oil products	2,196	3,278
Intermediate products	635	587
Natural gas and Liquefied Natural Gas (LNG)	78	135
Biofuels	13	14
Fertilizers	1	4
Total products	6,298	7,756
Materials, supplies and others	1,383	1,023
Total	7,681	8,779

Crude oil and LNG inventories can be traded or used for production of oil products.

Intermediate products are those product streams that have been through at least one of the refining processes, but still need further treatment, processing or converting to be available for sale.

Biofuels mainly include ethanol and biodiesel inventories.

Materials, supplies and others mainly comprise production supplies and operating materials used in the operations of the Company, stated at the average purchase cost, not exceeding replacement cost.

In 2023, the Company recognized a US\$ 7 reversal of cost of sales, adjusting inventories to net realizable value (a US\$ 11 loss within cost of sales in 2022), primarily due to changes in international prices of crude oil and oil products.

At December 31, 2023, the Company had pledged crude oil and oil products volumes as collateral for the Term of Financial Commitment (TFC) related to Pension Plans PPSP-R, PPSP-R Pre-70 and PPSP-NR Pre-70 signed by Petrobras and *Fundação Petrobras de Seguridade Social* – Petros Foundation in 2008, in the estimated amount of US\$ 986.

Accounting policy for inventories

Inventories are determined by the weighted average cost method adjusted to the net realizable value when it is lower than its carrying amount.

Net realizable value is the estimated selling price of inventory in the ordinary course of business, less estimated cost of completion and estimated expenses to complete its sale, considering the purpose for which the inventories are held. Inventories with identifiable sales contracts have a net realizable value based on the contracted price, as, for example, in offshore operations (without physical tanking, with loading onto the ship and direct unloading at the customer) or auctions. Other items in inventory have a net realizable value based on general selling prices, considering the most reliable evidence available at the time of the estimate.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

The net realizable value of inventories is determined by grouping similar items with the same characteristic or purpose. Changes in sales prices after the reporting date of the financial statements are considered in the calculation of the net realizable value if they confirm the conditions existing on that reporting date.

16. Trade payables

	12.31.2023	12.31.2022
Third parties in Brazil	3,624	3,497
Third parties abroad	1,176	1,935
Related parties (note 36.1)	13	32
Total	4,813	5,464

Forfeiting

The Company has a program to encourage the development of the oil and gas production chain called “*Mais Valor*” (More Value), operated by a partner company on a 100% digital platform.

By using this platform, the suppliers who want to anticipate their receivables may launch a reverse auction, in which the winner is the financial institution which offers the lowest discount rate. The financial institution becomes the creditor of invoices advanced by the supplier, and Petrobras pays the invoices on the same date and under the conditions originally agreed with the supplier.

Invoices are advanced in the “*Mais Valor*” program exclusively at the discretion of the suppliers and do not change the terms, prices and commercial conditions contracted by Petrobras with such suppliers, as well as it does not add financial charges to the Company, therefore, the classification is maintained as Trade payables in Statements of Cash Flows (Cash flows from operating activities).

As of December 31, 2023, the balance advanced by suppliers, within the scope of the program, is US\$ 110 (US\$ 130 as of December 31, 2022) and has a payment term from 7 to 92 days and a weighted average term of 57 days (24 days as of December 31, 2022), after the contracted commercial conditions have been met.

17. Taxes

17.1. Income taxes

	Current assets		Current liabilities		Non-current liabilities	
	12.31.2023	12.31.2022	12.31.2023	12.31.2022	12.31.2023	12.31.2022
Taxes in Brazil						
Income taxes	199	160	989	2,505	-	-
Income taxes - Tax settlement programs	-	-	58	50	299	302
	199	160	1,047	2,555	299	302
Taxes abroad	19	5	253	328	-	-
Total	218	165	1,300	2,883	299	302

Income taxes are calculated based on a 15% rate plus additional 10% on the taxable income for the IRPJ, and 9% on taxable income for the CSLL, considering the offset of tax loss carryforwards and negative basis of the CSLL, limited to 30% of the taxable income of the year. As of the 2015, due to the release of Law No. 12,973/2014, the net income obtained abroad by a direct or indirect subsidiary, or by an associated company, adjusted by dividends and by the result of equity accounted investments, multiplied by the income taxes rates existing in Brazil, comprise the income taxes expenses.

Income taxes assets refer mainly to tax credits resulting from the monthly process for estimation and payment of income taxes, in addition to the negative balance of IRPJ and CSLL related to 2017, 2018, 2019 and 2021. Income taxes within current liabilities refer to the current portion of IRPJ and CSLL to be paid.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Tax settlement programs amounts relate mainly to a notice of deficiency issued by the Brazilian Federal Revenue Service due to the treatment of expenses arising from the Terms of Financial Commitment (TFC) as deductible in determining taxable profit for the calculation of income taxes. The payment term is 145 monthly installments, indexed by the Selic interest rate, as of January 2018.

Reconciliation between statutory income tax rate and effective income tax rate

The following table provides the reconciliation of Brazilian statutory tax rate to the Company's effective rate on income before income taxes:

	2023	2022	2021
Net income before income taxes	35,396	53,525	28,225
Nominal income taxes computed based on Brazilian statutory corporate tax rates (34%)	(12,036)	(18,197)	(9,597)
Adjustments to arrive at the effective tax rate:			
Tax benefits from the deduction of interest on capital distributions	1,329	1,234	843
Different jurisdictional tax rates for companies abroad	579	822	296
Brazilian income taxes on income of companies incorporated outside Brazil ⁽¹⁾	(530)	(763)	(546)
Tax incentives	303	187	50
Tax loss carryforwards (unrecognized tax losses)	23	221	59
Non-taxable income (non-deductible expenses), net ⁽²⁾	322	(15)	234
Post-employment benefits	(348)	(394)	(802)
Results of equity-accounted investments in Brazil and abroad	(88)	87	318
Non-incidence of income taxes on indexation (SELIC interest rate) of undue paid taxes	54	33	903
Others	(9)	15	3
Income taxes	(10,401)	(16,770)	(8,239)
Deferred income taxes	(876)	(906)	(4,058)
Current income taxes	(9,525)	(15,864)	(4,181)
Effective tax rate of income taxes	29.4%	31.3%	(29.2)%

(1) It relates to Brazilian income taxes on earnings of offshore investees, as established by Law No. 12,973/2014.

(2) It includes provisions for legal proceedings and payment of an administrative contribution over the TFC Pre-70 for the administrative funding of the PPSP-R pre-70 and PPSP-NE pre-70 plans.

Deferred income taxes - non-current

The changes in the deferred income taxes are presented as follows:

	2023	2022
Opening balance	(5,918)	(625)
Recognized in the statement of income for the period	(876)	(906)
Recognized in shareholders' equity	(2,559)	(3,220)
Translation adjustment	(602)	(45)
Use of tax loss carryforwards	-	(1,123)
Others	10	1
Closing balance	(9,945)	(5,918)

The composition of deferred tax assets and liabilities is set out in the following table:

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Nature	Realization basis	12.31.2023	12.31.2022
PP&E - Exploration and decommissioning costs	Depreciation, amortization and write-offs of assets	(6,296)	(6,587)
	Amortization, impairment reversals and write-offs of assets	4,203	3,602
PP&E - Impairment			
PP&E - Right-of-use assets	Depreciation, amortization and write-offs of assets	(9,369)	(5,611)
PP&E - depreciation methods and capitalized borrowing	Depreciation, amortization and write-offs of assets	(18,784)	(15,438)
Loans, trade and other receivables / payables and financing	Payments, receipts and considerations	(2,479)	810
Leasings	Appropriation of the considerations	9,240	6,045
Provision for decommissioning costs	Payments and use of provisions	8,010	6,745
Provision for legal proceedings	Payments and use of provisions	954	885
Tax loss carryforwards	Taxable income compensation	1,140	914
Inventories	Sales, write-downs and losses	411	333
Employee Benefits	Payments and use of provisions	2,036	1,518
Others		989	866
Total		(9,945)	(5,918)
Deferred tax assets		965	832
Deferred tax liabilities		(10,910)	(6,750)

Timing of reversal of deferred income taxes

Deferred tax assets were recognized based on projections of taxable profit in future periods supported by the assumptions within the Company's Strategic Plan 2024-2028, whose pillars are the preservation of financial strength, financial and environment resilience of projects, and focus on value creation.

Management considers that the deferred tax assets will be realized to the extent the deferred tax liabilities are reversed and expected taxable events occur based on its Strategic Plan 2024-2028.

The estimated schedule of recovery/reversal of net deferred tax assets (liabilities) as of December 31, 2023 is set out in the following table:

	Assets	Liabilities
2024	138	(1,646)
2025	58	2,540
2026	61	402
2027	73	744
2028	71	(255)
2029 and thereafter	564	9,125
Recognized deferred tax assets	965	10,910

In addition, the Company has tax loss carryforwards arising from offshore subsidiaries, for which no deferred taxes were recognized.

	12.31.2023	Assets 12.31.2022
Brazil	368	-
Abroad	780	987
Unrecognized deferred tax assets	1,148	987

These unrecognized deferred tax assets arise mainly from subsidiaries operating in the oil and gas exploration and production and refining activities in the United States. In 2023, the Company recognized US\$ 26 of previously unrecognized deferred tax assets due to a reassessment of their recoverability related to expected future taxable income arising from business operations.

An aging of the unrecognized deferred tax assets from companies abroad is set out below:

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

	2030 - 2032	2033 - 2035	2036 - 2038	Undefined expiration	Total
Unrecognized deferred tax assets	285	299	141	55	780

Uncertain tax treatments on income taxes

As of December 31, 2023, the Company had US\$ 6,982 (US\$ 6,043 as of December 31, 2022) of uncertain tax treatments on income taxes, related to judicial and administrative proceedings (see note 19.3). Additionally, as of December 31, 2023, the Company has other positions that can be considered as uncertain tax treatments on income taxes amounting to US\$ 4,063 (US\$ 30,020 as of December 31, 2022), given the possibility of different interpretation by the tax authority. These uncertain tax treatments are supported by technical assessments and tax risk assessment methodology. Therefore, Petrobras believes that such positions are likely to be accepted by the tax authorities (including judicial courts).

Uncertain treatments on Corporate Income Tax (CIT)

In 2023, the Company received additional charges from the Dutch tax authority, due to a final assessment on the calculation of the Corporate Income Tax (CIT) of subsidiaries in the Netherlands from 2018 to 2020, arising from the valuation for tax purposes of platforms and equipment nationalized under the Repetro tax regime, in the amount of US\$ 595, updated by applicable interest rate.

Tax treatments of certain subsidiaries from 2020 to 2022 have not yet been assessed by this tax authority. Any charges by the Dutch tax authority for those years, on a similar basis to the periods already assessed, could reach the amount of US\$ 242. Thus, as of December 31, 2023, the total amount of these uncertain tax treatments is US\$ 837, updated by applicable interest rate.

The Company continues to defend its position but understands that it is not probable that the tax authority will fully accept this tax treatment. Thus, a liability was recognized with a corresponding effect in income taxes within the statement of income for the period, by means of the expected value method, constituted by the sum of amounts weighted by the probability of loss.

Accounting policy for income taxes

The Company calculates income taxes in accordance with current legislation and applying the rates in effect at the end of reporting period. Income taxes expense for the period are recognized in the statement of income of the period, except when the tax arises from a transaction or event which is recognized directly in equity.

a) Current income taxes

Current income taxes are offset when they relate to income taxes levied on the same taxable entity and by the same tax authority, when there is a legal right and the entity has the intention to set off current tax assets and current tax liabilities, simultaneously.

Uncertain tax treatments are periodically assessed, considering the probability of acceptance by the tax authority.

b) Deferred income taxes

Deferred income taxes are generally recognized on temporary differences between the tax base of an asset or liability and its carrying amount. They are measured at the tax rates that are provided for in the specific legislation to apply to the period when the asset is realized or the liability is settled.

Deferred tax assets and liabilities are recognized for all deductible temporary differences and carryforward of unused tax losses or credits to the extent that it is probable that taxable profit will be available against which those deductible temporary differences can be utilized. When there are insufficient taxable temporary differences relating

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

to the same taxation authority and the same taxable entity, a deferred tax is recognized to the extent that it is probable that the entity will have sufficient taxable profit in future periods, based on projections approved by management and supported by the Company's Strategic Plan.

Deferred tax assets and liabilities are offset when they relate to income taxes levied on the same taxable entity, when a legally enforceable right to set off current tax assets and current tax liabilities exists and when the deferred tax assets and deferred tax liabilities relate to taxes levied by the same tax authority on the same taxable entity.

17.2. Other taxes

	Current assets		Non-current assets		Current liabilities		Non-current liabilities ⁽¹⁾	
	12.31.2023	12.31.2022	12.31.2023	12.31.2022	12.31.2023	12.31.2022	12.31.2023	12.31.2022
Taxes in Brazil								
Current / Non-current ICMS (VAT)	592	716	607	473	1,032	699	-	-
Current / Non-current PIS and COFINS	304	378	2,876	2,362	265	28	141	89
Claim to recover PIS and COFINS	-	-	733	657	-	-	-	-
CIDE	-	1	-	-	-	5	-	-
Production taxes	-	-	-	-	2,094	1,996	145	114
Withholding income taxes	-	-	-	-	272	149	-	-
Others	58	40	290	273	443	152	90	90
Total in Brazil	954	1,135	4,506	3,765	4,106	3,029	376	293
Taxes abroad	6	7	10	13	60	19	-	-
Total	960	1,142	4,516	3,778	4,166	3,048	376	293

(1) Other non-current taxes are classified within other non-current liabilities in the statement of financial position.

Current and non-current ICMS (VAT) credits arise from requests for extemporaneous and overpaid tax, offset in accordance with the legislation of each state. They also arise on the acquisition of assets for property, plant and equipment, which are offset in a straight line over 4 years.

Current and non-current PIS/COFINS credits mainly refer to the acquisition of goods and services for assets under construction, since their use is permitted only after these assets enter into production, as well as to extemporaneous tax credits.

Production taxes are financial compensation due to the Brazilian Federal Government by companies that explore and produce oil and natural gas in Brazilian territory. They are composed of royalties, special participations, signature bonuses and payment for retention or occupation of area. They include the amounts referring to an agreement with the ANP to close a legal proceeding involving the recalculation of royalties and special participations relating to oil production in the Jubarte field, from August 2009 to February 2011 and from December 2012 to February 2015.

From March 1 to June 30, 2023, Export Tax was charged on the exports of crude oil, for which the Company recognized US\$ 285 as other taxes within the statement of income.

Claim to recover PIS and COFINS

The Company filed four civil lawsuits against the Brazilian Federal Government, claiming to recover PIS and COFINS paid over finance income and foreign exchange variation gains, from February 1999 to January 2004.

The court granted to the Company, in all the lawsuits, the definitive right to recover those taxes. Regarding two actions relating to Petroquisa, a former subsidiary that had been incorporated by the Company, the corresponding amounts were paid by the Brazilian Federal Government in 2023. In relation to the two remaining cases, both had rulings by the court favorable to the Company and, in one of them, the Brazilian Federal Government has already expressed its agreement and there was a decision in favor of the Company, still subject to appeal. Regarding the other lawsuit, there is no court decision at this point.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Pillar Two - Global Minimum Top-up Tax

In December 2021, the Organization for Economic Cooperation and Development (OECD) released the Pillar Two model rules to reform international corporate taxation that aim to ensure that multinationals with revenues exceeding €750 million pay a minimum top up tax on profits of its subsidiaries that are taxed at an effective tax rate of less than 15% per jurisdiction (Global Minimum Top-up Tax).

If the Parent Entity is located in a jurisdiction that has not implemented the top-up tax, this tax will be levied on the next entity in the organizational structure located in a jurisdiction that has implemented it, following a top-down approach. On December 19, 2023, the Netherlands enacted the Pillar Two income taxes legislation effective on January 1, 2024.

Petrobras is in the process of assessing if there is any exposure arising from Pillar Two legislation. Based on a preliminary assessment of the new rules, Petrobras does not expect a material exposure. Considering that the information for a comprehensive analysis is still being evaluated and due to the complexity of the new legislation, Petrobras expects to complete the assessment during 2024.

Petrobras applied the temporary exemption described in the amendments to IAS 12, issued by the IASB in May 2023, on the accounting for income taxes. Accordingly, the Company neither recognizes nor discloses information about deferred tax assets or liabilities related to the Pillar Two.

18. Employee benefits

Employee benefits are all forms of consideration given by an entity in exchange for service rendered by employees or for the termination of employment. It also includes expenses with directors and management. Such benefits include salaries, post-employment benefits, termination benefits and other benefits.

	12.31.2023	12.31.2022
Liabilities		
Short-term employee benefits	1,986	1,452
Termination benefits	143	192
Post-employment benefits	16,382	11,246
Total	18,511	12,890
Current	2,932	2,215
Non-current	15,579	10,675

18.1. Short-term employee benefits

	12.31.2023	12.31.2022
Variable compensation programs	464	489
Accrued vacation	574	505
Salaries and related charges and other provisions	343	327
Profit sharing	605	131
Total	1,986	1,452
Current	1,944	1,421
Non-current ⁽¹⁾	42	31

(1) Remaining balance relating to the four-year deferral of 40% of the PPP portion of executive officers and the upper management.

The Company recognized the following amounts in the statement of income:

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Expenses recognized in the statement of income	2023	2022	2021
Salaries, accrued vacations and related charges	(3,478)	(3,006)	(2,665)
Variable compensation programs ⁽¹⁾	(416)	(547)	(469)
Profit sharing ⁽¹⁾	(595)	(131)	(125)
Management fees and charges	(14)	(14)	(15)
Total	(4,503)	(3,698)	(3,274)

(1) It includes adjustments to provisions related to previous years.

18.1.1. Variable compensation programs

Performance award programs (*Programa de Prêmio por Desempenho - PPP* and *Programa de Prêmio por Performance - PRD*)

In 2023, the Company paid US\$ 562 in relation to the PPP for 2022, since the metrics relating to the Company's and individual performances were achieved in 2022.

For 2023, Petrobras revised its variable compensation program, implementing the PRD in replacement of the PPP. In the new model, the PRD is aimed at employees with and without managerial function, as a complementary program to the Profit Sharing (PLR).

The PRD intends to recognize the effort and individual performance of each employee to achieve the Company's results. The amounts to be paid to each employee continues to be defined by the achievement of the key metrics (which currently are Delta Valor Petrobras - VALOR, Greenhouse Gas Emissions Target Achievement Indicator - IAGEE, and Oil Leak Volume Indicator - VAZO) and of the individual goals (performance management score for all employees, with exception of executive managers, for whom the scorecard of their respective departments will be considered).

The PRD establishes that, in order to trigger this payment, it is necessary to have a declaration and payment of distribution to shareholders approved by the Company's Board of Directors, as well as net income for the year.

The total amount is limited to a percentage of the net income or the Adjusted EBITDA for the year (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; results on disposal/write-offs of assets; and results from co-participation agreements in bid areas). For 2023, the PRD is limited to 5% of the adjusted EBITDA.

In 2023, the Company provisioned US\$ 415 relating to the PRD (US\$ 553 for 2022), recorded in other income and expenses, including variable compensation programs from consolidated companies.

Profit Sharing (*Participações nos lucros ou resultados - PLR*)

In 2023, the Company settled US\$ 134 related to the PLR 2022, considering the agreement for the PLR 2021 and 2022, approved by the Secretariat of Management and Governance of State-owned Companies (SEST), which provided that only employees without managerial functions would be entitled to receive profit sharing with individual limits according to their remuneration.

For 2023, considering the change implemented in the Company's variable compensation programs, the PLR will also include employees with managerial functions, and it becomes the main variable compensation program of the Company.

For the payment of PLR relating to 2023, the Company needs to meet the following triggers: declaration and payment of distribution to shareholders approved by the Company's Board of Directors, net income for the year, as well as achieving at least 80% of the weighted average of a set of proposed indicators.

For 2023, the total amount is limited to the lower of 6.25% of the net income and to 25% of the distribution to shareholders.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

In 2023, the Company provisioned US\$ 591 referring to PLR for 2023 (US\$ 132 for 2022), recorded in other income and expenses.

Accounting policy for variable compensation programs (PRD, PPP and PLR)

The provisions for variable compensation programs are recognized on an accrual basis, during the periods in which the employees provided services. They represent the estimates of future disbursements arising from past events, based on the criteria and metrics of the PRD, PPP and PLR, provided that the requirements for activating these programs are met and that the obligation can be reliably estimated.

18.2. Termination benefits

Termination benefits are employee benefits provided in exchange for the termination of labor contract as a result of either: i) the Company's decision to terminate the labor contract before the employee's normal retirement date; or ii) an employee's decision to accept an offer of benefits in exchange for the termination of their employment.

Voluntary severance programs

The Company has voluntary severance programs specific for employees of the corporate segment and of divested assets, which provide for the same legal and indemnity advantages.

In 2023, 481 employees retired through these programs, while there were 55 enrollments and 179 withdrawals. Changes to the provisions for termination benefits are presented as follows:

	2023	2022
Opening Balance	192	349
Effects in the statement of income	(10)	16
Enrollments	6	18
Revision of provisions	(16)	(2)
Effects in cash and cash equivalents	(53)	(199)
Settlements in the period	(53)	(199)
Translation adjustment	14	26
Closing Balance	143	192
Current	81	75
Non-current	62	117

The provision for expenses is recognized as employees enroll to the programs.

The Company disburse the severance payments in two installments, one at the time of termination and the remainder one year after the termination.

As of December 31, 2023, from the balance of US\$ 143, US\$ 26 refers to the second installment of 494 retired employees and US\$ 117 refers to 1,046 employees enrolled in voluntary severance programs with expected termination by September 2025.

18.3. Post-employment benefits

The Company maintains a health care plan for its employees in Brazil (active and retiree) and their dependents (Saúde Petrobras - AMS), and five other major plans of post-employment benefits (collectively referred to as "pension plans").

The following table presents the balance of post-employment benefits:

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

	12.31.2023	12.31.2022
Liabilities		
Health Care Plan – Saúde Petrobras – AMS	9,662	5,813
Petros Pension Plan – Renegotiated (PPSP-R)	4,221	3,606
Petros Pension Plan – Non-renegotiated (PPSP-NR)	1,338	1,041
Petros Pension Plan – Renegotiated – Pre-70 (PPSP-R Pre 70)	519	284
Petros Pension Plan – Non-renegotiated – Pre-70 (PPSP-NR Pre 70)	461	339
Petros 2 Pension Plan (PP-2)	181	163
Total	16,382	11,246
Current	907	719
Non-current	15,475	10,527

18.3.1. Nature and risks associated with defined benefit plans

Health Care Plan

The health care plan *Saúde Petrobras – AMS* is managed and run by Petrobras Health Association (*Associação Petrobras de Saúde – APS*), a nonprofit civil association, and includes prevention and health care programs. The plan offers assistance to all employees, retirees, pensioners and eligible family members, according to the rules of the plan, and is open to new employees.

Currently sponsored by Petrobras, Transpetro, PBIO, TBG and Termobahia, this plan is primarily exposed to the risk of increase in medical costs due to inflation, new technologies, new types of coverage and an increase in the utilization of medical benefits. The Company continuously improves the quality of its technical and administrative processes, as well as the health programs offered to beneficiaries in order to mitigate such risks.

Employees, retirees and pensioners make monthly fixed contributions to cover high-risk procedures and variable contributions for the cost of medical procedures, both based on the contribution tables of the plan, which are determined based on certain parameters, such as salary and age levels. The plan also includes assistance towards the purchase of certain medicines through reimbursement or acquisition and home delivery, with co-participation of beneficiaries.

Benefits are paid by the Company based on the costs incurred by the beneficiaries. The financial participation of the Company and the beneficiaries on the expenses are provided for in the Collective Bargaining Agreement (ACT), being 60% by the Company and 40% by the participants.

As provided in clause 37, paragraph 2 of the Collective Bargaining Agreement 2023-2025, if the resolutions No. 42/2022 and No. 49/2023 of the Commission on Corporate Governance and the Administration of Corporate Holdings of the Brazilian Federal Government (*Comissão de Governança Corporativa e de Administração de Participações Societárias da União – CGPAR*) are revoked or amended, allowing adjustments in the cost-sharing of health care plans, the Company and the labor unions will meet to implement a new cost-sharing arrangement, in order to minimize the impact on the income of its beneficiaries.

Annual revision of the health care plan

At December 31, 2023, this obligation was revised using the revised actuarial assumptions, which results are shown in note 18.3.2.

Pension plans

The Company's post-retirement plans are managed by Petros Foundation (*Fundação Petrobras de Seguridade Social*), a nonprofit legal entity governed by private law with administrative and financial autonomy.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Pension plans in Brazil are regulated by the National Council for Supplementary Pension (*Conselho Nacional de Previdência Complementar – CNPC*), which establishes all guidelines and procedures to be adopted by the plans for their management and relationship with stakeholders.

Petros Foundation periodically carries out revisions of the plans and, when applicable, establishes measures aiming at maintaining the financial sustainability of the plans.

The net obligation with pension plans recorded by the Company is measured in accordance with the requirements of IFRS which has a different measurement methodology to that applicable to pension funds, regulated by the Post-Retirement Benefit Federal Council (*Conselho Nacional de Previdência Complementar – CNPC*).

On March 29, 2023, the Deliberative Council of Petros Foundation approved the financial statements of the pension plans for the year ended December 31, 2022, sponsored by the Company.

The following table below presents the reconciliation of the deficit of Petros Plan registered by Petros Foundation as of December 31, 2022 with the net actuarial liability registered by the Company at the same date (an updated reconciliation with the results of the plans as of December 31, 2023 will be disclosed in the first quarter of 2024, after the approval of Petros Foundation Deliberative Council of its financial statements for the year):

	PPSP-R (1)	PPSP-NR
Deficit registered by Petros	330	341
Ordinary and extraordinary future contributions – sponsor	4,212	1,079
Contributions related to the TFC – sponsor	691	391
Financial assumptions (interest rate and inflation), changes in fair value of plan assets and actuarial valuation method	(1,343)	(431)
Net actuarial liability recorded by the Company	3,890	1,380

(1) It includes the balance of PPSP-R pre-70 and PPSP-NR pre-70.

- Sponsor Contributions – in the calculation of the obligation, Petros considers the future cash flow of ordinary and extraordinary sponsor and participants contributions, discounted to present value, according to the CNPC criteria, while the Company only considers them as they are made.
- Financial Assumptions – the main difference is the definition of the real interest rate established by Petros, which is according to the expected profitability of the current investment portfolios and the parameters published by the CNPC, considering a moving average of recent years in setting safety limits. On the other hand, the Company determines the real interest rates through an equivalent rate that combines the maturity profile of pension and healthcare obligations with the future yield curve of long-term Brazilian Federal Government securities (“Tesouro IPCA”, formerly known as NTN).
- Changes in the fair value of plan assets – Petros measures government securities based on its curve, with a portfolio immunization strategy, while in the Company measures at market value.

The major post-retirement pension benefits sponsored by the Company are:

- . Petros Plan – Renegotiated (PPSP-R)
- . Petros Plan – Renegotiated – Pre-70 (PPSP-R Pre-70)
- . Petros Plan – Non-renegotiated (PPSP-NR)
- . Petros Plan – Non-renegotiated – Pre-70 (PPSP-NR Pre-70)
- . Petros 2 Plan (PP-2)
- . Petros 3 Plan (PP-3)

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Currently, PPSP-R, PPSP-NR, PPSP-R Pre-70, PPSP-NR Pre-70 and PP-3 are sponsored by Petrobras, and PP-2 by Petrobras, Transpetro, PBIO, TBG, Termobahia and Termomacaé.

The PPSP-R and PPSP-NR were created in 2018 as a split of Petros Plan (PPSP) originally established by the Company in July 1970. On January 1, 2020, PPSP-R Pre-70 and PPSP-NR Pre-70 were created as a split of PPSP-R and PPSP-NR, respectively.

Pension plans supplement the income of their participants during retirement, in addition to guaranteeing a pension for the beneficiaries in case of the death of a participant. The benefit consists of a monthly income supplementing the benefit granted by the Brazilian Social Security Institute.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

The following table provides other characteristics of these plans:

	PPSP-R	PPSP-R Pre-70	PPSP-NR	PPSP-NR Pre-70	PP-2	PP-3
Modality	Defined Benefit	Defined Benefit	Defined Benefit	Defined Benefit	Variable Contribution (defined benefit and defined contribution portions)	Defined Contribution
Participants of the plan	Generally covers employees and former employees who joined the company after 1970 that agreed with changes proposed by the Company in its original pension plan (P0) and amendments.	Generally covers employees and former employees hired prior to July 1, 1970, who enrolled in the P0 until January 1, 1996 and remained continuously linked to the original sponsor obtaining the condition of assisted.	Generally covers employees and former employees who joined the company after 1970 that did not agree with changes proposed by the Company in its original pension plan (P0) and amendments	Generally covers employees and former employees hired prior to July 1, 1970, who enrolled in the P0 until January 1, 1996 and remained continuously linked to the original sponsor obtaining the condition of assisted and did not agree with changes in its original pension plan (P0) and amendments.	This Plan was established in 2007, also covering employees and former employees that moved from other existing plans.	This plan was implemented in 2021, exclusive option for voluntary migration of employees and retirees from the PPSP-R and PPSP-NR plans.
New enrollments	Closed	Closed	Closed	Closed	Open	Closed
Retirement payments	Lifetime monthly payments supplementing the benefit granted by the Brazilian National Institute of Social Security.				Lifetime defined benefit monthly payments or non- defined benefit monthly payments in accordance with the participant's election.	Undefined benefit with monthly payments, in accordance with the participant election.
Other general benefits	Lump sum death benefit (insured capital) and monthly payments related to the following events: death, disability, sickness, and seclusion.					Lump sum death benefit (insured capital) and monthly payments related to the following events: death, disability, sickness, and seclusion.
Indexation of Retirement payments by the plan	Based on the Nationwide Consumer Price Index.		Based on the current index levels applicable to active employees' salaries and the indexes set out by the Brazilian National Institute of Social Security.		Lifetime monthly payments: based on the Nationwide Consumer Price Index	Undefined benefit monthly payments: based on the variation of individual account quota.
Parity contributions made by participants and the Company to the plans	It is comprised of: i) normal contributions that covers expected cost of the plans in the long term; and ii) extraordinary contributions that covers additional costs that are generally derived from actuarial deficits.	It is comprised of: normal contributions that covers expected cost of the plans in the long term. Participants are exempt from paying any extraordinary contributions in case of deficit until the settlement of the TFC.	It is comprised of: i) normal contributions that covers expected cost of the plans in the long term; and ii) extraordinary contributions that covers additional costs that are generally derived from actuarial deficits.	It is comprised of: normal contributions that covers expected cost of the plans in the long term. Participants are exempt from paying any extraordinary contributions in case of deficit until the settlement of the TFC.	It is comprised of: i) normal contributions that covers expected cost of the plans in the long term; and ii) extraordinary contributions that covers additional costs that are generally derived from actuarial deficits (these contributions are not currently being made but may occur in the future).	Regular contributions during the employment relationship, saving for the undefined benefit, accumulated in individual accounts
Terms of Financial Commitment - TFC (debt agreements) assumed by the Company to settle the deficits. Amounts to be paid to Petros Foundation (1).	Financial obligations with a principal amounting to US\$131 at 12/31/2023.	Financial obligations with a principal amounting to US\$390 at 12/31/2023.	Financial obligations settled early in 2021.	Financial obligations with a principal amounting to US\$267 at 12/31/2023.	N/A	N/A
	Annually remeasured in accordance with actuarial assumptions, with semi-annual payment of interest based on the updated balance and maturing in 2028.					

(1) This obligation is recorded in these financial statements, within actuarial liabilities.

Debt Assumption Instrument relating to Deficit Settlement Plan 2015 (PED 2015)

On October 18, 2022, the Company assumed its commitment for the payment of extraordinary sponsor's contributions in the scope of PED 2015, implemented in 2017, together with the PPSP-R and the PPSP-NR. These contributions were not previously made due to court injunctions.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

The amount owed by Petrobras is US\$ 230 (R\$ 1,114 million) and refers to amounts not charged from July 2020 to December 2021. The Company paid US\$ 44 on October 28, 2022, and the remaining balance will be paid according to the payroll in return for the collection of the portion of participants and assisted.

The effects of this plan have already been recognized in the financial statements in the years in which they were implemented.

At December 31, 2023, the balance of this instrument, recorded within actuarial liabilities, is US\$ 165 (US\$ 168 at December 31, 2022).

Deficit Settlement Plan 2021 referring to the PPSP-R plan (PED 2021)

On November 10, 2022, Petros' Foundation Deliberative Council approved a plan to settle the deficit registered by the PPSP-R in 2021. On April 1, 2023, this plan was implemented, following a favorable decision held on March 17, 2023 by the SEST.

This deficit, amounting to US\$ 1,759 (R\$ 8,515 million) as of December 31, 2023, is being settled on an equal basis between sponsors and participants (except in certain situations where it is self-sponsored by the participants) of which US\$ 829 (R\$ 4,012 million) paid by Petrobras, during the lifetime of the plan.

Deficit Settlement Plan 2022 referring to the PPSP-NR plan (PED 2022)

On December 22, 2023, the Company's Board of Directors approved a plan to settle the deficit registered by the PPSP-NR in 2022 (PED 2022), which was submitted for review by the SEST.

The PED 2022 provides for the settlement of a US\$ 298 deficit (R\$1,557 million) as of December 31, 2022, which meets the solvency needs of the plan, according to studies conducted by the Petros Foundation. This deficit, updated by the actuarial target of the plan until December 2023, amounts to US\$ 367 (R\$ 1,775 million).

According to Supplementary Laws 108/2001 and 109/2001, as well as Resolution No. 30/2018 of the CNPC, the deficit must be settled in equal parts among sponsors and participants of the PPSP-NR. Therefore, the Company will contribute with US\$ 171 (R\$ 827 million) of the deficit updated until December 2023.

Before the implementation of extraordinary collections of the PED 2022 by the Petros Foundation, scheduled to begin in April 2024, this settlement plan must receive a favorable assessment from the SEST.

The disbursement by the sponsors will decrease over the life of the plan, with an estimated additional average annual flow of US\$ 12 (R\$ 60 million) in the first 5 years.

The actuarial liability of the PPSP-NR as of December 31, 2023 reflects the effects of implementing new extraordinary contributions following the implementation of the PED 2022.

Annual revision of the pension plans

At December 31, 2023, this obligation was revised using the actuarial assumptions in force, which results are shown in note 18.3.2.

18.3.2. Net actuarial liabilities and expenses, and fair value of plans assets

a) Changes in the actuarial liabilities recognized in the statement of financial position

Net actuarial liabilities represent the obligations of the Company, net of the fair value of plan assets (when applicable), at present value.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

For information on actuarial assumptions used to determine the defined benefit obligation, see the table in Note 18.3.6.

Changes in the actuarial liabilities related to pension and healthcare plans with defined benefit characteristics is presented as follows:

					2023
	Pension Plans			Health Care Plan	Total
	PPSP-R ⁽¹⁾	PPSP-NR ⁽¹⁾	Petros 2	Saúde Petrobras-AMS	
Amounts recognized in the Statement of Financial Position					
Present value of obligations	14,941	4,806	1,357	9,662	30,766
(-) Fair value of plan assets	(10,201)	(3,007)	(1,176)	-	(14,384)
Net actuarial liability as of December 31, 2023	4,740	1,799	181	9,662	16,382
Changes in the net actuarial liability					
Balance as of January 1, 2023	3,890	1,380	163	5,813	11,246
Recognized in the Statement of Income	490	169	30	853	1,542
Current service cost	11	2	10	144	167
Net interest	479	167	20	709	1,375
Recognized in Equity - other comprehensive income	433	253	(14)	2,902	3,574
Remeasurement effects (2)	433	253	(14)	2,902	3,574
Cash effects	(385)	(115)	(12)	(415)	(927)
Contributions paid	(357)	(103)	(12)	(415)	(887)
Payments related to Term of financial commitment (TFC)	(28)	(12)	-	-	(40)
Other changes	312	112	14	509	947
Others	-	-	-	1	1
Translation Adjustment	312	112	14	508	946
Balance at December 31, 2023	4,740	1,799	181	9,662	16,382

(1) It includes the balance of PPSP-R pre-70 and PPSP-NR pre-70.

(2) It includes a complement of US\$ 109 related to 2022.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

						2022
	Pension Plans			Health Care Plan	Other plans	Total
	PPSP-R ⁽¹⁾	PPSP-NR ⁽¹⁾	Petros 2	Saúde Petrobras-AMS		
Amounts recognized in the Statement of Financial Position						
Present value of obligations	12,771	4,119	1,102	5,813	-	23,805
(-) Fair value of plan assets	(8,881)	(2,739)	(939)	-	-	(12,559)
Net actuarial liability as of December 31, 2022	3,890	1,380	163	5,813	-	11,246
Changes in the net actuarial liability						
Balance as of January 1, 2022 (2)	4,050	1,169	165	4,485	11	9,880
Recognized in the Statement of Income	457	129	33	609	-	1,228
Current service cost	10	1	13	105	-	129
Net interest	447	128	20	504	-	1,099
Recognized in Equity - other comprehensive income	420	417	(45)	791	-	1,583
Remeasurement effects recognized in other comprehensive income	420	417	(45)	791	-	1,583
Cash effects	(1,325)	(421)	-	(384)	-	(2,130)
Contributions paid	(304)	(94)	-	(384)	-	(782)
Payments related to Term of financial commitment (TFC)	(1,021)	(327)	-	-	-	(1,348)
Other changes	288	86	10	312	(11)	685
Others	-	-	-	1	(10)	(9)
Translation Adjustment	288	86	10	311	(1)	694
Balance at December 31, 2022	3,890	1,380	163	5,813	-	11,246

(1) It includes the balance of PPSP-R pre-70 and PPSP-NR pre-70.

(2) It includes the payment of US\$ 1,324 of a portion of the TFC made on February 25, 2022.

b) Changes in present value of the obligation

						2023
	Pension Plans			Health Care Plan		Total
	PPSP-R ⁽¹⁾	PPSP-NR ⁽¹⁾	Petros 2	Saúde Petrobras-AMS		
Present value of obligations at the beginning of the year	12,771	4,119	1,102	5,813		23,805
Recognized in the Statement of Income	1,559	496	141	853		3,049
Interest expense	1,548	494	131	709		2,882
Service cost	11	2	10	144		167
Recognized in Equity - other comprehensive income	737	274	73	2,902		3,986
Remeasurement: Experience (gains) / losses (2)	(318)	(107)	(94)	54		(465)
Remeasurement: (gains) / losses - demographic assumptions	929	80	(1)	127		1,135
Remeasurement: (gains) / losses - financial assumptions (2)	126	301	168	2,721		3,316
Others	(126)	(83)	41	94		(74)
Benefits paid, net of assisted contributions	(1,165)	(413)	(61)	(413)		(2,052)
Contributions paid by participants	25	6	9	-		40
Translation Adjustment	1,014	324	93	507		1,938
Present value of obligations at the end of the year	14,941	4,806	1,357	9,662		30,766

(1) It includes the balance of PPSP-R pre-70 and PPSP-NR pre-70.

(2) It includes a complement of US\$ 109 related to 2022.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

						2022
	Pension Plans			Health Care Plan	Other plans	Total
	PPSP-R (*)	PPSP-NR (*)	Petros 2	Saúde Petrobras-AMS		
Present value of obligations at the beginning of the year	11,481	3,485	987	4,485	9	20,447
Recognized in the Statement of Income	1,277	382	129	609	-	2,397
Interest expense	1,267	381	116	504	-	2,268
Service cost	10	1	13	105	-	129
Recognized in Equity - other comprehensive income	281	380	(6)	791	-	1,446
Remeasurement: Experience (gains) / losses	1,367	687	95	(277)	-	1,872
Remeasurement: (gains) / losses - demographic assumptions	-	4	6	(25)	-	(15)
Remeasurement: (gains) / losses - financial assumptions	(1,086)	(311)	(107)	1,093	-	(411)
Others	(268)	(128)	(8)	(72)	(9)	(485)
Benefits paid, net of assisted contributions	(1,088)	(379)	(72)	(384)	-	(1,923)
Contributions paid by participants	23	6	-	-	-	29
Others	-	-	1	-	(9)	(8)
Translation Adjustment	797	245	63	312	-	1,417
Present value of obligations at the end of the year	12,771	4,119	1,102	5,813	-	23,805

(*) It includes the balance of PPSP-R pre-70 and PPSP-NR pre-70.

c) Changes in the fair value of plan assets

Petrobras has four pension plans (PPSP-R, PPSP-NR, PPSP-R Pre-70) which are currently making use of plan assets, and one plan (PP-2) in which most of participants are in the phase of accumulating funds.

Therefore, changes to the fair value of plan assets reflect these effects, including inflows of contributions, outflows of funds for payment of benefits, and the return of these assets.

					2023
	Pension Plans			Health Care Plan	Total
	PPSP-R (1)	PPSP-NR (1)	Petros 2	Saúde Petrobras-AMS	
Fair value of plan assets at the beginning of the year	8,881	2,739	939	-	12,559
Recognized in the Statement of Income	1,069	327	111	-	1,507
Interest income	1,069	327	111	-	1,507
Recognized in Equity - other comprehensive income	304	21	87	-	412
Remeasurement: Higher/(lower) return on plan assets compared to discount rate	304	21	87	-	412
Cash effects	385	115	12	415	927
Contributions paid by the sponsor (Company)	357	103	12	415	887
Term of financial commitment (TFC) paid by the Company	28	12	-	-	40
Other Changes	(438)	(195)	27	(415)	(1,021)
Contributions paid by participants	25	6	9	-	40
Benefits paid, net of assisted contributions	(1,165)	(413)	(61)	(413)	(2,052)
Translation Adjustment	702	212	79	(2)	991
Fair value of plan assets at the end of the year	10,201	3,007	1,176	-	14,384

(1) It includes the balance of PPSP-R pre-70 and PPSP-NR pre-70.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

						2022
	Pension Plans			Health Care Plan	Other plans	Total
	PPSP-R (1)	PPSP-NR (1)	Petros 2	Saúde Petrobras-AMS		
Fair value of plan assets at the beginning of the year	7,431	2,316	822	-	(2)	10,567
Recognized in the Statement of Income	820	253	96	-	-	1,169
Interest income	820	253	96	-	-	1,169
Recognized in Equity - other comprehensive income	(139)	(37)	39	-	-	(137)
Remeasurement: Higher/(lower) return on plan assets compared to discount rate	(139)	(37)	39	-	-	(137)
Cash effects	1,325	421	-	384	-	2,130
Contributions paid by the sponsor (Company)	304	94	-	384	-	782
Term of financial commitment (TFC) paid by the Company	1,021	327	-	-	-	1,348
Other Changes	(556)	(214)	(18)	(384)	2	(1,170)
Contributions paid by participants	23	6	-	-	-	29
Benefits paid, net of assisted contributions	(1,088)	(379)	(72)	(384)	-	(1,923)
Transfer and contribution for PP-3	-	-	-	-	2	2
Translation Adjustment	509	159	54	-	-	722
Fair value of plan assets at the end of the year	8,881	2,739	939	-	-	12,559

(*) It includes the balance of PPSP-R pre-70 and PPSP-NR pre-70.

Investment management of pension plan assets

Petros Foundation annually prepares Investment Policies (PI) specific to each plan, following two models:

- (i) for Petros 2, the achievement of the actuarial goal with the lowest value at risk; and
- (ii) for defined benefit plans, the minimal mismatch in net cash flows, conditioned to the achievement of the actuarial target.

Pension plans assets follow a long-term investment strategy based on the risks assessed for each different class of assets and provide for diversification, in order to lower portfolio risk. The portfolio profile must comply with the Brazilian National Monetary Council (*Conselho Monetário Nacional* – CMN) regulations.

Petros Foundation establishes investment policies for 5-year periods, reviewed annually, using an asset liability management model (ALM) to address net cash flow mismatches of the benefit plans, based on liquidity and solvency parameters, simulating a 30-year period.

Pension plan assets by type of asset are set out as follows:

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Type of asset	2023				2022	
	Quoted prices in active markets	Unquoted prices	Total fair value	%	Total fair value	%
Receivables	-	1,466	1,466	10%	1,353	11%
Fixed income	3,212	7,698	10,910	75%	8,845	70%
Government bonds	1,756	7,694	9,450	-	7,450	-
Fixed income funds	786	-	786	-	864	-
Other investments	670	4	674	-	531	-
Variable income	735	210	945	5%	1,427	9%
Common and preferred shares	735	-	735	-	1,184	-
Other investments	-	210	210	-	243	-
Structured investments	185	31	216	4%	159	4%
Real estate properties	-	541	541	4%	490	4%
	4,132	9,946	14,078	98%	12,274	98%
Loans to participants	-	306	306	2%	285	2%
Fair value of plan assets at the end of the year	4,132	10,252	14,384	100%	12,559	100%

There is no plan asset for the health care plan. Loans to participants of pension plans are measured at amortized cost, which is considered an appropriate estimate of fair value.

As of December 31, 2023, the investment portfolio included Company's common shares in the amount of US\$ 1 (US\$ 1 in 2022) and real estate properties leased by the Company in the amount of US\$ 26 (US\$ 2 in 2022).

d) Net expenses relating to benefit plans

	Pension Plans			Health Care Plan	Other Plans	Total
	PPSP-R ⁽¹⁾	PPSP-NR ⁽¹⁾	Petros 2	Saúde Petrobras-AMS		
Related to active employees (cost of sales and expenses)	(48)	(9)	(14)	(299)	-	(370)
Related to retirees (other income and expenses)	(442)	(160)	(16)	(554)	-	(1,172)
Net expenses for 2023	(490)	(169)	(30)	(853)	-	(1,542)
Net expenses for 2022	(457)	(129)	(33)	(609)	-	(1,228)
Net expenses for 2021	(469)	(178)	(72)	(1,388)	9	(2,098)

(1) It includes the balance of PPSP-R pre-70 and PPSP-NR pre-70.

18.3.3. Contributions

In 2023, the Company contributed US\$ 927 to the defined benefit plans (US\$ 2,130 in 2022), reducing the balance of obligations of these plans, as presented in note 18.3.2. In addition, the Company contributed with US\$ 232 and US\$ 2, respectively, to the defined contribution portions of PP-2 and PP-3 plans (US\$ 197 for PP-2 and US\$ 2 for PP-3 in 2022), which were recognized in the statement of income.

For 2024, the expected contributions for the PPSP-R, PPSP-NR, PPSP-R pre-70, PPSP-NR pre-70 and for the defined benefit portion of PP-2, amounts to US\$ 524, while for the defined contribution portion of PP-2 amounts to US\$ 238.

The contribution to the defined benefit portion of the PP-2, which had been suspended since July 2012, was reestablished in April 2023, according to the decision of the Petros Foundation's Deliberative Council. Thus, a portion of the monthly contribution became allocated to risk coverage (mainly for the payment of benefits such as lump sum death benefit and for the coverage of minimum guarantees), reducing the balance of the actuarial obligation as contributions are made.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

18.3.4. Expected future cash flows

The estimate below reflects only the expected future cash flows to meet the defined benefit obligation recognized at the end of the reporting period.

					2023	2022
	Pension Plan		Health Care Plan		Total	Total
	PPSP-R ⁽¹⁾	PPSP-NR ⁽¹⁾	Petros 2	Saúde Petrobras-AMS		
Up to 1 Year	225	387	84	388	1,084	1,728
1 to 5 Years	4,915	1,602	361	2,077	8,955	7,021
6 to 10 Years	3,579	1,125	276	1,990	6,970	5,367
11 To 15 Years	2,514	747	205	1,646	5,112	3,762
Over 15 Years	3,708	945	431	3,561	8,645	5,927
Total	14,941	4,806	1,357	9,662	30,766	23,805

(1) It includes the balance of PPSP-R pre-70 and PPSP-NR pre-70.

18.3.5. Future payments to participants of defined benefit plans that are closed to new members

The following table provides the period during which the defined benefit obligation associated with these plans are expected to continue to affect the Company's financial statements.

	PPSP-R	PPSP-R Pré-70	PPSP-NR	PPSP-NR Pré-70
Number of years during which benefits must be paid to participants of defined benefit plans.	11.18	7.29	10.92	7.22

18.3.6. Measurement uncertainties associated with the defined benefit obligation

The significant financial and demographic actuarial assumptions used to determine the defined benefit obligation are presented in the following table:

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Assumptions	Pension Plans					2023 Health Care Plan
	PPSP-R	PPSP-NR	PPSP-R Pré-70	PPSP-NR Pré-70	PP2	Saúde Petrobras-AMS
Nominal discount rate (including inflation)(1)	9.53%	9.52%	9.46%	9.46%	9.56%	9.56%
Real discount rate	5.42%	5.41%	5.35%	5.35%	5.45%	5.45%
Nominal expected salary growth (including inflation) (2)	4.89%	4.63%	4.89%	4.63%	7.07%	n/a
Expected changes in medical and hospital costs (3)	n/a	n/a	n/a	n/a	n/a	13.11% a 3.75% p.a.
Mortality table	Petros Experience 2016	Petros Experiences 2025	Petros Experiences 2020	Petros Experiences 2023	AT-2012 IAM basic fem 10% smoothed	Employees: according to pension plan Assisted: PPSP-R: Ex Petros 2016
Disability table	American group	American group	n/a	n/a	Disability Experience PP-2 2022	Assets: PP-2: Disability Experience PP-2 2022 Assisted: n/a
Mortality table for disabled participants	AT-49 male	AT-83 Basic by gender	MI 2006, by gender, 20% smoothed	Petros Experience 2014	IAPB-57 strong, 30% smoothed	PPSP-R: AT-49 male
Age of retirement	Male, 56 years / Female, 55 years	Male, 58 years / Female, 56 years	Male, 56 years / Female, 55 years	Male, 58 years / Female, 56 years	1st eligibility according to RGPS Male, 65 years / Female, 60 years	Male, 56 years / Female, 55 years

(1) Inflation reflects market projections: 3.90% for 2024 and converging to 3.75% in 2031 onwards.

(2) Expected salary growth only of Petrobras, the sponsor, based on the Salaries and Benefits Plan.

(3) Decreasing rate, converging in 30 years to the long-term expected inflation. Refers only to Petrobras (sponsor) rate.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Assumptions	Pension Plans					2022 Health Care Plan
	PPSP-R	PPSP-NR	PPSP-R Pre-70	PPSP-NR Pre-70	PP2	Saúde Petrobras-AMS
Nominal discount rate (including inflation)(1)	11,95%	11,95%	11,93%	11,93%	11,97%	11,97%
Real discount rate	6,16%	6,16%	6,15%	6,15%	6,18%	6,18%
Nominal expected salary growth (including inflation) (2)	6,27%	6,16%	6,27%	6,16%	7,74%	n/a
Expected changes in medical and hospital costs (3)	n/a	n/a	n/a	n/a	n/a	9.87% a 3.25% p.a.
Mortality table	Petros Experience 2013	Petros Experiences 2020	Petros Experiences 2016	Petros Experiences 2020	AT-2012 IAM basic fem 10% smoothed	Employees: according to pension plan Assisted: Ex Petros 2013
Disability table	American group	American group	n/a	n/a	Disability Experience PP-2 2022	Assets: PP-2: Disability Experience PP-2
Mortality table for disabled participants	AT-49 male	AT-83 Basic by gender	MI 2006, by gender, 20% smoothed	Petros Experience 2014	IAPB-57 strong, 30% smoothed	AT-49 male
Age of retirement	Male, 56 years / Female, 55 years	Male, 58 years / Female, 56 years	n/a	n/a	1st eligibility	Male, 56 years / Female, 55 years

(1) Inflation reflects market projections: 5.45% for 2023 and converging to 3.25% in 2027 onwards.

(2) Expected salary growth only of Petrobras, the sponsor, based on the Salaries and Benefits Plan.

(3) Decreasing rate, converging in 30 years to the long-term expected inflation. Refers only to Petrobras (sponsor) rate.

The most significant assumptions are described in Note 4.4.

18.3.7. Sensitivity analysis of the defined benefit plans

The effect of a 100 basis points (bps) change in the discount rate and in the estimated future medical costs is set out below:

	Discount Rate				Expected changes in medical and hospital costs	
	Pension Benefits		Medical Benefits		Medical Benefits	
	+100 bps	-100 bps	+100 bps	-100 bps	+100 bps	-100 bps
Pension Obligation	(1,804)	2,357	(1,102)	1,364	1,388	(1,133)
Current Service cost and interest cost	(31)	73	(67)	82	198	(157)

Accounting policy for post-employment defined benefits

The obligations related to post-employment defined benefit plans and health-care plans are recognized as liabilities in the statement of financial position based on actuarial calculations which are revised annually by an independent qualified actuary (updating for material changes in actuarial assumptions and estimates of expected future benefits), using the projected credit unit method, net of the fair value of plan assets, when applicable, from which the obligations are to be directly settled.

Under the projected credit unit method, each period of service gives rise to an additional unit of benefit entitlement and each unit is measured separately to determine the final obligation. Actuarial assumptions include demographic and financial assumptions, medical costs estimate, historical data related to benefits paid and employee contributions, as set out in note 4.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Service cost are accounted for within the statement of income and comprises: (i) current service cost, which is the increase in the present value of the defined benefit obligation resulting from employee service in the current period; (ii) past service cost, which is the change in the present value of the defined benefit obligation for employee service in prior periods, resulting from a plan amendment (the introduction, modification, or withdrawal of a defined benefit plan) or a curtailment (a significant reduction by the entity in the number of employees covered by a plan); and (iii) any gain or loss on settlement.

Net interest on the net defined benefit liability is the change during the period in the net defined benefit liability that arises from the passage of time. Such interest is accounted for in the statement of income.

Remeasurement of the net defined benefit liability is recognized in shareholders' equity, in other comprehensive income, and comprises: (i) actuarial gains and losses and; (ii) return on plan assets, excluding net interest on the net defined liability, net of defined benefit plan assets.

The Company also contributes to defined contribution plans, on a parity basis in relation to the employee's contribution, that are expensed when incurred.

19. Provisions for legal proceedings, judicial deposits and contingent liabilities

19.1. Provisions for legal proceedings

The Company recognizes provisions for legal, administrative and arbitral proceedings based on the best estimate of the costs for which it is probable that an outflow of resources embodying economic benefits will be required and that can be reliably estimated. These proceedings mainly include:

- Labor claims, in particular: (i) several individual and collective labor claims; (ii) opt-out claims related to a review of the methodology by which the minimum compensation based on an employee's position and work schedule (*Remuneração Mínima por Nível e Regime - RMNR*) is calculated; and (iii) actions of outsourced employees.
- Tax claims including: (i) tax notices for alleged non-compliance with ancillary obligations; (ii) claims relating to benefits previously taken for Brazilian federal tax credits applied that were subsequently alleged to be disallowable; (iii) claims for alleged non-payment of CIDE on imports of propane and butane; and (iv) claims for alleged non-payment of social security contributions on allowances and bonuses.
- Civil claims, in particular: (i) lawsuits related to contracts; (ii) legal and administrative proceedings involving fines applied by the ANP - Brazilian Agency of Petroleum, Natural Gas and Biofuels (*Agência Nacional de Petróleo, Gás Natural e Biocombustíveis*), mainly relating to production measurement systems; and (iii) legal and administrative proceedings that discuss differences of royalties and special participation charges in several fields.
- Environmental claims, specially: (i) fines relating to an environmental accident in the State of Paraná in 2000; (ii) fines relating to the Company's offshore operation; and (iii) public civil action for oil spill in 2004 in Serra do Mar-São Paulo State Park.

Provisions for legal proceedings are set out as follows:

Non-current liabilities	12.31.2023	12.31.2022
Labor claims	806	737
Tax claims	544	466
Civil claims	1,614	1,504
Environmental claims	341	303
Total	3,305	3,010

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

	2023	2022
Opening Balance	3,010	2,018
Additions, net of reversals	389	1,072
Use of provision	(709)	(487)
Revaluation of existing proceedings and interest charges	376	273
Others	(5)	(2)
Translation adjustment	244	136
Closing Balance	3,305	3,010

In preparing its consolidated financial statements of 2023, the Company considered all available information concerning legal proceedings in which the Company is a defendant, in order to estimate the amounts of obligations and probability that outflows of resources will be required.

19.2. Judicial deposits

The Company makes deposits in judicial phases, mainly to suspend the chargeability of the tax debt and to maintain its tax compliance. Judicial deposits are set out in the table below according to the nature of the corresponding lawsuits:

Non-current assets	12.31.2023	12.31.2022
Tax	10,607	7,876
Labor	979	907
Civil	2,977	2,089
Environmental	115	109
Others	68	72
Total	14,746	11,053

	2023	2022
Opening Balance	11,053	8,038
Additions	1,735	1,710
Use	(148)	(115)
Accruals and charges	1,167	897
Others	(7)	(9)
Translation adjustment	946	532
Closing Balance	14,746	11,053

The Company maintains a Negotiated Legal Proceeding (NJP) agreement with the Brazilian National Treasury Attorney General's Office (PGFN), aiming to postpone judicial deposits related to federal tax lawsuits with values exceeding US\$ 41 (R\$ 200 million), which allows judicial discussion without the immediate disbursement.

To achieve this, the Company makes production capacity available as a guarantee from the Tupi, Sapinhoá, and Roncador fields. As the judicial deposits are made, the mentioned capacity is released for other processes that may be included in the NJP.

The Company's management understands that the mentioned NJP provides greater cash predictability and ensures the maintenance of federal tax regularity. As of December 31, 2023, the balance of production capacity held in guarantee in the NJP is US\$ 7,997.

19.3. Contingent liabilities

Contingent liabilities for which either the Company is unable to make a reliable estimate of the expected financial effect that might result from resolution of the proceeding, or a cash outflow is not probable, are not recognized as liabilities in the financial statements but are disclosed in the notes to the financial statements, unless the likelihood of any outflow of resources embodying economic benefits is considered remote.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

The estimates of contingent liabilities are indexed to inflation and updated by applicable interest rates. As of December 31, 2023, estimated contingent liabilities for which the possibility of loss is classified as possible are set out in the following table:

Nature	12.31.2023	12.31.2022
Tax	37,189	32,094
Labor	10,150	8,272
Civil	11,455	7,548
Environmental	1,427	1,257
Total	60,221	49,171

19.3.1. Information on contingent liabilities

The tables below detail the main causes of tax, civil, environmental and labor nature, whose expectations of losses are classified as possible:

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

	Estimate	
Description of tax matters	12.31.2023	12.31.2022
Plaintiff: Secretariat of the Federal Revenue of Brazil		
1) Withholding income tax (IRRF), Contribution of Intervention in the Economic Domain (CIDE), Social Integration Program (PIS) and Contribution to Social Security Financing (COFINS) on remittances for payments of vessel charters.		
Current status: The claim about the incidence of withholding income tax (Imposto de Renda Retido na Fonte- IRRF) on remittances for payments of vessel charters, occurred from 1999 to 2002, involves the legality of the normative rule issued by the Federal Revenue of Brazil, which ensured no taxation over those remittances. The Company considers the likelihood of loss as possible, since there are decisions from Superior Courts favorable to the Company, and will continue to defend its opinion.		
The other claims, concerning CIDE and PIS/COFINS, involve lawsuits in different administrative and judicial stages, for which the Company understands there is a possible likelihood of loss, since there are legal predictions in line with the position of the Company. In 2023, the amounts increased mainly due to inflation indexation, partially offset by the reduction in amounts of three cases already in the judicial phase that had unfavorable decisions in the Conselho Administrativo de Recursos Fiscais - CARF by the casting vote, and, as a result, the amounts of the fines were excluded from the active debt, in accordance with paragraph nine-A, article 25, of Law no. 14,689/2023.	11,409	10,386
2) Income from foreign subsidiaries located outside Brazil not included in the computation of taxable income (IRPJ and CSLL).		
Current status: This claim involves lawsuits in different administrative and judicial stages. The Company considers the likelihood of loss as possible, since there are decisions from Superior Courts favorable to the understanding of the Company. In 2023, there was a reduction in amounts, partially offset by the inflation indexation, considering that, in four cases already in the judicial phase, there were unfavorable decisions in the CARF by the casting vote, and, as a result, the amounts of the fines were excluded from the active debt, in accordance with paragraph nine-A, article 25, of Law no. 14,689/2023.	4,260	4,396
3) Collection of Import tax (II), PIS/COFINS and customs fines including Petrobras as jointly liable.		
Current status: Awaiting judgment of the Brazilian Federal Government appeal, at the CARF, because of a lower court administrative decision favorable to the Company. In 2023, the increase refers, in particular, to inflation indexation.	2,872	2,414
4) Requests to compensate federal taxes disallowed by the Brazilian Federal Tax Authority.		
Current status: This claim involves lawsuits in different administrative and judicial stages. In 2023, new tax notices were issued.	1,816	705
5) Collection of IRPJ and CSLL - Transfer price - Charter contracts		
Current status: The processes are in the administrative level. There are two decisions, one favorable and the other unfavorable to Petrobras in the first instance. The appeals from the Company and the Brazilian Federal Government are awaited. In 2023, the Company received a new tax notice relating to 2018.	1,418	498
6) Deduction of the PIS and COFINS tax base, including in ship or pay contracts and charters of aircraft and vessels.		
Current status: The claims involve lawsuits in different administrative and judicial stages. In 2023, the increase refers, in particular, to inflation indexation.	1,370	986
7) Collection of PIS/COFINS – Incidences on Amnesties.		
Current status: Collection of social contributions PIS/COFINS, resulting from the tax transaction provided for in article 3 of Law 13,586/2017. The Embargoes on Execution are in the stage of producing expert evidence. In 2023, the increase refers, in particular, to the registration of the debt in Active Debt of the Brazilian Federal Government.	1,263	870
8) Incidence of social security contributions over contingent bonuses paid to employees.		
Current status: Awaiting defense judgment and appeals at the administrative and judicial levels.	1,064	922
9) Deduction of the IRPJ and CSLL tax base of the amounts paid as an incentive to the Petros Plan renegotiation and past service.		
Current status: This claim involves lawsuits in different judicial stages.	723	646
10) Income taxes (IRPJ and CSLL) - Capital gains and Amortization of goodwill on the acquisition of equity interests.		
Current status: This claim involves lawsuits in different administrative stages.	578	501
11) Collection of Contribution of Intervention in the Economic Domain (CIDE) on transactions with fuel retailers and service stations protected by judicial injunctions determining that fuel sales were made without gross-up of such tax.		
Current status: This claim involves lawsuits in different judicial stages.	544	485
12) Import tax, PIS/COFINS and customs fines - Import of vessels through Repetro's Special Customs Regime.		
Current status: This claim involves lawsuits in different administrative and judicial stages. In 2023, a new tax notice was issued against the Company.	403	294
13) Customs – Fines of 1% and 5% on the Customs Value.		
Fines applied to the customs value of imported products due to inaccurated information in import declarations.		
Current status: This claim involves lawsuits in different administrative and judicial stages.	273	240

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Plaintiff: States of SP, RJ, BA, PA, AL, MA, PB, PE, AM and SE Finance Departments		
14) VAT (ICMS) and VAT credits on internal consumption of bunker fuel and marine diesel, destined to chartered vessels.		
Current status: This claim involves lawsuits in different administrative and judicial stages.	514	425
Plaintiff: States of RJ and BA Finance Departments		
15) VAT (ICMS) on dispatch of liquid natural gas (LNG) and C5+ (tax document not accepted by the tax authority), as well as challenges on the rights to this VAT tax credit.		
Current status: This claim involves lawsuits in different administrative and judicial stages.	960	842
Plaintiff: States of PE and RJ Finance Departments		
16) VAT Tax (ICMS) on imports required by Brazilian States.		
Current status: This claim involves lawsuits in different administrative and judicial stages. In 2023, the reduction refers, in particular, to the change in the expectation of loss of several processes, from possible to remote, due to the effects of the decision of the Constitutional Declaratory Action (ADC) 49 of the Federal Supreme Court.	355	440
Plaintiff: States of RJ, AM, PA, BA, MA, SP, RO, PE and RS Finance Departments		
17) Alleged failure to write-down VAT (ICMS) credits related to zero tax rated or non-taxable sales made by the Company and its customers.		
Current status: This claim involves lawsuits in different administrative and judicial stages. In 2023, the increase resulted, in particular, from the receipt of new tax notices and inflation indexation.	1,257	916
Plaintiff: States of RJ, BA, PE and MT Finance Departments		
18) The plaintiff alleges that the transfers between branches, especially in RJ, without segregating VAT (ICMS), under the special regime, reduced the total credits of the central department.		
Current status: This claim involves lawsuits in different administrative and judicial stages. In 2023, the increase refers, in particular, to the inflation indexation, partially offset by the change in the expectation of loss of several processes, from possible to remote, due to the effects of the decision of the Constitutional Declaratory Action (ADC) 49 of the Supreme Federal Court.	1,027	929
Plaintiff: States of RJ, BA, PB, SE, SP, ES, CE and PE Finance Departments		
19) Appropriation of ICMS credit on the acquisition of goods (products in general) that, in the understanding of the inspection, would fit into the concept of material for use and consumption, being the tax credit undue.		
Current status: This claim involves lawsuits in different administrative and judicial stages. In 2023, the reduction refers, in particular, to the change in the expectation of several processes, from possible to remote loss, due to the effects of the decision of the Constitutional Declaratory Action (ADC) 49 of the Supreme Federal Court.	374	687
Plaintiff: States of RJ, PR, AM, BA, PA, PE, SP, PB and AL Finance Departments		
20) Incidence of VAT (ICMS) over alleged differences in the control of physical and fiscal inventories.		
Current status: This claim involves lawsuits in different administrative and judicial stages.	913	799
Plaintiff: State of SP Finance Department		
21) Deferral of payment of VAT (ICMS) taxes on B100 Biodiesel sales and the charge of a 7% VAT rate on B100 on Biodiesel interstate sales, including states in the Midwest, North and Northeast regions of Brazil and the State of Espírito Santo.		
Current status: This claim involves lawsuits in different administrative and judicial stages.	299	263
Plaintiff: States of RJ, SP, BA, PE, PR and CE Finance Departments		
22) Misappropriation of VAT tax credit (ICMS) on the acquisitions of goods that, per the tax authorities, are not related to property, plant and equipment.		
Current status: This claim involves lawsuits in different administrative and judicial stages. In 2023, the increase resulted, in particular, from the receipt of new tax notices and inflation indexation.	576	478
Plaintiff: States of RJ, SP, BA, PA and AM Finance Departments		
23) Misappropriation of VAT tax credit (ICMS) on the acquisitions of drills and chemicals used in the formulation of drilling fluid, per the tax authorities.		
Current status: This claim involves lawsuits in different administrative and judicial stages. In 2023, the reduction refers, in particular, to the change in the expectation of several processes from possible to remote loss, due to the effects of the decision of the Constitutional Declaratory Action (ADC) 49 of the Brazilian Superior Court.	81	486
Plaintiff: States of AC, PA, AM, MA, BA, PB, PE, SE, TO, GO, MT, RJ, SP, SC and PR Finance Departments		
24) VAT Tax (ICMS) under substitution regime required by states.		
Current status: This claim involves lawsuits in different administrative and judicial stages. In 2023, the increase resulted, in particular, from the receipt of new tax notices.	223	160
Plaintiff: Municipal government of Angra dos Reis/RJ		
25) Added value of ICMS on oil import operations.		
Current status: This claim involves lawsuits in several judicial stages. In 2023, due to a decision in favor of the Company's thesis, in the Brazilian Superior Court, which dismissed the Municipality's Special Appeal, the expectation of some processes was changed from possible to remote loss. A new tax notice was also received.	311	347

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Plaintiff: Several Municipalities

26) Alleged failure to withhold and pay tax on services (ISSQN).

Current status: There are lawsuits in different administrative and judicial stages. 254 223

27) Other tax matters 2,052 1,756

Total for tax matters 37,189 32,094

Estimate

Description of labor matters

12.31.2023 12.31.2022

Plaintiff: Employees and Sindipetro Unions.

1) Actions requiring a review of the methodology by which the minimum compensation based on an employee's position and work schedule (Remuneração Mínima por Nível e Regime - RMNR) is calculated.

Current status: The dispute is in the Federal Supreme Court (STF). On 07/28/2021, Petrobras filed an appeal and the Minister Rapporteur decided favorably to the Company, reforming the decision of the Plenary of the Superior Labor Court (TST) which was contrary to Petrobras. The judgment of the appeals filed by the author of the action and by several amici curiae in light of the aforementioned decision of the Minister Rapporteur was concluded by the judging panel on 11/10/2023, confirming, by 3 votes to 1, the decision that recognized the merit of the collective bargaining agreement signed between Petrobras and the unions. In 2023, the increase was due, in particular, to the inflation indexation and amounts added in the period. In January 2024, the ruling was published by the Supreme Court. Against the aforementioned ruling, the complainant and union entities filed an appeal for clarification, which was discussed in a virtual plenary session started on 02/23/2024 and ended on 03/01/2024. The declaratory embargoes were not recognized by unanimous decision of the first Panel of the Supreme Court, maintaining the decision in favor of Petrobras. This decision is still pending publication.

8,362 6,806

2) Other labor matters 1,788 1,466

Total for labor matters 10,150 8,272

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Description of civil matters	Estimate	
	12.31.2023	12.31.2022
Plaintiff: Several goods and service providers		
1) Claims related to goods and services supply contracts, with emphasis on discussions about economic and financial imbalance, contractual breach, fines and early termination of contracts.		
Current status: The claims involve lawsuits in different judicial stages. In 2023, there was an increase in value due to new lawsuits and decisions unfavorable to Petrobras.	3,547	2,988
Plaintiff: Agência Nacional de Petróleo, Gás Natural e Biocombustíveis - ANP		
2) Proceedings challenging an ANP order requiring Petrobras to unite Tupi and Cernambi fields on the BM-S-11 joint venture; to unite Baúna and Piracicaba fields; and to unite Tartaruga Verde and Mestiça fields, which would cause changes in the payment of special participation charge.		
Current status: This list involves claims that are disputed in court and in arbitration proceedings, as follows. In 2023, there was an increase in the value, due to the judicial deposits that are made by Petrobras:		
a) Tupi and Cernambi: initially, the Company made judicial deposits for the alleged differences resulting from the special participation. However, with the reversal of the favorable injunction, the payment of these alleged differences were made directly to ANP, and such judicial deposits were resumed in the 2nd Quarter of 2019. The suspension of the arbitration was reversed by the BM-S-11 Consortium at the Brazilian Superior Court, so that the arbitration resumed its progress.		
b) Baúna and Piracicaba: the Federal Regional Court of the Second Region upheld the suspension of arbitration. Petrobras filed appeals with the Superior Courts.		
c) Tartaruga Verde and Mestiça: The Company has authorization to make the judicial deposits relating to these fields. The Regional Federal Court of the Second Region has the opinion that the Chamber of Arbitration has jurisdiction on this claim and the arbitration is ongoing up to item 6 of the joint schedule (pre-hearing meeting) formulated by the parties.	2,245	1,531
Plaintiff: Federations Oil Workers, Unions, employees and retired personnel from Petros		
3) Collective and individual actions that discuss topics related to Petros plans.		
Current status: The matter involves proceedings at different judicial stages. In 2023, the increase refers, in particular, to the change in the expectation of remote to possible loss in a collective action request.	2,225	6
Plaintiff: Agência Nacional de Petróleo, Gás Natural e Biocombustíveis - ANP and other agencies		
4) Administrative and legal proceedings that discuss:		
a) Difference in special participation and royalties in different fields;		
b) Fines imposed by ANP due to alleged failure to comply with the minimum exploration activities program, as well as alleged irregularities relating to compliance with oil and gas industry regulation. It also includes fines imposed by other agencies.		
Current status: The claims involve lawsuits in different administrative and judicial stages.	2,214	1,980
Plaintiff: Legal entities that participated in the purchase and sale of Petrobras assets		
5) Judicial and arbitration proceedings that discuss asset sales carried out by Petrobras.		
Current status: The matter involves proceedings in different judicial and arbitration stages. In 2023, there was an increase in value due to the receipt of new processes.	240	156
6) Several civil proceedings, with emphasis on those related to expropriation and easement of passage and civil liability.	984	887
Total for civil matters	11,455	7,548

Description of environmental matters	Estimate	
	12.31.2023	12.31.2022
Plaintiff: Several authors, notably: Ministério Público Federal, Ministérios Públicos Estaduais and public environmental bodies, such as IBAMA - Instituto Brasileiro de Meio Ambiente e Recursos Naturais Renováveis, state and municipal public bodies.		
1) Several lawsuits of an environmental nature, with emphasis on fines related to the Company's operations and public civil action for alleged environmental damage due to the sinking of Platform P-36.	1,427	1,257
Total for environmental matters	1,427	1,257

19.3.2. Minimum Compensation Based on Employee's Position and Work Schedule (Remuneração Mínima por Nível e Regime - RMNR)

There are lawsuits related to the Minimum Compensation Based on Employee's Position and Work Schedule (RMNR), with the objective of reviewing its calculation criteria.

The RMNR consists of a minimum remuneration guaranteed to employees, based on salary level, work schedule and geographic location. This policy was created through collective bargaining with union entities and was approved at employee meetings, being finally put into practice by Petrobras in 2007, but started being the subject of lawsuits three years after its implementation.

In 2018, the Brazilian Superior Labor Court (TST) ruled against the Company, which filed extraordinary appeals to the Brazilian Supreme Federal Court (STF) which suspended the effects of the decision issued by the TST and determined the national suspension of the ongoing proceedings related to the RMNR.

In July 2021, a monocratic decision was published in which the STF's Judge-Rapporteur granted an extraordinary appeal filed, accepting the Company's thesis and recognizing the validity of the collective bargaining agreement freely signed between Petrobras and the unions, reversing the decision of the TST.

In November 2023, the First Panel of the Supreme Federal Court decided in favor of the Company (with 3 votes against 1), confirming that there is an understanding of recognizing the merit of the collective bargaining agreement signed between the companies and the unions. In January 2024, the ruling was published by the STF. Against this ruling, the complainant and union entities filed an appeal for clarification, which was discussed in a virtual plenary session which occurred from February 23 to March 1, 2024. The declaratory embargoes were not recognized by unanimous decision of the first Panel of the Supreme Court, maintaining the decision in favor of Petrobras. This decision is still pending publication.

As of December 31, 2023, the balance of provisions for legal proceedings regarding RMNR amounts to US\$ 135, while the contingent liabilities amount to US\$ 8,362.

19.4. Class action and related proceedings

19.4.1. Class action in the Netherlands

On January 23, 2017, Stichting Petrobras Compensation Foundation ("Foundation") filed a class action in the Netherlands, at the District Court of Rotterdam, against Petróleo Brasileiro S.A. – Petrobras, Petrobras International Braspetro B.V. (PIB BV), Petrobras Global Finance B.V. (PGF), Petrobras Oil & Gas B.V. (PO&G) and some former Petrobras managers. The Foundation alleges that it represents the interests of an unidentified group of investors and asserts that, based on the facts revealed by the Lava-Jato Operation, the defendants acted illegally before the investors. On May 26, 2021, the District Court of Rotterdam decided that the class action should proceed and that the arbitration clause of Petrobras' bylaws does not prevent the Company's shareholders from having access to the Dutch Judiciary and have their interests represented by the "Foundation". However, investors who have already started arbitration against Petrobras or who are parties to legal proceedings in which the applicability of the arbitration clause has been definitively recognized are excluded from the scope of the action. The collective action moved to the discussion phase of merit issues.

On July 26, 2023, the Court issued an intermediary decision on the merits, ordering the production of evidence, in relation to which the parties may express their views before the publication of the decision on the merits, which is appealable. In addition, the Court expressed in advance some understanding, which must be included in the decision on the merits, among which: (i) the requests made against PIB BV, PO&G and certain former members of the Company's management were rejected; (ii) the Court declared that Petrobras and the PGF acted illegally in relation to their investors, although the Court expressed it does not consider itself sufficiently informed about relevant aspects of Brazilian, Argentine and Luxembourg laws to definitively decide on the merits of the action; and iii) the alleged rights under Spanish legislation are prescribed.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

The Foundation cannot claim compensation under the class action, which will depend not only on a result favorable to the interests of the investors in the class action, but also on the filing of subsequent actions by or on behalf of the investors by the Foundation itself, an opportunity in which Petrobras will be able to offer all the defenses already presented in the class action and others that it deems appropriate, including in relation to the occurrence and quantification of any damages that must be proven. Any compensation for the alleged damages will only be determined by court decisions in subsequent actions mentioned above.

This class action involves complex issues and the outcome is subject to substantial uncertainties, which depend on factors such as: the scope of the arbitration clause of the Petrobras Statute, the jurisdiction of the Dutch courts, the scope of the agreement that ended the Class Action in the United States, the Foundation's legitimacy to represent the interests of investors, the several laws applicable to the case, the information obtained from the production phase of evidence, the expert analyses, the timetable to be defined by the Court and the judicial decisions on key issues of the process, possible appeals, including before the Dutch Supreme Court, as well as the fact that the Foundation seeks only a declaratory decision in this class action.

The Company, based on the assessments of its advisors, considers that there are not enough indicative elements to qualify the universe of potential beneficiaries of a possible final decision unfavorable to Petrobras' interests, nor to quantify the supposedly compensable damages.

Thus, it is currently not possible to predict whether the Company will be liable for the effective payment of damages in any future individual claims, as this analysis will depend on the outcome of these complex procedures. In addition, it is not possible to know which investors will be able to bring subsequent individual actions related to this matter against Petrobras.

Furthermore, the claims formulated are broad, cover a multi-year period and involve a wide variety of activities and, in the current scenario, the impacts of such claims are highly uncertain. The uncertainties inherent in all of these issues affect the value and duration of final resolution of this action. As a result, Petrobras is unable to estimate an eventual loss resulting from this action. However, Petrobras reiterates its condition as a victim of the corruption scheme revealed by the Lava-Jato operation and intends to present and prove this condition before the Dutch court.

The Company denies the allegations made by the Foundation and will continue to defend themselves vigorously.

19.4.2. Arbitration and other legal proceedings in Argentina

In relation to the arbitration in Argentina, the Argentine Supreme Court denied the appeal, but the *Consumidores Damnificados Asociación Civil para su Defensa* (formerly *Consumidores Financieros Asociación Civil*, "Association") filed a new appeal to the Argentine Supreme Court, which was also denied, thus the arbitration was sent to the Arbitration Court. This arbitration discusses Petrobras' liability for an alleged loss of market value of Petrobras' shares in Argentina, as a result of the Lava Jato Operation. The Company is unable to provide a reliable estimate of the potential loss in this arbitration.

In parallel to such arbitration, the Association also initiated a collective action before the Civil and Commercial Court of Buenos Aires, in Argentina, with Petrobras appearing spontaneously on April 10, 2023, within the scope of which it alleges Petrobras' responsibility for an alleged loss of the market value of Petrobras' securities in Argentina, as a result of allegations made within the scope of Lava Jato Operation and their impact on the company's financial statements prior to 2015. Petrobras presented its defense on August 30, 2023. Petrobras denies the allegations presented by the Association and will vigorously defend itself against the accusations made by the author of the class action. The Company is unable to provide a reliable estimate of the potential loss in this arbitration.

Regarding criminal proceeding in Argentina related to an alleged fraudulent offer of securities, aggravated by the fact that Petrobras allegedly declared false data in its financial statements prior to 2015, the Court of Appeals revoked, on October 21, 2021, the lower court decision that had recognized Petrobras' immunity from jurisdiction and recommended that the lower court judge take steps to certify whether the Company could be considered criminally immune in Argentina for further reassessment of the issue. Petrobras appealed against this decision, but the higher

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

courts upheld the decision of the Court of Appeals. After carrying out the steps determined by the Court of Appeals, on May 30, 2023, the lower court denied the recognition of immunity from jurisdiction to Petrobras. Petrobras filed an appeal against this decision, which is still pending judgment. The Court of Appeals previously recognized that the Association could not act as a representative of financial consumers, due to the loss of its registration with the competent Argentine bodies, which was also the subject of an appeal upheld by the Court of Appeals on September 15, 2022, recognizing the Association the right to represent financial consumers. The Company presented its defense, as well as other procedural defenses, still subject to assessment by the Argentine Court of Appeals. This criminal action is being processed before the Economic Criminal Court No. 2 of the City of Buenos Aires.

As for the other criminal action for alleged non-compliance with the obligation to publish a "press release" in the Argentine market about the existence of a class action filed by *Consumidores Damnificados Asociación Civil para su Defensa* before the Commercial Court, there are no developments in 2023.

19.4.3. Lawsuit in United States regarding Sete Brasil Participações S.A ("Sete")

The EIG Energy Fund XIV, L.P. and affiliates ("EIG") filed a lawsuit against Petrobras, before the District Court of Columbia, United States, to recover alleged losses related to its investment in Sete Brasil Participações S.A. On August 8, 2022, the judge upheld EIG's claim as to Petrobras' responsibility for the alleged losses (which was recorded in 2022 as provisions for legal proceedings) but denied the motion for summary judgment with respect to damages, whereby the award of compensation will be subject to the proof of damages by EIG at a hearing and to the consideration of the defenses by the Company. In the same decision, the judge denied the request to dismiss the case based on Petrobras' immunity from jurisdiction, when an appeal was filed with the Federal Court of Appeals for the District of Columbia, which is still pending judgement. Considering the filing of the appeal, Petrobras requested the suspension of the process, which was granted by the lower court judge on October 26, 2022.

On August 26, 2022, on another procedural front initiated by the EIG, the District Court of Amsterdam granted a precautionary measure to block certain Petrobras assets in the Netherlands. This granting was based on the decision of the District Court of Columbia, on August 8, 2022, and was intended to ensure the satisfaction of EIG's claims contained in the aforementioned US lawsuit. For the purpose of this injunction, the District Court of Amsterdam limited EIG's claims to a total of US\$ 297, although the US Court ruled that any award of damages would depend on evidence of damages by EIG at a trial hearing. There are some discussions about the scope of the assets blocked by EIG, but there is no related lawsuit pending in the Netherlands. This precautionary block does not prevent Petrobras and its subsidiaries from complying with their obligations to third parties.

19.5. Arbitrations proposed by non-controlling shareholders in Brazil

Petrobras is also currently a party to seven arbitrations proceedings before the Market Arbitration Chamber (*Câmara de Arbitragem do Mercado - CAM*), linked to the Brazilian Stock Exchange (B3), brought by investors who purchased Petrobras' shares traded on B3. Six of these arbitrations were initiated by national and foreign investors. The other proceeding was brought by an association that is not a shareholder of the Company and intends to be a collective arbitration, through representation of all non-controlling shareholders of Petrobras that acquired shares on B3 between January 22, 2010 and July 28, 2015. Investors claim alleged financial losses caused by facts uncovered in the Lava Jato investigation.

These claims involve complex issues that are subject to substantial uncertainties and depend on a number of factors such as the novelty of the legal theories, the timing of the Chamber of Arbitration decisions, the information produced in discovery and analysis by retained experts.

Moreover, the claims asserted are broad and span a multi-year period. The uncertainties inherent in all such matters affect the amount and timing of their ultimate resolution. As a result, the Company is unable to make a reliable estimate of eventual loss arising from such arbitrations.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Depending on the outcome of these complaints, the Company may have to pay substantial amounts, which may have a significant effect on its consolidated financial position, financial performance and cash flows in a certain period. However, Petrobras does not recognize responsibility for the losses alleged by investors in these arbitrations.

Most of these arbitrations are still in the preliminary stages and a final decision is not expected in the near future.

However, in relation to one of the arbitrations, proposed by two institutional investors, on May 26, 2020, a partial arbitral award was issued indicating the Company's responsibility, but not determining the payment of amounts by Petrobras, nor ending the procedure. This arbitration, as well as the other arbitrations in progress, are confidential and the partial arbitral award - which does not represent a CAM position, but only of the three arbitrators that make up this arbitration panel - does not extend to the other ongoing arbitrations.

On July 20, 2020, Petrobras filed a lawsuit for the annulment of this partial arbitral award, as the Company understands that the award contains serious flaws and improprieties. On November 11, 2020, the 5th Business Court of Rio de Janeiro annulled the partial arbitration award, due to these serious flaws and improprieties pointed out by Petrobras. The appeals against this decision are still pending judgement. In compliance with CAM rules, the lawsuit is confidential and only available to those involved in the original arbitration proceeding. Petrobras will continue to defend itself in this and other arbitrations.

In 2023, there were no events that changed the assessment and information arbitrations proposed by non-controlling shareholders in Brazil.

19.6. Tax recoveries under dispute - Compulsory Loan - Eletrobras

The Brazilian Federal Government, aiming to finance the expansion of the national electricity system, established the compulsory loan that lasted until 1993 in favor of Eletrobras, which was the operator of this system. The loan was charged to consumers' electricity bills.

In 2010, the Company filed a lawsuit to recognize its right to receive the differences in inflation indexation and interest on a compulsory loan from Eletrobrás, in relation to the third conversion of Eletrobrás shares, in the period from 1987 to 1993.

In December 2022, the court issued a final decision in favor of the Company in relation to the merits of the case. On December 18, 2023, once the judgment settlement procedure began, a legal agreement was signed between the parties to end the discussion upon payment, by Eletrobras, of US\$ 239, received by the Company on December 26, 2023, ending the contingent asset.

19.7. Lawsuits brought by natural gas distributors and others

In 2023, Petrobras entered into agreements with CEG, CEG Rio and SERGÁS, with the aim of putting an end to existing litigation and pacifying controversial issues regarding the price of natural gas supplied, based on current economic conditions in the natural gas market. Currently, Petrobras still has one arbitration against a gas distributor at the Northeast of Brazil, which is confidential.

In relation to the State of Minas Gerais, the matter remains in court, where there is no ongoing arbitration, since the gas price collection continues to be carried out in accordance with the current agreement signed between Petrobras and GASMIG.

Accounting policy for provisions for legal proceedings, contingent liabilities and contingent assets

Provisions are recognized when: (i) the Company has a present obligation as a result of a past event; (ii) it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and (iii) the amount of the obligation can be reliably estimated.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Contingent liabilities are not recognized but are disclosed in explanatory notes when the likelihood of outflows is possible, including those whose amounts cannot be estimated, considering the best information available to the date of the issuance of these financial statements.

The methodology used to estimate the provisions is described in note 4.5.

Contingent assets are not recognized, but are disclosed in explanatory notes when the inflow of economic benefits is considered probable and the amount is considered material. However, if the inflow of economic benefits is virtually certain, which, in general, considers the final and unappealable decision, and if the value can be reliably measured, the related asset is not a contingent asset anymore and it is recognized.

20. Provision for decommissioning costs

The following table details the amount of the provision for decommissioning costs by producing area:

	12.31.2023	12.31.2022
Onshore	447	418
Shallow waters	6,253	4,399
Deep and ultra-deep post-salt	10,872	9,988
Pre-salt	5,630	3,795
Total	23,202	18,600

Changes in the provision for decommissioning costs are presented as follows:

Non-current liabilities	2023	2022
Opening balance	18,600	15,619
Adjustment to provision	3,821	3,484
Transfers related to liabilities held for sale ⁽¹⁾	(339)	(1,258)
Use of provisions	(1,227)	(854)
Interest accrued	837	476
Others	(8)	(5)
Translation adjustment	1,519	1,138
Closing balance	23,203	18,600
Current	2,032	-
Non-current	21,171	18,600

Decommissioning projects in Brazil are relatively recent and present specifications that can turn them complex and challenging to comply with the requirements of the ANP, the Brazilian Navy, and the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA). The better understanding of the regulatory environment, together with recent decommissioning practices adopted, have allowed the Company to align its Strategic Plan with this new reality, including the adoption of advanced Environmental Social and Governance (ESG) practices, such as the implementation of a green model for the disposal of its own floating platforms used in the decommissioning of platform P-32.

The Company is approaching the moment when it will have to decommission various systems where oil and gas production has become unfeasible or assets have ended their useful life, as seen in the Marlim field revitalization project, which has led to the closure of several platforms in recent years. In 2023, several Facility Decommissioning Programs (PDI) related to this field were approved, with the majority concentrated in December. With the approved PDIs, the Company commits to executing the activities outlined in the programs. While there is no firm commitment regarding the execution timeline, it allows the Company to estimate with reasonable certainty the short-term portion of the provision for decommissioning costs, which is disclosed in the current liabilities.

Even small variations in the discount rate can result in significant changes in the recognized value. The following table contains information about sensitivities in this key assumption:

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

	Effects on provision for decommissioning	Effects on carrying amounts of assets	Effects on other income and expenses
Sensitivity to the discount rate ⁽¹⁾			
Increase of 0.5 percentage points	(1,462)	(1,331)	(130)
Decrease of 0.5 percentage points	1,615	1,486	130

(1) It includes liabilities held for sale.

The transfer to liabilities held for sale refers to the register and revision of the provision associated with E&P assets in the divestment process and classified as assets held for sale. In 2023, it includes the provision established for the Uruguá group of fields (US\$ 381) in Rio de Janeiro and the reduction of the provision related to the Pescada group of fields (US\$ 41) in Rio Grande do Norte. In 2022, it refers to: the Potiguar groups of fields (US\$ 551), in Rio Grande do Norte state; the Albacora Leste Field (US\$ 490), in Rio de Janeiro; Golfinho and Camarupim (US\$ 175) and Norte Capixaba (US\$ 44) group of fields, in the state of Espírito Santo, as set out in note 31.

The due date estimates for the obligations are presented below:

Maturity	2024	2025	2026	2027	2028	2029 onwards	12.31.2023
Provision for decommissioning costs	2,032	2,095	2,031	2,283	1,952	12,810	23,203

Accounting policy for decommissioning costs

The initial recognition of legal obligations to remove equipment and restore land or sea areas at the end of operations occurs after the declaration of commercial feasibility of an oil and gas field. The calculations of the cost estimates for future environmental removals and recoveries are complex and involve significant uncertainties (as set out in note 4.6).

The estimates of decommissioning costs are reviewed annually based on current information on expected costs and recovery plans. When the revision of the estimates results in an increase in the provision for decommissioning costs, there is a corresponding increase in assets. Otherwise, if a decrease in the liability exceeds the carrying amount of the asset, the excess shall be recognized immediately in profit or loss, within other income and expenses.

NOTES TO THE FINANCIAL STATEMENTS**PETROBRAS***(Expressed in millions of US Dollars, unless otherwise indicated)***21. Other assets and liabilities**

Assets		12.31.2023	12.31.2022
Escrow account and/ or collateral	(a)	1,009	1,087
Advances to suppliers	(b)	1,814	1,561
Prepaid expenses	(c)	453	363
Derivatives transactions	(d)	92	54
Assets related to E&P partnerships	(e)	255	71
Others		262	194
		3,885	3,330
Current		1,570	1,777
Non-Current		2,315	1,553

Liabilities		12.31.2023	12.31.2022
Obligations arising from divestments	(f)	1,200	1,355
Contractual retentions	(g)	716	601
Advances from customers	(h)	692	906
Provisions for environmental expenses, research and development and fines	(i)	708	674
Other taxes	(j)	376	293
Unclaimed dividends	(k)	337	241
Derivatives transactions	(d)	62	147
Obligations arising from acquisition of equity interests	(l)	156	138
Various creditors		138	95
Others		520	523
		4,905	4,973
Current		3,015	3,001
Non-Current		1,890	1,972

The following references detail the nature of the operations that make up the balances of other assets and liabilities:

a) Amounts deposited for payment of obligations related to the finance agreement with China Development Bank, as well as margin in guarantee for futures and over-the-counter derivatives. In addition, there are amounts in investment funds from escrow accounts related to divestment of TAG and NTS.

b) Amounts whose compensation must be made by supplying materials or providing services contracted with these suppliers.

c) Spending on platform charters and equipment rentals when the start of operations has been postponed due to legal requirements or to the need for technical adjustments.

d) Fair value of open positions and transactions closed but not yet settled.

e) Cash and amounts receivable from partners in E&P consortia operated by Petrobras.

f) Provisions for contractual indemnities and financial reimbursements assumed by Petrobras to be made to the acquirer, referring to abandonment costs of divested assets. The settlement of these provisions follows decommissioning schedules, with payments beginning between two and three months after the date expected for the execution of operations, according to the contractual terms for reimbursement of abandonment of the respective oil fields.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

g) Retained amounts from obligations with suppliers to guarantee the execution of the contract, accounted for when the obligations with suppliers are due. Contractual retentions will be paid to suppliers at the end of the contract, upon issuance of the contract termination term.

h) Amounts related to the advances or cash receipt from third parties, related to the sale of products or services.

i) Accrued amounts for environmental compensation assumed by the Company in the course of its operations and research projects.

j) Non-current portion of other taxes (see note 17).

k) Dividends made available to shareholders and not paid due to the existence of pending registration issues for which the shareholders are responsible with the custodian bank for the shares and with Petrobras, according to note 34.

l) Obligations arising from the acquisition of equity interests in Araucária Nitrogenados, which will be settled by the end of 2030.

Accounting policy for other assets and liabilities

The accounting recognition of obligations arising from divestment is at present value, using a risk-free discount rate, adjusted to reflect the Company's credit risk, being the best estimate of the disbursement required to settle the present obligation on the statement of financial position date. The obligations are subject to significant changes as activity execution schedules are updated and detailed by buyers.

22. The "Lava Jato (Car Wash) Operation" and its effects on the Company

The Company has monitored the progress of investigations under the "Lava Jato" Operation and, in the preparation of these annual consolidated financial statements for the the year ended December 31, 2023, did not identify any additional information that would affect the adopted calculation methodology to write off, in the third quarter of 2014, amounts overpaid for the acquisition of property, plant and equipment. The Company will continue to monitor these investigations for additional information in order to assess their potential impact on the adjustment made.

In addition, the Company has fully cooperated with the investigation of the competent authorities and will continue to do so in the future.

During 2023, new leniency and plea agreements entitled the Company to receive funds with respect to compensation for damages, in the amount of US\$ 109 (US\$ 96 in 2022 and US\$ 235 in 2021), accounted for as other income and expenses. Thus, the total amount recovered from Lava Jato investigation through December 31, 2023 was US\$ 1,727.

23. Commitment to purchase natural gas

The Gas Supply Agreement (GSA) entered into with Petrobras and Yacimientos Petrolíferos Fiscales Bolivianos - YPFB was initially effective until December 31, 2019. Given the agreement provided for an extension clause, the GSA was automatically extended until the entire volume contracted is delivered by YPFB and withdrawn by Petrobras.

Since December 31, 2019, the contract has been adjusted, mainly to adapt the Guaranteed Daily Quantity (QDG) to the YPFB's supply availability. On December 15, 2023, through a new amendment to the GSA, the supply commitment was last revised by request of YPFB.

According to the contractual balance, the Company expects purchases to continue through December 2027, considering the withdrawal based on the QDG by YPFB, which means the maximum volume contracted every day, ranging from 6 million m³ per day to 18 million m³ per day (on a monthly basis), representing an estimated additional amount of US\$ 3.04 billion, from January 2024 to December 2027, according to price assumptions included in the Strategic Plan 2024-2028.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

If the withdrawal occurs based on the take-or-pay choice, ranging from 4.2 million m³ per day to 12.6 million m³ per day (on a monthly basis), there will be an additional extension until August 2030, representing an estimated additional total value of US\$ 2.88 billion from January 2024 to August 2030.

24. Property, plant and equipment

24.1. By class of assets

	Land, buildings and improvement	Equipment and other assets ⁽¹⁾	Assets under construction ⁽²⁾	Exploration and development costs ⁽³⁾	Right-of- use assets	Total
Balance at January 1, 2023	2,538	55,147	14,838	38,434	19,212	130,169
Cost	4,343	105,429	23,938	67,581	29,670	230,961
Accumulated depreciation and impairment ⁽⁴⁾	(1,805)	(50,282)	(9,100)	(29,147)	(10,458)	(100,792)
Additions	-	528	11,919	12	15,177	27,636
Decommissioning costs - Additions to / review of estimates	-	-	-	2,672	-	2,672
Capitalized borrowing costs	-	-	1,277	-	-	1,277
Signature Bonuses Transfers ⁽⁵⁾	-	-	-	16	-	16
Write-offs	(11)	(304)	(86)	(74)	(156)	(631)
Transfers ⁽⁶⁾	58	5,531	(7,058)	1,754	1	286
Transfers to assets held for sale	(16)	(36)	99	(241)	(85)	(279)
Depreciation, amortization and depletion	(84)	(5,079)	-	(4,711)	(5,432)	(15,306)
Impairment recognition (note 26)	-	(1,689)	(883)	(314)	(39)	(2,925)
Impairment reversal (note 26)	3	101	9	1	28	142
Translation adjustment	199	4,210	1,401	2,883	1,674	10,367
Balance at December 31, 2023	2,687	58,409	21,516	40,432	30,380	153,424
Cost	4,634	118,173	31,467	74,809	44,829	273,912
Accumulated depreciation and impairment ⁽⁴⁾	(1,947)	(59,764)	(9,951)	(34,377)	(14,449)	(120,488)
Balance at January 1, 2022	2,383	53,126	16,922	35,847	17,052	125,330
Cost	4,080	98,085	25,954	61,906	26,382	216,407
Accumulated depreciation and impairment ⁽⁴⁾	(1,697)	(44,959)	(9,032)	(26,059)	(9,330)	(91,077)
Additions	-	841	7,525	48	7,126	15,540
Decommissioning costs - Additions to / review of estimates	-	-	-	3,269	-	3,269
Capitalized borrowing costs	-	-	1,021	-	-	1,021
Signature Bonuses Transfers ⁽⁵⁾	-	-	-	1,177	-	1,177
Write-offs	(20)	(746)	(2,152)	(667)	(1,469)	(5,054)
Transfers ⁽⁶⁾	130	5,162	(8,611)	3,617	2	300
Transfers to assets held for sale	(27)	(1,874)	(410)	(1,976)	(140)	(4,427)
Depreciation, amortization and depletion	(88)	(4,746)	-	(5,306)	(4,478)	(14,618)
Impairment recognition (note 26)	-	(693)	(605)	(142)	(13)	(1,453)
Impairment reversal (note 26)	-	223	15	52	-	290
Translation adjustment	160	3,854	1,133	2,515	1,132	8,794
Balance at December 31, 2022	2,538	55,147	14,838	38,434	19,212	130,169
Cost	4,343	105,429	23,938	67,581	29,670	230,961
Accumulated depreciation and impairment ⁽⁴⁾	(1,805)	(50,282)	(9,100)	(29,147)	(10,458)	(100,792)

(1) It is composed of production platforms, refineries, thermoelectric power plants, natural gas processing plants, pipelines, and other operating, storage and production plants, including subsea equipment for the production and flow of oil and gas, depreciated based on the units of production method.

(2) See note 13 for assets under construction by operating segment.

(3) It is composed of exploration and production assets related to wells, abandonment and dismantling of areas, signature bonuses associated with proved reserves and other costs directly associated with the exploration and production of oil and gas.

(4) In the case of land and assets under construction, it refers only to impairment losses.

(5) Transfers from intangible assets. In 2023, it refers to the declaration of commerciality of the Manjuba, Espadim, Raia Manta and Raia Pintada fields. In 2022, it relates to Itapu, Sêpia and Atapu.

(6) It mainly includes transfers between classes of assets and transfers from advances to suppliers.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

The additions in right of use are mainly due to the entry into operation of FPSO Anita Garibaldi, FPSO Anna Nery, FPSO Almirante Barroso and FPSO Sepetiba, and the respective effect on lease liability (note 25).

24.2. Estimated useful life

The useful life of assets subject to depreciation are shown below:

Asset	Weighted average useful life in years
Buildings and improvement	40 (between 25 and 50)
Equipment and other assets	20 (between 3 to 31) – except assets by the units of production method
Exploration and development costs	Units of production method
Right-of-use	8 (between 2 and 47)

The estimated useful life of buildings and improvements, equipment and other assets is as follows:

Buildings and improvements, equipment and other assets			
Estimated useful life	Cost	Accumulated depreciation	Balance at December 31, 2023
5 years or less	6,065	(5,111)	954
6 - 10 years	8,312	(6,477)	1,835
11 - 15 years	5,811	(2,357)	3,454
16 - 20 years	31,428	(19,908)	11,520
21 - 25 years	33,217	(9,294)	23,923
25 - 30 years	12,915	(4,270)	8,645
30 years or more	5,417	(2,138)	3,279
Units of production method	19,503	(12,150)	7,353
Total	122,668	(61,705)	60,963
Buildings and improvements	4,495	(1,941)	2,554
Equipment and other assets	118,173	(59,764)	58,409

24.3. Right-of-use assets

The table below shows the split by type of asset and readjustment clauses with possible impacts on accumulated depreciation and impairment, as follows:

	Platforms	Vessels	Properties	Total
Balance at December 31, 2023	19,056	9,204	2,120	30,380
Cost	23,859	18,000	2,970	44,829
Accumulated depreciation and impairment	(4,803)	(8,796)	(850)	(14,449)
Without contractual readjustment clauses	-	(7,103)	(168)	(7,271)
With contractual readjustment clauses - Brazil	(4,803)	(225)	-	(5,028)
With contractual readjustment clauses – abroad	-	(1,468)	(682)	(2,150)
Balance at December 31, 2022	9,211	8,254	1,747	19,212
Cost	12,604	14,788	2,278	29,670
Accumulated depreciation and impairment	(3,393)	(6,534)	(531)	(10,458)
Without contractual readjustment clauses	-	(5,322)	(64)	(5,386)
With contractual readjustment clauses - Brazil	(3,393)	(218)	-	(3,611)
With contractual readjustment clauses – abroad	-	(994)	(467)	(1,461)

Accounting policy for property, plant and equipment

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Property, plant and equipment are measured at the cost of acquisition or construction, including all costs necessary to bring the asset to working condition for its intended use and the estimated cost of dismantling and removing the asset and restoring the site, reduced by accumulated depreciation and impairment losses.

A condition for continuing to operate certain items of property, plant and equipment, such as industrial plants, offshore plants and vessels is the performance of regular major inspections and maintenance. Those expenditures are capitalized if a maintenance campaign is expected to occur, at least, 12 months later. Otherwise, they are expensed when incurred. The capitalized costs are depreciated over the period through the next major maintenance date.

Spare parts are capitalized when they are expected to be used during more than one period and can only be used in connection with an item of property, plant and equipment, and are depreciated over the useful life of the item of property, plant and equipment to which they relate.

Borrowing costs directly attributable to the acquisition or construction of qualifying assets are capitalized as part of the costs of these assets.

General borrowing costs are capitalized based on the Company's weighted average cost of borrowings outstanding applied over the balance of assets under construction.

In general, the Company suspends capitalization of borrowing to the extent investments in a qualifying asset hibernates during a period greater than one year or whenever the asset is prepared for its intended use.

Assets directly associated to the production of oil and gas in a contracted area whose useful lives are not less than the life of the field (reserve exhaustion time), including rights and concessions such as signature bonus, are depleted by the unit-of-production method.

The unit-of-production method of depreciation (amortization) is computed based on the monthly production volume over the proved developed oil and gas reserves, except for signature bonuses for which unit of production method takes into account the monthly production over the total proved oil and gas reserves on a field-by-field basis.

Assets related to oil and gas production with useful lives shorter than the life of the field; floating platforms and other assets unrelated to oil and gas production are depreciated on a straight-line basis over their useful lives, which are reviewed annually. Note 24.2 provides further information on the estimated useful life by class of assets. Lands are not depreciated.

Right-of-use assets are presented as property, plant and equipment and, according to the useful lives of their respective underlying assets and the characteristics of lease agreements (term, asset transfer or exercise of call option), are depreciated using the straight-line method based on contractual terms.

24.4. Oil and Gas fields operated by Petrobras returned to ANP

In 2023, the following oil and gas fields, in Campos basin, were returned to ANP: Atum, Curimã, Espada and Xaréu. These fields were returned to ANP mainly due to their economic unfeasibility and, as a consequence, the Company wrote off the amount of US\$ 45 in addition to impairments recognized in prior years.

In 2022, the following oil and gas fields, in Ceará basin, were returned to ANP: Anequim, Congro, Corvina, Garoupa, Garoupinha, Malhado, Namorado, Parati and Viola. These fields were returned to ANP mainly due to their economic unfeasibility and, as a consequence, the Company wrote off the amount of US\$ 619 in addition to impairments recognized in prior years.

In 2021, the following oil and gas fields, in Santos basin, were returned to ANP: Bijupirá, Lagosta, Merluza e Salema. These fields were returned to ANP mainly due to their economic unfeasibility and, as a consequence, the Company wrote off the amount of US\$ 27 in addition to impairments recognized in prior years.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

24.5. Capitalization rate used to determine the amount of borrowing costs eligible for capitalization

The capitalization rate used to determine the amount of borrowing costs eligible for capitalization was the weighted average of the borrowing costs applicable to the borrowings that were outstanding during the period, other than borrowings made specifically for the purpose of obtaining a qualifying asset. For the year ended December 31, 2023, the capitalization rate was 7% p.a. (6.55% p.a. for the year ended December 31, 2022).

25. Intangible assets

25.1. By class of assets

	Rights and Concessions ⁽¹⁾	Software	Goodwill	Total
Balance at January 1, 2023	2,523	439	24	2,986
Cost	2,578	1,560	24	4,162
Accumulated amortization and impairment	(55)	(1,121)	-	(1,176)
Addition	148	200	-	348
Capitalized borrowing costs	-	13	-	13
Write-offs	(41)	-	-	(41)
Transfers	(11)	2	-	(9)
Signature Bonuses Transfers ⁽²⁾	(16)	-	-	(16)
Amortization	(4)	(100)	-	(104)
Impairment recognition (note 26)	(364)	-	-	(364)
Translation adjustment	190	38	1	229
Balance at December 31, 2023	2,425	592	25	3,042
Cost	2,489	1,891	25	4,405
Accumulated amortization and impairment	(64)	(1,299)	-	(1,363)
Estimated useful life in years	⁽³⁾	5	Indefinite	
Balance at January 1, 2022	2,695	308	22	3,025
Cost	2,744	1,321	22	4,087
Accumulated amortization and impairment	(49)	(1,013)	-	(1,062)
Addition	898	181	-	1,079
Capitalized borrowing costs	-	11	-	11
Write-offs	(12)	(6)	-	(18)
Transfers	(11)	(1)	-	(12)
Signature Bonuses Transfers ⁽²⁾	(1,177)	-	-	(1,177)
Amortization	(4)	(73)	-	(77)
Impairment recognition (note 26)	-	(1)	-	(1)
Translation adjustment	134	20	2	156
Balance at December 31, 2022	2,523	439	24	2,986
Cost	2,578	1,560	24	4,162
Accumulated amortization and impairment	(55)	(1,121)	-	(1,176)
Estimated useful life in years	⁽³⁾	5	Indefinite	

(1) It comprises mainly signature bonuses (amounts paid in concession contracts for oil or natural gas exploration and production sharing), in addition to public service concessions, trademarks and patents and others.

(2) Transfers to PP&E. In 2023, it refers to the declaration of commerciality of the Manjuba, Espadim, Raia Manta and Raia Pintada fields. In 2022, it relates to the Itapu, Atapu and Sepia.

(3) Mainly composed of assets with indefinite useful lives, which are reviewed annually to determine whether events and circumstances continue to support an indefinite useful life assessment.

25.2. ANP Bidding Result

Atapu and Sépia

On April 27, 2022, Petrobras signed the Production Sharing Contract for the surplus volume of the Transfer of Rights Agreement related to the Atapu field, in partnership with Shell Brasil Petróleo Ltda (25% interest) and TotalEnergies EP Brasil Ltda. (22.5% interest), and related to the Sépia field in consortium with TotalEnergies (28% interest), Petronas Petróleo Brasil Ltda. (21% interest) and QP Brasil Ltda. (21% interest), according to the results of the Second Bidding Round for the Surplus Volume of the Transfer of Rights Agreement in the Production Sharing regime, which was held on December 17, 2021.

Also on April 27, 2022, the Company signed the Co-participation Agreements and the Amendments to the Agreement for the Individualization of Atapu and Sépia Production (AIPs), which are necessary to manage the coexisting deposits of the Transfer of Rights Agreement and the Production Sharing Contract (related to the surplus volume) of these areas.

The compensation to Petrobras for Atapu and Sépia, including an estimate of the gross-up of the taxes levied, pursuant to Ordinance No. 8 of April 19, 2021 of the Ministry of Mines and Energy (MME), were paid by the partners in April 2022, totaling US\$ 2,093 for Atapu and US\$ 3,059 for Sépia.

The agreements became effective on May 2, 2022, when Pré-Sal Petróleo S.A. (PPSA) confirmed there was no settlement pending for this transaction, in accordance with the provisions of Ordinance No. 519 of May 21, 2021 of the MME.

Additionally, as established in Ordinance No. 8 of April 19, 2021, between 2022 and 2032, whenever the price of Brent oil reaches an annual average ranging from US\$ 40.00 to US\$ 70.00, an earn out is due to Petrobras, for which the Company expects to receive a maximum of US\$ 5,244.

In 2022, the Company recognized a portion of this contingent asset related to the Earn Out for 2022 and 2023, amounting to US\$ 693, as follows: (i) US\$ 384 received in January 2023; and (ii) US\$ 309 relating to 2023, at present value, considering the inflow of economic benefits as virtually certain.

During 2023, the portion of the Earn Out for 2023 had a US\$ 44 update and, in January 2024, the Company received US\$ 371, including price adjustments.

Additionally, in December 2023, the Company recognized a portion of the contingent asset related to the Earn Out for 2024, amounting to US\$ 241, at present value, expected to be received in 2025.

These amounts were recognized as other operating income and expenses.

Sudoeste de Sagitário, Água Marinha e Norte de Brava Blocks - 1st Cycle of Permanent Offer for Production Sharing

On December 16, 2022, Petrobras acquired the right to explore and produce oil and natural gas in Sudoeste de Sagitário and Água Marinha blocks in partnership, and the full right of the Norte de Brava block in the 1st Cycle of Permanent Offer for Production Sharing, carried out by the ANP. In May 2023, the Production Sharing Agreements were signed and the signature bonus was recognized in intangible assets, in the amount of US\$ 146 (US\$ 4 from Sudoeste de Sagitário block, US\$ 40 from Água Marinha block and US\$ 102 from Norte de Brava block).

The acquisition of the Southwest Sagitário block occurred jointly with Shell Brasil, with a 40% interest, with Petrobras being the operator with a 60% interest.

In Água Marinha, Petrobras acts as the operator, with a 30% interest, in partnership with TotalEnergies EP (30% interest), Petronas (20% interest), and QatarEnergy (20% interest).

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

The North Brava block was fully acquired by Petrobras.

Blocks in the Pelotas Basin - 4th Permanent Concession Offering Cycle

On December 13, 2023, Petrobras acquired exploration and production rights for oil and natural gas in 29 blocks in the Pelotas Basin in the 4th Permanent Concession Offering Cycle, conducted by ANP.

The total amount of the signing bonus, in the amount of US\$ 24 (R\$ 116 million), to be paid by Petrobras in the second quarter of 2024, will be recorded as an intangible asset at the time of payment.

Petrobras will operate all blocks, acquired in partnership:

- 26 blocks with 70% interest from Petrobras and 30% from Shell;
- 3 blocks with 50% interest from Petrobras, 30% from Shell Brasil, and 20% from CNOOC Brasil.

25.3. Exploration rights returned to the ANP

In 2023, 8 exploration areas located in the pre-salt area of the Campos Basin were returned to ANP, totaling US\$ 414 (R\$ 2,006 million) in exploration rights written-off. In 2022, there were no basins returned to the ANP.

For more information see note 27 regarding exploration and evaluation of oil and gas reserves.

Accounting policy for intangible assets

Intangible assets are measured at the acquisition cost, less accumulated amortization and impairment losses.

Internally-generated intangible assets are not capitalized and are expensed as incurred, except for development costs that meet the recognition criteria related to the completion and use of assets, probable future economic benefits, and others.

When the technical and commercial feasibility of oil and gas production is demonstrated for the first field in an area, the value of the signature bonus is reclassified to property, plant and equipment at their full value. While they are registered in intangible assets, they are not amortized. Other intangible assets with defined useful lives are amortized on a straight-line basis over their estimated useful lives.

If, when defining the technical and commercial feasibility of the first field of a block, there are exploratory activities being carried out in different locations in the block, so that oil and gas volumes can be estimated for other possible reservoirs in the area, then the value of the signature bonus is partially reclassified to PP&E, based on the ratio between the volume of oil and gas expected (oil in place - VOIP) of a specific reservoir and the total volume of oil and gas expected for all possible reservoirs in the area.

If exploratory activities in the remaining areas do not result in technical and commercial viability, the corresponding value of the signature bonus is not written off, but transferred to PP&E and added to the value of the signature bonus related to the location that was previously assessed as technically and commercially viable.

Intangible assets with an indefinite useful life are not amortized but are tested annually for impairment. Their useful lives are reviewed annually.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

26. Impairment

Statement of income	2023	2022	2021
Impairment (losses) reversals	(2,680)	(1,315)	3,190
Exploratory assets	(364)	-	-
Impairment on equity-accounted investments	(2)	(6)	383
Net effect within the statement of income	(3,046)	(1,321)	3,573
Losses	(3,307)	(1,640)	(654)
Reversals	261	319	4,227
Statement of financial position	2023	2022	2021
Property, plant and equipment	(2,783)	(1,163)	3,414
Intangible assets	(364)	(1)	1
Assets classified as held for sale	103	(151)	(225)
Investments	(2)	(6)	383
Net effect within the statement of financial position	(3,046)	(1,321)	3,573

The Company annually tests its assets for impairment or when there is an indication that their carrying amount may not be recoverable, or that there may be a reversal of impairment losses recognized in previous years.

On November 23, 2023, management concluded and approved its Strategic Plan 2024-2028, considering a complete update of economic assumptions, as well as its project portfolio and estimates of reserve volumes.

The oil and gas production estimated in the scope of this plan indicates a continuous growth focused on the development of projects that generate higher value, with an increase in the participation of assets in the pre-salt layer, which present lower lifting costs. During this period, 14 new production systems are expected to enter into operation, all of which to be allocated to deep and ultra-deep water projects.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

26.1. Impairment of property, plant and equipment and intangible assets

Asset or CGU by nature ⁽¹⁾	Carrying amount before impairment testing	Recoverable amount ⁽²⁾	Impairment (losses) / reversals ⁽³⁾	Business segment	Comments
2023					
Producing properties relating to oil and gas activities in Brazil (several	8,332	6,108	(2,217)	E&P	Item (a1)
Second refining unit in RNEST	943	455	(486)	RT&M	Item (b1)
Oil and gas exploratory assets (several CGUs)	371	-	(364)	E&P	Item (c)
Others			(80)	Several	
Total			(3,147)		
2022					
Producing properties relating to oil and gas activities in Brazil (several	8,307	7,747	(628)	E&P	Item (a2)
Oil and gas production and drilling equipment in Brazil (several CGUs)	486	7	(478)	E&P	Item (d1)
Itaboraí utilities	919	777	(142)	G&LCE	Item (d)
Second refining unit in RNEST	792	882	89	RT&M	Item (b2)
Others			(5)	Several	
Total			(1,164)		
2021					
Producing properties relating to oil and gas activities in Brazil (several	23,734	36,396	3,373	E&P	Item (a3)
Oil and gas production and drilling equipment in Brazil (several CGUs)	250	-	(250)	E&P	Item (d2)
Second refining unit in RNEST	404	767	359	RT&M	Item (b3)
Others			(67)	Several	
Total			3,415		

(1) It only refers to CGUs or assets which presented impairment losses or reversals in the period.

(2) The recoverable amounts of assets for impairment computation were their value in use, unless otherwise indicated.

(3) Impairment losses and reversals are calculated individually for each CGU. However, there are certain line items of this table which represent several CGUs. Thus, as impairment reversals are limited to pre-impairment carrying amounts less subsequent depreciation or amortization recognized, the "Impairment (losses) / reversals" of the line items representing several CGUs may not represent a direct relation between "Carrying amount" and "Recoverable Amount".

In assessing the recoverable amount of property, plant and equipment and intangible assets, individually or grouped in CGUs, the Company bases its cash flow projections on:

- the estimated useful life of the asset or assets grouped into the CGU, based on the expected use of those assets, considering the Company's maintenance policy;
- assumptions and financial forecasts approved by management for the period corresponding to the expected life cycle of each different business; and
- discount rates derived from the Company's post-tax weighted average cost of capital (WACC), adjusted by specific risk-premiums in case of projects postponed for an extended period, or by specific country-risks, in case of assets abroad. The use of post-tax discount rates in determining value in use does not result in different recoverable amounts if pre-tax discount rates had been used.

The cash flow projections used to measure the value in use of the CGUs, at December 31, 2023, were mainly based on the following updated assumptions for average Brent prices and Brazilian real/U.S. dollar average exchange rates:

Strategic Plan 2024-2028	2024	2025	2026	2027	2028	Long term Average
Average Brent (US\$/barrel)	80	78	75	73	70	65
Average Brazilian Real (excluding inflation) - Real /U.S. dollar exchange rate	5.05	5.04	5.03	4.98	4.90	4.65

At December 31, 2022, average Brent prices and Brazilian real/U.S. dollar average exchange rates used were:

Strategic Plan 2023-2027	2023	2024	2025	2026	2027	Long term Average
Average Brent (US\$/barrel)	85	80	75	70	65	55
Average Brazilian Real (excluding inflation) - Real /U.S. dollar exchange rate	5.02	5.00	5.00	4.97	4.88	4.76

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

At December 31, 2021, average Brent prices and Brazilian real/U.S. dollar average exchange rates used were:

Strategic Plan 2022-2026	2022	2023	2024	2025	2026	Long term Average
Average Brent (US\$/barrel)	72	65	60	55	55	55
Average Brazilian Real (excluding inflation) - Real /U.S. dollar exchange rate	5.40	5.33	5.19	5.15	5.14	5.08

Post-tax discount rates, excluding inflation, applied in the tests which presented the main impairment losses and reversals for the period were:

Activity	12.31.2023	12.31.2022
Producing properties relating to oil and gas activities in	7.6% p.a.	7.3% p.a.
RT&M in Brazil – postponed projects	7.0% p.a.	7.1% p.a.

In 2023, the main changes in the CGUs were:

- inclusion of the Manjuba and Espadim fields in the CGU North Cluster (in the E&P segment), since these new producing fields had their technical and economic feasibility demonstrated in 2023. Now, CGU North Cluster comprises the Marlim, Voador, Albacora, Manjuba and Espadim fields and their production facilities; creation of the CGU Raia Cluster, composed of the Raia Manta and Raia Pintada fields, resulting from the Evaluation Plan for the Discoveries of Pão-de-Açúcar, Seat and Gávea (block BM-C-33); extinction of UGC Uruguá Cluster, formed by the Uruguá and Tambaú fields, due to the signing of an agreement for the sale of Petrobras' entire interests in these fields; extinction of the CGUs P-33 platform and SC-106 drilling rig, due to disposal of these assets. As of December 31, 2023, the Uruguá cluster and P-33 platform are classified as held for sale; and
- return of the LUBNOR refinery to CGU Downstream (in the RT&M segment), due to the cancellation of its disposal.

Additional information on key assumptions for impairment testing and on CGU definitions is presented in note 4.2.2.

Information on the main impairment losses of property, plant and equipment and intangible assets is presented as follows:

a1) Producing properties in Brazil – 2023

Impairment losses on producing properties in Brazil amount to US\$ 2,217, mainly in Roncador field (US\$ 2,004), due to the revision of the production curve, in the Strategic Plan 2024-2028, arising from below-expected performance of its wells observed in 2023, due to the interruption of production in some wells and to the accelerated decline of production due to the increase in the percentage of water in other wells.

a2) Producing properties in Brazil – 2022

Impairment losses on producing properties in Brazil amount to US\$ 628, mainly in Roncador field (US\$ 518), reflecting the revision of abandonment costs and of the recovery of areas, as well as changes in operational efficiency estimates, which had a negative effect over production curves of this field.

a3) Producing properties in Brazil – 2021

Impairment reversals on producing properties in Brazil amount to US\$ 3,373, most of it related to CGUs of producing properties, reflecting the revision on the key assumptions of the Strategic Plan 2022-2026, mainly the increase in average Brent prices.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

b1) Second refining unit of RNEST – 2023

In 2023, the Company recognized a US\$ 486 loss on this asset, mainly due to: (i) the review of the scope for the implementation of logistics infrastructure, with an increase in necessary investments; and (ii) the revision of the assumptions of the Strategic Plan 2024-2028, resulting in an increase in operational costs.

b2) Second refining unit of RNEST – 2022

The cash flows to measure the value in use of the second refining unit of RNEST considers operational optimization and the margins for the refining segment estimated in the Strategic Plan 2023-2027, triggering impairment reversals in the amount of US\$ 89.

b3) Second refining unit of RNEST – 2021

The cash flows to measure the value in use of the second refining unit of RNEST took into account the decision to resume the works, according to the Strategic Plan 2022-2026, triggering impairment reversals in the amount of US\$ 359.

c) Oil and gas exploratory assets

The assessment carried out on exploratory assets located in the pre-salt layer of the Campos basin (blocks C-M-210, C-M-277, C-M-344, C-M-346, C-M-411 and C-M-413) resulted in the recognition of a US\$ 364 loss, due to the economic unfeasibility of projects in the phase of production development. In October 2023, the Company's management approved the full and voluntary return of these blocks to the ANP.

d1) Oil and gas production and drilling equipment in Brazil - 2022

Impairment losses of US\$ 478 relates to equipment and structures in the E&P segment, mainly due to the decision to cease the use of platforms P-18, P-19, P-20, P-35 and P-47 in the Marlim field, leading to the recognition of losses in the amount of US\$ 402.

d2) Oil and gas production and drilling equipment in Brazil - 2021

Impairment losses of US\$ 250 relates to equipment and structures in the E&P segment, mainly due to the decision to cease the use of platforms P-26 and P-33 in the Marlim field, leading to the recognition of losses in the amount of US\$ 210.

e) Itaboraí utilities - 2022

The postponement of the beginning of operations of the Natural Gas Processing Unit (UPGN) of the Gaslub plant in Itaboraí, in the state of Rio de Janeiro, due to the termination of the agreement with the contractor responsible for the works, impacted revenue estimate, resulting in the recognition of a US\$ 142 impairment loss.

26.1.1. Assets most sensitive to future impairment

Whenever the recoverable amount of an asset or CGU falls below the carrying amount, an impairment loss is recognized to reduce the carrying amount to the recoverable amount. The following table presents the assets and CGUs most sensitive to future impairment losses, presenting recoverable amounts close to their current carrying amounts.

The analysis presented as follows considers CGUs with estimated impairment losses or reversals if there was a 10% reduction or increase in their recoverable amounts, arising from changes in material assumptions:

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Potential impairment losses - 10% reduction in the recoverable amount	Business segment	Carrying amount	Recoverable amount	Sensitivity
Assets with impairment losses				
Producing properties relating to oil and gas activities in Brazil (CGU Roncador)	E&P	5,863	5,277	(586)
Second refining unit of RNEST	RT&M	455	409	(46)
Itaboraí utilities	G&LCE	924	832	(92)
		7,242	6,518	(724)

Potential impairment reversals - 10% increase in the recoverable amount	Business segment	Carrying amount	Recoverable amount	Sensitivity (1)
Assets with impairment losses				
Producing properties relating to oil and gas activities in Brazil (CGU Roncador)	E&P	5,863	6,449	586
Second refining unit of RNEST	RT&M	455	501	46
Itaboraí utilities	G&LCE	924	1,016	92
		7,242	7,966	724

(1) When calculating a 10% increase in the recoverable amount, the amount of impairment to be reversed is limited to the accumulated impairment of the CGU or to their recoverable amounts, whichever is lower.

Accounting policy for impairment of property, plant and equipment and intangible assets

Property, plant and equipment and intangible assets are assessed for impairment at the smallest identifiable group that generates largely independent cash inflows from other assets or groups of assets (CGU). Note 4.2 presents detailed information about the Company's CGUs.

Assets related to development and production of oil and gas assets (fields or clusters) that have indefinite useful lives, such as goodwill, are tested for impairment at least annually, irrespective of whether there is any indication of impairment.

Considering the existing synergies between the Company's assets and businesses, as well as the expectation of the use of its assets for their remaining useful lives, value in use is generally used by the Company for impairment testing purposes. When specifically indicated, the Company assesses differences between its assumptions and assumptions that would be used by market participants in the determination of the fair value of an asset or CGU.

Reversal of previously recognized impairment losses may occur for assets other than goodwill.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

26.2. Assets classified as held for sale

Asset or CGU by nature ⁽¹⁾	Carrying amount before impairment testing	Recoverable amount ⁽²⁾	Impairment (losses) / reversals ⁽³⁾	Business segment
				2023
Producing properties relating to oil and gas activities	230	334	103	E&P
Others			1	Several
Total			104	
				2022
Producing properties relating to oil and gas activities	376	300	(116)	E&P
Refinery and associated logistics assets	77	34	(44)	RT&M
Others			9	Several
Total			(151)	
				2021
Thermoelectric power plants	91	12	(79)	G&LCE
Investments in associates and joint ventures	107	44	(67)	G&LCE
Oil and gas production and drilling equipment	47	-	(46)	E&P
Refinery and associated logistics assets	255	218	(37)	RT&M
Others			4	Several
Total			(225)	

(1) It only refers to assets or groups of assets which presented impairment losses or reversals in the period.

(2) The recoverable amounts of assets for impairment computation were their fair value.

(3) Impairment losses and reversals are calculated individually for each CGU. However, certain line items of this table may represent several CGUs. Thus, as impairment reversals are limited to pre-impairment carrying amounts less subsequent depreciation or amortization recognized, the "Impairment (losses) / reversals" of each line item may not represent a direct relation between "Carrying amount" and "Recoverable Amount".

In 2023, the Company recognized reversals on assets held for sale in the amount of US\$ 104 arising from the assessment at the fair value of assets, net of disposal expenses, mainly arising from the approval for the disposal of Uruguá Cluster (US\$ 103).

In 2022, the Company recognized losses on assets held for sale in the amount of US\$ 151, arising from the assessment at the fair value of assets, net of disposal expenses, mainly:

- producing properties relating to oil and gas activities – a US\$ 116 impairment loss, due to the revision of abandonment costs and of the recovery of areas of several concessions in clusters Golfinho (a US\$ 72 impairment loss), Pescada (a US\$ 29 impairment loss) and Camarupim (a US\$ 15 impairment loss); and
- refinery and associated logistics assets: approval for the disposal of LUBNOR refinery, in the state of Ceará, resulting in the recognition of a US\$ 44 impairment loss.

In 2021, the Company recognized losses on assets held for sale, in the amount of US\$ 225, arising from the assessment at the fair value of assets, net of disposal expenses, mainly due to:

- Camaçari power plants – following the closing of the sale of thermoelectric power plants Arembepe, Muryci and Bahia 1, located in Camaçari, in the state of Bahia, these assets were measured at fair value net of selling expenses, and a US\$ 79 impairment loss was accounted for in the second quarter of 2021.
- Breitener Energética S.A – following the sale of this company, in the state of Amazonas, Petrobras recognized a US\$ 67 loss;
- Oil and gas production and drilling equipment in Brazil: approval for the disposal of P-32 platform, resulting in the recognition of US\$ 46 losses; and

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

- iv. Refineries and associated logistics assets: following the approval for the sale of refinery Isaac Sabbá (REMAN), in the state of Amazonas, a US\$ 12 impairment loss was recognized, and of the refinery Shale Industrialization Unit (SIX), in the state of Paraná, a US\$ 25 impairment loss was recognized.

The accounting policy for assets and liabilities held for sale is set out in note 31.

26.3. Investments in associates and joint ventures (including goodwill)

Value in use is generally used for impairment test of investments in associates and joint ventures (including goodwill). The basis for estimates of cash flow projections includes: projections covering a period of 5 to 12 years, zero-growth rate perpetuity, budgets, forecasts and assumptions approved by management and a post-tax discount rate derived from the WACC or the Capital Asset Pricing Model (CAPM) models, specific for each case.

Accounting policy for impairment of associates and joint ventures

Investments in associates and joint ventures are tested individually for impairment. When performing impairment testing of an equity-accounted investment, goodwill, if it exists, is also considered part of the carrying amount to be compared to the recoverable amount.

Except when specifically indicated, value in use is generally used by the Company for impairment testing purposes in proportion to the Company's interests in the present value of future cash flow projections via dividends and other distributions.

26.3.1. Investment in publicly traded associates

Braskem S.A.

Braskem's shares are publicly traded on stock exchanges in Brazil and abroad. As of December 31, 2023, the quoted market value of the Company's investment in Braskem was US\$ 1,294 based on the quoted values of both Petrobras' interest in Braskem's common stock (47% of the outstanding shares), and preferred stock (22% of the outstanding shares, see note 30.4). However, there is extremely limited trading of the common shares, since non-signatories of the shareholders' agreement hold only approximately 3% of the common shares.

Given the operational relationship between Petrobras and Braskem, the recoverable amount of the investment for impairment testing purposes was determined based on value in use, considering future cash flow projections and the manner in which the Company can derive value from this investment via dividends and other distributions to arrive at its value in use. As the recoverable amount was higher than the carrying amount, no impairment losses were recognized for this investment.

Cash flow projections to determine the value in use of Braskem were based on estimated prices of feedstock and petrochemical products reflecting international trends on prices, petrochemical products sales volume estimates reflecting projected Brazilian and global G.D.P. growth, post-tax discount rate (excluding inflation) of 6.7% p.a., (WACC), and decreases in the EBITDA margin during the growth cycle of the petrochemical industry in the next years and increases in the long-term. Estimated exchange rates and Brent prices are the same as those set out in note 26.1.

27. Exploration and evaluation of oil and gas reserves

Changes in the balances of capitalized costs directly associated with exploratory wells pending determination of proved reserves and the balance of amounts paid for obtaining rights and concessions for exploration of oil and natural gas (capitalized acquisition costs) are set out in the following table:

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Capitalized Exploratory Well Costs / Capitalized Acquisition Costs ⁽¹⁾	2023	2022
Property plant and equipment		
Opening Balance	1,876	1,994
Additions	505	379
Write-offs	(8)	(545)
Transfers	(1,000)	(83)
Translation adjustment	139	131
Closing Balance	1,512	1,876
Intangible assets		
Opening Balance	2,406	2,576
Additions	147	840
Write-offs	(41)	-
Transfers	(16)	(1,187)
Losses on exploration expenditures written off	(364)	-
Translation adjustment	181	177
Closing Balance	2,313	2,406
Capitalized Exploratory Well Costs / Capitalized Acquisition Costs	3,825	4,282

(1) Amounts capitalized and subsequently expensed in the same period have been excluded from this table.

The transfers which occurred in Property plant and equipment during 2023 were destined for the production development projects of the Raia Pintada and Raia Manta fields, related to the BM-C-33 block (US\$ 968), and the Sépia field (US\$ 46).

The additions occurred in Intangible assets during 2023 mainly refer to the signature bonuses paid by the Company to obtain exploration rights in the blocks North Brava (US\$ 103) and Southwest Sagitário (US\$ 40). In 2022 refer to the Sépia field (US\$ 424), Atapu field (US\$ 416), while the transfers mainly refer to these fields, as well as the Itapu field (US\$ 337).

In 2023, the recognition of losses in Intangible assets (US\$ 364) was due to the economic unfeasibility of projects in blocks C-M-210, C-M-277, C-M-344, C-M-346, C-M-411, and C-M-413, which were in the phase of production development. In October 2023, the Company's Management approved the voluntary full return of these blocks to the ANP, in addition to the return of Dois Irmãos block (US\$ 37) and Três Marias block (US\$ 6). All blocks are located in the pre-salt layer of the Campos basin and the corresponding assets were written-off.

Exploration costs recognized in the statement of income and cash used in oil and gas exploration and evaluation activities are set out in the following table:

	2023	2022	2021
Exploration costs recognized in the statement of income			
Geological and geophysical expenses	(566)	(342)	(358)
Exploration expenditures written off (includes dry wells and signature bonuses)	(421)	(691)	(248)
Contractual penalties on local content requirements	12	165	(47)
Other exploration expenses	(7)	(19)	(34)
Total expenses	(982)	(887)	(687)
Cash used in:			
Operating activities	574	360	393
Investment activities	671	1,253	555
Total cash used	1,245	1,613	948

In 2023 and 2022, Petrobras approved the execution, with the ANP, of a Term of Conduct Adjustment (TAC) to offset local content fines related to:

- 24 concessions in which Petrobras has a 100% interest, located in the Barreirinhas, Campos, Espírito Santo, Parecis, Potiguar, Recôncavo, Santos, Sergipe-Alagoas and Solimões basins; and

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

- 22 concessions in which Petrobras operates in partnership with other concessionaires, located in the Almada, Campos, Espírito Santo, Mucuri, Parnaíba, Pelotas, Pernambuco-Paraíba, Potiguar, Recôncavo, Santos and Sergipe basins.

The TAC provides for the conversion of fines into investment commitments in the Exploration and Production segment with local content. As a result, all administrative proceedings related to the collection of fines arising from alleged non-compliance with local content in these concessions were closed, resulting in a US\$ 54 gain in 2023 due to the reversal of liabilities whose settlement approvals by the ANP occurred in 2023 (a US\$ 180 gain in 2022 due to the approvals which occurred in that year).

As of December 31, 2023, under the terms of the agreement, Petrobras commits to investing US\$ 347 (R\$ 1,681 million) in local content by December 31, 2027.

Accounting policy for exploration and evaluation of oil and gas reserves

The costs incurred in connection with the exploration, appraisal and development of crude oil and natural gas production are accounted for using the successful efforts method of accounting, as set out below:

- geological and geophysical costs related to exploration and appraisal activities incurred until economic and technical feasibility are demonstrated are immediately recognized as an expense;
- amounts paid for obtaining concessions for exploration of crude oil and natural gas (capitalized acquisition costs) are initially capitalized as intangible assets and are transferred to property, plant and equipment once the technical and commercial feasibility are demonstrated. More information on intangible assets accounting policy, see note 25;
- costs directly attributable to exploratory wells, including their equipment, installations and other costs necessary to identify the technical and commercial feasibility, pending determination of proved reserves, are capitalized within property, plant and equipment. In some cases, exploratory wells have discovered oil and gas reserves, but at the moment the well drilling is completed they are not yet able to be classified as proved. In such cases, the expenses continue to be capitalized if the well has found a sufficient quantity of reserves to justify its completion as a producing well and progress on assessing the reserves and the technical and commercial feasibility of the project is under way (for more information see note 27.1);
- an internal commission of technical executives of the Company monthly reviews these conditions for each well, by analysis of geoscience and engineering data, existing economic conditions, operating methods and government regulations (for more information see note 4.1);
- costs related to exploratory wells drilled in areas of unproved reserves are charged to expense when determined to be dry or uneconomic by the aforementioned internal commission; and
- costs related to the construction, installation and completion of infrastructure facilities, such as drilling of development wells, construction of platforms and natural gas processing units, construction of equipment and facilities for the extraction, handling, storing, processing or treating crude oil and natural gas, pipelines, storage facilities, waste disposal facilities and other related costs incurred in connection with the development of proved reserve areas (technically and commercially feasible) are capitalized within property, plant and equipment.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

27.1. Aging of Capitalized Exploratory Well Costs

The following tables set out the amounts of exploratory well costs that have been capitalized for a period of one year or more after the completion of drilling, the number of projects whose costs have been capitalized for a period greater than one year, and an aging of those amounts by year (including the number of wells relating to those costs):

Aging of capitalized exploratory well costs ⁽¹⁾	2023	2022
Exploratory well costs capitalized for a period of one year	211	406
Exploratory well costs capitalized for a period greater than one year	1,301	1,470
Total capitalized exploratory well costs	1,512	1,876
Number of projects relating to exploratory well costs capitalized for a period greater than one year	17	15

	Capitalized costs (2023)	Number of wells
2022	238	3
2021	87	2
2020	20	1
2018 and previous years	956	16
Exploratory well costs that have been capitalized for a period greater than one year	1,301	22

(1) Amounts paid for obtaining rights and concessions for exploration of oil and gas (capitalized acquisition costs) are not included.

Exploratory well costs that have been capitalized for a period greater than one year since the completion of drilling relate to 17 projects comprising 22 wells, are composed of (i) US\$ 1,301 of wells in areas in which there has been ongoing drilling or firmly planned drilling activities for the near term and for which an evaluation plan has been submitted for approval by the ANP; and (ii) US\$ 131 relates to costs incurred to evaluate technical and commercial feasibility necessary for the decision on the production development and on definition of proved reserves.

28. Collateral for crude oil exploration concession agreements

The Company has granted collateral to ANP in connection with the performance of the Minimum Exploration Programs established in the concession agreements for petroleum exploration areas in the total amount of US\$ 1,770 (US\$ 1,748 as of December 31, 2022), which is still in force as of December 31, 2023, net of commitments undertaken. As of December 31, 2023, the collateral comprises future crude oil production capacity from Marlim and Buzios producing fields, already in production, pledged as collateral, in the amount of US\$ 1,756 (US\$ 1,648 as of December 31, 2022) and bank guarantees of US\$ 14 (US\$ 100 as of December 31, 2022).

29. Consortia (partnerships) in E&P activities

In line with its strategic objectives, Petrobras operates in association with other companies in consortia in Brazil as holder of oil and natural gas exploration and production rights in concessions and production sharing regimes.

As of December 31, 2023, the Company holds interests in 67 consortia with 32 companies, among which Petrobras is the operator in 39 (in 2022, 78 consortia with 36 companies and operator in 50).

The consortia formed in 2023 and 2022 are described below:

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Consortium	Location	Petrobras interest	Partners interest	Operator	Year	Additional Information	ANP Bonus Petrobras portion ⁽¹⁾
Água-Marinha	Campos basin	30.0%	Petronas - 20% Quatar Energy - 20% Total Energies - 30%	Petrobras	2023	1st Cycle of Permanent Offer for Production Sharing	4
Sudoeste de Sagitário	Santos basin	60.0%	Shell - 40%	Petrobras	2023	1st Cycle of Permanent Offer for Production Sharing	40
Atapu	Santos basin	52.5%	Shell - 25% TotalEnergies - 22.5%	Petrobras	2022	Production sharing	402
Sépie	Santos basin	30.0%	TotalEnergies - 28% Petronas - 21%	Petrobras	2022	Production sharing	409

(1) PPSA manages the Production Sharing Agreements.

Consortia bring benefits through risk sharing, increased investment capacity, technical and technological interchange, aiming at the growth in oil and gas production. The following table presents the production referring to Petrobras's participation in the main fields in which the Company is the operator in the consortium:

Field	Location	Petrobras interest	Partners interest	Petrobras production portion in 2023 (kboed)	Regime
Tupi	Santos basin pre-salt	65%	Shell - 25% Petrogal - 10%	705	Concession
Búzios	Santos basin pre-salt	85%	CNODC - 10% CNOOC - 5%	488	Production sharing
Roncador	Campos basin	75%	Equinor - 25%	105	Concession
Sapinhoá	Santos basin pre-salt	45%	Shell - 30% Repsol Sinopec - 25%	98	Concession
Mero	Santos basin pre-salt	40%	TotalEnergies - 20% Shell - 20% CNODC - 10% CNOOC - 10%	96	Production sharing
Atapu	Santos basin pre-salt	52.5%	Shell - 25% TotalEnergies - 22.5%	45	Production sharing
Sépie	Santos basin pre-salt	30%	TotalEnergies - 28% Petronas - 21% Qatar - 21%	35	Production sharing
Sururu	Santos basin pre-salt	42.5%	Shell - 25% TotalEnergies - 22.5% Petrogal - 10%	32	Concession
Berbigão	Santos basin pre-salt	42.5%	Shell - 25% TotalEnergies - 22.5% Petrogal - 10%	28	Concession
Tartaruga Verde	Campos basin	50%	Petronas - 50%	28	Concession
Total				1,660	

Accounting policy for joint operations

The E&P consortia are classified as joint operations, where the assets, liabilities, revenues and expenses relating to these consortia are accounted for in the financial statements individually, observing the applicable specific accounting policies and reflecting the portion of the contractual rights and obligations that the company has.

29.1. Unitization Agreements

Petrobras has Production Individualization Agreements (AIP) signed in Brazil with partner companies in E&P consortia, as well as contracts resulting from divestment operations and strategic partnerships related to these consortia. These agreements result in reimbursements payable to (or receivable from) partners regarding expenses and production volumes mainly related to Agulhinha, Albacora Leste, Berbigão, Brava, Budião Noroeste, Budião Sudeste, Caratinga and Sururu.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Provision for equalizations ⁽¹⁾

The table below presents changes in the reimbursements payable relating to the execution of the AIP submitted to the approval of the ANP:

	2023	2022
Opening balance	407	364
Additions/(Write-offs) on PP&E	17	(7)
Payments made	(56)	-
Other income and expenses	62	26
Translation adjustments	32	24
Closing balance	462	407

(1) Berbigão, Sururu, Albacora Leste and others

In 2023, these agreements resulted in additions and write-offs in PP&E, in addition to US\$ 62 of other income and expenses, reflecting the best available estimate of the assumptions used in the calculation base and the sharing of assets in areas to be equalized.

Closed agreements

In December 2023, a Payment Adjustment Agreement was signed, resulting from the redetermination process provided for in the Tartaruga Mestiça Individualization of Production Agreement (AIP) (BM-C-36 concession agreement). The amount paid by Petrobras to Petronas on December 26, 2023, was US\$ 56.

Accounting Policy for unitization agreements

A unitization agreement occurs when a reservoir extends across two or more license or contract areas. In this case, partners pool their individual interests in return for an interest in the overall unit (shared reservoir) and determine their new stake in the single producing unit.

Events that occurred prior to the unitization agreement may lead to the need for compensation between the partners. The compensation will be the difference between the expenses actually incurred by each party up to the reference date and those that should have been incurred by each party if the established participations in the shared reservoir by the AIP were already in effect during that period.

At the signing of the AIP, an amount to be reimbursed to the Company will be recognized as an asset only when there is a contractual right to reimbursement or when the reimbursement is practically certain. An amount to be reimbursed by the Company will be recognized as a liability when it derives from a contractual obligation or, when the outflow of funds is deemed probable and the amount can be reliably estimated. The provision will be offset by an increase or decrease in PP&E, revenues and/or expenses, according to the nature of the events to be reimbursed.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

30. Investments

30.1. Information on direct subsidiaries, joint arrangements and associates

	Main business segment	% Petrobras' ownership	% Petrobras' voting rights	Sales revenues (1)	Shareholders' equity (deficit)	Net income (loss) for the year	Country
Subsidiaries							
Petrobras International Braspetro - PIB BV	-	100.00	100.00	42,379	56,131	3,410	Netherlands
Petrobras Transporte S.A. - Transpetro	RT&M	100.00	100.00	2,223	967	93	Brazil
Petrobras Logística de Exploração e Produção S.A. - PB-LOG	E&P	100.00	100.00	669	116	202	Brazil
Petrobras Biocombustível S.A.	G&LCE	100.00	100.00	96	157	(18)	Brazil
Araucária Nitrogenados S.A.	RT&M	100.00	100.00	-	32	(1)	Brazil
Termomacacé S.A.	G&LCE	100.00	100.00	17	62	12	Brazil
Braspetro Oil Services Company - Brasoil (2)	Corporate, others	100.00	100.00	-	9	8	Cayman
Termobahia S.A.	G&LCE	98.85	98.85	-	100	89	Brazil
Baixada Santista Energia S.A.	G&LCE	100.00	100.00	-	64	2	Brazil
Fundo de Investimento Imobiliário RB Logística - FII	E&P	99.15	99.15	-	19	5	Brazil
Procurement Negócios Eletrônicos S.A.	Corporate, others	72.00	49.00	20	8	2	Brazil
Petrobras Comercializadora de Gás e Energia e Participações S.A.	Corporate, others	100.00	100.00	26	14	4	Brazil
Transportadora Brasileira Gasoduto Bolívia - Brasil S.A.	G&LCE	51.00	51.00	349	104	153	Brazil
Refinaria de Mucuripe S.A. (3)	RT&M	100.00	100.00	-	-	-	Brazil
Associação Petrobras de Saúde (4)	Corporate, others	93.41	93.41	823	144	18	Brazil
Joint operations							
Fábrica Carioca de Catalizadores S.A. - FCC	RT&M	50.00	50.00	64	57	21	Brazil
Joint ventures							
Logum Logística S.A.	RT&M	30.00	30.00	-	216	(31)	Brazil
Petrocoque S.A. Indústria e Comércio	RT&M	50.00	50.00	-	20	23	Brazil
Refinaria de Petróleo Riograndense S.A.	RT&M	33.20	33.33	-	25	4	Brazil
Brasympe Energia S.A.	G&LCE	20.00	20.00	-	15	2	Brazil
Brentech Energia S.A.	G&LCE	30.00	30.00	-	13	1	Brazil
Metanor S.A. - Metanol do Nordeste	RT&M	34.54	50.00	-	24	4	Brazil
Companhia de Coque Calcinado de Petróleo S.A. - Coquepar	RT&M	45.00	45.00	-	-	-	Brazil
Associates							
Braskem S.A. (5)	RT&M	36.15	47.03	-	1,038	(601)	Brazil
UEG Araucária Ltda.	G&LCE	18.80	18.80	-	66	(22)	Brazil
Energética SUAPE II S.A.	G&LCE	20.00	20.00	-	104	29	Brazil
Nitrocolor Produtos Químicos LTDA.	RT&M	38.80	38.80	-	-	-	Brazil
Bioenergética Britarumã S.A.	G&LCE	30.00	30.00	-	-	-	Brazil
Transportadora Sulbrasileira de Gás - TSB	G&LCE	25.00	25.00	-	3	2	Brazil

(1) Sales revenues refers to the home country of companies. Regarding PIBBV, the composition of sales revenue is: 56% in the Netherlands, 25% in the United States, and 19% in Singapore.

(2) In December 2023, Braspetro Oil Services Company - Brasoil repurchased 105,000,000 common shares for the amount of US\$1 per share.

(3) The contract for the sale of Refinaria de Mucuripe S.A. was rescinded due to the non-fulfillment of established precedent conditions.

(4) APS is a non-profit civil association, which carries out health assistance activities, and is consolidated in the Company's financial statements.

(5) Equity and net income at September 30, 2022, most current public information.

The main investees of PIB BV are:

- Petrobras Global Trading B.V. – PGT (100%, based in the Netherlands), dedicated to the trade of oil, oil products, biofuels and LNG (liquefied natural gas), as well as to the funding of its activities in light of Petrobras;
- Petrobras Global Finance B.V. – PGF (100%, based in the Netherlands); the finance subsidiary of Petrobras, raising funds through bonds issued in the international capital market;
- Petrobras America Inc. – PAI (100%, based in the United States), dedicated to trading and E&P activities (MP Gulf of Mexico, LLC);
- Petrobras Singapore Private Limited. - PSPL (100%, based in Singapore), which operates primarily in the trading of crude oil, oil products, biofuels and liquefied natural gas (LNG); and

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

- PNBV (100%, based in the Netherlands), operates through joint operations in Tupi BV (67.59%), Guarã BV (45%), Agri Development BV (90%), Libra (40%), Papa Terra BV (62.5%), Roncador BV (75%), Iara BV (90.11%), Petrobras Frade Inversiones SA - PFISA (100%) and BJOOS BV (20%), dedicated to the construction and lease of equipment and platforms for Brazilian E&P consortia. Currently, the Company is assessing the liquidation of Guara BV, Libra BV, Agri Development BV, Papa-Terra BV, Roncador BV and PFISA, where conditions precedent are pending. Subsequently, the Company will assess the liquidation of Tupi BV and Iara BV.

On December 28, 2023, the company approved the liquidation and dissolution of Ibiritermo S.A.

30.2. Investments in associates and joint ventures

	Balance at 12.31.2022	Investments	Restructuring, capital decrease and others	Results in equity- accounted investments	CTA	OCI	Dividends	Balance at 12.31.2023
Joint Ventures	546	12	-	(2)	2	1	(78)	481
MP Gulf of Mexico, LLC/PIB BV	374	-	-	(3)	(1)	-	(30)	340
Compañia Mega S.A. - MEGA	149	-	-	4	1	-	(35)	119
Other joint ventures	23	12	-	(3)	2	1	(13)	22
Associates	1,016	12	(1)	(302)	(114)	266	(4)	873
Other investments	4	-	-	-	-	-	-	4
Total	1,566	24	(1)	(304)	(112)	267	(82)	1,358

	Balance at 12.31.2021	Investments	Transfer to assets held for sale	Restructuring, capital decrease and others	Results in equity- accounted investments	CTA	OCI	Dividends	Balance at 12.31.2022
Joint Ventures	509	16	1	(2)	256	1	-	(235)	546
MP Gulf of Mexico, LLC/PIB BV	387	-	-	-	170	1	-	(184)	374
Compañia Mega S.A. - MEGA	98	-	-	-	55	1	-	(5)	149
Other joint ventures	24	16	1	(2)	31	(1)	-	(46)	23
Associates	998	11	(58)	(13)	(5)	(27)	219	(109)	1,016
Other investments	3	-	-	-	-	1	-	-	4
Total	1,510	27	(57)	(15)	251	(25)	219	(344)	1,566

30.3. Investments in non- consolidated listed companies

	Thousand-share lot			Quoted stock exchange prices (US\$ per share)			Fair value
	12.31.2023	12.31.2022	Type	12.31.2023	12.31.2022	12.31.2023	12.31.2022
Associate							
Braskem S.A.	212,427	212,427	Common	4.48	4.83	952	1,025
Braskem S.A.	75,762	75,762	Preferred A	4.52	4.55	342	345
						1,294	1,370

The fair value of these shares does not necessarily reflect the realizable value upon sale of a large block of shares.

Information on the main estimates used in the cash flow projections to determine the value in use of Braskem is set out in Note 26.

30.4. Non-controlling interest

The total amount of non-controlling interest at December 31, 2023 is US\$ 392 (US\$ 344 in 2022) primarily comprising US\$ 331 of FIDC (US\$ 277 in 2022); and US\$ 51 of Transportadora Brasileira Gasoduto Brasil-Bolívia – TBG (US\$ 58 in 2022).

Condensed financial information is set out as follows:

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

	2023	FIDC 2022	2023	TBG 2022	Gaspetro ⁽¹⁾ 2022
Current assets	7,803	3,951	260	200	-
Property, plant and equipment	1	-	314	298	-
Other non-current assets	-	-	4	3	-
	7,804	3,951	578	501	-
Current liabilities	8	1	250	145	-
Non-current liabilities	-	-	224	237	-
Shareholders' equity	7,796	3,950	104	119	-
	7,804	3,951	578	501	-
Sales revenues	-	-	349	350	100
Net income (loss)	1,203	416	153	181	21
Increase (decrease) in cash and cash equivalents	(1,133)	2	39	72	(14)

(1) In July 2022, the Company completed the sale of its entire stake in Gaspetro (51%).

The Credit Rights Investment Fund (FIDC) is a fund mainly intended to securitize “performed” and “non-performed” credits for operations carried out by the Company’s subsidiaries, aiming to optimize cash management.

TBG is an indirect subsidiary which operates in natural gas transmission activities mainly through Bolivia-Brazil Gas Pipeline. The Company holds 51% of interests in this indirect subsidiary.

30.5. Summarized information on joint ventures and associates

The Company invests in joint ventures and associates in Brazil and abroad, whose activities are related to petrochemical, refining, production, trade and logistics of oil products, gas distribution, biofuels, thermoelectric power plants, and other activities. Condensed financial information is set out below:

	2023			2022		
	Joint ventures		Associates ⁽¹⁾	Joint ventures		Associates ⁽¹⁾
	In Brazil	MP Gulf of Mexico, LLC	Other companies abroad	In Brazil	MP Gulf of Mexico, LLC	Other companies abroad
Current assets	330	537	275	7,910	295	481
Non-current assets	272	66	9	2,591	231	139
Property, plant and equipment	525	1,863	189	8,082	508	2,690
Other non-current assets	41	1	-	1,263	37	1
	1,168	2,467	473	19,846	1,071	3,311
Current liabilities	313	365	70	5,096	294	344
Non-current liabilities	533	424	52	13,182	494	548
Shareholders' equity	315	1,336	351	1,690	277	2,045
Non-controlling interest	7	342	-	(122)	6	374
	1,168	2,467	473	19,846	1,071	3,311
Sales revenues	1,036	907	-	14,199	1,159	1,408
Net Income (loss) for the year	5	408	21	(849)	72	887
Ownership interest - %	20 to 50%	20%	34 to 45%	18.8 to 38.8%	20 to 50%	20%
						34 to 45%
						18.8 to 38.8%

(1) It is mainly composed of Braskem.

Accounting policy for investments

Basis of consolidation

The consolidated financial statements include the financial information of Petrobras and the entities it controls (subsidiaries), joint operations (at the level of interest the Company has in them) and consolidated structured entities.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Intragroup balances and transactions, including unrealized profits arising from intragroup transactions, are eliminated in the consolidation of the financial statements.

Investments in other companies

Profit or loss, assets and liabilities related to joint ventures and associates are accounted for by the equity method.

Business combination

A business combination is a transaction in which the acquirer obtains control of another business, regardless its legal form. Acquisitions of businesses are accounted for using the acquisition method when control is obtained. Combinations of entities under common control are accounted for at cost. The acquisition method requires that the identifiable assets acquired and the liabilities assumed be measured at the acquisition-date fair value, with limited exceptions.

31. Disposal of assets and other transactions

The major classes of assets and related liabilities classified as held for sale are shown in the following table:

			12.31.2023	12.31.2022
	E&P	Corporate and other businesses	Total	Total
Assets classified as held for sale				
Inventories	-	-	-	21
Investments	-	-	-	-
Property, plant and equipment	335	-	335	3,587
Total	335	-	335	3,608
Liabilities on assets classified as held for sale				
Finance debt	-	99	99	133
Provision for decommissioning costs	442	-	442	1,332
Total	442	99	541	1,465

31.1. Sales pending closing at December 31, 2023

a) Urugua and Tambau fields

On December 21, 2023, the Company signed agreements with Enauta Energia S.A. for the sale of its entire interest in the Uruguá and Tambau fields located in the Santos basin.

The transaction amounts to up to US\$ 35, corresponding to: (a) US\$ 3 paid on the date of signing, (b) US\$ 7 to be paid at the closing of the transaction, and (c) up to US\$ 25 in contingent payments, depending on future Brent prices and events related to the development of the assets.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

31.2. Sales closed in 2023

Transaction	Acquirer	Signature date (S) Closing date (C)	Sale amount (1) (2)	Gain/ (loss) (3)	Further infor- mation
Sale of the Company's entire interest in Albacora Leste producing field, located in the Campos Basin	Petro Rio Jaguar Petróleo LTDA (PetroRio), a subsidiary of Petro Rio S.A.	April 2022 (S) January 2023 (C)	1,947	604	a
Sale of the Company's entire interest in a set of four onshore production fields, with integrated facilities, located in the state of Espírito Santo, jointly called Norte Capixaba cluster	Seacrest Petróleo SPE Norte Capixaba Ltda., a wholly-owned subsidiary of Seacrest Exploração e Produção de Petróleo Ltda.	February 2022 (S) April 2023 (C)	485	352	b
Sale of the Company's entire interest (100%) in a set of 22 production onshore and shallow water fields, together with their associated infrastructure, located in the Potiguar Basin, in the state of Rio Grande do Norte, jointly called Potiguar cluster	3R Potiguar S.A., a wholly-owned subsidiary of 3R Petroleum Óleo e Gás S.A.	January 2022 (S) June 2023 (C)	1,455	484	c
Sale of the Company's entire interest in a set of maritime concessions called Golfinho and Camarupim groups of fields, in deep waters of the post-salt layer, located in the Espírito Santo Basin.	BW Energy Maromba do Brasil Ltda (BWE)	June 2022 (S) August 2023 (C)	35	(15)	d
Total			3,922	1,425	

(1) Value agreed on the signing date, plus price adjustments on the closing date, when provided for in the contract.

(2) The amount of "Proceeds from disposal of assets" in the Statement of Cash Flows is composed of amounts received this period, including installments of operations from previous years, and advances referring to operations not completed.

(3) Recognized in "Results on disposal/write-offs of assets" (note 11).

a) Sale of Albacora Leste field

The transaction was closed after the fulfillment of conditions precedent, with the receipt of US\$ 1,635 (of which US\$ 1,586 was received in cash and US\$ 49 relates to sale of inventories, as provided for in the agreement), in addition to US\$ 293 received at the transaction signing and to US\$ 10 related to a final price adjustment as provided for in the contract. In addition, Petrobras is expected to receive up to US\$ 250 in contingent payments provided for in the contract, depending on future Brent prices. Of this amount, the Company recognized US\$ 58 as a receivable in 2023.

b) Sale of Norte Capixaba cluster

The transaction was closed with the receipt of US\$ 427, including price adjustments provided for in the contract, in addition to US\$ 36 received at the transaction signing. In addition, there is up to US\$ 66 in contingent payments for Petrobras provided for in the contract, depending on future Brent prices, of which the Company recognized US\$ 22 as a receivable in 2023.

c) Sale of Potiguar cluster

The transaction was closed with the receipt of US\$ 1,100 in addition to US\$ 110 received at the transaction signing, and to US\$ 10 relating to a final price adjustment as provided for in the contract. The Company will also receive US\$ 235 in 4 equal annual installments starting March 2024.

d) Sale of Golfinho and Camarupim groups of fields

The transaction was closed with the receipt of US\$ 12, including price adjustments provided for in the contract, in addition to US\$ 3 received at transaction signing. In addition, there is up to US\$ 60 in contingent payments for Petrobras provided for in the contract, depending on future Brent prices and asset development. Of this amount, the Company recognized US\$ 20 as a receivable in 2023.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

31.3. Transaction interrupted

On December 31, 2022, the main assets and liabilities classified as held for sale included the LUBNOR refinery and its associated logistics assets in the Ceará state.

In November 2023, the sales contract was interrupted due to the failure of the acquirer to fulfill the conditions precedent within the deadline foreseen in the agreement. As a result, the assets and liabilities under the transaction are no longer classified as held for sale. Petrobras has returned the advance received, in the updated amount of US\$ 3.

31.4. Contingent assets from disposed investments and other transactions

Some disposed assets and other agreements provide for receipts subject to contractual clauses, especially related to the Brent variation in transactions related to E&P assets.

The transactions that may generate revenue recognition, accounted for within other income and expenses, are presented below:

Transaction	Closing date	Contingent assets at the closing date	Assets recognized in 2023	Assets recognized in previous periods	Balance of contingent assets as of December 31, 2023
Sales in previous years					
Riacho da Forquilha cluster	December 2019	62	30	28	4
Pampo and Enchova cluster	July 2020	650	15	180	455
Baúna field	November 2020	285	27	132	126
Miranga cluster	December 2021	85	-	55	30
Cricare cluster	December 2021	118	-	22	96
Peroá cluster	August 2022	43	-	10	33
Papa-Terra field	December 2022	90	1	15	74
Sales in the period					
Albacora Leste field	January 2023	250	10	-	240
Norte Capixaba cluster	April 2023	66	11	-	55
Golfinho and Camarupim groups of fields	August 2023	60	-	-	60
Surplus volume of the Transfer of Rights Agreement					
Sepia and Atapu	April 2022	5,244	43	693	4,508
Total		6,953	137	1,135	5,681

31.5. Cash flows from sales of equity interest with loss of control

In 2022 the Company disposed of its interest in certain subsidiaries over which control was lost. The following table summarizes cash flows arising from losing control in subsidiaries:

	Cash received	Cash in subsidiary before losing control	Net Proceeds
2022			
Mataripe refinery (former RLAM)	391	(22)	369
REMAN	233	(22)	211
Total	624	(44)	580

In 2023, there were no sales of equity interests resulting in loss of control.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Accounting Policy for assets and liabilities held for sale

Non-current assets, disposal groups and liabilities directly associated with those assets are classified as held for sale if their carrying amounts will, principally, be recovered through the sale transaction rather than through continuing use.

The condition for classification as held for sale is met only when the sale is approved by the Company's Board of Directors and the asset or disposal group is available for immediate sale in its present condition and there is the expectation that the sale will occur within 12 months after its classification as held for sale. However, an extended period required to complete a sale does not preclude an asset (or disposal group) from being classified as held for sale if the delay is caused by events or circumstances beyond the Company's control and there is sufficient evidence that the Company remains committed to its plan to sell the assets (or disposal groups).

Assets (or disposal groups) classified as held for sale and the associated liabilities are measured at the lower of their carrying amount and fair value less disposal expenses. Assets and liabilities are presented separately in the statement of financial position.

In the classification of non-current assets as held for sale, provisions for decommissioning costs related to these assets are also disclosed. Any commitments with decommissioning assumed by the Company resulting from the sale process are recognized after the closing of the transaction, in accordance with the contractual terms.

When a component of the Company is disposed of or classified as held for sale, and it represented a separate major line of business, the disposed interest is considered a discontinued operation. Thus, its net income and cash flows are presented in separate line items until the date of the closing of the operation.

32. Finance debt

32.1. Balance by type of finance debt

In Brazil	12.31.2023	12.31.2022
Banking market	2,262	1,285
Capital market	3,130	2,896
Development banks ⁽¹⁾	698	723
Others	1	4
Total	6,091	4,908
Abroad		
Banking market	6,303	8,387
Capital market	14,384	14,061
Export credit agency	1,870	2,443
Others	153	155
Total	22,710	25,046
Total finance debt	28,801	29,954
Current	4,322	3,576
Non-current	24,479	26,378

(1) It includes BNDES, FINAME and FINEP.

Current finance debt is composed of:

	12.31.2023	12.31.2022
Short-term debt	4	-
Current portion of long-term debt	3,776	3,111
Accrued interest on short and long-term debt	542	465
Total	4,322	3,576

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

The capital market balance is mainly composed of US\$ 13,739 in global notes issued abroad by the wholly owned subsidiary PGF, as well as US\$ 2,029 in debentures and US\$ 980 in commercial notes issued by Petrobras in reais in Brazil.

The balance in global notes has maturities between 2024 to 2115 and does not require collateral. Such financing was carried out in dollars, euros and pounds, 87%, 2% and 11%, of the total global notes, respectively.

The debentures and the commercial notes, with maturities between 2024 and 2037, do not require collateral and are not convertible into shares or equity interests.

32.2. Changes in finance debt

	In Brazil	Abroad	Total
Balance at December 31, 2022	4,907	25,047	29,954
Proceeds from finance debt	925	1,285	2,210
Repayment of principal ⁽¹⁾	(331)	(3,907)	(4,238)
Repayment of interest ⁽¹⁾	(324)	(1,640)	(1,964)
Accrued interest ⁽²⁾	436	1,822	2,258
Foreign exchange/ inflation indexation charges	111	(150)	(39)
Translation adjustment	383	254	637
Modification of contractual cash flows	(17)	-	(17)
Balance at December 31, 2023	6,090	22,711	28,801

	In Brazil	Abroad	Total
Balance at December 31, 2021	4,517	31,183	35,700
Proceeds from finance debt	853	2,027	2,880
Repayment of principal ⁽¹⁾	(1,013)	(8,183)	(9,196)
Repayment of interest ⁽¹⁾	(292)	(1,554)	(1,846)
Accrued interest ⁽²⁾	396	1,867	2,263
Foreign exchange/ inflation indexation charges	120	(580)	(460)
Translation adjustment	326	287	613
Balance at December 31, 2022	4,907	25,047	29,954

(1) It includes pre-payments.

(2) It includes premium and discount over notional amounts, as well as gains and losses by modifications in contractual cash flows.

In 2023, the Company repaid several finance debts, in the amount of US\$ 6,171.

In the same period, the Company raised funds in the amount of US\$ 2,210, notably: (i) the issuance of Global notes in the international capital market in the amount of US\$ 1,235 due in 2033; and (ii) proceeds in the domestic banking market, in the amount of US\$ 907.

The Company carried out an exchange operation under the terms of a US\$ 519 debt in the domestic banking market, changing the term from 2024 to 2030. The modification of the contractual terms was not substantial and resulted in a gain of US\$ 17 per modification.

32.3. Reconciliation with cash flows from financing activities

	2023			2022		
	Proceeds from finance debt	Repayment of principal	Repayment of interest	Proceeds from finance debt	Repayment of principal	Repayment of interest
Changes in finance debt	2,210	(4,238)	(1,964)	2,880	(9,196)	(1,846)
Repurchase of debt securities		78	-		(121)	-
Deposits linked to finance debt ⁽¹⁾		(33)	(14)		(17)	(4)
Net cash used in financing activities	2,210	(4,193)	(1,978)	2,880	(9,334)	(1,850)

(1) Deposits linked to finance debt with China Development Bank, with semiannual settlements in June and December.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

32.4. Summarized information on current and non-current finance debt

Maturity in	Up to 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	5 years onwards	Total ⁽¹⁾	Fair Value
Financing in U.S.Dollars (US\$):	3,578	2,509	1,460	2,398	1,529	9,056	20,530	20,661
Floating rate debt ⁽²⁾	2,773	1,915	1,119	1,716	524	428	8,475	
Fixed rate debt	805	594	341	682	1,005	8,628	12,055	
Average interest rate p.a.	5.5%	5.5%	6.2%	5.8%	5.4%	6.6%	6.3%	
Financing in Brazilian Reais (R\$):	653	257	503	149	151	4,076	5,789	6,206
Floating rate debt ⁽³⁾	118	145	145	40	40	2,557	3,045	
Fixed rate debt	535	112	358	109	111	1,519	2,744	
Average interest rate p.a.	6.9%	6.6%	6.7%	7.2%	7.4%	6.6%	6.8%	
Financing in Euro (€):	51	300	-	-	136	472	959	970
Fixed rate debt	51	300	-	-	136	472	959	
Average interest rate p.a.	4.7%	4.7%	0.0%	0.0%	4.6%	4.7%	4.7%	
Financing in Pound Sterling (£):	40	-	588	-	-	895	1,523	1,492
Fixed rate debt	40	-	588	-	-	895	1,523	
Average interest rate p.a.	6.3%	0.0%	6.2%	0.0%	0.0%	6.6%	6.4%	
Total as of December 31, 2023	4,322	3,066	2,551	2,547	1,816	14,499	28,801	29,329
Average interest rate	5.8%	5.8%	6.3%	6.1%	5.9%	6.5%	6.4%	
Total as of December 31, 2022	3,576	3,943	3,079	2,523	2,892	13,941	29,954	29,853
Average interest rate	6.7%	6.5%	6.1%	6.2%	6.0%	6.6%	6.5%	

(1) The average maturity of outstanding debt as of December 31, 2023 is 11.38 years (12.07 years as of December 31, 2022).

(2) Operations with variable index + fixed spread.

(3) Operations with variable index + fixed spread, if applicable.

The fair value of the Company's finance debt is mainly determined and categorized into a fair value hierarchy as follows:

- Level 1- quoted prices in active markets for identical liabilities, when applicable, amounting to US\$ 13,971 of December 31, 2023 (US\$ 13,061 of December 31, 2022); and
- Level 2 – discounted cash flows based on discount rate determined by interpolating spot rates considering financing debts indexes proxies, taking into account their currencies and also Petrobras' credit risk, amounting to US\$ 15,358 as of December 31, 2023 (US\$ 16,792 as of December 31, 2022).

Regarding the Interest Rate Benchmark Reform (IBOR Reform), there was a necessity to amend the Company's contracts referenced in these indexes, considering the end of the publication of LIBOR (London Interbank Offered Rate) in dollars (US\$), of one, three and six months.

As of December 31, 2023, 23% of the Company's finance debt has been indexed to SOFR (Secured Overnight Financing Rate) and has the CSA (Credit Spread Adjustment) negotiated with the creditors serving as a parameter, while 1.0% will still undergo contractual changes to switch to this new index.

The renegotiations performed so far have been solely for the replacement of the LIBOR benchmark and are necessary as a direct consequence of the reform of the reference interest rate. In these renegotiated cash flows, the change of the index is economically equivalent to the previous basis. Thus, the changes were prospective with the recognition of interest at the new index in the applicable periods.

Therefore, the Company does not expect material effects for the contracts that will still undergo contractual changes for the new index, considering that they will occur under market conditions.

The sensitivity analysis for financial instruments subject to foreign exchange variation is set out in note 35.2.2.

A maturity schedule of the Company's finance debt (undiscounted), including face value and interest payments is set out as follows:

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Maturity	2024	2025	2026	2027	2028	2029 and thereafter	12.31.2023	12.31.2022
Principal	3,814	3,135	2,606	2,600	1,951	15,075	29,181	31,703
Interest	1,922	1,627	1,492	1,242	1,022	15,237	22,541	24,815
Total ⁽¹⁾	5,736	4,762	4,098	3,842	2,973	30,312	51,722	56,518

(1) A maturity schedule of the lease arrangements (nominal amounts) is set out in note 33.

32.5. Lines of credit

						12.31.2023
Company	Financial institution	Date	Maturity	Available (Lines of Credit)	Used	Balance
Abroad						
PGT BV	Syndicate of banks	12/16/2021	11/16/2026	5,000	-	5,000
PGT BV ⁽¹⁾	Syndicate of banks	3/27/2019	2/27/2026	2,050	-	2,050
Total				7,050	-	7,050
In Brazil						
Petrobras	Banco do Brasil	3/23/2018	9/26/2026	413	-	413
Petrobras	Banco do Brasil	10/4/2018	9/5/2025	413	-	413
Transpetro	Caixa Econômica Federal	11/23/2010	Not defined	68	-	68
Total				894	-	894

(1) On June 30, 2023, Petrobras reduced part of the Revolving Credit Facility to US\$ 2,050 compared to the US\$ 3,250 contracted in 2019. Thus, US\$ 2,050 will be available for withdrawal from July 1st, 2023, to February 27, 2026.

32.6. Covenants and Collateral

32.6.1. Covenants

The Company has covenants that were not in default at December 31, 2023 in its loan agreements and notes issued in the capital markets requiring, among other obligations i) the presentation of interim financial statements within 90 days of the end of each quarter (not reviewed by Independent Registered Public Accounting Firm) and audited financial statements within 120 days of the end of each fiscal year; ii) Negative Pledge / Permitted Liens clause.

Additionally, there are other non-financial obligations that the Company has to comply with: i) clauses of compliance with the laws, rules and regulations applicable to the conduct of its business including (but not limited to) environmental laws; (ii) clauses in financing agreements that require both the borrower and the guarantor to conduct their business in compliance with anti-corruption laws and anti-money laundering laws and to institute and maintain policies necessary for such compliance; and (iii) clauses in financing agreements that restrict relations with entities or even countries sanctioned primarily by the United States (including, but not limited to, the Office of Foreign Assets Control - OFAC, Department of State and Department of Commerce), the European Union and United Nations.

If the Company breaches any of the aforementioned covenants and either is incapable of remedy or continues to fail to comply with the covenants for a period ranging from 30 to 60 calendar days (depending on the contract) after it has received a written notice from the creditors specifying such default or breach and requiring it to be remedied and stating that such notice is a "Notice of Default", this may be declared an Event of Default, and in certain cases the debt related to that contract becomes due and payable.

32.6.2. Collateral

Most of the Company's debt is unsecured, but certain specific funding instruments to promote economic development are collateralized. Such contracts represent 13.9% of the total financing, notably a Financing agreement with China Development Bank (CDB).

The loans obtained by structured entities are collateralized based on the projects' assets, as well as liens on receivables of the structured entities.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Bonds issued by the Company in the capital market are unsecured.

The global notes issued by the Company in the capital market through its wholly-owned subsidiary Petrobras Global Finance B.V. – PGF are unsecured. However, Petrobras fully, unconditionally and irrevocably guarantees these notes.

Accounting policy for loans and finance debt

Loans and finance debt are initially recognized at fair value less transaction costs that are directly attributable to its issue and subsequently measured at amortized cost using the effective interest method.

When the contractual cash flows of a financial liability measured at amortized cost are renegotiated or modified and this change is not substantial, its gross carrying amount will reflect the discounted present value of its cash flows under new terms using the original effective interest rate. The difference between the book value immediately prior to such modification and the new gross carrying amount is recognized as gain or loss in the statement of income. When such modification is substantial, the original liability is extinguished and a new liability is recognized, impacting the statement of income of the period.

33. Lease liability

The Company is the lessee in agreements primarily including oil and gas producing units, drilling rigs and other exploration and production equipment, vessels and support vessels, helicopters, land and buildings. Changes in the balance of lease liabilities are presented below:

	Lessors in Brazil	Lessors abroad	Total
Balance at December 31, 2022	6,020	17,825	23,845
Remeasurement / new contracts	2,276	12,094	14,370
Payment of principal and interest ⁽¹⁾	(2,273)	(3,999)	(6,272)
Interest expenses	519	1,290	1,809
Foreign exchange losses	(223)	(1,635)	(1,858)
Translation adjustment	472	1,531	2,003
Transfers	1	(99)	(98)
Balance at December 31, 2023	6,792	27,007	33,799
Current			7,200
Non-current			26,599

(1) The Statement of Cash Flows comprises US\$ 14 relating to changes on liabilities held for sale.

	Lessors in Brazil	Lessors abroad	Total
Balance at December 31, 2021	4,604	18,439	23,043
Remeasurement / new contracts	2,730	2,219	4,949
Payment of principal and interest	(1,785)	(3,638)	(5,423)
Interest expenses	365	991	1,356
Foreign exchange losses	(169)	(1,221)	(1,390)
Translation adjustment	287	1,170	1,457
Transfers	(12)	(135)	(147)
Balance at December 31, 2022	6,020	17,825	23,845
Current			5,557
Non-current			18,288

A maturity schedule of the lease arrangements (nominal amounts) is set out as follows:

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Nominal Future Payments	2024	2025	2026	2027	2028	2029 onwards	Total	Recoverable taxes
Without readjustment								
Vessels	3,426	2,448	1,380	521	307	1,221	9,303	275
Others	127	83	49	25	2	-	286	26
With readjustment - abroad ⁽¹⁾								
Vessels	352	324	303	258	19	-	1,256	-
Platforms	2,115	2,275	2,120	2,109	2,078	22,939	33,636	-
With readjustment - Brazil								
Vessels	786	542	287	87	7	5	1,714	159
Properties	334	219	210	196	167	1,384	2,510	97
Others	302	246	198	171	128	390	1,435	133
Nominal amounts on December 31, 2023	7,442	6,137	4,547	3,367	2,708	25,939	50,140	690
Nominal amounts on December 31, 2022	5,710	4,621	3,380	2,394	2,122	14,498	32,725	555

(1) Contracts signed in the U.S. Dollars.

The following table presents the main information on leases by class of underlying assets, where platforms and vessels represent 92.3% of the lease liability:

Present Value of Future Payments ⁽¹⁾	Discount rate (%)	Average Period	Recoverable taxes	12.31.2023	12.31.2022
Without readjustment					
Vessels	5.0001	4.6 years	275	8,311	7,421
Others	4.8405	3.1 years	26	264	149
With readjustment - abroad					
Platforms	6.2966	17.7 years	-	20,336	12,340
Vessels	6.3550	3.5 years	-	1,127	838
With readjustment - Brazil					
Vessels	10.9330	2.5 years	159	1,506	1,298
Properties	7.9769	21.4 years	97	1,230	1,010
Others	11.2737	6.6 years	133	1,025	789
Total ⁽²⁾	6.0418	14.4 years	690	33,799	23,845

(1) Incremental nominal rate on company debt calculated from the yield curve of bonds and credit risk of the Company, as well as terms.

(2) Total amount, except for the average period column.

In certain contracts, there are variable payments and terms of less than 1 year recognized as expenses:

	12.31.2023	12.31.2022
Variable payments	1,067	1,060
Up to 1 year maturity	109	118
Variable payments x fixed payments	17%	20%

At December 31, 2023, the nominal amounts of lease agreements for which the lease term has not commenced, as they relate to assets under construction or not yet available for use, is US\$ 65,358 (US\$ 79,913 at December 31, 2022).

The sensitivity analysis of financial instruments subject to exchange variation is presented in note 35.2.

Accounting policy for lease liabilities

Lease liabilities, including those whose underlying assets are of low value, are measured at the present value of lease payments, which includes recoverable taxes, non-cancellable periods and options to extend a lease when they are reasonably certain. These payments are discounted at the Company's nominal incremental rate on loans, as the interest rates implicit in lease agreements with third parties usually cannot be readily determined.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Lease remeasurements reflect changes arising from contractual rates or indexes, as well as lease terms due to new expectations of lease extensions or terminations.

Unwinding of discount on the lease liability is classified as finance expense, while payments reduce their carrying amount. According to the Company's foreign exchange risk management, foreign exchange variations on lease liabilities denominated in U.S. dollars are designated as instruments to protect cash flow hedge relationships from highly probable future exports (see note 35.2.2).

In the E&P segment, some activities are conducted by joint operations with partner companies where the Company is the operator. In cases where all parties to the joint operation are primarily responsible for the lease payments, the Company recognizes the lease liability in proportion to its share. When using underlying assets arising from a specific contract in which the Company is solely responsible for the lease payments, the lease liabilities remain fully recognized and the partners are charged in proportion to their interests.

Payments associated with short-term leases (term of 12 months or less) are recognized as an expense over the term of the lease.

34. Equity

34.1. Share capital (net of share issuance costs)

As of December 31, 2023 and December 31, 2022, subscribed and fully paid share capital, net of issuance costs, was US\$ 107,101, represented by 7,442,454,142 common shares and 5,602,042,788 preferred shares, all of which are registered, book-entry shares with no par value.

Preferred shares have priority on returns of capital, do not grant any voting rights and are non-convertible into common shares.

34.2. Capital reserve

Capital reserve comprises treasury shares owned by Petrobras, in the amount of US\$ 2, at December 31, 2023 and December 31, 2022.

34.3. Capital transactions

34.3.1. Incremental costs directly attributable to the issue of shares

It includes any transaction costs directly attributable to the issuance of new shares, net of taxes.

34.3.2. Change in interest in subsidiaries

It includes any excess of amounts paid/received over the carrying value of the interest acquired/disposed. Changes in interests in subsidiaries that do not result in loss of control of the subsidiary are equity transactions.

34.3.3. Treasury shares

Shares held in treasury in the amount of US\$ 737, at December 31, 2023 and US\$ 2 at December 31, 2022, represented by 222,760 common shares and 104,136,909 preferred shares.

34.4. Appropriation of net income

34.4.1. Profit reserves

Legal reserve

It represents the accumulated balance of 5% of the net income for each year, calculated pursuant to article 193 of the Brazilian Corporation Law, limited to 20% of the share capital (calculated in Brazilian reais). The balance of this reserve reached the legal limit on December 31, 2023.

Statutory reserves

On November 30, 2023, the shareholders approved, in an Extraordinary General Meeting, the revision of article 56 of Petrobras' Bylaws, creating a new statutory reserve named Capital remuneration reserve.

Thus, in accordance with the Company's Bylaws, the constitution of the statutory reserves below must be considered in the proposal for distribution of net income, observing the following order of priority:

- Reserve for research and development (R&D): constituted with the appropriation of net income by applying 0.5% of the year-end share capital, with the accumulated balance not exceeding 5% of the share capital,

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

aiming at funding technological R&D. The balance of this reserve reached the legal limit on December 31, 2023.

- Capital remuneration reserve: may be constituted through the appropriation of up to 70% of the adjusted net income for the year, subject to article 202 of the Brazilian Corporation Law and to the Shareholders Remuneration Policy, limited to the share capital, with the purpose of ensuring resources for the payment of dividends, interest on capital or other form of shareholder remuneration provided for by law, its anticipations, shares repurchases authorized by law, absorption of losses and, as a remaining purpose, incorporation into the share capital.

The changes in the statutory reserves are presented as follows:

	R&D reserve	Capital remuneration reserve	Total Statutory reserves
Balance at December 31, 2021	3,084	-	3,084
Transfers to reserves	197	-	197
Balance at December 31, 2022	3,281	-	3,281
Transfers to reserves	116	8,428	8,544
Balance at December 31, 2023	3,397	8,428	11,825

Tax incentives reserve

Government grants are recognized in the statement of income and are appropriated from retained earnings to the tax incentive reserve pursuant to article 195-A of Brazilian Corporation Law. This reserve may only be used to offset losses or increase share capital.

As of December 31, 2023, this reserve amounts to US\$ 1,998 (US\$ 1,677 as of December 31, 2022), referring to a subsidy incentive for investments, granted by the Superintendencies for Development of the Northeast Region of Brazil (SUDENE) and of the Amazon (SUDAM).

Profit retention reserve

It includes funds intended for capital expenditures, primarily in oil and gas exploration and development activities, as per the capital budget of the Company, pursuant to article 196 of the Brazilian Corporation Law.

34.4.2. Distributions to shareholders

Distributions to shareholders are made by means of dividends, interest capital and share repurchases based on the limits defined in the Brazilian Corporation Law, in the Company's bylaws and in the shareholders remuneration policy.

Pursuant to Brazilian Corporation Law, the Company's shareholders are entitled to receive minimum mandatory dividends (and/or interest on capital) of 25% of the adjusted net income for the year in proportion to the number of common and preferred shares held by them.

To the extent the Company proposes dividend distributions, preferred shares have priority in dividend distribution, which is based on the highest of 3% of the preferred shares' net book value or 5% of the preferred share capital. Preferred shares participate under the same terms as common shares in capital increases resulting from the capitalization of profit reserves or retained earnings. However, this priority does not necessarily grant dividend distributions to the preferred shareholders in the event of loss for a year.

The payment of dividends may be made only to preferred shareholders if the priority dividends absorb all the adjusted net income for the year or reach an amount equal to or greater than the mandatory minimum dividend of 25%.

Shareholders Remuneration Policy

The Company's policy on distributions to shareholders, approved by the Company's Board of Directors on July 28, 2023, defines the following:

- minimum distribution of US\$ 4,000 for fiscal years when the average Brent price exceeds US\$ 40 per barrel, which shall be distributed regardless of its level of indebtedness, provided that the parameters set forth in the policy are observed. This distribution will be equal to both common and preferred shares, once it exceeds the minimum value for preferred shares provided for in the Company's bylaws;
- in the event of gross debt (comprising current and non-current finance debt and lease liability) equal to or less than the maximum debt level defined in the strategic plan (US\$ 65,000 in the 2024-2028 Strategic Plan), in addition to the existence of net income attributable to shareholders of Petrobras, to be verified at the end of the year, the Company shall distribute to its shareholders 45% of the difference between consolidated net cash provided by operating activities and consolidated cash used in the acquisition of PP&E and intangibles assets and on the acquisition of equity interests, calculated in Brazilian reais, provided that the result of this calculation exceeds US\$ 4,000 and does not compromise the financial sustainability of the Company. This calculation will be applied on a quarterly basis;
- any amounts related to share repurchases, as disclosed in the consolidated statement of cash flows, will be deducted from the amount resulting of the formula applied each quarter;
- the Company may, in exceptional cases, distribute extraordinary remuneration to its shareholders, higher than the minimum mandatory dividends or than the amount calculated according to this policy, provided that the financial sustainability of the Company is preserved;
- the distribution of remuneration to shareholders shall be made on a quarterly basis;
- the Company may exceptionally distribute dividends even if there is no net income for the year, in accordance with the rules provided for the Brazilian Corporation Law and the criteria defined in this policy.

Petrobras seeks, through its shareholders remuneration policy, to ensure short, medium and long-term financial sustainability, providing predictability to the dividend payments to shareholders.

Share Repurchase Program

On August 3, 2023, the Board of Directors approved a Share Repurchase Program, for the acquisition of up to 157.8 million preferred shares issued by the Company, on the Brazilian Stock Exchange (B3), to be held in treasury with subsequent cancellation, without reduction of share capital. This program will be carried in the scope of the revised Shareholders Remuneration Policy, within a maximum period of 12 months.

Proposed remuneration to the shareholders of Petrobras

For 2023, the proposed remuneration to the shareholders of Petrobras amounts to US\$ 15,489, to be carried out based on the shareholders remuneration policy, considering 60% of the free cash flow for the first quarter of 2023, according to the policy in force at the time, and 45% of the free cash flow for the remaining quarters of 2023 (both calculated in Brazilian Reais), by means of dividends, interest on capital and the share repurchase program.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

	2023	2022
Dividends and interest on capital	14,754	43,187
Share repurchase program ⁽¹⁾	735	-
Total capital remuneration reserve	15,489	43,187

(1) It excludes US\$ 293 thousand of transaction costs on the repurchase of shares.

For 2022, the proposed remuneration to the shareholders of Petrobras amounted to US\$ 43,187, which was higher than the amount calculated based on the shareholders remuneration policy (US\$ 23,660).

Anticipation of dividends relating to 2023

On 2023, the Board of Directors approved the anticipation of dividends and interest on capital in the total amount of US\$ 11,605 (R\$ 57,152 million), equivalent to US\$ 0.8910 (R\$ 4.3882) per common and preferred shares, based on the net income of the period from January to September 2023 (interim), as shown in the following table:

	Date of approval	Date of record	Amount per common and preferred share	Amount
Interim dividends and interest on capital - 1 st quarter 2023	05.11.2023	06.12.2023	0.381	4,970
Interim dividends and interest on capital - 2 nd quarter 2023	08.03.2023	08.21.2023	0.2355	3,072
Interim dividends and interest on capital - 3 rd quarter 2023 ⁽¹⁾	11.09.2023	11.21.2023	0.2745	3,563
Total anticipated dividends			0.8910	11,605
Indexation to the SELIC interest rate on anticipated dividends paid ⁽²⁾			0.0166	215
Total of anticipated dividends including indexation to the SELIC interest rate			0.9076	11,820

(1) The amount per share of anticipated dividends for the 3rd quarter of 2023 was updated due to the change in the number of treasury shares resulting from the current Share repurchase program.

(2) The amount per share of the indexation to the SELIC interest rate on anticipated dividends paid was calculated based on the the outstanding shares on December 31, 2023.

According to the Company's bylaws, these amounts are indexed to the Selic interest rate, from the date of the payment to the end of the fiscal year (US\$ 215) and are considered in determining the remaining dividends to be paid relating to 2023.

The interest on capital anticipated for the year 2023 resulted in a deductible expense which reduced the income tax expense by US\$ 1,234. This amount was subject to withholding income tax (IRRF) of 15%, except for immune and exempt shareholders, as established in applicable law.

Proposed dividends for 2023

The Dividends for 2023, proposed by management for approval at the Annual General Shareholders Meeting, amounts to US\$ 14,754 (US\$ 1.1415 per outstanding share), including the minimum mandatory dividend of 25% of the adjusted net income (US\$ 6,036) and additional dividends proposed (US\$ 8,718), arising from the remaining portion of retained earnings. This proposal is superior to the priority of preferred shares and in accordance with the shareholders remuneration policy.

The amount per share of the proposed dividends may vary up to the date of the Annual General Shareholders Meeting (date of record), due to the share repurchase program that may reduce the number of outstanding shares.

Dividends payable

As of December 31, 2023, dividends payable within current liabilities, amounting to US\$ 3,501, relate to the anticipation of dividend approved on November 9, 2023, related to the third quarter of 2023. The first installment of these dividends was paid on February 20, 2024 and the second installment will be paid on March 20, 2024.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

	2023	2022
Consolidated opening balance of dividends payable	4,171	-
Opening balance of dividends payable to non-controlling shareholders	(2)	-
Opening balance of dividends payable to shareholders of Petrobras	4,169	-
Additions relating to complementary dividends	6,864	6,688
Additions relating to anticipated dividends	11,605	35,030
Payments made	(19,670)	(37,701)
Indexation to the Selic interest rate	(512)	(298)
Transfers to unclaimed dividends	(84)	(165)
Withholding income taxes over interest on capital and over Indexation to the Selic interest rate ⁽¹⁾	(410)	(366)
Translation adjustment	1,539	981
Closing balance of dividends payable to shareholders of Petrobras	3,501	4,169
Closing balance of dividends payable to non-controlling shareholders	-	2
Consolidated closing balance of dividends payable	3,501	4,171

(1) It includes US\$ 359 over dividends paid and US\$ 51 over dividends payable.

Additional dividends proposed, amounting to US\$ 2,934 (US\$ 0.2270 per outstanding share), will be maintained in shareholders' equity until its approval on the Annual General Shareholders Meeting, expected to be held on April 25, 2024, when it will be reclassified to liabilities, if approved.

Share Repurchase Program for 2023

Since the start of Share Repurchase Program in September 2023, the Company repurchased 104,064,000 preferred shares for the amount of US\$ 735, including transaction costs (US\$ 293 thousand).

34.4.3. Unclaimed Dividends

As of December 31, 2023, the balance of dividends not claimed by shareholders of Petrobras is US\$ 337 recorded as other current liabilities, as described in note 21 (US\$ 241 as of December 31, 2022). The payment of these dividends was not carried out due to the lack of registration data for which the shareholders are responsible with the custodian bank for the Company's shares.

	2023	2022
Changes in unclaimed dividends		
Opening balance	241	81
Prescription	(7)	(11)
Transfers from dividends payable	84	165
Translation adjustment	19	6
Closing Balance	337	241

Prescribed dividends amounting to US\$ 7 in 2023 were transferred to equity, within retained earnings.

The following table presents the Company's expectation of prescription of unclaimed dividends if missing registration data is uninformed by shareholders of Petrobras.

	12.31.2023
Expectation of prescription of unclaimed dividends	
2024	67
2025	180
2026	90
	337

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Accounting policy on distributions to shareholders

Interest on capital is a deductible expense, since it is part of the dividend for the year, as provided for in the Company's bylaws, and accounted for in the statement of income, as required by tax legislation, resulting in a tax credit for income taxes recognized in the statement of income of the year.

The dividends portion provided for in the bylaws or that represents the minimum mandatory dividends is recognized as a liability within the statement of financial position. Any excess must be maintained in shareholders' equity, as additional dividends proposed, until its approval on the Annual General Shareholders Meeting.

Dividends not claimed by Petrobras' shareholders are transferred from dividends payable to other current liabilities. After 3 years from the date these dividends are made available to shareholders, they are reclassified from other current liabilities to equity within retained earnings, in accordance with Petrobras' bylaws.

34.5. Earnings per share

	2023			2022			2021		
	Common	Preferred	Total	Common	Preferred	Total	Common	Preferred	Total
Net income attributable to shareholders of Petrobras	14,221	10,663	24,884	20,895	15,728	36,623	11,339	8,536	19,875
Weighted average number of outstanding	7,442,231,382	5,580,057,862	13,022,289,244	7,442,231,382	5,601,969,879	13,044,201,261	7,442,231,382	5,601,969,879	13,044,201,261
Basic and diluted earnings per share - in U.S. dollars	1.91	1.91	1.91	2.81	2.81	2.81	1.52	1.52	1.52
Basic and diluted earnings (losses) per ADS equivalent - in U.S. dollars ⁽¹⁾	3.82	3.82	3.82	5.62	5.62	5.62	3.04	3.04	3.04

(1) Petrobras' ADSs are equivalent to two shares.

Basic earnings per share are calculated by dividing the net income (loss) attributable to shareholders of Petrobras by the weighted average number of outstanding shares during the period.

Diluted earnings per share are calculated by adjusting the net income (loss) attributable to shareholders of Petrobras and the weighted average number of outstanding shares during the period taking into account the effects of all dilutive potential shares (equity instrument or contractual arrangements that are convertible into shares).

Basic and diluted earnings are identical as the Company has no potentially dilutive shares.

35. Risk management

The Company is exposed to a variety of risks arising from its operations, including price risk (related to crude oil and oil products prices), foreign exchange rates risk, interest rates risk, credit risk and liquidity risk. Corporate risk management is part of the Company's commitment to act ethically and comply with the legal and regulatory requirements of the countries where it operates.

To manage market and financial risks the Company prefers structuring measures through adequate capital and leverage management. While managing risks, the Company considers its corporate governance and controls, technical departments and statutory committees monitoring, under the guidance of the Board of Executive Officers and the Board of Directors. The Company takes account of risks in its business decisions and manages any such risk in an integrated manner in order to enjoy the benefits of diversification.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

The Company presents a sensitivity analysis of factors relating to its corporate risk management process. The possible and remote scenarios are related to events with low and very low probability of occurrence, respectively. The period of application of the sensitivity analysis is one year, except for operations with commodity derivatives, for which a three-month period is applied, due to the short-term nature of these transactions.

35.1. Derivative financial instruments

Assets and liabilities

	12.31.2023	12.31.2022
Fair value Asset Position (Liability)		
Open derivatives transactions	20	-120
Closed derivatives transactions awaiting financial settlement	10	27
Recognized in Statements of Financial Position	30	-93
Other assets (note 21)	92	54
Other liabilities (note 21)	-62	-147

The following table presents the details of the open derivative financial instruments held by the Company as of December 31, 2023, and represents its risk exposure:

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

	Statement of Financial Position				
	Notional value		Fair value		Maturity
	12.31.2023	12.31.2022	Asset Position (Liability)	12.31.2022	
Derivatives not designated for hedge accounting					
Future contracts - total ⁽¹⁾	(1,053)	683	1	(40)	
Long position/Crude oil and oil products	2,527	9,058	-	-	2024
Short position/Crude oil and oil products	(3,580)	(8,375)	-	-	2024
Swap ⁽²⁾					-
Short position/ Soybean oil	(1)	(3)	-	-	2024
Forward contracts ⁽³⁾					
Short position/Foreign currency forwards (BRL/USD)	(1)	-	-	-	2024
Swap ⁽³⁾					
Swap - CDI X IPCA	R\$ 3,008	R\$ 3,008	68	(16)	2029/2034
Foreign currency / Cross-currency Swap ⁽³⁾	US\$ 729	US\$ 729	(49)	(64)	2024/2029
Total open derivative transactions			20	(120)	

(1) Notional value in thousands of bbl.

(2) Notional value in thousands of tons.

(3) Amounts in US\$ and R\$ are presented in million.

Profit or loss

	Gains/ (losses) recognized in the statement of income		
	2023	2022	2021
Commodity derivatives			
Other commodity derivative transactions - Note 35.2.1 (a)	11	(256)	(79)
Recognized in Other Income and Expenses	11	(256)	(79)
Currency derivatives			
Swap Pounds Sterling x Dollar	-	(297)	(85)
NDF - Pounds Sterling x Dollar	-	-	9
Swap CDI x Dollar - Note 35.2.2 (b)	81	211	(3)
Others	-	5	1
	81	(81)	(78)
Interest rate derivatives			
Swap - CDI X IPCA	25	(50)	(41)
	25	(50)	(41)
Cash flow hedge on exports -Note 35.2.2 (a)	(3,763)	(4,871)	(4,585)
Recognized in Net finance income (expense)	(3,657)	(5,002)	(4,704)
Total open derivative transactions	(3,646)	(5,258)	(4,783)

Comprehensive income

	Gains/ (losses) recognized in other comprehensive income		
	2023	2022	2021
Cash flow hedge on exports - Note 35.2.2 (a)	8,317	10,094	636

Collateral

	Guarantees given as collateral	
	12.31.2023	12.31.2022
Commodity derivatives	18	96

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

35.2. Market risks

35.2.1. Risk management of products prices

The Company is exposed to commodity price cycles, and it may use derivative instruments to hedge exposures related to prices of products purchased and sold to fulfill operational needs and in specific circumstances depending on business environment analysis and assessment of whether the targets of the Strategic Plan are being met.

a) Other commodity derivative transactions

Petrobras, by use of its assets, positions and market knowledge from its operations in Brazil and abroad, may seek to optimize some of its commercial operations in the international market, with the use of commodity derivatives to manage price risk.

b) Sensitivity analysis of commodity derivatives

The probable scenario uses market references, used in pricing models for oil, oil products and natural gas markets, and takes into account the closing price of the asset on December 31, 2023. Therefore, no variation is considered arising from outstanding operations in this scenario. The reasonably possible and remote scenarios reflect the potential effects on the statement of income from outstanding transactions, considering a variation in the closing price of 20% and 40%, respectively. To simulate the most unfavorable scenarios, the variation was applied to each asset according to open transactions: price decrease for long positions and increase for short positions.

Financial Instruments	Risk	Probable Scenario	Reasonably possible scenario	Remote Scenario
Derivatives not designated for hedge accounting				
Future and forward contracts	Crude oil and oil products - price changes	-	(18)	(37)
Future and forward contracts	Soybean oil - price changes	-	-	-
Forward contracts	Foreign currency - depreciation BRL x USD	-	-	-
		-	(18)	(37)
		-	(18)	(37)

35.2.2. Foreign exchange risk management

The Company's Risk Management Policy provides for, as an assumption, an integrated risk management that extends to the whole corporation, pursuing the benefit from the diversification of its businesses.

By managing its foreign exchange risk, the Company takes into account the cash flows derived from its operations as a whole. This concept is especially applicable to the risk relating to the exposure of the Brazilian Real against the U.S. dollar, in which future cash flows in U.S. dollar, as well as cash flows in Brazilian Real affected by the fluctuation between both currencies, such as cash flows derived from diesel and gasoline sales in the domestic market, are assessed in an integrated manner.

Accordingly, the financial risk management mainly involves structured actions encompassing the business of the Company.

Changes in the Real/U.S. dollar spot rate, as well as foreign exchange variation of the Real against other foreign currencies, may affect net income and the statement of financial position due to the exposures in foreign currencies, such as high probable future transactions, monetary items and firm commitments.

The Company seeks to mitigate the effect of potential variations in the Real/U.S. dollar spot rates mainly raising funds denominated in US dollars, aiming at reducing the net exposure between obligations and receipts in this

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

currency, thus representing a form of structural protection that takes into account criteria of liquidity and cost competitiveness.

Foreign exchange variation on future exports denominated in U.S. Dollar in a given period are efficiently hedged by the US dollar debt portfolio taking into account changes in such portfolio over time.

The foreign exchange risk management strategy may involve the use of derivative financial instruments to hedge certain liabilities, mitigating foreign exchange rate risk exposure, especially when the Company is exposed to a foreign currency in which no cash inflows are expected.

In the short-term, the foreign exchange risk is managed by applying resources in cash or cash equivalent denominated in Brazilian Real, U.S. Dollar or in another currency.

a) Cash Flow Hedge involving the Company's future exports

The carrying amounts, the fair value as of December 31, 2023, and a schedule of expected reclassifications to the statement of income of cumulative losses recognized in other comprehensive income (shareholders' equity) based on a US\$ 1.00 / R\$ 4.8413 exchange rate are set out below:

				Present value of hedging instrument notional value at 12.31.2023	
Hedging Instrument	Hedged Transactions	Nature of the Risk	Maturity Date	US\$ million	R\$ million
Foreign exchange gains and losses on proportion of non-derivative financial instruments cash flows	Foreign exchange gains and losses of highly probable future monthly exports revenues	Foreign Currency – Real vs U.S. Dollar Spot Rate	January 2024 to December 2033	65,138	315,350
Changes in the present value of hedging instrument notional value				US\$ million	R\$ million
Amounts designated as of December 31, 2022				62,119	324,121
Additional hedging relationships designated, designations revoked and hedging instruments re-designated				28,945	144,095
Exports affecting the statement of income				(9,380)	(46,894)
Principal repayments / amortization				(16,546)	(82,733)
Foreign exchange variation				-	(23,239)
Amounts designated as of December 31, 2023				65,138	315,350
Nominal value of hedging instrument (finance debt and lease liability) at December 31, 2023				84,028	406,807

In 2023, the Company recognized a US\$ 172 gain within foreign exchange gains (losses) due to ineffectiveness (a US\$ 62 loss in the same period of 2022).

The average ratio of future exports for which cash flow hedge accounting was designated to the highly probable future exports is 54.87%.

A roll-forward schedule of cumulative foreign exchange losses recognized in other comprehensive income as of December 31, 2023 is set out below:

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

	Exchange rate variation	Tax effect	Total
Balance at January 1, 2023	(26,527)	9,020	(17,507)
Recognized in Other comprehensive income	4,554	(1,550)	3,004
Reclassified to the statement of income - occurred exports	3,763	(1,280)	2,483
Balance at December 31, 2023	(18,210)	6,190	(12,020)

	Exchange rate variation	Tax effect	Total
Balance at January 1, 2022	(36,621)	12,452	(24,169)
Recognized in Other comprehensive income	5,223	(1,776)	3,447
Reclassified to the statement of income - occurred exports	4,871	(1,656)	3,215
Balance at December 31, 2022	(26,527)	9,020	(17,507)

Additional hedging relationships may be revoked or additional reclassification adjustments from equity to the statement of income may occur as a result of changes in forecasted export prices and export volumes following a revision of the Company's strategic plan. Based on a sensitivity analysis considering a US\$ 10/barrel decrease in Brent prices stress scenario, when compared to the Brent price projections in the Strategic Plan 2024-2028, would not indicate a reclassification from equity to the statement of income.

A schedule of expected reclassification of cumulative foreign exchange losses recognized in other comprehensive income to the statement of income as of December 31, 2023 is set out below:

	2024	2025	2026	2027	2028	2029 to 2033	Total
Expected realization	(7,439)	(4,145)	(3,020)	(3,714)	(2,024)	2,132	(18,210)

Accounting policy for hedge accounting

At inception of the hedge relationship, the Company documents its objective and strategy, including identification of the hedging instrument, the hedged item, the nature of the hedged risk and evaluation of hedge effectiveness requirements.

Considering the natural hedge and the risk management strategy, the Company designates hedging relationships to account for the effects of the existing hedge between a foreign exchange gain or loss from proportions of its long-term debt obligations (denominated in U.S. dollars) and foreign exchange gain or loss of its highly probable U.S. dollar denominated future exports revenues, so that gains or losses associated with the hedged transaction (the highly probable future exports) and the hedging instrument (debt obligations) are recognized in the statement of income in the same periods.

Foreign exchange gains and losses on proportions of debt obligations and lease liability (non-derivative financial instruments) have been designated as hedging instruments.

The highly probable future exports for each month are hedged by a proportion of the debt obligations with an equal US dollar nominal amount. Only a portion of the Company's forecast exports are considered highly probable.

The Company's future exports are exposed to the risk of variation in the Brazilian Real/U.S. dollar spot rate, which is offset by the converse exposure to the same type of risk with respect to its debt denominated in US dollar.

The hedge relationships are assessed on a monthly basis and they may cease and may be re-designated in order to achieve the risk management strategy.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Foreign exchange gains and losses relating to the effective portion of such hedges are recognized in other comprehensive income and reclassified to the statement of income within finance income (expense) in the periods when the hedged item affects the statement of income.

Whenever a portion of future exports for a certain period, for which their foreign exchange gains and losses hedging relationship has been designated is no longer highly probable, the Company revokes the designation and the cumulative foreign exchange gains or losses that have been recognized in other comprehensive income remain separately in equity until the forecast exports occur.

If future exports for which foreign exchange gains and losses hedging relationship has been designated is no longer expected to occur, any related cumulative foreign exchange gains or losses that have been recognized in other comprehensive income from the date the hedging relationship was designated to the date the Company revoked the designation is immediately recycled from other comprehensive income to the statement of income.

In addition, when a financial instrument designated as a hedging instrument expires or settles, the Company may replace it with another financial instrument in a manner in which the hedge relationship continues to occur. Likewise, whenever a hedged transaction effectively occurs, its financial instrument previously designated as a hedging instrument may be designated for a new hedge relationship.

Gains or losses relating to the ineffective portion are immediately recognized in finance income (expense). Ineffectiveness may occur as hedged items and hedge instruments have different maturity dates and due to discount rate used to determine their present value.

b) Information on ongoing contracts

Swap contracts – IPCA x CDI and CDI x Dollar

In September 2019, Petrobras contracted a cross currency swap aiming to protect against exposure arising from the 7th issuance of debentures, which was settled on October 9, 2019, in the total notional amount of US\$ 367 for IPCA x CDI operations, maturing in September 2029 and September 2034, and US\$ 240 for CDI x U.S. Dollar operations, maturing in September 2024 and September 2029.

In July 2023, the 1st repurchase plan for these debentures was closed. During the term of this plan, which started in July 2022, only an immaterial amount of this debt had been effectively repurchased. Thus, the position in this swap remains unchanged.

Changes in interest rate forward curves (CDI interest rate) may affect the Company's results, due to the market value of these swap contracts. In preparing a sensitivity analysis for these curves, a parallel shock on this curve was estimated based on the average maturity of these swap contracts, in the scope of the Company's Risk Management Policy. For possible and remote scenarios, the effects of 40% (400 b.p.) and 80% (800 b.p.) variations, respectively, on the interest rate forward curves were estimated. The effects of this sensitivity analysis, keeping all other variables remaining constant, are shown in the following table:

	Possible Result	Remote Result
SWAP Exchange rate (IPCA x USD)	(9)	(19)

The methodology used to calculate the fair value of this swap operation consists of calculating the future value of the operations, using rates agreed in each contract and the projections of the forward curves, IPCA coupon and foreign exchange coupon, discounting to present value using the risk-free rate. Curves are obtained from Bloomberg based on forward contracts traded in stock exchanges.

Finally, the mark-to-market is adjusted to the credit risk of the financial institutions, which is not relevant in terms of financial volume, since the Company makes contracts with highly rated banks.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

c) Sensitivity analysis for foreign exchange risk on financial instruments

A sensitivity analysis is set out below, showing the probable scenario for foreign exchange risk on financial instruments, computed based on external data along with reasonably possible and remote scenarios (20% and 40% changes in the foreign exchange rates prevailing on December 31, 2023, respectively), except for assets and liabilities of foreign subsidiaries, when transacted in a currency equivalent to their respective functional currencies. This analysis only covers the exchange rate variation and maintains all other variables constant.

Risk	Financial Instruments	Exposure at 12.31.2023	Probable Scenario ⁽¹⁾	Reasonably possible scenario	Remote Scenario
Dollar/Real	Assets	8,519	279	1,741	3,483
	Liabilities	(102,102)	(3,347)	(20,458)	(40,916)
	Exchange rate - Cross currency swap	(621)	(20)	(124)	(248)
	Cash flow hedge on exports	65,136	2,135	13,027	26,055
	Total	(29,068)	(953)	(5,814)	(11,626)
Euro/Dollar	Assets	1,286	18	257	514
	Liabilities	(2,193)	(30)	(439)	(877)
	Total	(907)	(12)	(182)	(363)
Pound/Dollar	Assets	1,547	23	309	619
	Liabilities	(3,051)	(45)	(610)	(1,220)
	Total	(1,504)	(22)	(301)	(601)
Pound/Real	Assets	1	-	-	-
	Liabilities	(33)	(2)	(7)	(13)
	Total	(32)	(2)	(7)	(13)
Euro/Real	Assets	5	-	1	2
	Liabilities	(15)	(1)	(3)	(6)
	Total	(10)	(1)	(2)	(4)
Peso/Dollar	Assets	12	(6)	(2)	(4)
	Total	12	(6)	(2)	(4)
Total at December 31, 2023		(31,509)	(996)	(6,308)	(12,611)

(1) At December 31, 2023, the probable scenario was computed based on the following risks: R\$ x U.S. dollar - a 3.28% depreciation of the real; peso x U.S. dollar - a 98.7% depreciation of the peso; euro x dollar: a 1.3% appreciation of the euro; pound sterling x U.S. dollar - a 1.42% appreciation of the pound sterling; real x euro: a 4.7% depreciation of the real; real x pound sterling - a 4.7% depreciation of the real; Source: Focus and Thomson Reuters.

35.2.3. Interest rate risk management

The Company considers that interest rate risk does not create a significant exposure and therefore, preferably does not use derivative financial instruments to manage interest rate risk, except for specific situations faced by certain subsidiaries of Petrobras.

The sensitivity analysis of interest rate risk presented in the table below is carried out for a twelve-month term. Amounts referring to reasonably possible and remote scenarios mean the total floating interest expense if there is a variation of 40% and 80% in these interest rates, respectively, maintaining all other variables constant.

The following table presents the amounts to be disbursed by Petrobras with the payment of interest related to debts with floating interest rates at December 31, 2023:

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Risk	Probable Scenario ⁽¹⁾	Reasonably possible scenario	Remote Scenario
LIBOR 6M	16	19	22
SOFR 3M ⁽²⁾	97	125	153
SOFR 6M ⁽²⁾	133	158	182
SOFR O/N ⁽²⁾	131	183	235
CDI	233	327	420
TR	6	9	11
TJLP	64	90	116
IPCA	102	143	184
	782	1,054	1,323

(1) The probable scenario was calculated considering the quotations of currencies and floating rates to which the debts are indexed.

(2) It represents the Secured Overnight Financing Rate.

35.3. Liquidity risk management

The possibility of insufficient cash to settle obligations on the scheduled dates is continuously managed by the company. The Company mitigates its liquidity risk by defining reference parameters for treasury management and by periodically analyzing the risks of the projected cash flows, quantifying its main risk factors through Monte Carlo simulations. These risks comprise oil prices, exchange rates, gasoline and international diesel prices, among others. Thus, the Company is able to predict cash needs for its operational continuity and for the execution of its strategic plan.

In this context, even in the case of the financial statements presenting a negative net working capital, management believes it does not compromise its liquidity.

Additionally, the Company maintains revolving credit facilities contracted as a liquidity reserve to be used in adverse scenarios (see note 32.5). The Company regularly assesses market conditions and may enter into transactions to repurchase its own securities or those of its subsidiaries, through a variety of means, including tender offers, make whole exercises and open market repurchases, since they are in line with the Company's liability management strategy, in order to improve its debt repayment profile and cost of debt.

The maturity schedules for the Company's undiscounted finance debt and lease liability are presented in note 32.4 and 33, respectively.

35.4. Credit risk

Credit risk management in Petrobras aims to mitigate risk of not collecting receivables, financial deposits or collateral from third parties or financial institutions through efficient credit analysis, granting and management based on quantitative and qualitative parameters that are appropriate for each market segment in which the Company operates.

The commercial credit portfolio is broad and diversified and comprises clients from the domestic and foreign markets.

Credit granted to financial institutions is related to collaterals received, cash surplus invested and derivative financial instruments. It is spread among "investment grade" international banks rated by international rating agencies and Brazilian banks with low credit risk.

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

35.4.1. Credit quality of financial assets

a) Trade and other receivables

Most of Petrobras's clients do not have a risk rating granted by rating agencies. Thus, for the definition and monitoring of credit limits, management evaluates the customer's field of activity, commercial relationship, financial relationship with Petrobras and its financial statements, among other aspects.

b) Other financial assets

Credit quality of cash and cash equivalents, as well as marketable securities, is based on external credit ratings provided by Standard & Poor's, Moody's and Fitch. The credit quality of those financial assets, that are neither past due nor considered to be credit impaired, are set out below:

	Cash and cash equivalents		Marketable securities	
	12.31.2023	12.31.2022	12.31.2023	12.31.2022
AA	593	-	651	-
A	6,890	3,806	464	820
BBB	20	212	-	-
BB	3,251	917	-	205
AAA.br	1,966	3,034	4,113	3,311
AA.br	-	1	-	1
Other ratings	7	26	-	-
	12,727	7,996	5,228	4,337

35.5. Fair value of financial assets and liabilities

				Total fair value recorded
	Level I	Level II	Level III	
Assets				
Commodity derivatives	1	-	-	1
Interest rate derivatives	-	68	-	68
Balance at December 31, 2023	1	68	-	69
Balance at December 31, 2022	-	-	-	-
Liabilities				
Foreign currency derivatives	-	(49)	-	(49)
Balance at December 31, 2023	-	(49)	-	(49)
Balance at December 31, 2022	(40)	(81)	-	(121)

The fair value of other financial assets and liabilities is presented in the respective notes: 8 – Marketable securities; 14 – Trade and other receivables; and 32 – Finance debt (estimated amount).

The fair values of cash and cash equivalents, current debt and other financial assets and liabilities are equivalent or do not differ significantly from their carrying amounts.

36. Related-party transactions

The Company has a related-party transactions policy, which is annually revised and approved by the Board of Directors in accordance with the Company's bylaws.

In order to ensure the goals of the Company are achieved and to align them with transparency of processes and corporate governance best practices, this policy guides Petrobras while entering into related-party transactions and

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

dealing with potential conflicts of interest on these transactions, based on the following assumptions and provisions: competitiveness, compliance, transparency, fairness and commutability.

The Statutory Audit Committee (CAE) must approve in advance transactions between the Company and: i) the Brazilian Federal Government, including its agencies or similar bodies; ii) Petros Foundation; iii) Petrobras Health Association; iv) entities controlled by Petrobras in which there is a participation in the share capital of the controlled company by the Brazilian Federal Government, its Entities, or any authority of a public entity to which Petrobras is linked, or by individuals connected to it; v) Petrobras' associated entities (including entities controlled by its associates); and vi) entities controlled by key management personnel or by their close family members, taking into account the materiality established by this policy.

Transactions with the Brazilian Federal Government, including its agencies or similar bodies and controlled entities (the latter when classified as out of the Company's normal course of business by the CAE), which are under the scope of Board of Directors approval, must be preceded by the CAE and Minority Shareholders Committee assessment and must have prior approval of, at least, 2/3 of the board members.

The related-party transactions policy also aims to ensure an adequate and diligent decision-making process for the Company's key management.

36.1. Transactions with joint ventures, associates, government entities and pension plans

The Company has engaged, and expects to continue to engage, in the ordinary course of business in numerous transactions with joint ventures, associates, pension plans, as well as with the Company's controlling shareholder, the Brazilian Federal Government, which include transactions with banks and other entities under its control, such as financing and banking, asset management and other transactions.

The balances of significant transactions are set out in the following table:

	12.31.2023		12.31.2022	
	Assets	Liabilities	Assets	Liabilities
Joint ventures and associates				
Petrochemical companies (associates)	45	4	21	10
Other associates and joint ventures	95	10	72	21
Subtotal	140	14	93	31
Brazilian government – Parent and its controlled entities				
Government bonds	1,819	–	1,689	–
Banks controlled by the Brazilian Government	15,526	2,119	11,811	1,567
Petroleum and alcohol account - receivables from the Brazilian Government (note 14.1)	278	–	602	–
Brazilian Federal Government ⁽¹⁾	–	1,378	–	1,422
Pré-Sal Petróleo S.A. – PPSA	–	28	–	57
Others	138	80	58	71
Subtotal	17,761	3,605	14,160	3,117
Petros	64	305	56	301
Total	17,965	3,924	14,309	3,449
Current	2,684	1,676	2,603	2,119
Non-Current	15,281	2,248	11,706	1,330

(1) It includes amounts related to lease liability.

The income/expenses of significant transactions are set out in the following table:

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

	2023	2022	2021
Joint ventures and associates			
BR Distribuidora (now called Vibra Energia)	-	-	7,936
Natural Gas Transportation Companies	-	-	(308)
State-controlled gas distributors (joint ventures) ⁽¹⁾	-	1,196	2,410
Petrochemical companies (associates)	3,402	4,465	3,553
Other associates and joint ventures	57	96	418
Subtotal	3,459	5,757	14,009
Brazilian government – Parent and its controlled entities			
Government bonds	210	204	64
Banks controlled by the Brazilian Government	(19)	71	(157)
Receivables from the Electricity sector	233	-	131
Petroleum and alcohol account - receivables from the Brazilian Government	15	62	58
Brazilian Federal Government	(124)	288	31
Pré-Sal Petróleo S.A. – PPSA	(361)	(657)	(139)
Others	(204)	(79)	(34)
Subtotal	(250)	(111)	(46)
Petros	(19)	(21)	-
Total	3,190	5,625	13,963
Revenues, mainly sales revenues	3,450	5,821	14,672
Purchases and services	12	(4)	(494)
Income (expenses)	(582)	(804)	(315)
Foreign exchange and inflation indexation charges, net	(267)	299	(59)
Finance income (expenses), net	577	313	159
Total	3,190	5,625	13,963

(1) In July 2022, the Company disposed its entire interest in Gaspetro.

Information on the judicialized debts from the Brazilian Federal Government (*precatórios*) issued in favor of the Company arising from the petroleum and alcohol accounts is disclosed in note 14.

The liability related to pension plans of the Company's employees and managed by the Petros Foundation, including debt instruments, is presented in note 18.

36.2. Compensation of key management personnel

The criteria for compensation of employees and officers are established based on the relevant labor legislation and the Company's Positions, Salaries and Benefits Plan (*Plano de Cargos e Salários e de Benefícios e Vantagens*).

The compensation of employees (including those occupying managerial positions) in December 2023 and December 2022 were:

Compensation of employees, excluding officers (amounts in U.S. dollars)	2023	2022
Lowest compensation	920	759
Average compensation	4,921	4,367
Highest compensation	21,516	20,790
Employees	2023	2022
Number of employees	40,213	38,682

The annual compensation of Executive Officers, including variable compensation, for the years 2023 and 2022 were:

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

Compensation of the Director of Petrobras (includes variable compensation)	2023	2022
Lowest compensation ⁽¹⁾	29,707	322,668
Average compensation ⁽²⁾	750,378	586,324
Highest compensation ⁽³⁾	551,477	437,916

(1) It corresponds to the lowest annual compensation, including former members, according to the Annual Circular Letter CVM/SEP of March 28, 2023. In 2023, no members have served for 12 months in the fiscal year. The value of the minimum annual individual compensation was determined based on the actual remuneration paid to members who worked throughout the year. The member with the lowest remuneration served for 1 month in the fiscal year. On the other hand, if we consider the member who served for the longest period in the fiscal year (11 months), the lowest remuneration corresponds to US\$ 342,459. If the Company excluded from the calculation the amounts paid to former members, as termination of office and deferred variable compensation, and considered the amounts paid to members who held the position for less than 12 months, the lowest amount would be US\$ 14,318 in 2023 and US\$ 65,172 in 2022.

(2) It corresponds to the total value of the annual compensation, including expenses with former members, divided by the number of remunerated positions (9), according to the Annual Circular Letter CVM/SEP of March 28, 2023. If the Company excluded from the average compensation the amounts paid to former members, as termination of office and deferred variable compensation, the average amount would be US\$ 359,629 in 2023 and US\$ 414,854 in 2022.

(3) It corresponds to the annual compensation, without any exclusions, of the officer with the highest individual compensation, according to the Annual Circular Letter CVM/SEP of March 28, 2023. In the years 2023 and 2022, it corresponds to members who held the position for 4 and 12 months in the fiscal year, respectively.

The criteria for compensation of members of the Board of Directors and the Board Executive Officers is based on the guidelines established by the Secretariat of Management and Governance of the State-owned Companies (SEST) of the Ministry of Management and Innovation in Public Services, and by the Ministry of Mines and Energy. The total compensation is set out as follows:

	2023			Parent Company 2022		
	Executive Officers	Board of Directors	Total	Executive Officers	Board of Directors	Total
Wages and short-term benefits	3.0	0.1	3.1	2.7	0.1	2.8
Social security and other employee-related taxes	0.9	-	0.9	0.8	-	0.8
Post-employment benefits (pension plan)	0.3	-	0.3	0.4	-	0.4
Variable compensation	2.9	-	2.9	2.8	-	2.8
Benefits due to termination of tenure	0.9	-	0.9	0.3	-	0.3
Total compensation recognized in the statement of income	8.0	0.1	8.1	7.0	0.1	7.1
Total compensation paid ⁽¹⁾	7.6	-	7.6	6.3	-	6.3
Monthly average number of members in the period	9.00	11.00	20.00	9.00	11.00	20.00
Monthly average number of paid members in the period	9.00	6.33	15.33	9.00	3.83	12.83

(1) It includes Variable Compensation Program (PPP) for Executive Officers.

In 2023, expenses related to compensation of the board members and executive officers of Petrobras amounted to US\$ 13.9 (US\$ 13.7 in 2022 and US\$ 14.7 in 2021).

The compensation of the Advisory Committees to the Board of Directors is separate from the fixed compensation set for the Board Members and, therefore, has not been classified under compensation of Petrobras' key management personnel.

In accordance with Brazilian regulations applicable to companies controlled by the Brazilian Federal Government, Board members who are also members of the Statutory Audit Committees are only compensated with respect to their Audit Committee duties. The total compensation concerning these members was US\$ 403 thousand for 2023 (US\$ 484 thousand with tax and social security costs). For 2022, the total compensation concerning these members was US\$ 613 thousand (US\$ 728 thousand with tax and social security costs). For 2021, it was US\$ 544 thousand (US\$ 642 thousand with tax and social security costs).

On April 27, 2023, the shareholders, at the Company's Annual General Shareholders Meeting, set the threshold for the overall compensation for executive officers and board members at US\$ 8.9 (R\$ 44.99 million) from April 2023 to March 2024.

The average annual remuneration of the members of Petrobras' Fiscal Council, in fiscal year 2023, was US\$ 31 (US\$ 38, considering social security costs). In 2022, the average annual remuneration was US\$ 28 (US\$ 33, considering social security costs). In 2021, the average annual remuneration was US\$ 25 (US\$ 29, considering social security costs).

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

The Variable Compensation Program for Executive Officers is subject to compliance with prerequisites and performance indicators. The variable remuneration to be paid changes according to the percentage of goals achievement and its payment is deferred in 5 years.

In 2023, the Company provisioned US\$ 2.9 referring to the Performance Award Program – PPP 2023 for Executive Directors.

Exemption from damage (indemnity)

The Company's Bylaws establish since 2002 the obligation to indemnify and keep its managers, members with statutory functions and other employees and agents who legally act by delegation of the Company's managers, in order to cover certain expenses due to complaints, inquiries, administrative, arbitration or judicial investigations and proceedings, in Brazil or in any other jurisdiction, which aim to impute any responsibility for regular management acts practiced exclusively in the exercise of its activities since the date of its investiture or the beginning of the contractual relationship with the Company.

The first Indemnity Commitment was approved by the Board of Directors on December 18, 2018, starting from its signature until the Ordinary General Meeting of 2020. The maximum exposure established by the Company (global limit for all eventual damages) was US\$ 500.

The second Indemnity Commitment was approved by the Board of Directors on March 25, 2020, starting from its signature until the Ordinary General Meeting of 2022. The maximum exposure established by the Company (global limit for all possible damages) was US\$ 300.

The third Indemnity Commitment was approved by the Board of Directors on March 30, 2022, starting from its signature, until the Ordinary General Meeting of 2024. The maximum exposure established by the Company (global limit for all possible damages) was US\$ 200.

The term of coverage provided for in the Commitment begins from the date of signature until the occurrence of the following events, whichever comes last: (i) the end of the fifth year following the date on which the beneficiary leave, for any reason, to exercise the mandate or function/position; (ii) the course of the time required in transit of any Process in which the Beneficiary is partly due to the practice of Regular Management Act; or (iii) the course of the limitation period according to law to events that can generate the obligations of indemnification by the Company, including, but not limited to, the criminal statute applicable deadline, even if such period is applied by administrative authorities or at any time when there is an indemnifiable event based on an imprescriptible fact.

Indemnity agreements shall not cover: (i) acts covered under Directors and Officers (D&O) insurance policy purchased by the Company, as formally recognized and implemented by the insurance Company; (ii) acts outside the regular exercise of the duties or powers of the Beneficiaries; (iii) acts in bad faith act, malicious acts, fraud or serious fault on the part of the Beneficiaries, observing the principle of presumed innocence; (iv) self-interested acts or in favor of third parties that damage the Company's social interest; (v) obligation to pay damages arising from social action according to article 159 of Law 6,404/76 or reimbursement of the damages according to art. 11, § 5º, II of Law 6,385/76; (vi) other cases where a manifest conflict of interest with the Company is established.

Petrobras will have no obligation to indemnify the Beneficiaries for loss of profits, loss of business opportunity, interruption of professional activity, moral damages or indirect damages. eventually claimed by the Beneficiaries, with compensation or reimbursement limited to the cases provided for in the Indemnity Commitment.

In the case of conviction for an intentional act or committed with gross error, final and unappealable in criminal, public civil, impropriety, popular action, action proposed by a third party, or by shareholders in favor of the Company, or, still, of an unappealable administrative decision in which it concludes by the practice of a malicious act or committed with gross error and that has not been subject to judicial suspension, the beneficiary undertakes, regardless of any manifestation of the independent third party, to reimburse the Company for all amounts spent by the Company within

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

the scope of this Commitment, including all expenses and costs related to the process, refunding them within a period of up to 30 (thirty) days from the competent notification.

In order to avoid the configuration of conflicts of interest, notably as provided for in art. 156 of Law 6,404/76, the Company will hire external professionals, who may act individually or jointly, with an unblemished, impartial and independent reputation ("Independent Third Party"), and with robust experience to analyze any claim by the Beneficiaries on the characterization of Regular Management Act or on the hypothesis of exclusions. In addition, Beneficiaries who are claiming said amounts are prohibited from participating in meetings or discussions that deal with the approval of the payment of expenses, in compliance with the provisions of art. 156, head provision of Law 6,404/76, Brazilian Corporate Law.

37. Supplemental information on statement of cash flows

	2023	2022	2021
Amounts paid/received during the year:			
Withholding income tax paid on behalf of third-parties	1,403	1,413	904
Transactions not involving cash			
Purchase of property, plant and equipment on credit	-	19	-
Lease	14,992	6,923	6,945
Provision for decommissioning costs	2,641	3,260	(1,082)
Use of tax credits and judicial deposit for the payment of contingency	144	1,236	1,173
Assets received due to the increase of interest in concessions without disbursement	-	-	165
Remeasurement of property, plant and equipment acquired in previous periods	5	24	-
Earn Out related to Atapu and S��pia fields	280	694	54

The opening balance of Cash and cash equivalents in the Statements of Cash Flows includes amounts related to assets classified as held for sale, as shown in the reconciliation below:

	2023	2022
Reconciliation of the balance at the beginning of the period		
Cash and cash equivalents in statements of financial position	7,996	10,467
Cash and cash equivalents classified as assets held for sale	-	13
Cash and cash equivalents according to Statements of Cash Flows (opening balance)	7,996	10,480

37.1. Reconciliation of Depreciation, depletion and amortization with Statements of Cash Flows

	2023	2022	2021
Depreciation of Property, plant and equipment	15,306	14,618	12,955
Amortization of Intangible assets	104	77	60
Capitalized depreciation	(1,965)	(1,343)	(1,240)
Depreciation of right of use - recovery of PIS/COFINS	(165)	(134)	(80)
Depreciation, depletion and amortization in the Statements of Cash Flows	13,280	13,218	11,695

38. Subsequent events

Receipt of Earn Out relating to S  pia and Atapu

In January 2024, the Company received the amount of US\$ 371 for the complement of the earnout of 2023 relating to the S  pia and Atapu fields. This amount includes the gross-up of the taxes levied on the 28%, 21%, and 21% interests held in S  pia by TotalEnergies EP Brasil Ltda., PETRONAS Petr  leo Brasil Ltda., and QatarEnergy Brasil Ltda., respectively, and on the 25% and 22.5% held in Atapu by Shell Brasil Petr  leo Ltda. and TotalEnergies EP Brasil Ltda., respectively. For more information, see note 25.

Petrobras signs agreement with ANP

NOTES TO THE FINANCIAL STATEMENTS

PETROBRAS

(Expressed in millions of US Dollars, unless otherwise indicated)

On January 30, 2024, Petrobras signed an agreement with ANP to settle a lawsuit relating to the recalculation of production taxes (royalties and special participation) related to oil production in the Jubarte field, from August 2009 to February 2011 and December 2012 to February 2015.

The agreement involves the payment of US\$ 172 (R\$ 832 million), updated as of December 2023, to be adjusted until the date of payment of the first installment. The amounts of the agreement will be paid in an initial installment of 35% and the remaining balance in 48 installments adjusted by the SELIC rate. On March 4, 2024, this agreement was approved by the 23rd Federal Court of the Judicial Section of Rio de Janeiro State.

As of December 31, 2023, these amounts are accounted for within other non-current liabilities. For further information, see note 17.2.

Petróleo Brasileiro S.A. – Petrobras

Supplementary information (unaudited)

(Expressed in millions of US Dollars, unless otherwise indicated)

Supplementary information on Oil and Gas Exploration and Production (unaudited)

In accordance with Codification Topic 932 - Extractive Activities – Oil and Gas, this section provides supplemental information on oil and gas exploration and production activities of the Company. The information included in items (i) through (iii) provides historical cost information pertaining to costs incurred in exploration, property acquisition and development, capitalized costs and results of operations. The information included in items (iv) and (v) presents information on Petrobras' estimated net proved reserve quantities, standardized measure of estimated discounted future net cash flows related to proven reserves, and changes in estimated discounted future net cash flows.

The Company, on December 31, 2023, maintains activities mainly in Brazil, in addition to activities in Argentina, Colombia and Bolivia, in South America. The equity-accounted investments are comprised of the operations of the joint venture company MP Gulf of Mexico, LLC (MPGoM), in the USA, in which Murphy Exploration & Production Company ("Murphy") has an 80% stake and Petrobras America Inc ("PAI") a 20% stake. The Company reports its reserves in Brazil, United States of America and Argentina. Volumes in Bolivia are not registered as the Constitution of this country does not allow. In Colombia, our activities are exploratory, and therefore, there are no associated reserves.

i) Capitalized costs relating to oil and gas producing activities

As set out in note 27, the Company uses the successful efforts method of accounting for appraisal and development costs of crude oil and natural gas production. In addition, notes 24 and 25 presents the accounting policies applied by the Company for recognition, measurement and disclosure of property, plant and equipment and intangible assets.

The following table summarizes capitalized costs for oil and gas exploration and production activities with the related accumulated depreciation, depletion and amortization, and asset retirement obligations:

	Consolidated entities				Equity Method Investees
	Brazil	South America	Others	Total	
December 31, 2023					
Unproved oil and gas properties	3,764	61	-	61	3,825
Proved oil and gas properties	82,396	243	-	243	82,639
Support Equipment	103,285	758	1	759	104,044
Gross Capitalized costs	189,444	1,062	1	1,063	190,507
Depreciation, depletion and amortization	(63,003)	(811)	(1)	(812)	(63,815)
Net capitalized costs	126,442	251	-	251	126,692
December 31, 2022					
Unproved oil and gas properties	4,227	55	-	55	4,282
Proved oil and gas properties	83,030	205	-	205	83,235
Support Equipment	69,735	732	1	733	70,468
Gross Capitalized costs	156,993	992	1	993	157,986
Depreciation, depletion and amortization	(52,836)	(769)	(1)	(770)	(53,606)
Net capitalized costs	104,156	223	-	223	104,380
December 31, 2021					
Unproved oil and gas properties	4,455	115	-	115	4,570
Proved oil and gas properties	80,523	172	-	172	80,695
Support Equipment	67,988	777	1	778	68,766
Gross Capitalized costs	152,967	1,064	1	1,065	154,032
Depreciation, depletion and amortization	(51,621)	(733)	(1)	(734)	(52,355)
Net capitalized costs	101,345	331	-	331	101,677

Petróleo Brasileiro S.A. – Petrobras

Supplementary information (unaudited)

(Expressed in millions of US Dollars, unless otherwise indicated)

ii) Costs incurred in oil and gas property acquisition, exploration and development activities

Costs incurred are summarized below and include both amounts expensed and capitalized:

	Consolidated entities				Equity Method Investees
	Brazil	Abroad		Total	
		South America	Total		
December 31, 2023					
Acquisition costs:					
Proved	-	-	-	-	-
Unproved	146	-	-	146	-
Exploration costs	862	11	11	873	10
Development costs	10,929	53	53	10,982	37
Total	11,937	64	64	12,001	47
December 31, 2022					
Acquisition costs:					
Proved	-	-	-	-	-
Unproved	892	-	-	892	-
Exploration costs	707	51	51	758	1
Development costs	6,883	31	31	6,914	30
Total	8,482	82	82	8,564	31
December 31, 2021					
Acquisition costs:					
Proved	-	-	-	-	-
Unproved	-	-	-	-	-
Exploration costs	682	5	5	687	-
Development costs	6,035	44	44	6,079	37
Total	6,717	49	49	6,766	37

(iii) Results of operations for oil and gas producing activities

The Company's results of operations from oil and gas producing activities for the years ended December 31, 2023, 2022 and 2021 are shown in the following table. The Company transfers substantially all of its Brazilian crude oil and gas production to the RT&M and G&LCE segments, respectively, in Brazil. The internal transfer prices calculated by the Company's model may not be indicative of the price the Company would have realized had this production been sold in an unregulated spot market. Additionally, the prices calculated by the Company's model may not be indicative of the future prices to be realized by the Company. Gas prices used are those set out in contracts with third parties.

Production costs are lifting costs incurred to operate and maintain productive wells and related equipment and facilities, including operating employees' compensation, materials, supplies, fuel consumed in operations and operating costs related to natural gas processing plants.

Exploration expenses include the costs of geological and geophysical activities and projects without economic feasibility. Depreciation and amortization expenses relate to assets employed in exploration and development activities. In accordance with Codification Topic 932 – Extractive Activities – Oil and Gas, income taxes are based on statutory tax rates, reflecting allowable deductions. Interest income and expense are excluded from the results reported in this table.

Petróleo Brasileiro S.A. – Petrobras

Supplementary information (unaudited)

(Expressed in millions of US Dollars, unless otherwise indicated)

	Consolidated entities					Equity Method Investees
	Brazil	South America	North America	Others	Total	
December 31, 2023						
Net operation revenues:						
Sales to third parties	631	136	-	-	136	159
Intersegment	66,113	-	-	-	-	-
	66,744	136	-	-	136	159
Production costs	(16,946)	(63)	-	-	(63)	(36)
Exploration expenses	(981)	(1)	-	-	(1)	-
Depreciation, depletion and amortization	(10,186)	(44)	-	-	(44)	(26)
Impairment of oil and gas properties	(2,105)	-	-	-	-	(75)
Other operating expenses	(2,504)	(15)	(8)	(1)	(24)	(25)
Results before income tax expenses	34,023	12	(8)	(1)	3	(3)
Income tax expenses	(11,568)	(4)	3	1	(1)	-
Results of operations (excluding corporate overhead and interest costs)	22,455	8	(5)	(1)	2	(3)
December 31, 2022						
Net operation revenues:						
Sales to third parties	1,153	158	-	-	158	275
Intersegment	76,579	-	-	-	-	-
	77,732	158	-	-	158	275
Production costs	(19,975)	(75)	-	-	(75)	(41)
Exploration expenses	(719)	(168)	-	-	(168)	-
Depreciation, depletion and amortization	(10,373)	(42)	-	-	(42)	(42)
Impairment of oil and gas properties	(1,216)	(2)	-	-	(2)	-
Other operating expenses	3,000	(1)	(8)	21	12	(22)
Results before income tax expenses	48,449	(130)	(8)	21	(117)	170
Income tax expenses	(16,474)	44	-	(3)	41	-
Results of operations (excluding corporate overhead and interest costs)	31,975	(86)	(8)	19	(76)	170
December 31, 2021						
Net operation revenues:						
Sales to third parties	974	131	-	-	131	220
Intersegment	54,479	-	-	-	-	-
	55,453	131	-	-	131	220
Production costs	(14,601)	(67)	-	-	(67)	(44)
Exploration expenses	(685)	(2)	-	-	(2)	-
Depreciation, depletion and amortization	(8,959)	(46)	-	-	(46)	(38)
Impairment of oil and gas properties	3,107	-	-	-	-	-
Other operating expenses	809	15	114	(118)	11	(17)
Results before income tax expenses	35,124	31	114	(118)	27	121
Income tax expenses	(11,984)	(11)	-	43	33	-
Results of operations (excluding corporate overhead and interest costs)	23,141	20	114	(75)	59	121

Petróleo Brasileiro S.A. – Petrobras

Supplementary information (unaudited)

(Expressed in millions of US Dollars, unless otherwise indicated)

(iv) Reserve quantities information

As presented in note 4.1, proved oil and gas reserves are those quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulations – prior to the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain. The project to extract the hydrocarbons must have commenced or there must be reasonable certainty that the project will commence within a reasonable time. Reserves estimate involves a high degree of judgment and complexity and its application affects different items of these Financial Statements.

The Company's estimated net proved oil and gas reserves and changes thereto for the years 2023, 2022 and 2021 are presented in the following table. Proved reserves are estimated in accordance with the reserve definitions prescribed by the Securities and Exchange Commission.

Proved developed oil and gas reserves are proved reserves that can be expected to be recovered: (i) through existing wells with existing equipment and operating methods or in which the cost of the required equipment is relatively minor compared to the cost of a new well; and (ii) through installed extraction equipment and infrastructure operational at the time of the reserves estimate if the extraction is done by means not involving a well.

Proved reserves for which substantial new investments in additional wells and related facilities will be required are named proved undeveloped reserves.

Reserve estimates are subject to variations due to technical uncertainties in the reservoir and changes in economic scenarios. A summary of the annual changes in the proved reserves of oil is as follows (in millions of barrels):

Proved developed and undeveloped reserves ^(*)	Consolidated Entities				Equity Method Investees	
	Crude oil in Brazil	Crude Oil in South America	Synthetic Oil in Brazil	Consolidated Total	Crude Oil in North America	Total
At January 1, 2023	8,908	2	-	8,910	16	8,926
Extensions and discoveries	95	-	-	95	-	95
Revisions of previous estimates	1,140	-	-	1,140	2	1,142
Sales of reserves	(147)	-	-	(147)	-	(147)
Production for the year	(786)	-	-	(786)	(2)	(789)
Reserves at December 31, 2023	9,210	2	-	9,212	16	9,228
At January 1, 2022	8,406	2	10	8,419	17	8,435
Revisions of previous estimates	1,705	-	-	1,705	3	1,708
Sales of reserves ⁽¹⁾	(455)	-	(10)	(465)	(1)	(465)
Production for the year	(748)	-	(1)	(749)	(3)	(752)
Reserves at December 31, 2022	8,908	2	-	8,910	16	8,926
At January 1, 2021	7,534	-	-	7,534	18	7,552
Extensions and discoveries	-	-	-	-	-	-
Revisions of previous estimates	1,654	2	11	1,667	1	1,668
Sales of reserves	(9)	-	-	(9)	-	(9)
Production for the year	(773)	-	(1)	(774)	(3)	(777)
Reserves at December 31, 2021	8,406	2	10	8,419	17	8,435

(1) Includes the effects of the write-offs related to the Co-Participation Agreements of Atapu and Sepia fields.

(*) Apparent differences in the sum of the numbers are due to rounding.

In 2023, we standardized the conversion between gas and oil equivalent to 5,614.65 ft³ = 1 boe, which is equivalent to the conversion used in contracts in Brazil. Quantities from previous years were restated with the new conversion.

Petróleo Brasileiro S.A. – Petrobras

Supplementary information (unaudited)

(Expressed in millions of US Dollars, unless otherwise indicated)

A summary of the annual changes in the proved reserves of natural gas is as follows (in billions of cubic feet):

Proved developed and undeveloped reserves ^(*)	Consolidated Entities				Equity Method Investees	Total
	Natural Gas in Brazil	Natural Gas in South America	Synthetic Gas in Brazil	Consolidated Total	Natural Gas in North America	
At January 1, 2023	8,504	173	–	8,677	6	8,683
Extensions and discoveries	779	15	–	794	–	794
Revisions of previous estimates	673	(5)	–	668	1	669
Sales of reserves	(47)	–	–	(47)	–	(47)
Production for the year	(573)	(20)	–	(594)	(1)	(595)
Reserves at December 31, 2023	9,335	163	–	9,498	7	9,504
At January 1, 2022	7,912	177	17	8,106	7	8,113
Revisions of previous estimates	1,560	16	–	1,575	–	1,575
Sales of reserves ⁽¹⁾	(382)	–	(15)	(397)	(1)	(398)
Production for the year	(586)	(20)	(1)	(606)	(1)	(607)
Reserves at December 31, 2022	8,504	173	–	8,677	6	8,683
At January 1, 2021	7,062	26	–	7,088	8	7,095
Extensions and discoveries	–	–	–	–	–	–
Revisions of previous estimates	1,512	167	18	1,697	–	1,697
Sales of reserves	(14)	–	–	(14)	–	(14)
Production for the year	(647)	(16)	(1)	(664)	(1)	(666)
Reserves at December 31, 2021	7,912	177	17	8,106	7	8,113

(1) Includes the effects of the write-offs related to the Co-Participation Agreements of Atapu and Sepia fields.

(*) Apparent differences in the sum of the numbers are due to rounding.

In 2023, we standardized the conversion between gas and oil equivalent to 5,614.65 ft³ = 1 boe, which is equivalent to the conversion used in contracts in Brazil. Quantities from previous years were restated with the new conversion.

Natural gas production volumes used in these tables are the net volumes withdrawn from our proved reserves, including gas consumed in operations and excluding reinjected gas. Our disclosure of proved gas reserves includes gas consumed in operations, which represent 35% of our total proved reserves of natural gas as of December 31, 2023.

Petróleo Brasileiro S.A. – Petrobras

Supplementary information (unaudited)

(Expressed in millions of US Dollars, unless otherwise indicated)

The tables below summarize information about the changes in total proved reserves of crude oil and natural gas, in millions of barrels of oil equivalent, in our consolidated entities and equity method investees for 2023, 2022 and 2021:

	Consolidated Entities				Equity Method Investees	
Proved developed and undeveloped reserves ^(*)	Oil equivalent in Brazil	Oil equivalent in South America	Synthetic Oil in Brazil	Consolidated Total	Oil equivalent in North America	Total
At January 1, 2023	10,423	33	–	10,455	17	10,473
Extensions and discoveries	233	3	–	236	–	237
Revisions of previous estimates	1,260	(1)	–	1,259	2	1,262
Sales of reserves	(155)	–	–	(155)	–	(155)
Production for the year	(888)	(4)	–	(892)	(2)	(894)
Reserves at December 31, 2023	10,873	31	–	10,904	17	10,921
At January 1, 2022	9,816	33	13	9,862	18	9,880
Revisions of previous estimates	1,983	3	–	1,986	3	1,989
Sales of reserves ⁽¹⁾	(523)	–	(12)	(536)	(1)	(536)
Production for the year	(852)	(4)	(1)	(857)	(3)	(860)
Reserves at December 31, 2022	10,423	33	–	10,455	17	10,473
At January 1, 2021	8,792	5	–	8,797	19	8,816
Extensions and discoveries	–	–	–	–	1	1
Revisions of previous estimates	1,923	32	14	1,969	2	1,971
Sales of reserves	(11)	–	–	(11)	–	(11)
Production for the year	(888)	(3)	(1)	(892)	(3)	(896)
Reserves at December 31, 2021	9,816	33	13	9,862	18	9,880

(1) Includes the effects of the write-offs related to the Co-Participation Agreements of Atapu and Sepia fields.

(*) Apparent differences in the sum of the numbers are due to rounding.

In 2023, we standardized the conversion between gas and oil equivalent to 5,614.65 ft³ = 1 boe, which is equivalent to the conversion used in contracts in Brazil. Quantities from previous years were restated with the new conversion.

In 2023, we incorporated 1,262 million boe of proved reserves by revising previous estimates, including:

(i) addition of 1,092 million boe arising from the good performance of assets, mainly in Búzios, Tupi and Atapu fields, in the Santos Basin;

(ii) addition of 170 million boe due to new projects and other revisions.

We did not have relevant changes related to the variation in the oil price.

In addition, we incorporated 237 million boe from discoveries and extensions, mainly due to the declaration of commerciality of Raia Manta and Raia Pintada fields (non-operated), in the Campos Basin.

Moreover, proved reserves were reduced by 155 million boe, resulting from sales.

The Company's total proved reserve resulted in 10,921 million boe in 2023, considering the variations above and the reduction from 2023 production of 894 million boe. Production refers to volumes that were previously included in our reserves and, therefore, does not consider natural gas liquids, since the reserve is estimated at a reference point prior to gas processing, except in the United States of America and Argentina. The production also does not consider volumes of injected gas, the production of Extended Well Tests in exploratory blocks and production in Bolivia, since the Bolivian Constitution does not allow the registration of reserves by the Company.

In 2022, we incorporated 1,989 million boe of proved reserves by revising previous estimates, including:

(i) addition of 1,279 million boe due to new projects, mainly in Búzios field and in other fields in the Santos and Campos Basins; and

Petróleo Brasileiro S.A. – Petrobras

Supplementary information (unaudited)

(Expressed in millions of US Dollars, unless otherwise indicated)

(ii) addition of 710 million boe arising from other revisions, mainly due to good performance of reservoirs in the pre-salt layer of Santos Basin and to the contract term extension of Rio Urucu and Leste do Urucu fields.

We did not have relevant changes related to the variation in the oil price.

The addition in our proved reserves were partially offset by the reduction of 536 million boe, due to the effects of the transfer of interests of 5% of the Surplus Volume of the Transfer of Rights of Búzios field, of the write-offs related to the Co-Participation Agreements of Atapu and Sepia fields and of sales of properties in mature fields.

The Company's total proved reserve resulted in 10,473 million boe in 2022, considering the variations above and the reduction from 2022 production of 860 million boe. Production refers to volumes that were previously included in our reserves and, therefore, does not consider natural gas liquids, since the reserve is estimated at a reference point prior to gas processing, except in the United States of America and Argentina. The production also does not consider volumes of injected gas, the production of Extended Well Tests in exploratory blocks and production in Bolivia, since the Bolivian Constitution does not allow the registration of reserves by the Company.

In 2021, we incorporated 1,971 million boe of proved reserves by revising previous estimates, including:

(i) addition of 1,376 million boe due to new projects, mainly in Búzios field and in other fields in the Santos and Campos Basins. The new projects in Búzios field were made possible due to the acquisition of the Transfer of Rights Surplus and the approval of Búzios Coparticipation Agreement;

(ii) addition of 429 million boe related to economic revisions, mainly due to the increase in oil prices; and

(iii) addition of 166 million boe arising from technical revisions, mainly due to good performance and increased production experience in reservoirs in the pre-salt layer of Santos Basin.

The additions in our proved reserves were partially offset by the reduction of 11 million boe due to sales of proved reserves.

The Company's total proved reserve resulted in 9,880 million boe in 2021, considering the variations above and the reduction from 2021 production of 896 million boe. Production refers to volumes that were previously included in our reserves and, therefore, does not consider natural gas liquids, since the reserve is estimated at a reference point prior to gas processing, except in the United States of America and Argentina. The production also does not consider volumes of injected gas, the production of Extended Well Tests in exploratory blocks and production in Bolivia, since the Bolivian Constitution does not allow the registration of reserves by the Company.

Petróleo Brasileiro S.A. – Petrobras

Supplementary information (unaudited)

(Expressed in millions of US Dollars, unless otherwise indicated)

The tables below present the volumes of proved developed and undeveloped reserves, net, that is, reflecting Petrobras' participation:

	2023				
	Crude Oil	Synthetic Oil	Natural Gas	Synthetic Gas	Total oil and gas
	(mmbbl)		(bncf)		(mmboe)
Net proved developed reserves (*) :					
Consolidated Entities					
Brazil	4,710	-	5,522	-	5,694
South America, outside Brazil ⁽¹⁾	1	-	92	-	17
Total Consolidated Entities	4,711	-	5,614	-	5,711
Equity Method Investees					
North America ⁽¹⁾	14	-	6	-	15
Total Equity Method Investees	14	-	6	-	15
Total developed Consolidated and Equity Method Investees	4,726	-	5,620	-	5,727
Net proved undeveloped reserves (*) :					
Consolidated Entities					
Brazil	4,500	-	3,814	-	5,179
South America, outside Brazil ⁽¹⁾	1	-	70	-	13
Total Consolidated Entities	4,501	-	3,884	-	5,193
Equity Method Investees					
North America ⁽¹⁾	2	-	1	-	2
Total Equity Method Investees	2	-	1	-	2
Total undeveloped Consolidated and Equity Method Investees	4,503	-	3,885	-	5,194
Total proved reserves (developed and undeveloped)	9,228	-	9,504	-	10,921

(1) South America oil reserves includes 25% of natural gas liquid (NGL) in proved developed reserves and 26% of NGL in proved undeveloped reserves. North America oil reserves includes 6% of natural gas liquid (NGL) in proved developed reserves and 7% of NGL in proved undeveloped reserves.

(*) Apparent differences in the sum of the numbers are due to rounding.

In 2023, we standardized the conversion between gas and oil equivalent to 5,614.65 ft3 = 1 boe, which is equivalent to the conversion used in contracts in Brazil. Quantities from previous years were restated with the new conversion.

	2022				
	Crude Oil	Synthetic Oil	Natural Gas	Synthetic Gas	Total oil and gas
	(mmbbl)		(bncf)		(mmboe)
Net proved developed reserves (*) :					
Consolidated Entities					
Brazil	4,185	-	5,097	-	5,093
South America, outside Brazil (1)	1	-	91	-	17
Total Consolidated Entities	4,186	-	5,188	-	5,110
Equity Method Investees					
North America (1)	14	-	5	-	15
Total Equity Method Investees	14	-	5	-	15
Total developed Consolidated and Equity Method Investees	4,200	-	5,193	-	5,125
Net proved undeveloped reserves (*) :					
Consolidated Entities					
Brazil	4,723	-	3,407	-	5,330
South America, outside Brazil (1)	1	-	82	-	15
Total Consolidated Entities	4,724	-	3,489	-	5,346
Equity Method Investees					
North America (1)	2	-	1	-	2
Total Equity Method Investees	2	-	1	-	2
Total undeveloped Consolidated and Equity Method Investees	4,726	-	3,490	-	5,348
Total proved reserves (developed and undeveloped)	8,926	-	8,683	-	10,473

(1) South America oil reserves includes 24% of natural gas liquid (NGL) in proved developed reserves and 24% of NGL in proved undeveloped reserves. North America oil reserves includes 2% of natural gas liquid (NGL) in proved developed reserves and 4% of NGL in proved undeveloped reserves.

(*) Apparent differences in the sum of the numbers are due to rounding.

In 2023, we standardized the conversion between gas and oil equivalent to 5,614.65 ft3 = 1 boe, which is equivalent to the conversion used in contracts in Brazil. Quantities from previous years were restated with the new conversion.

Petróleo Brasileiro S.A. – Petrobras

Supplementary information (unaudited)

(Expressed in millions of US Dollars, unless otherwise indicated)

	2021				
	Crude Oil	Synthetic Oil	Natural Gas	Synthetic Gas	Total oil and gas
	(mmbbl)		(bncf)		(mmboe)
Net proved developed reserves (*):					
Consolidated Entities					
Brazil	4,711	10	5,232	17	5,656
South America, outside Brazil (1)	1	-	79	-	15
Total Consolidated Entities	4,712	10	5,310	17	5,671
Equity Method Investees					
North America (1)	15	-	6	-	16
Total Equity Method Investees	15	-	6	-	16
Total developed Consolidated and Equity Method Investees	4,727	10	5,316	17	5,687
Net proved undeveloped reserves (*):					
Consolidated Entities					
Brazil	3,695	-	2,681	-	4,173
South America, outside Brazil (1)	1	-	98	-	18
Total Consolidated Entities	3,696	-	2,779	-	4,191
Equity Method Investees					
North America (1)	2	-	1	-	2
Total Equity Method Investees	2	-	1	-	2
Total undeveloped Consolidated and Equity Method Investees	3,698	-	2,780	-	4,193
Total proved reserves (developed and undeveloped)	8,425	10	8,096	17	9,880

(1) South America oil reserves includes 24% of natural gas liquid (NGL) in proved developed reserves and 24% of NGL in proved undeveloped reserves. North America oil reserves includes 2% of natural gas liquid (NGL) in proved developed reserves and 3% of NGL in proved undeveloped reserves.

(*) Apparent differences in the sum of the numbers are due to rounding.

In 2023, we standardized the conversion between gas and oil equivalent to 5,614.65 ft³ = 1 boe, which is equivalent to the conversion used in contracts in Brazil. Quantities from previous years were restated with the new conversion.

Petróleo Brasileiro S.A. – Petrobras

Supplementary information (unaudited)

(Expressed in millions of US Dollars, unless otherwise indicated)

(v) Standardized measure of discounted future net cash flows relating to proved oil and gas quantities and changes therein

The standardized measure of discounted future net cash flows, related to the above proved oil and gas reserves, is calculated in accordance with the requirements of Codification Topic 932 – Extractive Activities – Oil and Gas.

Estimated future cash inflows from production in Brazil are computed by applying the average price during the 12-month period prior to the ending date of the period covered by the report, determined as an unweighted arithmetic average of the first-day-of-the-month price for each month within such period, unless prices are defined by contractual arrangements, excluding escalations based upon future conditions. Future price changes are limited to those provided by contractual arrangements existing at the end of each reporting year. Future development and production costs are those estimated future expenditures necessary to develop and produce year-end estimated proved reserves based on current costs, including abandonment costs, assuming continuing economic conditions. Estimated future income taxes (including future social contributions on net income - CSLL) are calculated by applying appropriate year-end statutory tax rates. The amounts presented as future income taxes expenses reflect allowable deductions considering statutory tax rates. Discounted future net cash flows are calculated using 10% mid-period discount factors. This discounting requires a year-by-year estimate of when the future expenditures will be incurred and when the reserves will be produced.

The valuation prescribed under Codification Topic 932 – Extractive Activities – Oil and Gas requires assumptions as to the timing and amount of future development and production costs. The calculations are made as of December 31 each year and should not be relied upon as an indication of Petrobras' future cash flows or the value of its oil and gas reserves.

Petróleo Brasileiro S.A. – Petrobras

Supplementary information (unaudited)

(Expressed in millions of US Dollars, unless otherwise indicated)

Standardized measure of discounted future net cash flows:

	Consolidated entities			Equity Method Investees
	Brazil	Abroad	Total	
		South America		
December 31, 2023				
Future cash inflows	819,428	650	820,078	1,213
Future production costs	(348,787)	(354)	(349,142)	(191)
Future development costs	(64,121)	(113)	(64,235)	(13)
Future income tax expenses	(140,774)	(43)	(140,818)	-
Undiscounted future net cash flows	265,745	139	265,884	1,009
10 percent midyear annual discount for timing of estimated cash flows ⁽¹⁾	(120,216)	(46)	(120,262)	(319)
Standardized measure of discounted future net cash flows	145,529	93	145,622	691
December 31, 2022				
Future cash inflows	983,826	837	984,663	1,581
Future production costs	(399,655)	(357)	(400,012)	(273)
Future development costs	(62,548)	(128)	(62,676)	(21)
Future income tax expenses	(178,412)	(88)	(178,500)	-
Undiscounted future net cash flows	343,211	264	343,475	1,287
10 percent midyear annual discount for timing of estimated cash flows ⁽¹⁾	(151,828)	(124)	(151,951)	(401)
Standardized measure of discounted future net cash flows	191,383	141	191,524	886
December 31, 2021				
Future cash inflows	612,924	587	613,511	1,129
Future production costs	(264,158)	(261)	(264,419)	(329)
Future development costs	(44,027)	(107)	(44,134)	(28)
Future income tax expenses	(104,568)	(61)	(104,628)	-
Undiscounted future net cash flows	200,171	159	200,330	772
10 percent midyear annual discount for timing of estimated cash flows ⁽¹⁾	(85,391)	(70)	(85,461)	(303)
Standardized measure of discounted future net cash flows	114,780	89	114,869	470

(1) Semiannual capitalization

Apparent differences in the sum of the numbers are due to rounding.

Petróleo Brasileiro S.A. – Petrobras

Supplementary information (unaudited)

(Expressed in millions of US Dollars, unless otherwise indicated)

Changes in discounted net future cash flows:

	Consolidated entities			
		Abroad		
	Brazil	South America	Total	Equity Method Investees
Balance at January 1, 2023	191,383	141	191,524	886
Sales and transfers of oil and gas, net of production cost	(49,797)	(54)	(49,851)	(123)
Development cost incurred	10,929	53	10,982	37
Net change due to purchases and sales of minerals in place	(3,894)	-	(3,894)	-
Net change due to extensions, discoveries and improved recovery related costs	5,858	19	5,876	11
Revisions of previous quantity estimates	31,616	3	31,619	82
Net change in prices, transfer prices and in production costs	(63,907)	(97)	(64,004)	(201)
Changes in estimated future development costs	(16,409)	(27)	(16,436)	(17)
Accretion of discount	19,138	20	19,159	68
Net change in income taxes	20,611	30	20,641	-
Other - unspecified	-	5	5	(53)
Balance at December 31, 2023	145,529	93	145,622	691
Balance at January 1, 2022	114,780	89	114,869	470
Sales and transfers of oil and gas, net of production cost	(54,230)	(62)	(54,291)	(235)
Development cost incurred	6,883	31	6,913	29
Net change due to purchases and sales of minerals in place	(17,030)	-	(17,030)	-
Net change due to extensions, discoveries and improved recovery related costs	-	-	-	10
Revisions of previous quantity estimates	64,535	17	64,553	82
Net change in prices, transfer prices and in production costs	129,462	122	129,584	349
Changes in estimated future development costs	(23,317)	(39)	(23,356)	(4)
Accretion of discount	11,478	14	11,492	93
Net change in income taxes	(41,178)	(17)	(41,194)	-
Other - unspecified	-	(15)	(15)	92
Balance at December 31, 2022	191,383	141	191,524	886
Balance at January 1, 2021	45,978	1	45,979	74
Sales and transfers of oil and gas, net of production cost	(38,074)	(43)	(38,117)	(177)
Development cost incurred	6,035	44	6,079	37
Net change due to purchases and sales of minerals in place	(246)	-	(246)	-
Net change due to extensions, discoveries and improved recovery related costs	-	-	-	10
Revisions of previous quantity estimates	41,211	205	41,416	30
Net change in prices, transfer prices and in production costs	108,268	58	108,326	401
Changes in estimated future development costs	(19,900)	(119)	(20,019)	3
Accretion of discount	4,598	-	4,598	49
Net change in income taxes	(33,089)	(47)	(33,136)	48
Other - unspecified	-	(9)	(9)	(7)
Balance at December 31, 2021	114,780	89	114,869	470

Apparent differences in the sum of the numbers are due to rounding.



KPMG Auditores Independentes Ltda.
Rua do Passeio, 38 - Setor 2 - 17º andar - Centro
20021-290 - Rio de Janeiro/RJ - Brasil
Caixa Postal 2888 - CEP 20001-970 - Rio de Janeiro/RJ - Brasil
Telefone +55 (21) 2207-9400
www.kpmg.com.br

Independent auditors' report on the consolidated financial statements

To the Board of Directors and Shareholders of

Petróleo Brasileiro S.A. - Petrobras

Rio de Janeiro – RJ

Opinion

We have audited the consolidated financial statements of Petróleo Brasileiro S.A. - Petrobras S.A. ("Company") which comprise the consolidated statement of financial position as at December 31, 2023, the consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for the year then ended, and notes to the consolidated financial statements, including material accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of Petróleo Brasileiro S.A. - Petrobras S.A., as at December 31, 2023, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditors Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Company and its subsidiaries in accordance with the ethical requirements that are relevant to our audit of the consolidated



financial statements included in the Accountants Professional Code of Ethics ("*Código de Ética Profissional do Contador*") and in the professional standards issued by the Brazilian Federal Accounting Council ("*Conselho Federal de Contabilidade*"), and we have fulfilled our ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

We have audited the consolidated financial statements of Petróleo Brasileiro S.A. - Petrobras S.A. ("Company") which comprise the consolidated statement of financial position as at December 31, 2023, the consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for the year then ended, and notes to the consolidated financial statements, including material accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of Petróleo Brasileiro S.A. - Petrobras S.A., as at December 31, 2023, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditors Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Company and its subsidiaries in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements included in the Accountants Professional Code of Ethics ("*Código de Ética Profissional do Contador*") and in the professional standards issued by the Brazilian Federal Accounting Council ("*Conselho Federal de Contabilidade*"), and we have fulfilled our ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not express a separate opinion on these matters.

1 - Assessment of the measurement of the actuarial obligation of the defined benefit pension and health care plans

According to notes 4.4 and 18.3 of the consolidated financial statements.

Key audit matter	How the matter was addressed in our audit
<p>The Company sponsors defined benefit pension and health care plans that provide supplementary post retirement benefits and medical care to its employees.</p> <p>The measurement of the actuarial obligation of the pension and health care plans is dependent, in part, of certain actuarial assumptions. These assumptions include the discount rate and projected medical and hospital costs. The Company hires external actuary to assist in the process of assessing the actuarial assumptions and valuing the actuarial obligation under its pension and health care plans.</p> <p>We considered the measurement of the actuarial obligations for the pension and health care plans as a key audit matter due to the level of judgment inherent to the actuarial assumptions determination, as well as for the impact that changes on these assumptions could have on the actuarial obligations of the pension and health care plans.</p>	<p>Our audit procedures included, but were not limited to:</p> <ul style="list-style-type: none"> – Tests of design and effectiveness of certain internal controls related to the process of measuring the actuarial liability, including controls related to the development, review and approval of the discount rates assumptions and projected medical and hospital costs; – Assessment of the scope, competency, and objectivity of the external actuary hired to assist in the estimate definition of the actuarial obligations for the pension and health care plans, including the nature and scope of the work performed, their qualification and professional experience; and – Assessment, with the support of our actuarial specialists, of the assumptions such as discount rates and projected medical and hospital costs, including comparing them to data obtained from external sources. <p>According to the evidence obtained from performing the procedures described above, we considered that the measurement of the actuarial liability of the defined benefit pension and health</p>

care plans is acceptable in the context of the consolidated financial statements taken as a whole, for the year ended December 31, 2023.

2 - Evaluation of the impairment testing of exploration and production cash generating units

According to notes 4.2.1, 4.2.2, 4.2.2(a) and 26 of the consolidated financial statements.

Key audit matter	How the matter was addressed in our audit
<p>The Company identifies its cash generating units ("CGUs"), estimates the recoverable amount of each CGUs based on a projected cash flow for each CGU, and compares to the carrying amount of these CGUs. The cash flow projections used to determine the recoverable amount depend on certain future assumptions such as: Brent oil price, exchange rate (Brazilian Real/US Dollar), capitalizing expenditures ("CAPEX"), operating expenditures ("OPEX"), and volume and timing estimates of recovery of the oil and gas reserves. The recoverable amount is also sensitive to changes in the discount rate used in the cash flow.</p> <p>Additionally, the definition of exploration and production segment CGUs considers operational factors that impact the interdependencies between oil and gas assets, and, may result in redefinition through aggregations or segregations of the exploration and production areas into CGUs.</p> <p>We considered the impairment testing of exploration and production cash generating units as a key audit matter due to the level of complexity and subjectivity on the definition of exploration and production's CGUs, and the impact that changes in future assumptions could have on the estimate of the recoverable amount.</p>	<p>Our audit procedures included, but were not limited to:</p> <ul style="list-style-type: none"> – Tests of design and effectiveness of certain internal controls related to the process of determining the recoverable amount of exploration and production's CGU assets, including controls related to the review and approval of the determination of the CGUs, and of the key assumptions used to estimate the recoverable amount; – Assessment of the operational factors considered by the Company for changes in exploration and production CGUs during the year, and compared them to information obtained from internal and external sources; – Assessment of the determination of recovery of oil and gas reserves estimates internally prepared, by comparing it with volumes certified by external reservoirs specialists hired by the Company, and, for a sampling selection of CGUs, with historical data on production; – Assessment of the scope, competency, and objectivity of the Company's internal engineers responsible for the estimate of the oil and gas reserves, as well as the external reservoir specialists hired by the Company, this included assessing the nature and scope of the work performed, and their qualifications and professional experience; – Assessment, for a sampling selection of CGUs, of the CAPEX and OPEX used on the cash flows projection by

	<p>comparing to the same business plan approved by the Company, and its long-term budgets;</p> <ul style="list-style-type: none"> – Assessment of Company's ability to project cash flows by comparing the estimated cash flows with actual Company's cash flows for the year ended December 31, 2023 for a selection of CGUs; and – Assessment, with the support of our valuation specialists, of the key assumptions used in the impairment test, such as discount rate, future price of oil and natural gas and exchange rates, comparing them to external market data. <p>According to the evidence obtained from performing the procedures described above, we considered that the recoverable amounts for assets of the exploration and production cash generating units are acceptable in the context of the consolidated financial statements taken as a whole, for the year ended December 31, 2023.</p>
--	---

3 - Evaluation of the estimate of the provision for decommissioning costs

According to notes 4.6 and 20 of the consolidated financial statements.

Key audit matter	How the matter was addressed in our audit
<p>As a part of its operations, the Company incurs on costs related to the obligation to restore and rehabilitate the environment upon the area abandonment.</p> <p>The Company's estimate of the provision for decommissioning costs includes assumptions in relation to the extent of the obligations assumed for environmental restoration, which comprise the costs for decommissioning and removal of oil and gas production facilities, as well as the estimated timing of the abandonment.</p> <p>We considered the evaluation of the estimate of the provision for decommissioning costs as a key audit matter due to the level of judgment involved on</p>	<p>Our audit procedures included, but were not limited to:</p> <ul style="list-style-type: none"> – Tests of design and effectiveness of certain internal controls related to the process of defining the provision for decommissioning areas estimate, including controls related to the development, review and approval of the key assumptions such as timing of area abandonment and estimated costs of abandonment; – Assessment of the assumptions of abandonment timing used by the Company, by comparing the production curves and useful life of the oil and gas reserves used in the estimate, with oil and gas reserve volumes certified by external reservoirs specialists hired by the Company; – Assessment of the estimated costs of abandonment by

determining the respective assumptions, especially on the extent of the obligations assumed for the environmental repair, which is the criteria to be met when the removal and restoration actually occurs, the timing and estimated costs of abandonment.

comparing certain costs with external market data;

- Assessment of the scope, competency, and objectivity of the Company's internal engineers responsible for the production curves and useful life of the oil and gas reserves, as well as the external reservoir specialists hired by the Company, which included assessing the nature and scope of the work performed, and their qualifications and professional experience; and
- Assessment of Company's ability to prepare this estimate by comparing a sampling selection of actual expenditure incurred with the decommissioning of oil and gas production facilities already under abandonment, to the provision for decommissioning previously recognized for such facilities.

During the course of our audit procedures, were identified unrecorded adjustments that affect the measurement and disclosure of the provision for decommissioning costs, which were not corrected by management, since they were considered to be immaterial.

According to the evidence obtained from performing the procedures described above, we considered that the amount of provision for decommissioning costs is acceptable in the context of the consolidated financial statements taken as a whole, for the year ended December 31, 2023.

Other Information

Management is responsible for the other information. The other information comprises the Financial Performance Report.

Our opinion on the consolidated financial statements does not cover the Financial Performance Report and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the Financial Performance Report and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work performed, we conclude that there is material misstatement in the Financial Performance Report, we are required to report on that fact. We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRS, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but it is not a guarantee that an audit conducted in accordance with International Standards on Auditing will always detect possible existing material misstatements. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of our audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve the act of collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on



the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's and its subsidiaries' ability to continue as a going concern. If we conclude that a material uncertainty exists, then we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company and its subsidiaries to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current year and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Rio de Janeiro, March 7, 2024

KPMG Auditores Independentes Ltda.
CRC SP-014428/O-6 F-RJ

Ulysses M. Duarte Magalhães
Accountant CRC RJ-092095/O-8