

Financial Performance 2Q23

FPSO Almirante Barroso
1st oil in May 2023

FPSO ALMIRANTE
BARROSO MV92
NASSAU
IMO 9238274

Petrobras financial performance in 2Q23

Rio de Janeiro, August 03, 2023

Main achievements:

- Robust recurring EBITDA of US\$ 11.7 billion, a 19% decrease compared to 1Q23, mainly influenced by international diesel crack spreads, which declined more than 40% QoQ
- Gross debt under control at US\$ 58 billion, even after the increase in leases due to the startup of chartered FPSOs Anna Nery and Almirante Barroso
- Cash generation resilience: Operating Cash Flow of US\$ 9.6 billion
- Return to society with payment of R\$ 56.1 billion in taxes
- New pre-salt production record with 2.06 MMboed in 2Q23, representing 78% of Petrobras total production in the quarter
- New units: start-up in May 2023 of FPSO Anna Nery, in Marlim, and FPSO Almirante Barroso, in Búzios field. FPSO Anita Garibaldi in Marlim, with mooring activities completed and expected to start operations in 3Q23
- Refining utilization factor: 93% in 2Q23, the highest level since 3Q15, with diesel, gasoline, and jet fuel production representing 67% of the total
- Sales records: diesel S10 accounting for 62.2% of total diesel sales. Highest gasoline sales in the year's first half in 6 years
- Maritime sustainability: beginning of testing of maritime fuel with 24% renewable content and the first contract for a hybrid support vessel
- First sustainable decommissioning auction for P-32 platform

Disclaimer

This report may contain forward-looking statements. Such forward-looking statements only reflect expectations of the Company's managers regarding future economic conditions, as well as the Company's performance, financial performance and results, among others. The terms "anticipates", "believes", "expects", "predicts", "intends", "plans", "projects", "objective", "should", and similar terms, which evidently involve risks and uncertainties that may or may not be anticipated by the Company and therefore are not guarantees of future results of the Company's operations that may differ from current expectations. The readers should not rely exclusively on any forward-looking statement contained herein. The Company does not undertake any responsibility to update the presentations and forecasts in the light of new information or its future developments, and the figures reported for 2Q23 onwards are estimates or targets. These indicators do not have standardized meanings and may not be comparable to indicators with a similar description used by others. We provide these indicators because we use them as measures of company performance; they should not be considered in isolation or as a substitute for other financial metrics that have been disclosed in accordance with BR GAAP or IFRS. See definitions of Free Cash Flow, Adjusted EBITDA and Net Indebtedness in the Glossary and their reconciliations in the Liquidity and Capital Resources sections, Reconciliation of Adjusted EBITDA and Net Indebtedness. Consolidated accounting information revised by independent auditors in accordance with international accounting standard IAS 34 – Interim Financial Reporting, issued by International Accounting Standards Board (IASB).

Main items

Table 1 – Main items

US\$ million	2Q23	1Q23	2Q22	1H23	1H22	Variation (%)		
						2Q23 X 1Q23	2Q23 X 2Q22	1H23 X 1H22
Sales revenues	22,979	26,771	34,703	49,750	61,892	(14.2)	(33.8)	(19.6)
Gross profit	11,637	14,113	19,463	25,750	33,873	(17.5)	(40.2)	(24.0)
Operating expenses	(3,159)	(2,560)	94	(5,719)	(2,048)	23.4	-	179.2
Consolidated net income (loss) attributable to the shareholders of Petrobras	5,828	7,341	11,010	13,169	19,615	(20.6)	(47.1)	(32.9)
Recurring consolidated net income (loss) attributable to the shareholders of Petrobras *	5,834	7,320	9,101	13,154	17,474	(20.3)	(35.9)	(24.7)
Net cash provided by operating activities	9,642	10,347	14,496	19,989	24,804	(6.8)	(33.5)	(19.4)
Free cash flow	6,721	7,916	12,789	14,637	20,712	(15.1)	(47.4)	(29.3)
Adjusted EBITDA	11,436	13,956	19,943	25,392	34,904	(18.1)	(42.7)	(27.3)
Recurring adjusted EBITDA *	11,734	14,445	20,159	26,179	35,220	(18.8)	(41.8)	(25.7)
Gross debt (US\$ million)	57,971	53,349	53,577	57,971	53,577	8.7	8.2	8.2
Net debt (US\$ million)	42,177	37,588	34,435	42,177	34,435	12.2	22.5	22.5
Net debt/LTM Adjusted EBITDA ratio	0.74	0.58	0.60	0.74	0.60	27.6	23.3	23.3
Average commercial selling rate for U.S. dollar	4.95	5.19	4.92	5.07	5.08	(4.6)	0.6	(0.2)
Brent crude (US\$/bbl)	78.39	81.27	113.78	79.83	107.59	(3.5)	(31.1)	(25.8)
Domestic basic oil by-products price (US\$/bbl)	95.91	109.53	135.20	102.62	120.04	(12.4)	(29.1)	(14.5)
TRI (total recordable injuries per million men-hour frequency rate)	-	-	-	0.80	0.70	-	-	14.3
ROCE (Return on Capital Employed)	12.8%	15.7%	12.8%	12.8%	12.8%	-2,9 p.p.	0 p.p.	0 p.p.

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

Consolidated results

Net revenues

Table 2 – Net revenues by products

US\$ million	2Q23	1Q23	2Q22	1H23	1H22	Variation (%)		
						2Q23 X 1Q23	2Q23 X 2Q22	1H23 X 1H22
Diesel	7,082	8,305	10,681	15,387	18,164	(14.7)	(33.7)	(15.3)
Gasoline	3,775	3,694	4,309	7,469	8,034	2.2	(12.4)	(7.0)
Liquefied petroleum gas (LPG)	951	929	1,437	1,880	2,623	2.4	(33.8)	(28.3)
Jet fuel	1,102	1,406	1,400	2,508	2,391	(21.6)	(21.3)	4.9
Naphtha	430	478	724	908	1,335	(10.0)	(40.6)	(32.0)
Fuel oil (including bunker fuel)	261	286	352	547	718	(8.7)	(25.9)	(23.8)
Other oil products	1,128	1,084	1,615	2,212	2,889	4.1	(30.2)	(23.4)
Subtotal oil products	14,729	16,182	20,518	30,911	36,154	(9.0)	(28.2)	(14.5)
Natural gas	1,429	1,526	1,961	2,955	3,684	(6.4)	(27.1)	(19.8)
Crude oil	1,365	1,350	2,682	2,715	4,443	1.1	(49.1)	(38.9)
Renewables and nitrogen products	25	21	95	46	161	19.0	(73.7)	(71.4)
Revenues from non-exercised rights	218	220	170	438	274	(0.9)	28.2	59.9
Electricity	153	110	109	263	402	39.1	40.4	(34.6)
Services, agency and others	281	244	307	525	545	15.2	(8.5)	(3.7)
Total domestic market	18,200	19,653	25,842	37,853	45,663	(7.4)	(29.6)	(17.1)
Exports	4,431	6,741	8,189	11,172	14,924	(34.3)	(45.9)	(25.1)
Crude oil	2,909	5,547	5,593	8,456	10,405	(47.6)	(48.0)	(18.7)
Fuel oil (including bunker fuel)	1,329	1,034	2,276	2,363	4,161	28.5	(41.6)	(43.2)
Other oil products and other products	193	160	320	353	358	20.6	(39.7)	(1.4)
Sales abroad (*)	348	377	672	725	1,305	(7.7)	(48.2)	(44.4)
Total foreign market	4,779	7,118	8,861	11,897	16,229	(32.9)	(46.1)	(26.7)
Total	22,979	26,771	34,703	49,750	61,892	(14.2)	(33.8)	(19.6)

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

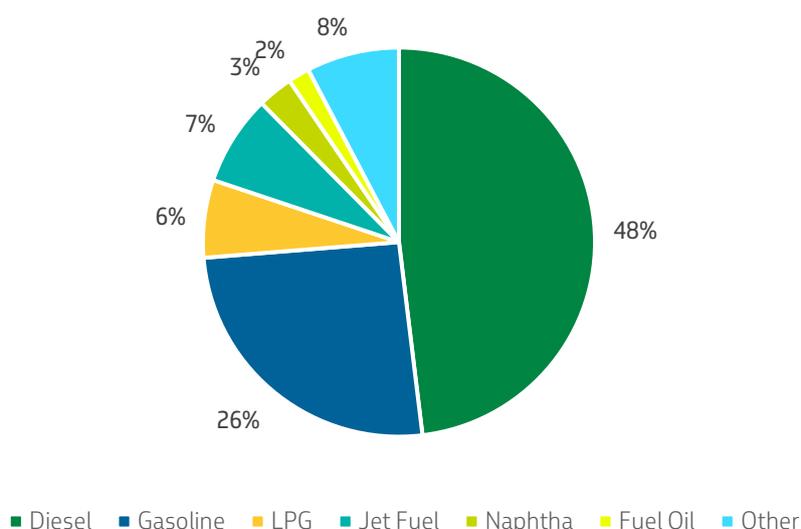
In 2Q23, net revenues fell 14% compared to 1Q23, largely due to the 4% depreciation of Brent prices, declines in international diesel crack spreads above 40%, in addition to lower export revenues.

Revenues from oil products in the domestic market fell 9% in 2Q23 as a result of the average 12% reduction in oil product prices, reflecting the fall in international prices. This effect was partially offset by higher volumes, especially due to the increased competitiveness of gasoline against our customers' main supply alternatives. The decrease in natural gas revenues was mainly due to lower prices, as a consequence of contractual readjustments with distributors as of May 2023.

There was a 34% decrease in export revenues compared to 1Q23, mainly explained by the 48% fall in oil export revenues. This was largely due to the decrease in exports volumes in 2Q23, caused by the increase in refinery processing and the realization in 1Q23 of exports from previous periods. In addition, the depreciation of Brent between the periods contributed to the drop in revenues. This effect was partially offset by higher revenues from fuel oil exports, for which demand was higher in 2Q23.

During 2Q23, the principal traded products remained diesel and gasoline, which accounted for approximately 74% of the revenue generated from the sale of oil products.

Graph 1 – Oil products sales revenues 2Q23 – domestic market



Noteworthy in exports is Petrobras first oil sale to Greece, totaling 1 million barrels. The sale results from the continuous development of markets for pre-salt oils in Europe, which was boosted with the change in oil flows as a result of the war in Ukraine.

In 2Q23, export volumes were diversified among different destinations, as presented below:

Table 3 – Destination of oil exports

Country	2Q23	1Q23	2Q22
China	28%	42%	15%
Europe	20%	26%	39%
Latam	26%	22%	24%
USA	14%	2%	8%
Asia (Ex China)	11%	9%	12%
Caribbean	0%	0%	2%

Table 4 – Destination of exports of oil products

Country	2Q23	1Q23	2Q22
Singapore	50%	63%	55%
USA	37%	18%	26%
Others	13%	19%	19%

Cost of goods sold *

Table 5 – Cost of goods sold

US\$ million	2Q23	1Q23	2Q22	1H23	1H22	Variation (%)		
						2Q23 X 1Q23	2Q23 X 2Q22	1H23 X 1H22
Acquisitions	(4,361)	(4,885)	(5,405)	(9,246)	(10,033)	(10.7)	(19.3)	(7.8)
Crude oil imports	(2,086)	(2,668)	(2,618)	(4,754)	(4,302)	(21.8)	(20.3)	10.5
Oil products imports	(1,568)	(1,811)	(1,810)	(3,379)	(3,165)	(13.4)	(13.4)	6.8
Natural gas imports	(707)	(406)	(977)	(1,113)	(2,566)	74.1	(27.6)	(56.6)
Production	(6,482)	(7,155)	(8,956)	(13,637)	(16,441)	(9.4)	(27.6)	(17.1)
Crude oil	(5,415)	(6,249)	(7,537)	(11,664)	(13,698)	(13.3)	(28.2)	(14.8)
Production taxes	(2,481)	(2,710)	(4,134)	(5,191)	(7,307)	(8.5)	(40.0)	(29.0)
Other costs	(2,934)	(3,539)	(3,403)	(6,473)	(6,391)	(17.1)	(13.8)	1.3
Oil products	(563)	(440)	(641)	(1,003)	(1,265)	28.0	(12.2)	(20.7)
Natural gas	(504)	(466)	(778)	(970)	(1,478)	8.2	(35.2)	(34.4)
Production taxes	(92)	(92)	(261)	(184)	(493)	-	(64.8)	(62.7)
Other costs	(412)	(374)	(517)	(786)	(985)	10.2	(20.3)	(20.2)
Services, electricity, operations abroad and others	(499)	(618)	(879)	(1,117)	(1,545)	(19.3)	(43.2)	(27.7)
Total	(11,342)	(12,658)	(15,240)	(24,000)	(28,019)	(10.4)	(25.6)	(14.3)

* Managerial information (non-audited).

In 2Q23, cost of goods sold decreased 10% compared to 1Q23, reflecting the decrease in costs of oil and oil products imports, due to lower prices and lower volumes of oil imports. This impact was partially offset by higher LNG (liquefied natural gas) import costs, which were necessary to balance the reduction in Bolivian gas supply.

In addition, the decrease in oil production and the fall in government take, due to the devaluation of Brent, also contributed to the reduction in costs of goods sold in 2Q23.

The increase in the volume of sales of oil products in the domestic market was met by higher production at the refineries, which was the main driver for the increase in the production costs of oil products in 2Q23.

Operating expenses

Table 6 – Operating expenses

US\$ million	2Q23	1Q23	2Q22	1H23	1H22	Variation (%)		
						2Q23 X 1Q23	2Q23 X 2Q22	1H23 X 1H22
Selling, General and Administrative Expenses	(1,588)	(1,578)	(1,570)	(3,166)	(3,047)	0.6	1.1	3.9
Selling expenses	(1,200)	(1,221)	(1,247)	(2,421)	(2,425)	(1.7)	(3.8)	(0.2)
Materials, third-party services, freight, rent and other related costs	(1,022)	(1,026)	(1,000)	(2,048)	(1,948)	(0.4)	2.2	5.1
Depreciation, depletion and amortization	(154)	(150)	(217)	(304)	(417)	2.7	(29.0)	(27.1)
Allowance for expected credit losses	4	(21)	(6)	(17)	(14)	-	-	21.4
Employee compensation	(28)	(24)	(24)	(52)	(46)	16.7	16.7	13.0
General and administrative expenses	(388)	(357)	(323)	(745)	(622)	8.7	20.1	19.8
Employee compensation	(244)	(229)	(216)	(473)	(414)	6.6	13.0	14.3
Materials, third-party services, rent and other related costs	(112)	(102)	(83)	(214)	(161)	9.8	34.9	32.9
Depreciation, depletion and amortization	(32)	(26)	(24)	(58)	(47)	23.1	33.3	23.4
Exploration costs	(191)	(157)	(44)	(348)	(123)	21.7	334.1	182.9
Research and Development	(172)	(154)	(220)	(326)	(426)	11.7	(21.8)	(23.5)
Other taxes	(329)	(200)	(93)	(529)	(152)	64.5	253.8	248.0
Impairment of assets	(401)	(3)	(168)	(404)	(167)	13266.7	138.7	141.9
Other income and expenses, net	(478)	(468)	2,189	(946)	1,867	2.1	-	-
Total	(3,159)	(2,560)	94	(5,719)	(2,048)	23.4	-	179.2

In 2Q23, operating expenses increased 23% vs. 1Q23, mainly reflecting higher impairment expenses (-US\$ 0.4 billion), mainly related to the 2nd train of RNEST (due to increased project scope, increased discount rate and appreciation of the BRL, but with the project still resilient and presenting positive NPV), and higher tax expenses (-US\$ 0.1 billion), as a result of the tax on oil exports, which was in force for 4 months from March 2023.

In 2Q23, selling expenses decreased by 2%, because of lower logistics expenses due to the decrease in oil export volumes. However, this was partially offset by higher fuel oil exports.

In other operating revenues, the highlight in 2Q23 was the higher capital gains from asset sales (+US\$ 0.2 billion), mainly related to the closing of the Potiguar and Norte Capixaba clusters.

Adjusted EBITDA

In 2Q23, Adjusted EBITDA was US\$ 11.4 billion, a decrease of 18% compared to 1Q23. This drop was mainly attributed to the Brent depreciation, declines in international diesel crack spreads above 40%, lower oil exports and higher LNG imports (from 0 in 1Q23 to 3 MMm³/d in 2Q23).

Financial results

Table 7 – Financial results

US\$ million	2Q23	1Q23	2Q22	1H23	1H22	Variation (%)		
						2Q23 X 1Q23	2Q23 X 2Q22	1H23 X 1H22
Finance income	516	465	619	981	881	11.0	(16.6)	11.4
Income from investments and marketable securities (Government Bonds)	424	333	369	757	532	27.3	14.9	42.3
Other finance income	92	132	250	224	349	(30.3)	(63.2)	(35.8)
Finance expenses	(868)	(844)	(959)	(1,712)	(1,716)	2.8	(9.5)	(0.2)
Interest on finance debt	(512)	(541)	(693)	(1,053)	(1,223)	(5.4)	(26.1)	(13.9)
Unwinding of discount on lease liabilities	(400)	(358)	(334)	(758)	(624)	11.7	19.8	21.5
Discount and premium on repurchase of debt securities	-	-	(84)	-	(110)	-	-	-
Capitalized borrowing costs	318	271	297	589	535	17.3	7.1	10.1
Unwinding of discount on the provision for decommissioning costs	(219)	(212)	(137)	(431)	(267)	3.3	59.9	61.4
Other finance expenses	(55)	(4)	(8)	(59)	(27)	1275.0	587.5	118.5
Foreign exchange gains (losses) and indexation charges	331	(243)	(2,858)	88	(1,767)	-	-	-
Foreign exchange gains (losses)	1,523	797	(1,640)	2,320	781	91.1	-	197.1
Reclassification of hedge accounting to the Statement of Income	(1,078)	(1,154)	(1,108)	(2,232)	(2,488)	(6.6)	(2.7)	(10.3)
Monetary restatement of anticipated dividends and dividends payable	(397)	(32)	(280)	(429)	(280)	1140.6	41.8	53.2
Recoverable taxes inflation indexation income	31	64	24	95	45	(51.6)	29.2	111.1
Other foreign exchange gains (losses) and indexation charges, net	252	82	146	334	175	207.3	72.6	90.9
Total	(21)	(622)	(3,198)	(643)	(2,602)	(96.6)	(99.3)	(75.3)

In 2Q23, the financial result was negative by US\$ 21 million, compared to a negative result of US\$ 622 million in 1Q23. The improvement in the result can be explained mainly by higher gains from the FX variation of the BRL against the USD (+US\$ 726 million), which appreciated 5.1% in 2Q23 (from R\$ 5.08/US\$ on 03/31/2023 to R\$ 4.82/US\$ on 06/30/2023) versus an appreciation of 2.6% in 1Q23 (from R\$5.22/US\$ on 12/31/2022 to R\$ 5.08/US\$ on 03/31/2023). This effect was partially offset, basically, by the monetary restatement by the Selic rate of the complementary dividends for the year 2022 (-US\$ 365 million).

Net profit (loss) attributable to Petrobras shareholders

In 2Q23, net income was US\$ 5.8 billion, compared to US\$ 7.3 billion in 1Q23. This result is mainly explained by the depreciation of Brent, declines in international diesel crack spreads above 40% and higher operating expenses, especially impairment charges (-US\$ 0.4 billion) and tax expenses (-US\$ 0.1 billion). These effects were partially offset by higher capital gains from the sale of assets (+US\$ 0.2 billion), lower financial expenses (+US\$ 0.6 billion), as a result of foreign exchange gains due to the appreciation of the BRL against the USD, and lower income tax expenses (+US\$

1.0 billion), due to lower income before taxes and tax credits in 2Q23 resulting from the anticipation of the distribution of dividends for the 2023 financial year in the form of interest on equity.

Recurring net income attributable to Petrobras shareholders and recurring Adjusted EBITDA

Excluding non-recurring items, net income would have remained stable at US\$ 5.8 billion. Among the items that comprise the positive impact the highlights were the gains from the sale of the Potiguar and Norte Capixaba clusters (+US\$ 0.7 billion), mainly offset by impairment expenses (-US\$ 0.4 billion), legal contingencies (-US\$ 0.1 billion) and the tax on oil exports (-US\$ 0.2 billion), which was in force for 4 months from March 2023.

Adjusted EBITDA had a negative impact of US\$ 0.3 billion, influenced by legal contingencies (-US\$ 0.1 billion) and the tax on oil exports (-US\$ 0.2 billion). Excluding the effects of non-recurring items, Adjusted EBITDA would have reached US\$ 11.7 billion in 2Q23.

Special items

Table 8 – Special items

US\$ million	2Q23	1Q23	2Q22	1H23	1H22	Variation (%)		
						2Q23 X 1Q23	2Q23 X 2Q22	1H23 X 1H22
Net income	5,859	7,370	11,041	13,229	19,689	(20.5)	(46.9)	(32.8)
Non-recurring items	(8)	32	2,892	24	3,248	-	-	(99.3)
Non-recurring items that do not affect Adjusted EBITDA	290	521	3,108	811	3,564	(44.3)	(90.7)	(77.2)
Impairment of assets and investments	(401)	(2)	(170)	(403)	(178)	19950.0	135.9	126.4
Gains and losses on disposal / write-offs of assets	691	496	371	1,187	847	39.3	86.3	40.1
Results from co-participation agreements in bid areas	-	27	2,872	27	2,872	-	-	(99.1)
Discount and premium on repurchase of debt securities	-	-	35	-	23	-	-	-
Other non-recurring items	(298)	(489)	(216)	(787)	(316)	(39.1)	38.0	149.1
Voluntary Separation Plan	2	3	(3)	5	(7)	(33.3)	-	-
Amounts recovered from Lava Jato investigation	4	89	-	93	12	(95.5)	-	675.0
Gains / (losses) on decommissioning of returned/abandoned areas	(11)	-	(4)	(11)	(28)	-	175.0	(60.7)
Gains / (losses) related to legal proceedings	(94)	(145)	(172)	(239)	(284)	(35.2)	(45.3)	(15.8)
Equalization of expenses - Production Individualization Agreements	(6)	(17)	(37)	(23)	(9)	(64.7)	(83.8)	155.6
Compensation for the termination of a vessel charter agreement	-	(317)	-	(317)	-	-	-	-
Export tax on crude oil	(193)	(102)	-	(295)	-	89.2	-	-
Net effect of non-recurring items on IR / CSLL	2	(11)	(984)	(9)	(1,107)	-	-	(99.2)
Recurring net income	5,865	7,349	9,133	13,214	17,548	(20.2)	(35.8)	(24.7)
Shareholders of Petrobras	5,834	7,320	9,101	13,154	17,474	(20.3)	(35.9)	(24.7)
Non-controlling interests	31	29	32	60	74	6.9	(3.1)	(18.9)
Adjusted EBITDA	11,436	13,956	19,943	25,392	34,904	(18.1)	(42.7)	(27.3)
Non-recurring items	(298)	(489)	(216)	(787)	(316)	(39.1)	38.0	149.1
Recurring Adjusted EBITDA	11,734	14,445	20,159	26,179	35,220	(18.8)	(41.8)	(25.7)

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

Capex

Table 9 - Capex

US\$ million	2Q23	1Q23	2Q22	1H23	1H22	Variation (%)		
						2Q23 X 1Q23	2Q23 X 2Q22	1H23 X 1H22
Exploration and Production	2,599	2,040	1,674	4,639	3,049	27.3	55.2	52.2
Refining, Transportation and Marketing	365	342	274	707	526	6.7	33.2	34.4
Gas and Power	43	33	92	76	186	30.3	(53.4)	(59.2)
Others	93	67	141	160	189	39.3	(33.8)	(15.0)
Subtotal	3,100	2,482	2,181	5,582	3,949	24.9	42.1	41.3
Signature bonus	141	-	892	141	892	-	-	-
Total	3,241	2,482	3,073	5,723	4,841	30.5	5.5	18.2

In 2Q23, capex totaled US\$ 3.2 billion, 31% above 1Q23, mainly due to the large pre-salt projects and the impact of the signature bonus related to the Southwest Sagittarius, Água Marinha and North Brava fields.

In the Exploration and & Production segment, capex totaled US\$ 2.6 billion, 27% above 1Q23, due to the development of large projects, especially the progress in the construction and integration of FPSOs in Búzios, in addition to higher exploratory expenses in the pre-salt. Investments in 2Q23 were mainly focused on: (i) the development of production in the Santos Basin pre-salt (US\$ 1.4 billion); (ii) deepwater production development (US\$0.4 billion); (iii) exploratory investments (US\$ 0.2 billion).

In the Refining, Transport and Commercialization segment, capex totaled US\$ 0.37 billion, with a focus on the progress in the works of the SNOx (emission abatement unit) of RNEST and higher number of dockages for TRANSPETRO ships. In the Gas and Power segment, capex totaled US\$ 0.04 billion in 2Q23, with emphasis on investments in the Route 3 Natural Gas processing unit.

Additionally, it is worth highlighting the entry into operation of the leased FPSOs units Anna Nery (Marlim 2) and Almirante Barroso (Búzios 5), whose lease amounts totaled US\$ 5.2 billion. Just like owned units, leased FPSOs are recognized in the Company's assets and constitute an investment effort to expand production capacity with new units, but are not considered under Capex figures.

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

Table 10 – Main projects

Unit	Start-up	FPSO capacity (bbl/day)	Petrobras Actual Investment US\$ bn	Petrobras Total Investment US\$ bn ¹	Petrobras Stake	Status
Marlim 1 FPSO Anita Garibaldi (Chartered unit)	2023	80,000	0.23	1.8	100%	Project in phase of execution. Production system arrived at the Marlim field. 1 well drilled and completed. ²
Mero 2 FPSO Sepetiba (Chartered unit)	2023	180,000	0.37	0.8	38.6%	Project in phase of execution. Production system in transit to Brazil. 13 wells drilled and 12 completed.
Mero 3 FPSO Marechal Duque de Caxias (Chartered unit)	2024	180,000	0.17	0.8	38.6%	Project in phase of execution with production system under construction. 8 wells drilled and 2 completed.
Integrado Parque das Baleias (IPB) FPSO Maria Quitéria (Chartered unit)	2025	100,000	0.44	1.7	100%	Project in phase of execution with production system under construction. 3 wells drilled and 1 completed. ²
Búzios 7 FPSO Almirante Tamandaré (Chartered unit)	2025	225,000	0.25	2.0	88.99%	Project in phase of execution with production system under construction. 4 wells drilled and 1 completed.
Búzios 6 P-78 (Owned unit)	2025	180,000	0.81	4.2	88.99%	Project in phase of execution with production system under construction. 3 wells drilled and 1 completed.
Búzios 8 P-79 (Owned unit)	2025	180,000	0.71	4.3	88.99%	Project in phase of execution with production system under construction. 5 wells drilled and 1 completed.
Mero 4 FPSO Alexandre de Gusmão (Chartered unit)	2025	180,000	0.05	0.8	38.6%	Project in phase of execution with production system under construction. 6 wells drilled and 2 completed.
Búzios 9 P-80 (Owned unit)	2026	225,000	0.29	4.9	88.99%	Project in phase of execution with production system under construction. 2 wells drilled and 2 completed.
Búzios 10 P-82 (Owned unit)	2027	225,000	0.20	5.5	88.99%	Project in phase of execution with production system under construction. 1 well drilled.
Búzios 11 P-83 (Owned unit)	2027	225,000	0.18	4.8	88.99%	Project in phase of execution with production system under construction. 2 wells drilled.
BM-C-33 Non-operated project	2028	126,000	0.12	2,3 ³	30%	Project in phase of execution. Production system supply contract signed in May 2023.

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

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

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

Liquidity and capital resources

Table 11 - Liquidity and capital resources

US\$ million	2Q23	1Q23	2Q22	1H23	1H22
Adjusted cash and cash equivalents at the beginning of period	15,761	12,283	18,482	12,283	11,117
Government bonds, bank deposit certificates and time deposits with maturities of more than 3 months at the beginning of period *	(5,471)	(4,287)	(1,259)	(4,287)	(650)
Cash and cash equivalents in companies classified as held for sale at the beginning of the period	-	-	9	-	13
Cash and cash equivalents at the beginning of period	10,290	7,996	17,232	7,996	10,480
Net cash provided by operating activities	9,642	10,347	14,496	19,989	24,804
Net cash (used in) provided by investing activities	(795)	(1,104)	3,621	(1,899)	2,633
Acquisition of PP&E and intangible assets	(2,912)	(2,423)	(1,697)	(5,335)	(4,073)
Acquisition of equity interests	(9)	(8)	(10)	(17)	(19)
Proceeds from disposal of assets - Divestment	1,606	1,855	1,625	3,461	3,378
Financial compensation from co-participation agreements	-	391	5,152	391	5,213
Dividends received	58	11	190	69	242
Investment in marketable securities	462	(930)	(1,639)	(468)	(2,108)
(=) Net cash provided by operating and investing activities	8,847	9,243	18,117	18,090	27,437
Net cash used in financing activities	(8,808)	(6,973)	(18,099)	(15,781)	(21,249)
Net financings	(1,155)	(1,269)	(4,155)	(2,424)	(6,063)
Proceeds from finance debt	11	51	180	62	330
Repayments	(1,166)	(1,320)	(4,335)	(2,486)	(6,393)
Repayment of lease liability	(1,473)	(1,389)	(1,361)	(2,862)	(2,682)
Dividends paid to shareholders of Petrobras	(6,205)	(4,192)	(12,429)	(10,397)	(12,429)
Dividends paid to non-controlling interests	-	(48)	(53)	(48)	(58)
Changes in non-controlling interest	25	(75)	(101)	(50)	(17)
Effect of exchange rate changes on cash and cash equivalents	22	24	(956)	46	(374)
Cash and cash equivalents at the end of period	10,351	10,290	16,294	10,351	16,294
Government bonds, bank deposit certificates and time deposits with maturities of more than 3 months at the end of period *	5,443	5,471	2,855	5,443	2,855
Cash and cash equivalents in companies classified as held for sale at the end of the period	-	-	(7)	-	(7)
Adjusted cash and cash equivalents at the end of period	15,794	15,761	19,142	15,794	19,142
Reconciliation of Free Cash Flow					
Net cash provided by operating activities	9,642	10,347	14,496	19,989	24,804
Acquisition of PP&E and intangible assets	(2,912)	(2,423)	(1,697)	(5,335)	(4,073)
Acquisition of equity interests	(9)	(8)	(10)	(17)	(19)
Free cash flow**	6,721	7,916	12,789	14,637	20,712

As of June 30, 2023, cash and cash equivalents totaled US\$ 10.4 billion and adjusted cash and cash equivalents totaled US\$ 15.8 billion.

In 2Q23, cash generated from operating activities reached US\$ 9.6 billion and positive free cash flow totaled US\$ 6.7 billion. This level of cash generation, along with the inflow of funds from the divestments of US\$ 1.6 billion, especially the conclusion of the sales of the Potiguar (US\$ 1.1 billion) and the Norte Capixaba (US\$ 0.4 billion) clusters were used to: (a) pay remuneration to shareholders (US\$ 6.2 billion), (b) make investments (US\$ 2.9 billion), (c) amortize lease liabilities (US\$ 1.5 billion), and (d) amortize principal and interest due in the period (US\$ 1.2 billion).

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

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

Debt indicators

As of 06/30/2023, gross debt reached US\$ 58.0 billion, an increase of 8.7% compared to 03/31/2023, mainly due to the increase in leases in the period with the entry into operation of the leased FPSOs Anna Nery and Almirante Barroso, which added US\$ 5.2 billion to the company's lease liabilities. On the other hand, financial debt fell by US\$ 608 million, compared to 03/31/2023, reaching US\$ 29.2 billion on 06/30/2023.

Average maturity increased from 12 to 12.1 years and average cost varied from 6.5% p.a. to 6.6% p.a. over the same period.

The gross debt/EBITDA ratio reached 1.02x on 06/30/2023, compared to 0.82x on 03/31/2023.

On 06/30/2023, net debt reached US\$ 42.2 billion, an increase of 12.2% compared to 03/31/2023, mainly due to the increase in leases in the period.

Table 12 – Debt indicators

US\$ million	06.30.2023	03.31.2023	Δ %	06.30.2022
Financial Debt	29,228	29,836	(2.0)	31,051
Capital Markets	17,363	17,011	2.1	18,261
Banking Market	8,775	9,741	(9.9)	9,158
Development banks	735	720	2.1	770
Export Credit Agencies	2,190	2,201	(0.5)	2,688
Others	165	163	1.2	174
Finance leases	28,743	23,513	22.2	22,526
Gross debt	57,971	53,349	8.7	53,577
Adjusted cash and cash equivalents	15,794	15,761	0.2	19,142
Net debt	42,177	37,588	12.2	34,435
Net Debt/(Net Debt + Market Cap) - Leverage	33%	37%	(10.8)	32%
Average interest rate (% p.a.)	6.6	6.5	1.5	6.3
Weighted average maturity of outstanding debt (years)	12.12	12.02	0.8	13.04
Net debt/LTM Adjusted EBITDA ratio	0.74	0.58	27.6	0.60
Gross debt/LTM Adjusted EBITDA ratio	1.02	0.82	25.0	0.93

Results by segment

Exploration and Production

Table 13 – E&P results

US\$ million	2Q23	1Q23	2Q22	1H23	1H22	Variation (%) (*)		
						2Q23 X 1Q23	2Q23 X 2Q22	1H23 X 1H22
Sales revenues	14,722	15,730	21,940	30,452	41,624	(6.4)	(32.9)	(26.8)
Gross profit	8,610	9,351	13,764	17,961	25,772	(7.9)	(37.4)	(30.3)
Operating expenses	(554)	(123)	2,519	(677)	2,481	350.4	-	-
Operating income	8,056	9,228	16,283	17,284	28,253	(12.7)	(50.5)	(38.8)
Net income (loss) attributable to the shareholders of Petrobras	5,335	6,108	10,803	11,443	18,757	(12.7)	(50.6)	(39.0)
Adjusted EBITDA of the segment	9,876	10,895	15,937	20,771	29,956	(9.4)	(38.0)	(30.7)
EBITDA margin of the segment (%)	67	69	73	68	72	(2)	(6)	(4)
ROCE (Return on Capital Employed) (%)	15.5	18.5	17.4	15.5	17.4	(3.0)	(1.9)	(1.9)
Average Brent crude (US\$/bbl)	78.39	81.27	113.78	79.83	107.59	(3.5)	(31.1)	(25.8)
Lifting cost - Brazil (US\$/boe)								
excluding production taxes and leases	5.96	5.51	5.22	5.73	5.60	8.2	14.0	2.4
excluding production taxes	7.92	7.27	6.97	7.59	7.32	9.0	13.6	3.7
Onshore and shallow waters								
with leases	15.71	14.70	16.44	15.21	16.82	6.9	(4.5)	(9.6)
excluding leases	15.71	14.70	16.44	15.21	16.82	6.9	(4.5)	(9.6)
Deep and ultra-deep post-salt								
with leases	16.85	12.94	11.28	14.80	12.83	30.2	49.3	15.4
excluding leases	14.56	11.45	9.57	12.93	11.27	27.2	52.1	14.8
Pre-salt								
with leases	5.71	5.61	5.13	5.66	5.16	1.7	11.3	9.7
excluding leases	3.72	3.71	3.25	3.72	3.28	0.4	14.5	13.3
including production taxes and excluding leases	19.29	19.19	24.36	19.24	25.14	0.5	(20.8)	(23.5)
including production taxes and leases	21.25	20.95	26.11	21.10	26.86	1.4	(18.6)	(21.4)
Production taxes - Brazil	2,695	2,784	4,034	5,479	8,101	(3.2)	(33.2)	(32.4)
Royalties	1,553	1,610	2,247	3,163	4,388	(3.5)	(30.9)	(27.9)
Special participation	1,130	1,162	1,774	2,292	3,688	(2.8)	(36.3)	(37.9)
Retention of areas	12	12	13	24	24	-	(4.8)	(0.8)

(*) EBITDA margin and ROCE variations in percentage points

In 2Q23, E&P gross profit was US\$ 8.6 billion, a reduction of 8% when compared to 1Q23. This reduction was mainly due to lower Brent prices and lower production in the period.

Operating income in 2Q23 was 13% lower than 1Q23, as a reflection of lower gross profit and higher tax expenses related to oil export operations.

Lifting costs in 2Q23, excluding production taxes and leases, was US\$ 5.96/boe, an 8% increase when compared to 1Q23, due to higher integrity expenses, mainly subsea inspections and well interventions, and the appreciation of the Brazilian real against the US dollar.

Lifting costs in the pre-salt remained stable compared to 1Q23. The effect of the exchange rate appreciation was offset by the reduction in costs, mainly due to the reduction in well interventions and the increase in production in Búzios, due to the FPSO Almirante Barroso start-up, and Itapu, due to the ramp-up of P-71.

In the post-salt, the increase in lifting costs is explained by the higher volume of intervention activities in wells in the Campos Basin and by subsea inspection and maintenance activities. The lower production and the effect of Brazilian real appreciation also contributed to this result.

In onshore and shallow water assets, there was a 7% increase in lifting costs, also due to the effect of the exchange rate appreciation in 2Q23 and the resumption of production in onshore fields in Bahia.

The decrease with government take in dollars is explained by the lower Brent prices in 2Q23.

Refining, Transportation and Marketing

Table 14 – RTM results

US\$ million	2Q23	1Q23	2Q22	1H23	1H22	Variation (%) (*)		
						2Q23 X 1Q23	2Q23 X 2Q22	1H23 X 1H22
Sales revenues	21,057	24,842	31,956	45,899	56,641	(15.2)	(34.1)	(19.0)
Gross profit (loss)	1,729	2,974	5,169	4,703	8,307	(41.9)	(66.6)	(43.4)
Operating expenses	(1,151)	(1,178)	(843)	(2,329)	(1,651)	(2.3)	36.5	41.1
Operating Income	578	1,796	4,326	2,374	6,656	(67.8)	(86.6)	(64.3)
Net income (loss) attributable to the shareholders of Petrobras	312	1,199	2,761	1,511	4,570	(74.0)	(88.7)	(66.9)
Adjusted EBITDA of the segment	1,597	2,381	4,923	3,978	7,771	(32.9)	(67.6)	(48.8)
EBITDA margin of the segment (%)	8	10	15	9	14	(2)	(8)	(5)
ROCE (Return on Capital Employed) (%)	7.7	11.7	10.5	7.7	10.5	(4.0)	(2.8)	(2.8)
Refining cost (US\$ / barrel) - Brazil	2.24	2.12	1.84	2.18	1.81	5.7	21.7	20.4
Domestic basic oil by-products price (US\$/bbl)	95.91	109.53	135.20	102.62	120.04	(12.4)	(29.1)	(14.5)

(*) EBITDA margin and ROCE variations in percentage points

In 2Q23, the international diesel crack spreads dropped more than 40% leading to a gross profit of US\$1.7 billion, US\$1.2 billion lower than 1Q23. The inventory turnover was less pronounced in 2Q23 due to the lower changes in Brent prices, - US\$ 0.46 billion vs. - US\$ 1.14 billion in 1Q23. Excluding this effect, gross profit would have been US\$ 2.2 billion in 2Q23 and US\$ 4.1 billion in 1Q23.

The aforementioned lower margins in 2Q23, mainly those of diesel and jet fuel, were partially offset by higher domestic volumes of sales of gasoline, because of its greater competitiveness relative to ethanol, of diesel, due to the typical seasonality and by higher export volumes of fuel oil.

In 2Q23, operating income was lower, reflecting the lower gross profit.

In 2Q23, the refining cost per barrel was 5.7% higher than 1Q23, due to higher expenses with materials and maintenance services and with catalysts, an input mainly used in the conversion units to produce gasoline, in addition to the appreciation of the real against the dollar. These effects were partially offset by the higher feedstock in the period.

Gas and Power

Table 15 – G&P results

US\$ million	2Q23	1Q23	2Q22	1H23	1H22	Variation (%) (*)		
						2Q23 X 1Q23	2Q23 X 2Q22	1H23 X 1H22
Sales revenues	2,767	2,854	3,734	5,621	7,099	(3.0)	(25.9)	(20.8)
Gross profit	1,141	1,387	1,368	2,528	1,848	(17.7)	(16.6)	36.8
Operating expenses	(765)	(779)	(816)	(1,544)	(1,690)	(1.8)	(6.3)	(8.6)
Operating income	376	608	552	984	158	(38.2)	(31.9)	522.8
Net income (loss) attributable to the shareholders of Petrobras	247	388	368	635	110	(36.3)	(32.9)	477.3
Adjusted EBITDA of the segment	499	739	657	1,238	371	(32.5)	(24.0)	233.7
EBITDA margin of the segment (%)	18	26	18	22	5	(8)	-	17
ROCE (Return on Capital Employed) (%)	10.0	10.7	(3.9)	10.0	(3.9)	(0.7)	13.9	13.9
Natural gas sales price - Brazil (US\$/bbl)	70.96	73.27	71.16	72.13	63.00	(3.2)	(0.3)	14.5
Natural gas sales price - Brazil (US\$/MMBtu)	11.96	12.35	12.00	12.16	10.62	(3.2)	(0.3)	14.5
Fixed revenues from power auctions	86.77	81.68	104.51	168.45	200.21	6.2	(17.0)	(15.9)
Average price for power generation(US\$/MWh)	11.25	6.53	18.90	8.88	46.48	72.3	(40.4)	(80.9)

(*) EBITDA margin and ROCE variations in percentage points

In 2Q23, gross profit was US\$ 1.1 billion, a 17.7% decrease when compared to 1Q23, while operating income was US\$ 0.4 billion, 38.2% lower than 1Q23. This result was due to the reduction in Bolivian gas purchases, as per the contractual curve agreed, partially offset by the regasification of LNG in the period. The higher use of LNG, of approximately 3MM m³/d in 2Q23, had a negative impact on the segment's result, given its higher acquisition cost.

Reconciliation of Adjusted EBITDA

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

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

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

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

Table 16 - Reconciliation of Adjusted EBITDA

US\$ million	2Q23	1Q23	2Q22	1H23	1H22	Variation (%) (*)		
						2Q23 X 1Q23	2Q23 X 2Q22	1H23 X 1H22
Net income	5,859	7,370	11,041	13,229	19,689	(20.5)	(46.9)	(32.8)
Net finance (expense) income	21	622	3,198	643	2,602	(96.6)	(99.3)	(75.3)
Income taxes	2,576	3,596	5,309	6,172	9,875	(28.4)	(51.5)	(37.5)
Depreciation, depletion and amortization	3,249	2,924	3,460	6,173	6,630	11.1	(6.1)	(6.9)
EBITDA	11,705	14,512	23,008	26,217	38,796	(19.3)	(49.1)	(32.4)
Results in equity-accounted investments	22	(35)	9	(13)	(341)	-	144.4	(96.2)
Impairment of assets (reversals)	401	3	168	404	167	13266.7	138.7	141.9
Results on disposal/write-offs of assets and on remeasurement of investment retained with loss of control	(692)	(496)	(370)	(1,188)	(846)	39.5	87.0	40.4
Results from co-participation agreements in bid areas	-	(28)	(2,872)	(28)	(2,872)	-	-	(99.0)
Adjusted EBITDA	11,436	13,956	19,943	25,392	34,904	(18.1)	(42.7)	(27.3)
Adjusted EBITDA margin (%)	50	52	57	51	56	(2.0)	(7.0)	(5.0)

(*) EBITDA Margin variations in percentage points

Financial statements

Table 17 - Income statement - Consolidated

US\$ million	2Q23	1Q23	2Q22	1H23	1H22
Sales revenues	22,979	26,771	34,703	49,750	61,892
Cost of sales	(11,342)	(12,658)	(15,240)	(24,000)	(28,019)
Gross profit	11,637	14,113	19,463	25,750	33,873
Selling expenses	(1,200)	(1,221)	(1,247)	(2,421)	(2,425)
General and administrative expenses	(388)	(357)	(323)	(745)	(622)
Exploration costs	(191)	(157)	(44)	(348)	(123)
Research and development expenses	(172)	(154)	(220)	(326)	(426)
Other taxes	(329)	(200)	(93)	(529)	(152)
Impairment (losses) reversals	(401)	(3)	(168)	(404)	(167)
Other income and expenses, net	(478)	(468)	2,189	(946)	1,867
	(3,159)	(2,560)	94	(5,719)	(2,048)
Operating income	8,478	11,553	19,557	20,031	31,825
Finance income	516	465	619	981	881
Finance expenses	(868)	(844)	(959)	(1,712)	(1,716)
Foreign exchange gains (losses) and inflation indexation charges	331	(243)	(2,858)	88	(1,767)
Net finance income (expense)	(21)	(622)	(3,198)	(643)	(2,602)
Results of equity-accounted investments	(22)	35	(9)	13	341
Income before income taxes	8,435	10,966	16,350	19,401	29,564
Income taxes	(2,576)	(3,596)	(5,309)	(6,172)	(9,875)
Net Income	5,859	7,370	11,041	13,229	19,689
Net income attributable to:					
Shareholders of Petrobras	5,828	7,341	11,010	13,169	19,615
Non-controlling interests	31	29	31	60	74

Table 18 - Statement of financial position – Consolidated

ASSETS - US\$ million	06.30.2023	12.31.2022
Current assets	28,390	31,250
Cash and cash equivalents	10,351	7,996
Marketable securities	2,304	2,773
Trade and other receivables, net	4,366	5,010
Inventories	8,143	8,779
Recoverable taxes	1,319	1,307
Assets classified as held for sale	402	3,608
Other current assets	1,505	1,777
Non-current assets	177,134	155,941
Long-term receivables	25,471	21,220
Trade and other receivables, net	2,003	2,440
Marketable securities	3,192	1,564
Judicial deposits	13,335	11,053
Deferred taxes	671	832
Other tax assets	4,270	3,778
Other non-current assets	2,000	1,553
Investments	1,644	1,566
Property, plant and equipment	146,632	130,169
Intangible assets	3,387	2,986
Total assets	205,524	187,191
LIABILITIES - US\$ million	06.30.2023	12.31.2022
Current liabilities	31,457	31,380
Trade payables	5,430	5,464
Finance debt	4,129	3,576
Lease liability	6,209	5,557
Taxes payable	3,846	5,931
Dividends payable	6,396	4,171
Short-term employee benefits	2,198	2,215
Liabilities related to assets classified as held for sale	424	1,465
Other current liabilities	2,825	3,001
Non-current liabilities	96,817	85,975
Finance debt	25,099	26,378
Lease liability	22,534	18,288
Income taxes payable	315	302
Deferred taxes	11,100	6,750
Employee benefits	11,976	10,675
Provision for legal and administrative proceedings	3,529	3,010
Provision for decommissioning costs	20,103	18,600
Other non-current liabilities	2,161	1,972
Shareholders' equity	77,250	69,836
Share capital (net of share issuance costs)	107,101	107,101
Profit reserves and others	(30,183)	(37,609)
Non-controlling interests	332	344
Total liabilities and shareholders' equity	205,524	187,191

Table 19 - Statement of cash flow – Consolidated

US\$ million	2Q23	1Q23	2Q22	1H23	1H22
Cash flows from operating activities					
Net income for the period	5,859	7,370	11,041	13,229	19,689
Adjustments for:					
Pension and medical benefits - actuarial losses	389	370	326	759	633
Results of equity-accounted investments	22	(35)	9	(13)	(341)
Depreciation, depletion and amortization	3,249	2,924	3,460	6,173	6,630
Impairment of assets (reversals)	401	3	168	404	167
Inventory (write-back) to net realizable value	14	(8)	10	6	3
Allowance for credit loss on trade and other receivables	10	24	18	34	39
Exploratory expenditure write-offs	6	32	71	38	94
Disposal/write-offs of assets, remeasurement of investment retained with loss of control and reclassification of CTA	(691)	(496)	(370)	(1,187)	(846)
Foreign exchange, indexation and finance charges	191	656	3,371	847	2,882
Income taxes	2,576	3,596	5,309	6,172	9,875
Revision and unwinding of discount on the provision for decommissioning costs	231	212	141	443	295
PIS and COFINS recovery - exclusion of ICMS (VAT tax) from the basis of calculation	-	-	(4)	-	(4)
Results from co-participation agreements in bid areas	-	(28)	(2,872)	(28)	(2,872)
Early termination and cash outflows revision of lease agreements	(91)	(167)	(176)	(258)	(401)
Losses with legal, administrative and arbitration proceedings, net	277	254	298	531	557
Decrease (Increase) in assets					
Trade and other receivables	763	412	(584)	1,175	57
Inventories	91	989	(117)	1,080	(2,034)
Judicial deposits	(379)	(403)	(461)	(782)	(859)
Other assets	164	111	(625)	275	(652)
Increase (Decrease) in liabilities					
Trade payables	187	(478)	(3)	(291)	(141)
Other taxes payable	(747)	(217)	(1,211)	(964)	(981)
Pension and medical benefits	(273)	(178)	(212)	(451)	(1,689)
Provisions for legal proceedings	(134)	(85)	(126)	(219)	(178)
Other employee benefits	(251)	35	(216)	(216)	(366)
Provision for decommissioning costs	(173)	(165)	(146)	(338)	(278)
Other liabilities	(27)	(101)	924	(128)	627
Income taxes paid	(2,022)	(4,280)	(3,527)	(6,302)	(5,102)
Net cash provided by operating activities	9,642	10,347	14,496	19,989	24,804
Cash flows from investing activities					
Acquisition of PP&E and intangible assets	(2,912)	(2,423)	(1,697)	(5,335)	(4,073)
Acquisition of equity interests	(9)	(8)	(10)	(17)	(19)
Proceeds from disposal of assets - Divestment	1,606	1,855	1,625	3,461	3,378
Financial compensation from co-participation agreements	-	391	5,152	391	5,213
Investment in marketable securities	462	(930)	(1,639)	(468)	(2,108)
Dividends received	58	11	190	69	242
Net cash (used in) provided by investing activities	(795)	(1,104)	3,621	(1,899)	2,633
Cash flows from financing activities					
Changes in non-controlling interest	25	(75)	(101)	(50)	(17)
Financing and loans, net:					
Proceeds from finance debt	11	51	180	62	330
Repayment of principal - finance debt	(732)	(750)	(3,986)	(1,482)	(5,477)
Repayment of interest - finance debt	(434)	(570)	(349)	(1,004)	(916)
Repayment of lease liability	(1,473)	(1,389)	(1,361)	(2,862)	(2,682)
Dividends paid to Shareholders of Petrobras	(6,205)	(4,192)	(12,429)	(10,397)	(12,429)
Dividends paid to non-controlling interests	-	(48)	(53)	(48)	(58)
Net cash used in financing activities	(8,808)	(6,973)	(18,099)	(15,781)	(21,249)
Effect of exchange rate changes on cash and cash equivalents	22	24	(956)	46	(374)
Net change in cash and cash equivalents	61	2,294	(938)	2,355	5,814
Cash and cash equivalents at the beginning of the period	10,290	7,996	17,232	7,996	10,480
Cash and cash equivalents at the end of the period	10,351	10,290	16,294	10,351	16,294

Financial information by business areas

Table 20 - Consolidated income by segment – 1H23

US\$ million	E&P	RTM	GAS & POWER	CORP.	ELIMIN.	TOTAL
Sales revenues	30,452	45,899	5,621	163	(32,385)	49,750
Intersegments	29,940	840	1,601	4	(32,385)	-
Third parties	512	45,059	4,020	159	-	49,750
Cost of sales	(12,491)	(41,196)	(3,093)	(164)	32,944	(24,000)
Gross profit	17,961	4,703	2,528	(1)	559	25,750
Expenses	(677)	(2,329)	(1,544)	(1,161)	(8)	(5,719)
Selling expenses	(12)	(1,044)	(1,335)	(22)	(8)	(2,421)
General and administrative expenses	(34)	(162)	(32)	(517)	-	(745)
Exploration costs	(348)	-	-	-	-	(348)
Research and development expenses	(251)	(14)	(1)	(60)	-	(326)
Other taxes	(354)	(1)	(19)	(155)	-	(529)
Impairment (losses) reversals	(18)	(416)	-	30	-	(404)
Other income and expenses, net	340	(692)	(157)	(437)	-	(946)
Operating income (loss)	17,284	2,374	984	(1,162)	551	20,031
Net finance income (expense)	-	-	-	(643)	-	(643)
Results of equity-accounted investments	35	(55)	21	12	-	13
Income (loss) before income taxes	17,319	2,319	1,005	(1,793)	551	19,401
Income taxes	(5,878)	(808)	(333)	1,034	(187)	(6,172)
Net income (loss)	11,441	1,511	672	(759)	364	13,229
Net income (loss) attributable to:						
Shareholders of Petrobras	11,443	1,511	635	(784)	364	13,169
Non-controlling interests	(2)	-	37	25	-	60

Table 21 - Consolidated income by segment – 1H22

US\$ million	E&P	RTM	GAS & POWER	CORP.	ELIMIN.	TOTAL
Sales revenues	41,624	56,641	7,099	276	(43,748)	61,892
Intersegments	40,946	931	1,870	1	(43,748)	-
Third parties	678	55,710	5,229	275	-	61,892
Cost of sales	(15,852)	(48,334)	(5,251)	(272)	41,690	(28,019)
Gross profit	25,772	8,307	1,848	4	(2,058)	33,873
Expenses	2,481	(1,651)	(1,690)	(1,181)	(7)	(2,048)
Selling expenses	(5)	(870)	(1,521)	(22)	(7)	(2,425)
General and administrative expenses	(24)	(131)	(34)	(433)	-	(622)
Exploration costs	(123)	-	-	-	-	(123)
Research and development expenses	(365)	(6)	(3)	(52)	-	(426)
Other taxes	(39)	(25)	(19)	(69)	-	(152)
Impairment (losses) reversals	(123)	(44)	1	(1)	-	(167)
Other income and expenses, net	3,160	(575)	(114)	(604)	-	1,867
Operating income (loss)	28,253	6,656	158	(1,177)	(2,065)	31,825
Net finance income (expense)	-	-	-	(2,602)	-	(2,602)
Results of equity-accounted investments	108	176	59	(2)	-	341
Income (loss) before income taxes	28,361	6,832	217	(3,781)	(2,065)	29,564
Income taxes	(9,606)	(2,262)	(55)	1,344	704	(9,875)
Net income (loss)	18,755	4,570	162	(2,437)	(1,361)	19,689
Net income (loss) attributable to:						
Shareholders of Petrobras	18,757	4,570	110	(2,461)	(1,361)	19,615
Non-controlling interests	(2)	-	52	24	-	74

Table 22 – Quarterly consolidated income by segment – 2Q23

US\$ million	E&P	RTM	GAS & POWER	CORP.	ELIMIN.	TOTAL
Sales revenues	14,722	21,057	2,767	87	(15,654)	22,979
Intersegments	14,490	366	796	2	(15,654)	-
Third parties	232	20,691	1,971	85	-	22,979
Cost of sales	(6,112)	(19,328)	(1,626)	(87)	15,811	(11,342)
Gross profit	8,610	1,729	1,141	-	157	11,637
Expenses	(554)	(1,151)	(765)	(686)	(3)	(3,159)
Selling expenses	(5)	(511)	(683)	2	(3)	(1,200)
General and administrative expenses	(18)	(84)	(17)	(269)	-	(388)
Exploration costs	(191)	-	-	-	-	(191)
Research and development expenses	(127)	(12)	-	(33)	-	(172)
Other taxes	(336)	105	(10)	(88)	-	(329)
Impairment (losses) reversals	(31)	(400)	-	30	-	(401)
Other income and expenses, net	154	(249)	(55)	(328)	-	(478)
Operating income (loss)	8,056	578	376	(686)	154	8,478
Net finance income (expense)	-	-	-	(21)	-	(21)
Results of equity-accounted investments	18	(69)	17	12	-	(22)
Income (loss) before income taxes	8,074	509	393	(695)	154	8,435
Income taxes	(2,740)	(197)	(127)	540	(52)	(2,576)
Net income (loss)	5,334	312	266	(155)	102	5,859
Net income (loss) attributable to:						
Shareholders of Petrobras	5,335	312	247	(168)	102	5,828
Non-controlling interests	(1)	-	19	13	-	31

Table 23 – Quarterly consolidated income by segment – 1Q23

US\$ million	E&P	RTM	GAS & POWER	CORP.	ELIMIN.	TOTAL
Sales revenues	15,730	24,842	2,854	76	(16,731)	26,771
Intersegments	15,450	474	805	2	(16,731)	-
Third parties	280	24,368	2,049	74	-	26,771
Cost of sales	(6,379)	(21,868)	(1,467)	(77)	17,133	(12,658)
Gross profit	9,351	2,974	1,387	(1)	402	14,113
Expenses	(123)	(1,178)	(779)	(475)	(5)	(2,560)
Selling expenses	(7)	(533)	(652)	(24)	(5)	(1,221)
General and administrative expenses	(16)	(78)	(15)	(248)	-	(357)
Exploration costs	(157)	-	-	-	-	(157)
Research and development expenses	(124)	(2)	(1)	(27)	-	(154)
Other taxes	(18)	(106)	(9)	(67)	-	(200)
Impairment (losses) reversals	13	(16)	-	-	-	(3)
Other income and expenses, net	186	(443)	(102)	(109)	-	(468)
Operating income (loss)	9,228	1,796	608	(476)	397	11,553
Net finance income (expense)	-	-	-	(622)	-	(622)
Results of equity-accounted investments	17	14	4	-	-	35
Income (loss) before income taxes	9,245	1,810	612	(1,098)	397	10,966
Income taxes	(3,138)	(611)	(206)	494	(135)	(3,596)
Net income (loss)	6,107	1,199	406	(604)	262	7,370
Net income (loss) attributable to:						
Shareholders of Petrobras	6,108	1,199	388	(616)	262	7,341
Non-controlling interests	(1)	-	18	12	-	29

Table 24 - Other income and expenses by segment – 1H23

US\$ million	E&P	RTM	GAS & POWER	CORP.	ELIMIN.	TOTAL
Unscheduled stoppages and pre-operating expenses	(1,052)	(10)	(22)	(15)	-	(1,099)
Pension and medical benefits - retirees	-	-	-	(577)	-	(577)
Gains (losses) with legal, administrative and arbitration proceedings	(165)	(321)	3	(48)	-	(531)
Performance award program	(108)	(63)	(14)	(86)	-	(271)
Profit sharing	(30)	(13)	(4)	(20)	-	(67)
Losses on decommissioning of returned/abandoned areas	(13)	-	-	-	-	(13)
Results from co-participation agreements in bid areas	28	-	-	-	-	28
Gains with Commodities Derivatives	-	68	-	1	-	69
Amounts recovered from Lava Jato investigation (*)	-	-	-	93	-	93
Government grants	13	-	-	163	-	176
Early termination and changes to cash flow estimates of leases	185	75	-	(2)	-	258
Reimbursements from E&P partnership operations	280	-	-	-	-	280
Results on disposal/write-offs of assets and on remeasurement of investment retained with loss of control	1,207	(29)	-	9	-	1,187
Others (**)	(5)	(399)	(120)	45	-	(479)
	340	(692)	(157)	(437)	-	(946)

(*) Through December 31, 2022, the amount recovered of US\$ 1,618 was recognized through collaboration and leniency agreements entered into with individuals and legal entities.

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

Table 25 - Other income and expenses by segment – 1H22

US\$ million	E&P	RTM	GAS & POWER	CORP.	ELIMIN.	TOTAL
Unscheduled stoppages and pre-operating expenses	(852)	(12)	(10)	(15)	-	(889)
Pension and medical benefits - retirees	-	-	-	(491)	-	(491)
Losses with legal, administrative and arbitration proceedings	(136)	(247)	(59)	(115)	-	(557)
Performance award program	(102)	(51)	(13)	(81)	-	(247)
Profit sharing	(26)	(16)	(4)	(19)	-	(65)
Losses on decommissioning of returned/abandoned areas	(27)	-	-	-	-	(27)
Results from co-participation agreements in bid areas	2,872	-	-	-	-	2,872
Losses with Commodities Derivatives	-	(222)	-	-	-	(222)
Amounts recovered from Lava Jato investigation	-	-	-	12	-	12
Government grants	2	-	-	197	-	199
Early termination and changes to cash flow estimates of leases	375	30	3	(7)	-	401
Reimbursements from E&P partnership operations	154	-	-	-	-	154
Results on disposal/write-offs of assets and on remeasurement of investment retained with loss of control	806	44	(7)	3	-	846
Others	94	(101)	(24)	(88)	-	(119)
	3,160	(575)	(114)	(604)	-	1,867

Table 26 - Other income and expenses by segment – 2Q23

US\$ million	E&P	RTM	GAS & POWER	CORP.	ELIMIN.	TOTAL
Unscheduled stoppages and pre-operating expenses	(575)	(5)	(12)	(8)	-	(600)
Pension and medical benefits - retirees	-	-	-	(296)	-	(296)
Losses with legal, administrative and arbitration proceedings	(107)	(109)	(4)	(57)	-	(277)
Performance award program	(53)	(32)	(7)	(39)	-	(131)
Profit sharing	(16)	(4)	(2)	(10)	-	(32)
Losses on decommissioning of returned/abandoned areas	(12)	-	-	-	-	(12)
Gains (losses) with Commodities Derivatives	-	(17)	7	-	-	(10)
Results from co-participation agreements in bid areas	-	-	-	-	-	-
Amounts recovered from Lava Jato investigation (*)	-	-	-	4	-	4
Government grants	12	-	-	60	-	72
Early termination and changes to cash flow estimates of leases	101	(6)	(1)	(3)	-	91
Reimbursements from E&P partnership operations	119	-	-	-	-	119
Results on disposal/write-offs of assets and on remeasurement of investment retained with loss of control	700	(18)	7	2	-	691
Others (**)	(15)	(58)	(43)	19	-	(97)
	154	(249)	(55)	(328)	-	(478)

(*) Through December 31, 2022, the amount recovered of US\$ 1,618 was recognized through collaboration and leniency agreements entered into with individuals and legal entities.

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

Table 27 - Other income and expenses by segment – 1Q23

US\$ million	E&P	RTM	GAS & POWER	CORP.	ELIMIN.	TOTAL
Unscheduled stoppages and pre-operating expenses	(477)	(5)	(10)	(7)	-	(499)
Pension and medical benefits - retirees	-	-	-	(281)	-	(281)
Gains (losses) with legal, administrative and arbitration proceedings	(58)	(212)	7	9	-	(254)
Performance award program	(55)	(31)	(7)	(47)	-	(140)
Profit sharing	(14)	(9)	(2)	(10)	-	(35)
Losses on decommissioning of returned/abandoned areas	(1)	-	-	-	-	(1)
Gains (losses) with Commodities Derivatives	-	85	(7)	1	-	79
Results from co-participation agreements in bid areas	28	-	-	-	-	28
Amounts recovered from Lava Jato investigation (*)	-	-	-	89	-	89
Government grants	1	-	-	103	-	104
Early termination and changes to cash flow estimates of leases	84	81	1	1	-	167
Reimbursements from E&P partnership operations	161	-	-	-	-	161
Results on disposal/write-offs of assets and on remeasurement of investment retained with loss of control	507	(11)	(7)	7	-	496
Others (**)	10	(341)	(77)	26	-	(382)
	186	(443)	(102)	(109)	-	(468)

(*) Through December 31, 2022, the amount recovered of US\$ 1,618 was recognized through collaboration and leniency agreements entered into with individuals and legal entities.

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

Table 28 - Consolidated assets by segment – 06.30.2023

US\$ million	E&P	RTM	GAS & POWER	CORP. AND OTHERS	ELIMIN.	TOTAL
Total assets	131,625	34,438	6,877	37,367	(4,783)	205,524
Current assets	2,542	10,810	459	19,362	(4,783)	28,390
Non-current assets	129,083	23,628	6,418	18,005	-	177,134
Long-term receivables	7,857	2,078	101	15,435	-	25,471
Investments	399	1,028	160	57	-	1,644
Property, plant and equipment	118,005	20,396	6,074	2,157	-	146,632
Operating assets	103,840	17,431	3,746	1,722	-	126,739
Assets under construction	14,165	2,965	2,328	435	-	19,893
Intangible assets	2,822	126	83	356	-	3,387

Table 29 - Consolidated assets by segment – 12.31.2022

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

Table 30 - Reconciliation of Adjusted EBITDA by segment – 1H23

US\$ million	E&P	RTM	GAS & POWER	CORP. AND OTHERS	ELIMIN.	TOTAL
Net income (loss)	11,441	1,511	672	(759)	364	13,229
Net finance income (expense)	-	-	-	643	-	643
Income taxes	5,878	808	333	(1,034)	187	6,172
Depreciation, depletion and amortization	4,704	1,159	254	56	-	6,173
EBITDA	22,023	3,478	1,259	(1,094)	551	26,217
Results in equity-accounted investments	(35)	55	(21)	(12)	-	(13)
Impairment of assets (reversals)	18	416	-	(30)	-	404
Results on disposal/write-offs of assets and on remeasurement of investment retained with loss of control	(1,207)	29	-	(10)	-	(1,188)
Results from co-participation agreements in bid areas	(28)	-	-	-	-	(28)
Adjusted EBITDA	20,771	3,978	1,238	(1,146)	551	25,392

Table 31 - Reconciliation of Adjusted EBITDA by segment – 1H22

US\$ million	E&P	RTM	GAS & POWER	CORP. AND OTHERS	ELIMIN.	TOTAL
Net income (loss)	18,755	4,570	162	(2,437)	(1,361)	19,689
Net finance income (expense)	-	-	-	2,602	-	2,602
Income taxes	9,606	2,262	55	(1,344)	(704)	9,875
Depreciation, depletion and amortization	5,258	1,114	207	51	-	6,630
EBITDA	33,619	7,946	424	(1,128)	(2,065)	38,796
Results in equity-accounted investments	(108)	(176)	(59)	2	-	(341)
Impairment of assets (reversals)	123	44	(1)	1	-	167
Results on disposal/write-offs of assets and on remeasurement of investment retained with loss of control	(806)	(43)	7	(4)	-	(846)
Results from co-participation agreements in bid areas	(2,872)	-	-	-	-	(2,872)
Adjusted EBITDA	29,956	7,771	371	(1,129)	(2,065)	34,904

Table 32 - Reconciliation of Adjusted EBITDA by segment – 2Q23

US\$ million	E&P	RTM	GAS & POWER	CORP. AND OTHERS	ELIMIN.	TOTAL
Net income (loss)	5,334	312	266	(155)	102	5,859
Net finance income (expense)	-	-	-	21	-	21
Income taxes	2,740	197	127	(540)	52	2,576
Depreciation, depletion and amortization	2,489	601	130	29	-	3,249
EBITDA	10,563	1,110	523	(645)	154	11,705
Results in equity-accounted investments	(18)	69	(17)	(12)	-	22
Impairment of assets (reversals)	31	400	-	(30)	-	401
Results on disposal/write-offs of assets and on remeasurement of investment retained with loss of control	(700)	18	(7)	(3)	-	(692)
Results from co-participation agreements in bid areas	-	-	-	-	-	-
Adjusted EBITDA	9,876	1,597	499	(690)	154	11,436

Table 33 - Reconciliation of Adjusted EBITDA by segment – 1Q23

US\$ million	E&P	RTM	GAS & POWER	CORP. AND OTHERS	ELIMIN.	TOTAL
Net income (loss)	6,107	1,199	406	(604)	262	7,370
Net finance income (expense)	-	-	-	622	-	622
Income taxes	3,138	611	206	(494)	135	3,596
Depreciation, depletion and amortization	2,215	558	124	27	-	2,924
EBITDA	11,460	2,368	736	(449)	397	14,512
Results in equity-accounted investments	(17)	(14)	(4)	-	-	(35)
Impairment of assets (reversals)	(13)	16	-	-	-	3
Results on disposal/write-offs of assets and on remeasurement of investment retained with loss of control	(507)	11	7	(7)	-	(496)
Results from co-participation agreements in bid areas	(28)	-	-	-	-	(28)
Adjusted EBITDA	10,895	2,381	739	(456)	397	13,956

Glossary

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

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

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

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

Adjusted EBITDA margin – Adjusted EBITDA divided by sales revenues.

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

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

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

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

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

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

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

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

Lifting Cost – Crude oil and natural gas lifting cost indicator, which considers expenditures occurred in the period.

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

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

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

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

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

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

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

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

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

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

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