

2023 Results first quarter

CONTRIBUTING TO THE COUNTRY'S DEVELOPMENT AND ENERGY SECURITY



Generating value through TEGS



GENERAL SHAREHOLDERS' MEETING OF ECOPETROL

COP \$593 per share

(ordinary COP 487 + extraordinary COP 106 p.s.)

Highest dividend in history

First carbon neutral General Shareholders' meeting in Colombia

Transfers to the Nation

COP 5.5 trillion 1Q23



New DECARBONIZATION Commitment Reduction in methane emissions

2025 target

45%

2030 target

55%

Baseline

2 0 1 9



Creating SOCIAL VALUE **COP 773** billion

31,599 students
benefitted 1Q23

Ecopetrol Educa program

15 girls
benefitted in 1Q23

Ella es Astronauta program

Cutting-Edge Knowledge



FAC STA-2 CHIRIBIQUE SATELLITE: Launched the first satellite in Colombia to identify and measure GHG* emissions.

INAUGURATION OF THE CARTAGENA INNOVATION AND TECHNOLOGY CENTRE (ECONOVA): First innovation hub in Colombia

* Greenhouse gas emissions

Competitive Returns



Grow with the Energy Transition

Low-emission solutions

Sustainable mobility with low-carbon hydrogen

2,379 Social gas program
new connections
+198% vs 1Q22

Hydrocarbons

Refining

412 mbd
record throughput refineries

Production

719 mboed (+3.9% vs 1Q22)

Transmission and toll roads

Awarded

13 extensions in Brazil
and 8 connections

334 km circuit to the grid

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I am honoured to be part of the Ecopetrol Group. As a team, and in line with our commitment to generate sustainable value for all our stakeholders, we will continue to build a just energy transition within the framework of our 2040 strategy “Energy that Transforms”. My priorities will be focused on maintaining value generation as we move towards the energy transition, ensuring safe operations while always prioritising life, optimal and efficient resource management, transparency, and sustainability across all operations.

We began 2023 recording strong operating and financial as compare to 1Q22. During the first quarter, we recorded revenues totaling COP 38.9 trillion, net income of COP 5.7 trillion, EBITDA of COP 17.8 trillion and an EBITDA margin of 46%. These results were achieved amid: i) a stronger Brent price translated into Colombian pesos given the devaluation of the currency; ii) robust operations in the hydrocarbons business line with higher production and volumes transported; iii) greater throughput capacity of the Cartagena Refinery; and iv) outstanding performance of the transmission and toll roads segment, continuing on a solid and ever-increasing growth path. The gross debt/EBITDA ratio was 1.5 times and the return on capital employed (ROACE) was 17.8%.

In the **hydrocarbons** business line, the Company's strong operating performance was supported by an increase in production, refining margins, and transported volumes, relative to 1Q22. The exploration campaign began in 2023 with the addition of two new successful wells, Arrecife Norte-1, located in the Department of Córdoba, which indicated the presence of natural gas in the Ciénaga de Oro formation, and Tororoi-1, located in the Department of Casanare, which confirmed the presence of light crude oil. These wells were drilled in 2022 and initial tests were completed during this quarter. By the end of March, we drilled 8 exploratory wells, 32% ahead of the annual target.

Average **production** for the quarter reached 719.4 mboed, a year-on-year increase of 27.3 mboed versus 1Q22, despite the public order situations and blockades caused by third parties that occurred during this period. Caño Sur, Permian, and Rubiales are the assets with the highest contribution to total production growth. At our Permian assets, 37 new

wells were drilled, reaching a production of 51.4 mboed (net to Ecopetrol before royalties), an increase of 24.7 mboed versus 1Q22. Also worth noting is the start-up of the first tankless facility in the Permian which reduced venting emissions through the elimination of tanks.

In the **midstream** segment, total transported volumes increased by 49.4 mbd compared to 1Q22 for a total of 1,090 mbd, primarily through an increase in refined products transported and higher hydrocarbon production in the Llanos operation that increased pipeline usage, mainly explained by the increase in refined products, and higher hydrocarbon production in the Llanos region, which increased pipeline transportation. Additionally, Cenit's Cisneros station marked a new milestone with the startup of the Cantayús Small Hydroelectric Plant (SHP) (4.3 MW) interconnection, located in the Ddepartment of Antioquia, an asset that generates and supplies 100% of the electricity required to operate the station. For the second consecutive year Cenit received the 2023 Top Employer Certification in recognition of its positive leadership, diversity and sustainability practices, and its focus on the welfare of its people.

The **downstream** segment achieved a historical consolidated throughput this quarter, totaling 412 mbd. The segment results were supported by operational stability, including the recent entry into operation of the Cartagena Crude Oil Interconnection Project (IPCC) in a context of favorable international market conditions for refining margins. In line with our commitment to contribute to the improvement of air quality in Colombia and deliver cleaner fuels, during the first quarter of the year the refining segment delivered diesel with less than 8.9 ppm sulphur, lower than the levels required by national regulation (maximum 15 ppm sulphur).

On the **commercial** front, the Company continues to drive a market diversification strategy focused on new export destinations, supported by the stable quality of our crude and the reliability of our supply network, with crude oil export volumes increasing by 11.3%, from 396.6 mbd in 1Q22 to 441.5 mbd in 1Q23. Additionally, Ecopetrol Trading Asia, our subsidiary in Singapore, contributed an incremental value to the Group's EBITDA of USD 44 million and has allowed us to reach new destinations such as Malaysia and Thailand, and strengthening our relationships with customers in the Asian market.

An efficient sales fuel strategy was implemented to meet the increase in domestic demand and offer the

surpluses generated from the Cartagena Refinery's increase in installed capacity and higher operational availability at the Barrancabermeja Refinery to both domestic and international markets.

As part of the Company's commitment to net-zero carbon emissions by 2050, Ecopetrol's new carbon trading desk came into operation during 1Q23 to assist in the process to decarbonize commercial operations. Two shipments of 1.0 million barrels of carbon-offset Castilla Blend® were sold to the United States. In addition, we continued with the pilot test for the sale of carbon-offset extra gasoline to wholesale distributors in Colombia.

Regarding the **Low Emission Solutions** business line, which includes natural gas, LPG, hydrogen, and renewable energies, it should be noted that **natural gas and LPG** contributed 22.3% of the Group's total hydrocarbon production during the first quarter of the year. On the social gas programme, in 1Q23 a total of 2,379 new physical connections were completed, a year-on-year increase of 198% compared to 1Q22, ratifying our social commitment to deliver this fuel to more families in Colombia. To date, the Ecopetrol Group supplies ~81% of the domestic LPG market, contributing to the consumption of 3.5 million families, especially in low and middle socioeconomic status and rural areas, who represent 53% of total demand.

On the **hydrogen** front, successful feasibility studies were completed for two industrial-scale projects with an electrolysis capacity of 60 MW each, allowing us to move forward to the project's final maturity phase. Likewise, we would like to emphasize the launch of the first sustainable public transportation mobility operation in Colombia in partnership with FENOGÉ, an agency attached to the Ministry of Mines and Energy. The operation, which will initially run for eight years in the Integrated Public Transport Service (SITP) of Bogotá, is expected to avoid 1,083 tCO₂ emissions.

Regarding **renewable energies**, we signed an agreement with Total Eren for the construction of a photovoltaic solar farm in the Rubiales field with an installed capacity of approximately 100 MWp, which will allow us to avoid 24,000 tCO₂e emissions per year. Another agreement was signed to acquire all the energy generated from the first industrial-scale forest biomass project in the country, located in the Department of Casanare, consistent with our goal to diversify the Company's portfolio by increasing non-conventional renewable sources.

During 1Q23, the **transmission and toll roads** business line, ISA executed investments for COP 1.4 trillion, contributing to the entry of non-conventional renewable energies into the interconnected systems, consequently furthering the energy transition. In addition, ISA was awarded 13 extensions and 8 connections in Brazil for a total investment of close to USD 80 million and 334 additional kilometers of circuits to the grid. For this quarter, ISA's total revenues reached COP 3.9 trillion, surpassing by 41% those of 1Q22. EBITDA amounted to COP 2.7 trillion, exceeding 1Q22 results by 38%.

In terms of **TESG** results, the following are worth highlighting:

In the **environmental** dimension, we announced our commitment by 2025 to reduce by 45% methane emissions and 55% by 2030 against the 2019 baseline. The foregoing applies to direct operations of the production segment through the detection, measurement and elimination of fugitive emissions and reducing tank and well venting. In this manner, we ratify our commitment to sustainable development and to leading the energy transition not only in the industry, but also in Colombia and Latin America. In partnership with the Mayor's Office of Bogotá, Transmilenio, Esentia and the *Botellas de Amor* Foundation, we launched the first Transmilenio station that meets environmentally sustainable criteria in the Ricaurte station of Bogotá, using 19 tons of recycled plastic and operated via solar panels, a model for public transportation and the protection of the environment, and establishing Ecopetrol as a circular economy benchmark in transportation and sustainable mobility for the nation's capital. On the other hand, ISA obtained the carbon neutrality certification issued by ICONTEC for 11 of its subsidiaries.

In the **social** dimension, we have begun negotiations for a new collective bargaining agreement with 13 labor union organizations. Ecopetrol commends and recognizes the commitment, dedication, and professionalism of the negotiating teams as we continue to move forward under conditions based on constructive dialogue and respect, seeking agreements that contribute to the fulfillment of our 2040 strategy.

During 1Q23, the Ecopetrol Group allocated resources totaling COP 56,971 billion towards social, environmental and outreach initiatives, including strategic and mandatory investments. Social investments target education, road and community

infrastructure, entrepreneurship and business development, inclusive rural development, and access to public services such as water, sewage, gas, and power. I would specifically like to highlight the completion of the Social Gas Barranquilla project, which benefited more than 10,000 families in 71 urban neighborhoods of the lower socio-economic level 1 and 2, providing them with new natural gas service connections, thus expanding this public service coverage from 91% to 98%.

In terms of **corporate governance**, the following are some of the milestones reached during the first quarter: i) Ecopetrol held its General Shareholders' Meeting, the first carbon-neutral in Colombia. The General Shareholders' Meeting was organized in partnership with the *Asociación de Recicladores Modelo de Vida de Bogotá* which guaranteed the proper disposal of waste under circular economy practices; ii) the approval of a total dividend of COP 593 per share (ordinary dividend of COP 487 and an extraordinary dividend of COP 106 per share), the highest in Ecopetrol's history; and iii) the election of the members of the Board of Directors for the remainder of the 2021 - 2025 period, recognizing the value of diversity and inclusion by appointing three women to the Board: Mónica de Greiff, Sandra Ospina and Claudia González.

In terms of transparency and reporting, we highlight the publication of the 2022 Integrated Management Report, which presents the advances in our TEGS pillar, as well as the publication of the 20F Report before the Securities and Exchange Commission (SEC) of the United States. Also, the ESG (Environmental, Social and Governance) radar, *Sustainalytics*, improved Ecopetrol's rating from 30.81 in 2021 to 28.43 in 2022 and upgraded its risk category from High to Medium.

As part of its **innovation and technology** agenda, Ecopetrol in partnership with the Colombian Air Force successfully launched FACSAT-2 Chibiriquete into space, the second Colombian satellite whose objective will be to monitor and analyze the country's natural wealth in an effort to assist in its conservation. This technology, which is considered unique in Latin America, monitors greenhouse gases (GHG) to determine the sources of CO₂ emissions and generate real-time strategies to mitigate the effects of climate change.

Furthermore, we also inaugurated the Econova Caribe Network in the city of Cartagena, the first innovation hub in Colombia focusing on the

development of technological solutions for energy transition and circular economy. During this event, we invited participants to apply for 8 open innovation challenges relating to the use of hydrogen, improvements to the operations of the Cartagena Refinery, and addressing community challenges. In this innovation hub, we launched the hydrogen mobility pilot, a project which will have a 3 year duration within the framework of the agreement signed between Toyota and Ecopetrol.

Finally, I would like to emphasize my commitment to maintain and strengthen the Ecopetrol Group's 2040 Strategy. We will focus our efforts to ensure that Ecopetrol continues to be a reference within the energy sector with operational excellence and financial performance and a global leader for the energy transition. In 2023, we will continue to strengthen our relationships with all our stakeholders. We look forward to the future and to the many opportunities ahead underpinned on our strong corporate governance and our long term strategy. We will continue to work to guarantee Colombia's energy security and generate sustainable value.

Ricardo Roa Barragan
CEO of Ecopetrol S.A.

Bogotá D.C., May 9, 2023, Ecopetrol S.A. (BVC: ECOPETROL; NYSE: EC) announced today the Ecopetrol Groups' financial results for the first quarter of 2023, prepared under International Financial Reporting Standards applicable in Colombia.

During the first quarter of 2023, the Ecopetrol Group obtained strong financial results despite the changes in the price environment, achieving an EBITDA of COP 17.8 trillion, the third highest in its history, and a net income of COP 5.7 trillion.

The solid financial performance was supported by the following: i) a favorable Brent-peso environment; ii) positive operating performance; and iii) solid results across all business lines. The above allowed us to offset: i) higher effective tax rates; ii) a decrease in the negotiated crude oil spread; and iii) inflationary and exchange rate pressures on operating costs and expenses.

Table 1: Financial Summary Income Statement – Ecopetrol Group

Billion (COP)	1Q 2023	1Q 2022	Δ (\$)	Δ (%)
Total sales	38,854	32,473	6,381	19.7%
Depreciation and amortization	3,009	2,579	430	16.7%
Variable cost	15,348	12,065	3,283	27.2%
Fixed cost	4,422	3,294	1,128	34.2%
Cost of sales	22,779	17,938	4,841	27.0%
Gross income	16,075	14,535	1,540	10.6%
Operating and exploratory expenses	2,354	2,005	349	17.4%
Operating income	13,721	12,530	1,191	9.5%
Financial income (loss), net	(1,506)	(1,524)	18	(1.2%)
Share of profit of companies	342	202	140	69.3%
Income before income tax	12,557	11,208	1,349	12.0%
Income tax	(5,593)	(3,884)	(1,709)	44.0%
Net income consolidated	6,964	7,324	(360)	(4.9%)
Non-controlling interest	(1,304)	(751)	(553)	73.6%
Net income attributable to owners of Ecopetrol	5,660	6,573	(913)	(13.9%)
EBITDA	17,842	15,896	1,946	12.2%
EBITDA Margin	45.9%	49.0%	-	(3.1%)

Financial information included in this report has not been audited, is presented in Colombian GAAP and is expressed in billion or trillions of Colombian pesos (COP) or US dollars (USD), or thousands of barrels of oil equivalent per day (mboed) or tons, as noted. For presentation purposes, certain figures in this report were rounded to the nearest decimal place.

Forward-looking statements: This release contains statements that may be considered forward-looking statements concerning Ecopetrol's business, operational and financial results, and prospects for growth. These are forward-looking statements and, as such, are based solely on management's expectations regarding Ecopetrol's future and its ongoing access to capital to fund Ecopetrol's business plan. Such forward-looking statements depend, primarily, on changes in market conditions, government regulations, competitive pressures, the performance of the Colombian economy and the industry, to mention a few; therefore, they are subject to change without notice.

I. Financial and Operating Results

Sales Revenue

Sales revenues increased 19.7% in 1Q23 as compared to 1Q22, or COP +6.4 trillion, and totaling COP 38.9 trillion, as a combined result of:

- An increase in the average exchange rate, positively impacting revenues (COP +5.5 trillion).
- An increase in sales volume (COP +3.5 trillion, +101.6 mboed), due to: i) realization of cargoes negotiated under the DAP (Delivery at Place) modality, which was in transit at the close of December 2022; ii) an increase in production in the Permian basin and Colombia; iii) increase in the export of refined products, given the greater operational availability in both refineries; and iv) an increase in the domestic demand for fuel products.
- An increase in service revenues, primarily from energy transmission and toll roads (COP +1.4 trillion).
- A decrease of -11.0 USD/BI (COP -4.0 trillion) in the weighted average sales price of crude oil, refined products and natural gas, due to a lower Brent benchmark price and decline in the negotiated crude oil spread, which was partially offset by the strengthening of the fuel spread versus the Brent.

Table 2: Sales Volumes – Ecopetrol Group

Local Sales Volume - mboed	1Q 2023	1Q 2022	Δ (%)
Medium Distillates	171.0	164.5	4.0%
Gasoline	151.8	149.9	1.3%
Natural Gas	90.6	96.8	(6.4%)
Industrials and Petrochemicals	22.4	22.3	0.4%
LPG and Propane	19.0	18.7	1.6%
Crude Oil	2.1	2.1	0%
Fuel Oil	0.3	0.0	-
Total Local Volumes	457.2	454.3	0.6%
Export Sales Volume - mboed	1Q 2023	1Q 2022	Δ (%)
Crude Oil	441.5	396.6	11.3%
Products	108.1	58.0	86.4%
Natural Gas*	7.9	4.1	92.7%
Total Export Volumes	557.5	458.7	21.5%
Total Sales Volumes	1,014.7	913.1	11.1%

* Natural gas exports correspond to local sales of Ecopetrol América LLC and Ecopetrol Permian LLC

Total volume sold during 1Q23 amounted to 1,015 mboed, increasing 11% compared to 1Q22, as a result of higher export volumes, both in crude oil and products, and steady domestic sales.

Sales in Colombia, which account for 45% of total sales, increased in volume by 1% or 2.8 mboed versus 1Q22, mainly due to:

- An increase in middle distillates sales (+6.5 mbod) and gasoline (+1.9 mbod) due to stronger domestic demand.
- A decrease in gas sales (-6.3 mboed) was mainly due to lower consumption in the unregulated market (industrial sector) and lower thermal energy generation.

International sales, which account for 55% of total sales, increased 22% or 98.8 mboed versus 1Q22, mainly due to:

- Higher crude oil exports (+44.9 mbod, mainly explained by a higher number of cargoes in transit in 1Q23 (+70.3 mbod) versus 1Q22 (25.4 mbod) to China, India, the US Gulf and Spain.
- Higher refined product exports (+44.2 mbod), as a result of greater product availability associated with the start-up of the additional crude unit of the Cartagena Refinery's IPCC Project.
- Higher sales of crude and gas condensates, mainly in Permian (+10 mboed) due to an increase in production.

Table 3: Average Realization Prices – Ecopetrol Group

USD/BI	1Q 2023	1Q 2022	Δ (%)
Brent	82.1	97.9	(16.1%)
Natural Gas Basket	29.6	27.1	9.2%
Crude Oil Basket	69.3	88.3	(21.5%)
Products Basket	99.7	108.3	(7.9%)

Crude: Crude oil basket prices decreased by 19 USD/BI in 1Q23 versus 1Q22, from 88.3 USD/BI to 69.3 USD/BI, primarily due to market conditions associated with inventory increases in the United States, higher interest rates, lower demand from China and the impact of decisions taken by OPEC. Despite the above, Castilla crude oil remains ahead of its competitors thanks to the success of the commercial strategy of markets and customers diversification, supported by quality assurance, timely deliveries at export terminals and destination ports, as well as a more direct approach to the Asian market through our subsidiary Ecopetrol Trading Asia, based in Singapore. Likewise, during this period, the crude basket spread has been recovering due to the opening of China and sales volumes continue to be negotiated in DAP (Delivered at Place) mode to various destinations such as China, India, Malaysia, Spain and the Gulf Coast of the United States.

Refined Products: The product sales basket decreased by 8.7 USD/BI in 1Q23, from 108.3 USD/BI to 99.7 USD/BI in 1Q22, mainly due to the weakening of the Brent crude benchmark (-16%), partially offset by the strengthening of international price indicators, especially those for diesel and jet fuel, which increased their spread against Brent in 11.3 USD/BI and 22.5 USD/BI respectively in such periods.

Natural Gas: Gas sales prices increased by 2.5 USD/BI from 27.1 USD/BI to 29.6 USD/BI in 1Q23 relative to 1Q22, mainly due to the indexation to the Producer Price Index (PPI), which increased by 21.8% in 2022.

Hedging Program: During 1Q23, three tactical hedges were executed for 5.28 million barrels: i) 4.55 million barrels of crude oil exports; and ii) 0.73 million barrels of crude oil imports. Ecopetrol Trading Asia executed hedges for 7.78 million barrels in 1Q23.

TESG: In 1Q23, the Carbon Trading Desk was consolidated under the following strategic lines: (i) Carbon offsetting of crude oil, refined products, and maritime transportation; (ii) Carbon neutrality of subsidiaries; (iii) Neutralization of the carbon tax; and (iv) Trading and optimization activities.

Additionally, thanks to the pilot scheme for the sale of carbon offset extra gasoline at the Barrancabermeja and Cartagena refineries, around 28 KtonCO₂e were offset, thus covering the emissions generated in the processes of extraction, transport, refining and delivery of gasoline to wholesale customers. This was achieved through the purchase of credits associated with the climate change mitigation project located in the Caribbean region.

Cost of Sales

Cost of sales increased by 27% or COP +4.8 trillion in 1Q23 year-on-year versus 1Q22.

Variable Costs:

Variable costs increased by 27.2% in 1Q23 compared to 1Q22, or COP +3.3 trillion, as the combined effect of:

- Increase in inventory consumption valued at a higher price (COP +3.1 trillion), due to: i) the realization of inventories in transit in 4Q22 and ii) the increased use of finished products and imported products for sale.
- Increase in other variable costs (COP +0.4 trillion), owing to an increase in operational activity across all business segments, inflationary effect and foreign exchange impact on costs given the higher average exchange rate.
- Decrease in purchases of crude oil, gas, and products (COP -0.2 trillion), because of the net effect between: i) lower weighted average purchase price of -22 USD/BI (COP -2.6 trillion) and ii) higher average exchange rate on purchases (COP +2.4 trillion).

Fixed Costs

Fixed costs increased by 34.2% or COP +1.1 trillion in 1Q23 versus 1Q22, due to: i) inflationary and exchange rate impact on costs, ii) greater construction activity of ISA in Chile and Peru, iii) higher maintenance and field operation services costs, and iv) higher labor costs, mainly associated with higher salaries compared to the previous year, among others.

Depreciation and Amortization:

Depreciation and amortization increased by 16.7% or COP +0.4 trillion in 1Q23 relative to 1Q22, as a result of: i) exchange rate effect in the depreciation of Group subsidiaries which use the US dollar as their functional currency, given the devaluation of the Colombian peso; ii) increase in the Permian basin and Ecopetrol S.A.'s production; and iii) increased capital expenditures. The above was partially offset by a higher level of reserves, which translates into a lower depreciation rate.

Operating Expenses, net of other income

Operating expenses increased by 17.4% or COP +0.3 trillion compared to 1Q22, mainly explained by the combined effect of:

- An increase in exploration expenses of COP +0.2 trillion, generated by: i) recognition of the exploratory activity of unsuccessful wells; and ii) higher seismic activities and exploratory studies conducted by Ecopetrol S.A.
- An increase in customs operation, mainly due to the higher number of sales under DAP modality for COP +0.1 trillion.
- An increase in labor expenses for COP +0.1 trillion, mainly due to salary increases.
- Updating of environmental and other provisions for COP +0.1 trillion.
- Asset write-offs associated with the exit of the Rydberg project in Ecopetrol America after the technical and economic feasibility analysis in 1Q22 for COP -0.3 trillion.
- Other items +0.1 trillion.

Financial Result (Non-Operating)

Financial expenses decreased by -1.2% in 1Q23, or COP -18 billion, compared to 1Q22, as a result of:

- Increase in yields and valuation of the investment portfolio (COP +0.4 trillion).
- Greater income from foreign exchange difference (COP +0.2 trillion) as a result of the revaluation of the COP against the USD during 1Q23, given the Ecopetrol Group's net liability position in USD.
- Increase in financial cost of debt (COP -0.6 trillion), due to higher debt levels (from USD 23.9 billion in 1Q22 to USD 25.04 billion in 1Q23), and increase in interest rates and exchange effect on interest on foreign currency debt due to higher average exchange rate.

The **Effective Tax Rate** for 1Q23 was 44.5%, while in 1Q22 it was 34.7%. The increase is due to higher corporate tax rates in Colombia for companies in the hydrocarbon sector as of January 2023, given the income surtax for high prices, which was set at 15% for the 2023 taxable year, in addition to the nominal rate of 35% and the non-deductibility of royalties. This was partially offset by better results in subsidiary companies with lower nominal tax rates than described above.

Statement of Financial Position

The Ecopetrol Group's **assets** increased by COP +6.0 trillion compared to 4Q22 mainly due to:

- An increase in **accounts receivable** (COP +9.1 trillion), mainly due to a higher value of the Fuel Price Stabilization Fund account (COP +7.9 trillion) and higher investments in concessions operated by ISA Brazil.
- A decrease in deferred tax (COP -1.7 trillion), given the revaluation and its impact on subsidiary companies that use the US dollar as their functional currency.
- A decrease in **inventories**, mainly due to the realization of cargos-in-transits for 2022 (COP -0.8 trillion).
- A decrease in **property, plant, equipment, and natural resources** (COP -0.7 trillion), generated by: i) the negative translation effect in companies that use a functional currency other than the Colombian peso, given its revaluation in 1Q23; ii) the depreciation of the period, was offset by: iii) an increase in capital expenditures primarily in Ecopetrol S.A. and Permian.

The increase (COP +25.4 trillion) in total **liabilities** during 1Q23 was mainly due to:

- An increase in **accounts payable** (COP +23.1 trillion) mainly due to the recognition of dividends decreed at the General Shareholders' Meeting last March 30, 2023. Out of this amount, COP 21.6 billion will be offset against the account receivable from the FEPC, once the process with the Ministry of Finance is completed and the respective resolutions are issued (deadline until December 31, 2023).
- An increase in the **income tax** (COP +2.4 trillion), given the higher tax rate established for 2023.
- An increase in **debt** (COP +1.2 trillion), generated by the net effect between the new indebtedness contracted and debt amortizations in Ecopetrol S.A.
- The above was partially offset by a decrease in **employee benefits** and other liabilities (COP +1.3 trillion), mainly due to a higher valuation of the autonomous assets that support pension liabilities.

Total equity of the Ecopetrol Group at the end of 1Q23 was COP 99.7 trillion. Equity attributable to Ecopetrol's shareholders was COP 72.6 trillion, with a decrease of COP -18.4 trillion as compared to

December 2022, mainly as a result of the effect of the declaration of dividends and profits in 1Q2023 for the year 2022.

Cash Flow and Debt

Table 4: Cash position – Ecopetrol Group

Billion (COP)	1Q 2023	1Q 2022
Initial cash and cash equivalents	15,401	14,550
(+) Cash flow from operations	2,071	3,786
(-) CAPEX	(5,154)	(3,355)
(+/-) Investment portfolio movement	750	400
(+) Other investment activities	666	177
(+/-) Adquisition, borrowings and interest payments of debt	2,114	(1,272)
(-) Dividend payments	(227)	(274)
(+/-) Exchange difference (cash impact)	(124)	(13)
Final cash and cash equivalents	15,497	13,999
Investment portfolio	2,215	2,550
Total cash	17,712	16,549

Cash Flow

At March 31, 2023, the Ecopetrol Group reported cash totaling COP 17.7 trillion (65% in USD and 35% in COP).

In 1Q23, operations generated COP 2.1 trillion, including an increase in working capital due to: i) an increase in the account receivable from the FEPC of COP +7.9 trillion associated with higher motor gasoline and diesel prices in the international market as compared to the regulated price in Colombia (as of March 2023, the balance amounts to COP 34.2 trillion, and of this amount COP 21.6 trillion will be offset against the accounts receivable from the FEPC, once the process with the Ministry of Finance is completed and the respective resolutions are issued); and ii) payments of accounts payable and current taxes in the period. The above was partially offset by the decrease in inventories in transit given their deliveries during 1Q23.

The main cash outflows in 1Q23 were: i) capital expenditure disbursements for COP 5.2 trillion, mainly made in Ecopetrol S.A., Permian and ISA; and; ii) payment of dividends for COP 0.2 trillion made by the subsidiaries to their shareholders.

Regarding the dividends approved by the General Shareholders' Meeting on March 30, 2023, which amount to COP 593 per share (73% payout on 2022 profits) or COP 24.4 trillion, the first installment was paid in April to minority shareholders for COP 0.9 trillion.

Debt

At the end of March 2023, the balance sheet debt amounted to COP 116.4 trillion, equivalent to USD 25,046 million (ISA Group's consolidated debt accounts for USD 7,542 million), with an increase of COP +1.2 trillion compared to December 2022. This increase is primarily due to the impact of new indebtedness contracted by the business group.

The Gross Debt/EBITDA indicator at the end of March 2023 remains at 1.5 times, within the range established in the Ecopetrol Group's 2040 strategy. The Debt/Equity ratio at the end of March 2023 is 1.17 times.

As part of its refinancing strategy and financing of the 2023 investment plan, during the 1Q23, Ecopetrol S.A. issued bonds for USD 2,000 million, the resources of which were allocated to prepay and refinance debt maturing in 2023, with a portion allocated to additional debt.

Efficiencies

In 1Q23 the Ecopetrol Group continues working on a comprehensive strategy that focuses on alleviating the effects of international markets, particularly the Russia-Ukraine conflict, on the cost structure of our operations and investments, as well as impact on the complexity of the business strategies. As such, the 2023 efficiency strategy seeks to mitigate these impacts through improvements in operations, investments, and commercial strategies.

As a result, at the end of 1Q23, the Group has incorporated cumulative efficiencies totaling COP 905.4 billion, the main actions summarized as follows:

1. Actions focused on mitigating the impacts that may affect the Group's EBITDA margin total COP 797.8 billion focused on:
 - Identifying and implementing strategies in the upstream segment focused on optimizing lifting costs.
 - Dilution cost optimization and evacuation strategy of heavy and extra-heavy crudes, resulting from optimizing the crude dilution factor, which decreased from 12.4% in 2022 to 12% in 1Q23, given the enhanced performance of LPG co-dilution and higher viscosity in the deliveries to Ocesa.
 - Enhanced operational strategies implemented in the midstream subsidiaries.
 - Margin and revenue improvement strategies deployed by the commercial area, the downstream and petrochemical operations, as well as the revenues from energy surplus sales, among other actions.
 - Initiatives deployed by our corporate and support areas.
Energy efficiency strategies, gas consumption optimization and cost efficiency in our refineries.
2. Strategies focused on improving the operational and technical performance of investment projects have integrated efficiencies totaling COP 108 billion, as a result of:
 - Strategies for the improvement of operations in exploratory wells in the Piedemonte.
 - Continuation of strategies to improve drilling and development completion costs in our subsidiaries and operations.

Investments

Table 5: Investments by Business Line – Ecopetrol Group

Investments	Ecopetrol Group		% share
	MUSD	BCOP Equivalent	
Hydrocarbons	817	3.9	64.7%
Low Emission Solutions	155	0.7	12.3%
Energy Transmission and Toll Roads	290	1.4	23.0%
Business line	1,262	6.0	

* Includes the total amount of investments of each of the subsidiaries and affiliates of the Ecopetrol Group Companies (both controlling and non-controlling interest).

In 1Q23, the Ecopetrol Group's organic investments amounted to USD 1,262 million (COP 6.0 trillion). Colombia accounted for 58% of total Ecopetrol Group investments, while the remaining 42% was allocated abroad, mainly in the United States (27%) and Brazil (5%).

Hydrocarbons

The segment represented 65% of the Group's organic investments, with resources allocated mainly to drilling and completion activities in the Rubiales, Caño Sur, Castilla, Chichimene, Floreña and Casabe fields. In addition, exploratory activities were carried out in the CPO9 and Santiago de las Atalayas (SDLA) blocks. Internationally, investments were focused on development activities in the Permian basin located in Texas, United States, and in the Gunflint, K2, and Dalmatian assets.

Investments in the midstream segment focused mainly on operational continuity activities, including geotechnical, mechanical repairs and maintenance of pumping units, which enables us to maintain the integrity and reliability of the different pipeline and multipurpose pipeline systems. Regarding downstream, investments focused on operational continuity (90%), intending to maintain the efficiency, reliability, and integrity of refinery operations.

Low-emission solutions and TESG

In 1Q23, investments amounted to USD 155 million (COP 0.7 trillion), approximately USD 130 million (COP 0.6 trillion) were allocated to gas projects in assets located in the Piedemonte, and to exploratory blocks, mainly in SDLA, Tayrona and Llanos 9.

In terms of TESG, resources were allocated to decarbonization projects, efficient water operations management, energy efficiency, fuel quality and hydrogen. Investments associated with decarbonization projects led to advances in the development of renewable energy projects, energy efficiency, fossil fuels and fugitive emissions, which will enable us to meet the Group's objectives for 2023 and our net-zero carbon goal by 2050.

Energy Transmission and Toll Roads:

Investments totaling USD 290 million (COP 1.4 trillion) were made in 1Q23, of which 71% corresponded to the energy transmission business line, 26% to the toll roads business and the remaining 3% to the telecommunications business. These investments made it possible to advance in the construction of electric circuits and in improvements aimed at increasing the reliability of the existing network, as well as in the Ruta del Loa, Ruta de la Araucanía and Ruta del Maipo road projects in Chile.

II. Results by Business Line

Following the 2040 Strategy, as of 2022, the Ecopetrol Group aligned its current segments to the new Ecopetrol Group business lines. To that end, for operational purposes, the Exploration and Production, Transportation and Logistics, Refining and Petrochemicals segments were reorganized as follows: i) Hydrocarbons, which includes Exploration and Production, Transportation and Logistics, Refining and Petrochemicals; ii) Low Emission Solutions, which includes gas, biogas, LPG, power, renewables, hydrogen and Carbon Capture, Use and Storage (CCUS); and iii) Energy Transmission and Toll Roads. For purposes of this report, operating and financial information will continue to be presented under the previous business lines. During the remainder of 2023 we will work on aligning the company's reporting along these lines of business.

1. HYDROCARBONS

1.1 Upstream

Exploration

During 1Q23, Ecopetrol and its partners drilled 8 exploratory wells, in line with the proposed plan of 25 wells for the year:

- 6 well were drilled in the Llanos Orientales: Magnus-1, Zorzal-1 and Leyenda-1 currently under evaluation, and Picabuey-1, Turupe-1 ST and Koala-1, which were declared dry.
- 2 wells in the Piedemonte with gas potential: Cupiagua XD45 and Cusiana V31, currently under evaluation.

In March, the successful result of the Arrecife Norte-1 and Tororoi-1 wells, drilled at the end of 2022 by our subsidiary Hocol, was announced:

- Arrecife Norte-1, 100% operated by Hocol, located southeast of Montería and close to the Arrecife discovery, revealed the presence of gas in the Ciénaga de Oro formation. Initial production tests were completed, once it is connected to the Arrecife discovery, extensive testing will begin. This discovery supports the strategy to increase natural gas production in northern Colombia.
- Tororoi-1, operated by Geopark and Hocol holds a 50% stake, located in Villanueva, Casanare in the Llanos Orientales, confirmed the presence of 35° API light crude oil in the Mirador formation. Initial testing was completed at the end of the quarter and the well is currently undergoing extensive testing.

Offshore exploration activity in Colombia is moving forward with the evaluation and appraisal of the Uchuva-1 and Gorgón-2 discoveries in the Colombian Caribbean. In addition, contracting is underway to start drilling the Orca Norte -1 appraisal well, estimated for the end of this year.

Regarding seismic activity, noteworthy events this quarter include: i) Ecopetrol acquired 312 km² of seismic data through the Flamencos 3D program located in the Middle Magdalena Valley, in the municipalities of Puerto Wilches and Sabana de Torres, in Santander; ii) the purchase of 4,287 km of 2D seismic data in the Llanos Orientales; iii) 2,732 km equivalent were reprocessed in the Middle and Upper Magdalena Valley basins, Piedemonte and Offshore; iv) the launch of the San Jacinto N1 2D seismic program; and v) the acquisition of 10.5 km² of the INOR 3D seismic program In La Cira Infantas.

Additionally, we are implementing the "Integrated Full Tensor Gravity (iFTG)" technology in Colombia, which allows us to obtain high resolution magnetic and gravimetric data, being Ecopetrol pioneer in the registration of this type of information in the country, which will help in the construction of subsoil geological models, which will improve the probability of success and the identification of new exploratory opportunities.

Internationally, Ecopetrol Brazil began the 3D seismic acquisition of the Santos Sur project, in accordance with the commitment established with the National Petroleum Agency (ANP) in the 7 blocks acquired jointly with Shell-Operador (70%). Ecopetrol México completed the assignment of interests in block 8 in Mexico and is in the process of returning Block 6 to the National Hydrocarbons Commission (CNH), in line with the approach of the 2040 Strategy.

Production

Table 6: Gross Production – Ecopetrol Group

Production - mboed	1Q 2023	1Q 2022	Δ (%)
Crude Oil	496.6	487.6	1.8%
Natural Gas	129.1	132.3	(2.4%)
Total Ecopetrol S.A.	625.6	619.9	0.9%
Crude Oil	17.2	16.0	7.5%
Natural Gas	19.0	20.0	(5.0%)
Total Hocol	36.2	36.0	0.6%
Crude Oil	5.3	8.4	(36.9%)
Natural Gas	0.9	1.0	(10.0%)
Total Ecopetrol America	6.3	9.4	(33.0%)
Crude Oil	28.6	17.1	67.3%
Natural Gas	22.7	9.6	136.5%
Total Ecopetrol Permian	51.4	26.7	92.5%
Crude Oil	547.7	529.1	3.5%
Natural Gas	171.7	163.0	5.3%
Total Ecopetrol Group	719.4	692.1	3.9%

Note 1: Gross production includes royalties and is prorated by Ecopetrol's participation in each Company. Natural Gas includes gas and white products.

Note 2: At the request of the ANH, condensate production is considered as the production of crude oil and not of white products in the Gibraltar field, which adjusts the distribution between crude oil and natural gas in 1Q22 and 2Q22.

In 1Q23, Ecopetrol Group production reached 719.4 mboed, increasing 27.3 mboed as compared to 1Q22, with Ecopetrol S.A. contributing 625.6 mboed and subsidiaries 93.8 mboed. We would like to highlight: i) the incremental production in Rubiales, leveraged on the pressure sustaining project which involves the reuse of production water; ii) the continued incremental campaign in Caño Sur, which reached production levels of 27.3 mboed; iii) incremental production from the Permian subsidiary; iv) increased gas sales from Bonga-Mamey, in Hocol; v) production contribution from the Lorito, Flamencos, Arrecife and Ibamaca exploratory wells; and vi) a greater share in production from the Caño Limón, Quifa and La Cira-Infantas fields in line with the high price clause.

Moreover, during the period production levels were affected by: (i) security issues that led to a 6.8 mboed impact due to the closure of the Capachos field from January 21 to April 15, and the shutdown of the Gibraltar gas plant in March, due to attacks to the Caño Limón Coveñas pipeline; (ii) third-party blockades in Quifa, Caño Sur and Rubiales fields, with an impact of 2.6 mboed; iii) lower gas demand from external clients and operational events in thermal plants in the Orinoquía region; and iv) a decrease in white product production associated with the reduction of gas consumption and corrective maintenance activities performed in Cusiana.

Additionally, the joint operation between Ecopetrol and OXY in the Permian basin in 1Q23 drilled 37 new wells for a total of 257 cumulative wells and achieved net production for Ecopetrol before royalties of 51.4 mboed. The start-up of the first "tankless" facility is also worth mentioning; this new concept involves the elimination of tanks, which reduced fugitive emissions.

In terms of development drilling, 108 wells were drilled and completed with an average use of 30 active drills during the period. We expect to maintain this positive performance trend until the end of the year, primarily in the fields located in the Department of Meta and the Permian assets.

Lifting and Dilution Cost

Table 7: Lifting and Dilution Cost - Ecopetrol Group

USD/BI	1Q 2023	1Q 2022	Δ (%)
Lifting Cost*	8.78	8.66	1.4%
Dilution Cost**	4.87	6.25	(22.1%)

* Calculated based on barrels produced without royalties. ** Calculated based on barrels sold

Lifting Cost

The lifting cost for 1Q23 was 8.78 USD/BI, with a slight increase of 0.12 USD/BI compared to 1Q22, mainly explained by the following factors:

Cost effect (+2.35 USD/BI): Increased costs due to: i) higher electricity rates and increased consumption associated with production levels; ii) increased operating support services costs due to the inflationary effect on rates; iii) increased maintenance and civil works due to increased and anticipated activity in operations; iv) increased contractual rates and volumes of chemical treatments required for the operation's fluids.

Exchange rate effect (-1.90 USD/BI): Impact from the average devaluation of the peso against the dollar by + 847 pesos/dollar.

Volume effect (-0.33 USD/BI): Higher production levels.

Efficiencies of 0.2 USD/BI were achieved at the end of 1Q23, mainly in the energy, subsoil, and surface fronts.

Dilution Cost

The dilution cost as of 1Q23 was 4.87 USD/BI, 1.38 USD/BI below that recorded in 1Q22, mainly explained by:

Price effect (+0.28 USD/BI): decrease in the purchase price of naphtha (-22.96 USD/BI) due to the change in the Brent benchmark indicator.

Exchange Rate Effect (-1.06 USD/BI): Impact from the increase in the average COP/USD exchange rate of COP +847 per USD.

Volume Effect (-0.60 USD/BI): Higher purchase volume of naphtha barrels (+6.3 mbed) due to higher consumption in fields such as Castilla, Chichimene, Rubiales, Jazmín, Nare and Ayacucho. mboed

Financial Results

Table 8: Income Statement – Exploration and Production

Billion (COP)	1Q 2023	1Q 2022	Δ (\$)	Δ (%)
Total revenue	20,627	18,938	1,689	8.9%
Depreciation, amortization and depletion	1,835	1,597	238	14.9%
Variable costs	7,636	5,552	2,084	37.5%
Fixed costs	3,223	2,569	654	25.5%
Total cost of sales	12,694	9,718	2,976	30.6%
Gross income	7,933	9,220	(1,287)	(14.0%)
Operating and exploratory expenses	1,373	1,155	218	18.9%
Operating income	6,560	8,065	(1,505)	(18.7%)
Financial result, net	(90)	(406)	316	(77.8%)
Share of profit of companies	5	(1)	6	(600.0%)
Income before income tax	6,475	7,658	(1,183)	(15.4%)
Provision for income tax	(3,812)	(2,668)	(1,144)	42.9%
Consolidated net income	2,663	4,990	(2,327)	(46.6%)
Non-controlling interest	27	21	6	28.6%

Net income attributable to owners of Ecopetrol	2,690	5,011	(2,321)	(46.3%)
EBITDA	8,666	9,862	(1,196)	(12.1%)
EBITDA Margin	42.0%	52.1%	-	(10.1%)

Revenues for 1Q23 increased as compared to 1Q22, mainly as a result of: i) a higher exchange rate; ii) higher crude oil exports driven by higher production and in-transit sales finalized in 4Q22, which were partially offset by iii) lower benchmark prices.

Cost of sales for 1Q23 increased compared to 1Q22, due to:

- Higher inventory consumption due to the completion of crude oil vessels in transit.
- Higher purchases from the ANH due to the increase in volume and exchange rate, offset by lower prices.
- Higher execution of costs due to: i) inflationary pressures on global power rates, well interventions, chemical treatment, and support areas for the operation; ii) an increase in activities regarding subsoil and contracted services; and, iii) higher consumption of electrical power due to higher production.
- Higher transportation costs due to: i) increase in the exchange rate; ii) higher volumes transported; and, iii) annual update of oil pipelines and multipurpose pipeline rates, partially offset by logistical transportation operations.

Operating expenses (net of revenues) in 1Q23 increased compared to 1Q22, mainly due to: i) updating of environmental and other provisions and the addressing of well contingencies; ii) increase in customs operations, mainly due to the higher number of sales under the Delivery At Place (DAP) modality and increase in tariffs; and iii) higher labor expenses associated with salary increases during the year; this was partially offset by iv) write-off of the investments made in the Rydberg asset in Ecopetrol America recorded in 2022.

Exploration expenses in 1Q23 increased relative to 1Q22, due to higher recognition of exploration activity, execution of seismic activities and other expenses in Ecopetrol.

The **net financial results** (non-operating) for 1Q23 decreased year-on-year, mainly due to higher income in exchange differences due to the revaluation of the peso given the segment's liability position.

During 1Q23, the segment's results were negatively affected by the increase of the corporate tax rate applied as a result of the tax reform in Colombia.

1.2 Midstream

Table 9: Volumes Transported - Ecopetrol Group

mbd	1Q 2023	1Q 2022	Δ (%)
Crude Oil	783.9	757.3	3.5%
Products	306.3	283.5	8.0%
Total	1,090.2	1,040.8	4.7%

Note: Volumes reported are subject to adjustments due to Volumetric Quality Control (VQC) changes as the volumetric balances are formalized.

The total volume transported at the end of 1Q23 reached 1,090.2 mbd, an increase of 49.4 mbd from 1Q22, mainly due to a 3.5% increase in the transport of crude oil, due to higher production in the Llanos region as well as an 8% increase in the volume of refined products transported in 1Q23 versus 1Q22.

Crudes: Transported volumes increased by 3.5% in 1Q23 with respect to 1Q22, as a result of: i) increased national production, mainly in the Llanos region; ii) higher deliveries of Castilla Norte crude to the Barrancabermeja Refinery; and iii) additional third-party barrels captured that were previously outside the pipeline network. Approximately 85.4% of the crude volume transported during 1Q23 is owned by the Ecopetrol Group.

During 1Q23, there were 9 reported incidents reported to the pipeline caused by third parties, a decrease of 18% versus 1Q22. Similarly, the installation of illicit valves in 1Q23 decreased by 2% compared to the same quarter last year. To ensure the evacuation of productions from the Caño Limón field following damage to the Caño Limón-Coveñas pipeline, three reversion cycles were carried out in the Bicentenario pipeline, evacuating approximately 662 thousand barrels.

Refined Products: In 1Q23, volumes of refined products transported increased by 8%, mainly due to higher refinery availability and operational optimizations. It is worth highlighting that the transport of refined products reached record highs for the third consecutive quarter, reaching 306.3 mbd.

During 1Q23, the installation of illicit valves remained at 1Q22 levels. Approximately 27.3% of the volume transported by pipeline during 1Q23 was comprised by Ecopetrol's products.

Regulatory framework for pipeline transportation tariffs

On 30 March 2023, the Ministry of Mines and Energy published Resolution No. 00279: "Whereby some temporary provisions are established in relation to the setting of tariffs for the transportation of crude oil by pipeline", which suspends the application of the annual tariff update factor for macroeconomic variables and stipulates that the tariffs set for the period July 2019 - June 2023 will remain in force until the tariffs for the period July 2023 - June 2027 are set, in accordance with the terms established by the new methodology to be issued.

Fuel supply to the southwest region:

In response to the emergency situation in the southwest of the country resulting from a natural disaster that blocked part of the Panamerican highway, generating fuel shortages, Cenit immediately embarked on a project to enable new ways to deliver products to the affected areas of the country. This included the construction of facilities at the Buenaventura station and terminal Tumaco, including the implementation of a new 6-inch pipeline inside the station to improve tanker loading times.

These adjustments allowed operations to increase flow by around 750 to 2,000 bph and reduced tanker loading times from 46 to 22 effective hours. Using this approach, 11 vessels were loaded that successfully supplied approximately 279 thousand barrels of gasoline and diesel to the afflicted regions.

Storage tank construction in Yumbo:

Aiming to increase the country's fuel storage capacity, the construction and filling of the Yumbo TK-8000 storage tank with a nominal capacity of 60 mbbls were completed. It is expected to eliminate dependence on leased tanks, reduce bottlenecks from high and low inventories, eradicate tanker truck freight costs, and capture an increased share of the growing demand for fuels, among others.

Cost per barrel transported

Table 10: Cost per Barrel Transported - Ecopetrol Group

USD/BI	1Q 2023	1Q 2022	Δ (%)
Cost per Transported Barrel	2.58	2.77	(6.9%)

The cost per barrel transported in 1Q23 was 2.58 USD/BI, 0.19 USD/BI less than that recorded in 1Q22, mainly explained by:

Cost effect (+0.42 USD/BI): i) Higher maintenance and contracted services costs; ii) higher variable cost due to an increase in materials and energy consumption attributed to higher volumes transported and rate increases derived from market conditions; and iii) higher depreciation mainly associated with a higher level of capital investment and the impact of the exchange rate on the depreciation of segment subsidiaries which use the US dollar as their functional currency.

Exchange Rate Effect (-0.49 USD/BI): Impact from an increase in the average COP/USD exchange rate of COP +846.7 per USD.

Volume Effect (-0.12 USD/BI): Lower cost per barrel for additional volume transported (+4.7%) versus 1Q22, associated with: i) increase in the country's production, primarily in the Llanos region; ii) higher deliveries of Castilla Norte crude to the Barrancabermeja refinery; iii) additional third-party barrels captured that were previously outside the pipeline network; and iv) increase in volumes of refined products transported primarily due to greater availability of products from the refineries and operational streamlining in the transport systems.

Financial Results

Table 11: Income Statement – Midstream

Billion (COP)	1Q 2023	1Q 2022	Δ (\$)	Δ (%)
Total revenue	3,984	3,063	921	30.1%
Depreciation, amortization and depletion	354	327	27	8.3%
Variable costs	192	157	35	22.3%
Fixed costs	436	341	95	27.9%
Total cost of sales	982	825	157	19.0%
Gross income	3,002	2,238	764	34.1%
Operating expenses	220	199	21	10.6%
Operating income	2,782	2,039	743	36.4%
Financial result, net	(10)	(197)	187	(94.9%)
Share of profit of companies	0	0	0	-
Income before income tax	2,772	1,842	930	50.5%
Provision for income tax	(985)	(655)	(330)	50.4%
Consolidated net income	1,787	1,187	600	50.5%
Non-controlling interest	(340)	(241)	(99)	41.1%
Net income attributable to owners of Ecopetrol	1,447	946	501	53.0%
EBITDA	3,186	2,419	767	31.7%
EBITDA Margin	80.0%	79.0%	-	1.0%

Revenues for 1Q23 increased year-on-year versus 1Q22, primarily as a result of: i) higher average COP/USD exchange rate; ii) annual rate updates; iii) higher volumes of crude transported mainly because of increased national production and additional third-party barrels captured that were previously outside the pipeline network; iv) increase in volumes of refined products transported chiefly associated with higher refinery production and operational streamlining in the transport systems; and v) the execution of three provisional reversion cycles in the Bicentenario pipeline.

Cost of sales increased in 1Q23 relative to 1Q22, mainly due to the effect of: i) higher maintenance and contracted services costs; ii) higher variable costs attributable to increased materials and energy consumption due to higher volumes transported and price increases consistent with market conditions; and iii) the COP/USD exchange rate effect on costs.

The net financial result (non-operating) for 1Q23 versus that of 1Q22 showed improved performance, primarily because of: i) lower expenses resulting from an exchange rate spread from the FX effect of a lower average net asset position in USD of the segment; and ii) higher financial yields associated with the behavior of interest rates on deposits and investments.

1.3 Downstream

In 1Q23, the downstream segment reached a historical quarterly record in combined throughput of 412 mbd, and in clean fuels with the production of 151 mbd of diesel, 117 mbd of gasoline and 34 mbd of jet fuel. Likewise, a combined refining gross margin of 22.6 USD/BI was achieved, exceeding 4Q22 by 14% and 1Q22 by 63%.

The segment's results were attained through tactical, operational, and commercial strategies that obtained: i) operating stability in the refinery units and petrochemical plants to leverage market advantages; and ii) joint planning throughout the logistic chain that maximized the refineries' consumption of domestic crude. This was coupled with benefits associated with: i) the wide product basket spreads versus Brent; ii) an effective commercial strategy to capture new business opportunities; and iii) high levels of RGP (refinery-grade propylene) deliveries by the refineries to Esenttia.

On January 1, 2023, the diesel quality regulation that mandates a maximum sulfur content of 15 ppm (Resolution 40103) came into effect, and in 1Q23 the downstream segment delivered diesel with a sulfur content below 8.9 ppm.

Concerning energy transition, progress was made in key projects aligned with the four pillars of the 2040 Strategy. With the approval of phase 2, Project Selection, the technical and operational frameworks to develop the following projects were defined:

- Green hydrogen at both refineries within the low-carbon hydrogen strategic plan, which will make strong headway for both the Growth and TESS pillars.
- The Barrancabermeja refinery fuel quality baseline, a carbon-neutral project that will help achieve the quality roadmap to 2030, focusing on guaranteeing the domestic fuel supply.

Cartagena Refinery

In 1Q23, the Cartagena refinery achieved a historic quarterly record throughput of 189 mbd and a gross margin of 26.5 USD/BI, 42.5% higher than in 1Q22, with the entry into operation of the Cartagena Crude Oil Plant Interconnection Project (IPCC for its Spanish acronym) in 3Q22, and also driven by: i) higher operational availability of the plants in January and February (96.7%), despite limited operational events in March; ii) better fuel spreads versus Brent; and iii) higher diesel and jet fuel production by maximizing throughputs in the hydrotreatment units of the Cartagena hydrotreatment plants and catalytic cracking units. It is important to mention that in the second half of 2023, major maintenances will begin at the refinery.

Table 12: Throughput, Utilization Factor, Production and Refining Margin - Cartagena Refinery

Cartagena Refinery	1Q 2023	1Q 2022	Δ (%)
Throughput* (mbd)	189.0	133.9	41.2%
Utilization Factor (%)	88.6%	75.1%	18.0%
Production (mbd)	183.4	128.7	42.5%
Gross Margin (USD/BI)	26.5	18.6	42.5%

* Corresponds to effective throughput, not volumes received

Barrancabermeja Refinery

In 1Q23, the Barrancabermeja refinery reached a throughput of 222.8 mbd, 16.7% higher than 1Q22, mainly due to greater operational availability of the units (96.8%) despite lower volumes of light crude received because of the incidents on the Caño Limón-Coveñas pipeline and community blockades.

Gross margin reached 19.4 USD/BI, 83% higher than in 1Q22, mainly explained by: i) wide fuel price spreads versus Brent; ii) higher gasoline, diesel, and jet fuel production yields associated to the grater operational availability of all its units and iii) strategies implemented to minimize fuel oil production.

Table 13: Throughput, Utilization Factor, Production and Refining Margin- Barrancabermeja Refinery

Barrancabermeja Refinery	1Q 2023	1Q 2022	Δ (%)
Throughput* (mbd)	222.8	190.9	16.7%
Utilization Factor (%)	82.5%	56.9%	45.1%
Production (mbd)	226.4	193.8	16.8%
Gross Margin (USD/BI)	19.4	10.6	83.0%

* Corresponds to effective throughput, not volumes received

Esenttia

In 1Q23, total sales grew 3.9% versus 1Q22, in line with demand. Total margin decreased 71.4% in 1Q23 in relation to 1Q22, affected by market factors including: i) lower prices from high inventories and decreased demand in the US and China; ii) higher raw material costs; and iii) lower PP¹ - PGP² spread, partially offset by the PGP - RGP³ spread of the fractionating tower. Progress on the Plant 2 Expansion project is noteworthy, along with having been ranked 12th in the *Merco Responsables ESG* 2022 ranking of the most responsible industries in Colombian in ESG-related issues.

Table 14: Sales and Margin – Esenttia

Esenttia	1Q 2023	1Q 2022	Δ (%)
Total Sales (Kton)	140.1	134.9	3.9%
Total Margin (USD/Ton)	76.3	266.4	(71.3%)

Invercolsa

In the first quarter of 2023, the goal of 2.0 million installed users was exceeded, including subsidiaries controlled and not controlled by Invercolsa. Likewise, the volume of natural gas marketed grew by 3.9% compared to the first quarter of 2022, leveraged mainly by the sale of industrial volume from the subsidiary Gases del Oriente, derived from higher demand in the period. Regarding LPG, Invercolsa maintained the recovery path of the last 3 quarters, achieving an operating ebitda 5 times higher than the one obtained during the first quarter of 2022.

Refining Cash Cost

Table 15: Refining Cash Cost*

USD/BI	1Q 2023	1Q 2022	Δ (%)
Refining Cash Cost	3.69	4.50	(18.0%)

* Includes Barrancabermeja and Cartagena refineries and Esenttia.

Refining cash cost fell by -0.81 USD/BI in 1Q23 versus 1Q22, due to:

Cost and Volume Effect (-0.01 USD/BI): Higher crude throughputs in refineries (+87 mbd) offset the increase in operational activity and inflationary effect.

¹ PP: Polypropylene

² PGP: Polymer Grade Propylene

³ RGP: Refinery Grade Propylene

Exchange Rate Effect (-0.80 USD/BI): Impact from the increase in the average COP/USD exchange rate of COP +846.7 per USD.

Financial Results

Table 16: Income Statement – Downstream

Billion (COP)	1Q 2023	1Q 2022	Δ (\$)	Δ (%)
Total revenue	22,585	17,118	5,467	31.9%
Depreciation, amortization and depletion	530	406	124	30.5%
Variable costs	18,558	14,765	3,793	25.7%
Fixed costs	607	474	133	28.1%
Total cost of sales	19,695	15,645	4,050	25.9%
Gross income	2,890	1,473	1,417	96.2%
Operating expenses	558	484	74	15.3%
Operating income (loss)	2,332	989	1,343	135.8%
Financial result, net	(275)	(167)	(108)	64.7%
Share of profit of companies	90	54	36	66.7%
Loss before income tax	2,147	876	1,271	145.1%
Provision for income tax	(786)	(347)	(439)	126.5%
Consolidated net income	1,361	529	832	157.3%
Non-controlling interest	(63)	(41)	(22)	53.7%
Net income attributable to owners of Ecopetrol	1,298	488	810	166.0%
EBITDA	3,237	1,642	1,595	97.1%
EBITDA Margin	14.3%	9.6%	-	4.7%

In 1Q23, the downstream segment achieved its second-highest historic quarterly EBITDA of 3.2 trillion COP.

Revenues for 1Q23 grew compared to 1Q22 due to: i) higher product sales, mainly diesel, gasoline, and fuel oil, associated to higher refinery throughputs; and ii) increasing demand for domestic fuels. Invercolsa's revenues grew with higher gas transport and sales.

Cost of sales increased in 1Q23 compared to 1Q22, mainly due to: i) higher crude throughput volumes at the refineries; ii) higher consumption of finished product inventory, partially offset by iii) lower feedstock prices; and iv) lower gasoline and diesel imports.

Operating expenses in 1Q23 increased relative to 1Q22, largely explained by higher marketing expenses associated with higher sales volumes.

The **financial result (non-operating)** for 1Q23 versus 1Q22 presented higher interest and financial expenses as a consequence of interest rates behavior.

2. LOW-EMISSION SOLUTIONS

Gas Strategy and Sales

In the Low-Emissions Solutions business line, natural gas and LPG comprised 22.3% of the Group's total production, reaching 160.2 mboed. Regarding social gas projects, in 1Q23 we accomplished 2,379 new connections, an increase of 198% compared to 1Q22, emphasizing our social commitment to provide more Colombian families access to this fuel.

During 1Q23, gas demand averaged 1,000 GBTUD (including third parties and self-consumption), registering a 1% increase (14.7 GBTUD) versus 4Q22, mainly due to the increase in Ecopetrol's internal consumption and the thermal generation sector. Demand decreased relative to 1Q22 by 3%

(-27.7 GBTUD) mainly due to a decrease in thermal generation and lower consumption in the non-regulated segment.

Renewable Energies

In January 2023, Ecopetrol partnered with Total Eren for the construction of a photovoltaic solar farm the Rubiales field, located in the Municipality of Puerto Gaitan, Meta. This solar farm will have a capacity of approximately 100 MWp generated from 180,000 monocrystalline bifacial panels that will contribute to the sustainable growth of the region by reducing more than 24,000 tons of carbon emissions per year. During peak production, this solar park will cover 34% of the field's power demand.

At the end of 1Q23, the reduction of 6,417 tCO₂ emission was achieved thanks to the operations of the Brisas, Castilla, San Fernando and solar farms in Cenit and the operation of the Small Hydroelectric Plant Cantayús; additionally, this alternative energy source delivered savings of close to COP 6,638 billion.

Seeking to incorporate new sources of non-conventional renewable energies into the Group's portfolio, an agreement with EDF Colombia and Refocosta was reached to construct a biomass power plant powered by eucalyptus in the municipality of Villanueva, Department of Casanare, which will have an installed capacity of 25 MW net and aims to avoid 70,000 tCO₂ emissions per year.

Additionally, a memorandum of understanding was signed with Baker Hughes and the Caldas Hydroelectric Power Plant, to structure feasibility studies to implement a geothermal power generation project in the Nereidas Valley, located in the Department of Caldas. This initiative, which uses the high temperatures inside the earth to produce electricity, could generate between 50 and 100 MW of renewable energy equivalent to benefit over 250,000 families. The agreement includes technical studies, subsoil analysis and the structuring of financing sources.

Energy Efficiency

In 2023, Ecopetrol began a new stage in our energy efficiency program for 2023-2025, which focuses on implementing technological improvements to optimize the thermal and electrical demand of the Ecopetrol Group.

This quarter we can boast the successful energy optimization of 1.1 MW and 33.9 GBTU, a 19 ktonCO₂e reduction in emissions and energy efficiency savings of COP 4.4 billion: this equals a 5.6% cumulative improvement in electricity demand since 2018. This result was achieved mainly through: i) online energy management and operational control in the refineries; and ii) a decrease of reactive energy losses in the transmission and distribution systems of the Orinoco Regional Vicepresidency.

Moreover, in 1Q23 Cenit was certified under the ISO 50001 international standard, which establishes an internationally recognized framework for managing and improving energy performance and certifies good practices in efficient and more sustainable energy use.

Hydrogen

In line with the agreement signed in 2022 between Ecopetrol and Toyota to initiate hydrogen mobility testing, on March 17 the mobility pilot launch event was held at the Caribbean Innovation and Technology Center (ECONOVA) to debut the Toyota Mirai vehicle and the hydrogen generator. This is a three-year pilot for mobility testing at ECONOVA.

Likewise, on March 27, an event was held to launch the comprehensive public transport mobility operation employing low-emission hydrogen in Bogotá, which includes the production of this renewable energy source and a 50-passenger public transport bus designed and assembled in Colombia, with a range of more than 450 kilometers with a single daily refueling. The operation within the Integrated Public Transport Service (SITP), which initially will transpire during an eight-year

period, aims to evaluate hydrogen production system variables and vehicle performance, as well as commercial and technological features related to the use of this energy source.

In terms of industrial use, the two green hydrogen projects in our Barrancabermeja and Cartagena refineries progressed to the final phase of maturity, which will add up to a capacity of 120 MW of electrolysis with PEM technology, powered by renewable energy sources of more than 300 MW, to produce approximately 18,000 tons of green hydrogen per year. With the approval of the alternatives selection phase reached in 1Q23, we expect to conclude the joint development studies with world-class strategic allies.

3. ENERGY TRANSMISSION AND TOLL ROADS

Energy Transmission

During 1Q23, ISA executed investments for COP 1.4 trillion, which includes projects that will enable the application of non-conventional renewable energies in interconnected systems and contribute to strengthening the transmission network by improving its reliability and capacity.

During 1Q23, ISA was awarded 13 network expansion projects in Brazil and 8 connection projects (five in Brazil, two in Colombia and one in Peru), which combined will total a CAPEX of USD 80 million and add 334 km of electrical circuit to the grid.

During the quarter, 1 reinforcement and 15 improvements at ISA CTEEP came into operation, which generate an annual regulated revenue of USD 500,000.⁴ Additionally, IE Itaúnas⁵ began partial operations, with the right to 66% of its annual regulated revenue, equal to USD 8 million⁶. The investments executed so far total USD 68 million.

ISA will continue with the construction of 31 power transmission projects, which represent more than 4,840 km of additional electric circuits to the transmission network and, once in operation, are expected to generate revenues of close to USD 262 million.⁷

Toll Roads

Construction continues on Rutas del Loa, which extends over 136 km and is expected to start operating in 2024. Likewise, progress continues in additional works on the Ruta del Maipo, Ruta de los Ríos and Ruta de la Araucanía concessions, which will generate new revenues or extend the term of these concessions.

Financial Results

Table 17: Income Statement – Energy transmission and toll roads

Billion (COP)	1Q 2023	1Q 2022	Δ (\$)	Δ (%)
Total revenue	3,911	2,766	1,145	41.4%
Depreciation, amortization and depletion	289	249	40	16.1%
Fixed costs	1,282	828	454	54.8%
Total cost of sales	1,571	1,077	494	45.9%
Gross income	2,340	1,689	651	38.5%
Operating expenses	334	261	73	28.0%
Operating income	2,006	1,428	578	40.5%
Financial Income (expenses)	(1,090)	(744)	(346)	46.5%

⁴ According to the annual regulated revenue (*Receita Anual Permitida "RAP"*) for the 2022/2023 rate cycle (July 1, 2022, to June 30, 2023).

⁵ IE Itaúnas, a 100% wholly-owned subsidiary of ISA CTEEP.

⁶ According to the 2022/2023 rate cycle

⁷ The portfolio of projects under construction includes 100% of CAPEX and revenue from subsidiaries and subordinates that are not 100% owned by ISA.

Share of profit of companies	247	149	98	65.8%
Income before income tax	1,163	833	330	39.6%
Provision for income tax	(10)	(215)	205	(95.3%)
Consolidated net income	1,153	618	535	86.6%
Non-controlling interest	(928)	(490)	(438)	89.4%
Net income attributable to owners of Ecopetrol	225	128	97	75.8%
EBITDA	2,712	1,964	748	38.1%
EBITDA Margin	69.3%	71.0%	-	(1.7%)

The **Operating income** increased in the 1Q23 versus the 1Q22, primarily due to circumstances presented below:

- In energy transmission: i) performance of contractual scaling;⁸ ii) higher yields on contract assets; iii) efficiencies in energy projects in Brazil; and iv) entry into operation of projects in Brazil and Colombia.
- In toll roads: i) adjustment to the treatment of the road concessions' financial asset in Chile, (from the Chilean pesos to *Unidades de Fomento* as of 3Q22; ii) foreign exchange effect; iii) higher construction activity in Ruta del Loa, Ruta de la Araucanía and Ruta de los Ríos; and iv) higher revenues from the Ruta Costera concession in Colombia.
- In telecommunications: i) adjustment of contract indexation; and ii) higher connectivity services and capacity sales in Colombia and Peru.

The **Operating costs and expenses** increased in 1Q23 compared to 1Q22, mainly due to: i) higher inflation in Colombia, Brazil, and Chile; ii) the entry into operation of new energy transmission projects; iii) new telecommunications contracts; and iv) greater road maintenance activities.

The net **financial result** for 1Q23 increased relative to 1Q22, mainly because of the foreign exchange effect and interest on the debt acquired to finance the acquisition of ISA.

The **result from equity** in companies in 1Q23 increased versus that of 1Q22, due to the restatement of the residual value of Ivaí⁹ in Brazil and the positive performance of contractual scaling.

III. Technology, Environment, Social and Corporate Governance (TESG)

Integrated Water Management

The operation reused 36.9 million cubic meters of water (2.6 million barrels per day), meaning that the company avoided capturing and/or discharging this volume, thus reducing pressure on water resources. This figure increased by 22% relative to 1Q22 and is equal to 78% of the total water required to operate during this quarter. These results have been achieved thanks to the implementation of good water reuse and recirculation practices in the Barrancabermeja and Cartagena Refineries as well as the development of secondary recovery and pressure maintenance projects and in the production fields.¹⁰

⁸ In the energy sector, contractual scaling refers to refers to price adjustment clauses tied to economic indicators

⁹ IE Ivaí, 50% co-controlled by ISA ICTEEP

¹⁰ In terms of best practices, the reuse/recirculation of water in refineries is noteworthy, mainly in condensate recovery and firefighting systems. Likewise, in the production fields, reuse/recirculation is

in: i) drilling activities that reuse domestic and industrial wastewater after tertiary treatments (reverse osmosis and demineralization); ii) preparation of drilling mud; iii) equipment washing; iv) use of cooling water for pumps and industrial uses; v) re-injection to maintain reservoir pressure or increase hydrocarbon production.

During 1Q23, 10.2 million cubic meters of fresh water (0.71 million barrels per day) were captured, 10% more than in 1Q22, which is 22% of the total water required to operate in Ecopetrol. This is mainly attributed to increased water requirements in the refineries due to greater throughputs.

In 1Q23, 0.9 million cubic meters of treated production water from the Castilla Field (an average of 61 thousand barrels daily) were reused in agroforestry activities in the ASA La Guarupaya Ecoreserve in the Municipality of Acacías (Department of Meta), which represents a 153% reduction versus 1Q22, due to a hydraulic restriction in the pipeline

Climate Change - Decarbonization

By 2023, the Ecopetrol Group estimates it will have reduced its greenhouse gas emissions (GHG) by 407,040 tCO₂e through initiatives and projects related to energy efficiency, renewable energies, gas utilization and reduction of fugitive emissions and venting. In 1Q23, a reduction of 74,632 tCO₂e was achieved representing it avoided the emission of 74,632 tCO₂e, an 18% compliance with the target.

Additionally, Ecopetrol announced its commitment to reduce methane emissions by 45% by 2025 and 55% by 2030 relative to the 2019 baseline in direct operations of the Upstream through the detection, measurement, and elimination of fugitive emissions and by reducing venting in tanks and wells. This will allow the company to avoid the emission of close to 45,000 tons of methane, which equals more than 1,200,000 tons of carbon dioxide (CO₂). Ecopetrol will periodically monitor compliance with this goal, analyzing technological, operational, and economic feasibility to approach net-zero methane emissions in operations over the next decade, align with leader companies in the industry. To date, we have made great strides in detecting and measuring emissions by employing state-of-the-art technologies including infrared cameras and flow meters (bottom-up approach), as well as analyzing satellite images and conducting flights with methane sensors (top-down approach), having now evaluated close to 95% of the company's operations.

Biodiversity

An agreement was signed with the national business trade association, ANDI, to: (i) develop proposals seeking regulatory adjustments to more effectively enforce environmental obligations regarding biodiversity protection; and (ii) coordinate the participation of the business sector in biodiversity management, consistent with the goals of Convention on Biological Diversity established at Conference of the Parties within the framework of the "Biodiversity and Development" initiative.

Environmental Planning and Authorizations

During 1Q23, Ecopetrol S.A. obtained 41 environmental approvals to develop its projects and operations (five from the national environmental licensing authority, ANLA, and 36 from regional environmental corporations, CARs). The above is the result of environmental planning in the projects to safely execute activities associated with well drilling, water injection for recovery purposes, exploitation, offshore exploration, and the efficient use of natural resources.

Circular Economy

On March 27, Ecopetrol and Esenttia, in partnership with the Mayor's Office of Bogotá, TransMilenio S.A. and the *Botellas de Amor* foundation, delivered the first TransMilenio mass transit system station placed at the Ricaurte location, whose operations meet environmental sustainability criteria and was built using nineteen tons of recycled plastic, equivalent to more than 2.7 million plastic bags.

In addition, the third stretch of 1.6 Kilometers of road paved with plastic-modified asphalt was inaugurated in the Montecristo Alto area, between Guamal and Cubarral (Meta), recycling 850,000 plastic bags. The above, to position the Ecopetrol Group as a referent in circular economy in the transportation industry and sustainable mobility in Bogota D.C.

Social and Environmental Investment

During 1Q23, the Ecopetrol Group allocated resources to execute projects within its Sustainable Development Portfolio, characterized as social, environmental and outreach investments, totaling COP 56,971¹¹ million, including strategic and mandatory investments. Social investments were focused on education, road and community infrastructure, entrepreneurship and business development, inclusive rural development, and access to public services such as water, sewage, gas, and electricity. Milestones for the quarter included:

- *Road and community infrastructure:* the first photovoltaic system to operate in a TransMilenio station was installed, with 32 solar panels that will provide energy for the station and will avoid CO₂ emissions by 9.2 t.
- *Access to public services:* completion of the social gas Barranquilla project, which benefited more than 10,000 households in 71 neighborhoods in the metropolitan area of Barranquilla from socio-economic strata one and two, providing them with natural gas service connections and expanding the coverage of this public service from 91% to 98% in these strata. The project's investment was close to COP 10,600 million with contributions from Ecopetrol and the municipality of Barranquilla.
- *Education:* 31,599 students from public educational institutions were benefited, through various initiatives including:
 - ✓ Announcement of the 35 winners of the 2023 face-to-face edition of "She is an Astronaut" program, 15 of whom are sponsored by Ecopetrol.
 - ✓ Selection of 94 students who will receive higher education scholarships as well as funds to support their living expenses in the "Bachilleres Ecopetrol Mario Galán Gómez" program
 - ✓ Completion of Crea Sonidos alliance - Yury Buenaventura foundation and CoCrea which benefited 100 musicians, including 50 residents from Ecopetrol's areas of interest.
 - ✓ Completed the "Music in the Frontiers" program in partnership with the Batuta foundation, benefiting 1,704 children in 14 border municipalities in the departments of Amazonas, Arauca, Cesar, Chocó, La Guajira, Putumayo, Nariño, Norte de Santander, and Vichada.
- *Entrepreneurship and business development:* completed the "Ecopetrol Emprende" entrepreneurship program in Villavicencio, benefiting close to 100 entrepreneurs and MSMEs, by helping them to define their business models, craft their business plans, and access trade shows and sources of financing, among others.

On the other hand, within the framework of the "Works in Lieu of Taxes" mechanism, CENIT completed the construction of a bridge that leads from the Astilleros road to Tibú for a value of COP 12,633 million, which benefits more than 47 thousand inhabitants of the region. Additionally, as of March 31, the Ecopetrol Group expressed its interest to the National Government for undertaking 32 new projects totaling more than COP 181 billion, continuing with its commitment to lead the implementation of the "Works in Lieu of Taxes" mechanism in the country, considering that it has a 39% accumulated participation 2018-2022. The Territorial Renewal Agency (ART for its Spanish acronym), which heads the allocation of these projects, will announce its decision during 2Q23.

Regarding environmental investments, in 1Q23 Ecopetrol subscribed environmental investment contracts totaling COP 17,085.4 million, of which COP 1,312.1 million are strategic investments and COP 15,773.4 million are mandatory investments that will be executed during 2023. In the strategic environmental investments category, the following are noteworthy: i) asphalt binders research as an alternative for using the sludge byproduct generated by Ecopetrol's operations; ii) implementation of

¹¹ Cumulative investment of the Ecopetrol Group to 1Q23 is broken down into: i) strategic investments for COP 51,260 million; and ii) mandatory investment for COP 5,711 million. Includes within its strategic value, the execution in 2023 of the "Works In Lieu of Taxes" projects totaling COP 2,067 million by Ecopetrol S.A. Ecopetrol S.A.: cumulative social, environmental and outreach investment totals COP 44,810 million. Subordinates: cumulative socio-environmental investment totals COP 12,161 million.

the collective action mechanism to manage water security in the supply basins of the municipalities of Villavicencio and Acacias; iii) further strengthening the *Vida Silvestre* wildlife preservation project; and iv) continuing to oversee conservation, biodiversity and ecosystemic services in the Ecoreserves of Ecopetrol and its Group.

Communities and Territories

Community Outreach: In 1Q23, nine dialogues were held nationally, sponsored by Ecopetrol, with the participation of social actors including Community Action Boards, academia, businesses, and local institutions. Likewise, Ecopetrol participated in the realization of the National Popular Communal Assembly 2023, which was attended by 5,000 members of the Community Action Boards. Ecopetrol's participation in the dialogues allowed us to understand the visions of community members regarding the energy transition, the dynamics of the hydrocarbon sector, popular economies, and environmental protection.

Indigenous community outreach: Ecopetrol and Hocol agreed on the methodology to carry out the prior consultation with the Alto Unuma Meta Resguardo (RAUM) reservation of Puerto Gaitán, to move forward with the environmental license modification for the Rubiales Field and the injector well drilling project. An initial approach was made with the Wayuu communities aiming to agree on the necessary actions to initiate the prior consultation for the Orca Desarrollo project, which will transport gas from the Orca well to the Guajira Association's facilities.

Human Rights

Following the approval of the Annual Human Rights (HR) Plan 2023, the Human Rights Risks Survey began at the operational level with the Andean East Regional Vicepresidency to identify the Human Right risks and impacts associated with the business activity in the area. This exercise involves a bidirectional perspective that includes in its first phase direct workers, suppliers, and community leaders.

Corporate Governance and Corporate Bodies

The ordinary General Shareholders' Meeting was held on March 30, with the participation of 3,590 shareholders and 10,015 connections through streaming and social networks. In line with our sustainability and circular economy practices, we would like to highlight:

- Ecopetrol's General Shareholders' Meeting was the first meeting in Colombia that achieved carbon neutrality. The company Caia was responsible for measuring the CO₂ emissions of the event, estimated to be 74.51 tCO₂e and offset by the purchase of REDD+ project bonds, that aid in avoiding the degradation and deforestation of native forests in Bajo Calima and Bahía Málaga (Buenaventura).
- The association of recyclers *Asociación de Recicladores Modelo de Vida* of Bogotá was responsible for ensuring the proper disposal of the waste generated during the event and providing reuse to the elements used in the meeting. A total of 105 tons of usable waste was collected.

During the meeting, the following agenda items, among others, were approved: (i) the profit distribution project, with an ordinary dividend of COP \$487 per share and an extraordinary dividend of COP \$106 per share, for a total dividend of COP \$593 per share; (ii) the 2022 Annual Corporate Governance Report and the Integrated Management Report; (iii) the statutory auditor election and assignment of fees for the remainder of the period 2021 - 2025; and finally, (iv) the appointment of the members of the Board of Directors for the remainder of the 2021 - 2025 period.

Additionally, on April 11, the Board of Directors appointed Ricardo Roa Barragán as President of Ecopetrol S.A. The assessment and selection process of the candidates was carried out with the support of the Compensation, Nomination and Culture Committee of the Board of Directors of Ecopetrol S.A., assisted by a renowned international executive search firm. The appointment took

place after a rigorous examination of the proposed candidates, following the Succession Policy for the President of Ecopetrol S.A. and other applicable regulations.

Finally, the Company issued its 2022 Integrated Management Report, which was presented and approved at the General Shareholders' Meeting. In this report, the Ecopetrol Group conveyed to all its stakeholders the structure adopted through three lines of business to achieve the 2040 Strategy, the operating results and the progress made in the TSEG driver. The publication of the SASB (Sustainability Accounting Standards Board) report for the 2022 fiscal year is also noteworthy.

On the other hand, the improvement in the Sustainalytics rating from "severe" risk in 2019 to "medium" in 2022 stands out. In terms of Relative Performance, Ecopetrol was placed in the category in which close to 19% of the companies in the Integrated O&G are located. The radar is divided into 11 topics, where the main improvements were in "Land Use and Biodiversity", "Carbon - Own Operations", "Emissions, Effluents and Waste" and "Occupational Health and Safety".

Science, Technology, and Innovation

During 1Q23, the Company continued the path to incorporate cutting-edge knowledge as well as technology and innovation, capturing benefits of USD 176.9 million. Business technologies developed by the Colombian Petroleum Institute (ICP for its Spanish acronym) accounted for 77% of the benefits captured, primarily in the fields of incremental production, reduction of naphtha and middle distillate deferrals and yields, energy and gas efficiency, and higher productivity. 1Q23 achievements included:

- Ecopetrol, in partnership with the Colombian Air Force, the Ministry of Science and the Ministry of Defense, launched the first FACSAT2-Chiribiquete satellite, which has a sensor that will allow monitoring of greenhouse gases (GHG), with the purpose of characterizing the sources of emissions and to generate real-time strategies to mitigate the effects of climate change and continue protecting the environment.
- Implemented a linked network of eddy-covariance flux towers, a system that measures the exchange of gases between the soil and the atmosphere seeking to estimate the potential storage, capture and use capacity of GHGs. The first tower was installed in the mangrove ecosystem adjacent to the Cartagena Refinery and their installation in six additional ecosystems of national interest in the Magdalena Medio and Orinoquia regions is scheduled.
- The first version of the Nature-Based Solutions digital platform was developed to conduct carbon sequestration and biodiversity modeling as well as territory analysis and scenario deployment, seeking opportunities for CO₂ sinks and natural climate solutions.
- Progress was made in automating laboratories and pilot plants of the Colombian Petroleum Institute with the commissioning of robots for sample distribution, which enable experimental efficiencies regarding methods and times. The control system of the pilot plants was also updated, enabling remote access.

Regarding **innovation, ecosystems, and partnerships**, in 1Q23 the Ecopetrol Group launched Econova Caribe, the first innovation center in the country focused on developing technological solutions that contribute to fast-track the energy transition and strengthen initiatives in the circular economy. As part of its unveiling, Econova Caribe launched 8 open innovation challenges for technological solutions through projects focused on the use of hydrogen, improving the operations of the Cartagena refinery, and addressing community problems in the Mamonal sector.

Concerning **intellectual property**, in 1Q23, Ecopetrol obtained, together with the Universidad Pontificia Bolivariana, an invention patent in Colombia for a device that extracts sediment samples in bodies of water; this technology will greatly help the treatment systems of bodies of water.

IV. Risks

In compliance with "Appendix 1 - Periodic Information from Issuers" established by External Circular 012 of 2022 issued by the Superintendence of Finance of Colombia concerning the format and detailed content of the quarterly reports and following the provisions of Article 5.2.4.2.3. of Decree 2555 of 2010, during 1Q23 there were no material variations in the degree of risk exposure concerning the immediately preceding quarter. Furthermore, no new risks were identified during the aforementioned period.

V. Presentation of Results

On Wednesday, May 10th, 2023, Ecopetrol's senior management will host two conference calls to review the results, one in Spanish and the other in English. Please find below the timing and links to access the conferences:

Spanish Conference Call	English Conference Call
08:00 a.m. Col Time	10:00 a.m. Col Time
09:00 a.m. NY Time	11:00 a.m. NY Time

To access the webcast, the following link will be available:

Spanish:

<https://xegmenta.co/ecopetrol/conferencia-de-resultados-1t-2023/>

English:

<https://xegmenta.co/ecopetrol/results-conference-call-1th-2023/>

Please check if your browser allows the normal viewing of the online presentation. We recommend using the latest versions of Internet Explorer, Google Chrome, and Mozilla Firefox.

The results report, the presentation, the webcast, and the replay of the conference will be available on the Ecopetrol website: www.ecopetrol.com.co

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Ecopetrol Group Appendices

Table 1: Income Statement - Ecopetrol Group

Billion (COP)	1Q 2023	1Q 2022	Δ (%)
Revenue			
Local	20,264	16,614	22.0%
Export	18,590	15,859	17.2%
Total revenue	38,854	32,473	19.7%
Cost of sales			
Depreciation, amortization and depletion	3,009	2,579	16.7%
Variable depreciation, amortization and depletion	1,743	1,506	15.7%
Fixed cost depreciation	1,266	1,073	18.0%
Variable costs	15,348	12,065	27.2%
Imported products	7,075	7,685	(7.9%)
Local purchases	5,953	5,531	7.6%
Hydrocarbon transportation services	374	254	47.2%
Inventories and others	1,946	(1,405)	(238.5%)
Fixed costs	4,422	3,294	34.2%
Contracted services	1,089	1,332	(18.2%)
Construction services	751	0	-
Maintenance	934	706	32.3%
Labor costs	962	782	23.0%
Other	686	474	44.7%
Total cost of sales	22,779	17,938	27.0%
Gross income	16,075	14,535	10.6%
Operating expenses	2,354	2,005	17.4%
Administration expenses	2,105	1,908	10.3%
Exploration and projects expenses	249	93	167.7%
(Recovery) expense for impairment long-term assets	0	4	(100.0%)
Operating income	13,721	12,530	9.5%
Finance result, net	(1,506)	(1,524)	(1.2%)
Foreign exchange, net	248	47	427.7%
Interest, net	(1,185)	(940)	26.1%
Financial income/loss	(569)	(631)	(9.8%)
Share of profit of companies	342	202	69.3%
Income before income tax	12,557	11,208	12.0%
Income tax	(5,593)	(3,884)	44.0%
Net income consolidated	6,964	7,324	(4.9%)
Non-controlling interest	(1,304)	(751)	73.6%
Net income attributable to owners of Ecopetrol	5,660	6,573	(13.9%)
EBITDA	17,842	15,896	12.2%
EBITDA margin	45.9%	49.0%	(3.1%)

Table 2: Statement of Financial Position - Ecopetrol Group

Billion (COP)	March 31, 2023	December 31, 2022	Δ (%)
Current assets			
Cash and cash equivalents	15,497	15,401	0.6%
Trade and other receivables	47,654	39,225	21.5%
Inventories	11,123	11,880	(6.4%)
Current tax assets	7,076	6,784	4.3%
Other financial assets	1,684	1,162	44.9%
Other assets	3,263	2,779	17.4%
	86,297	77,231	11.7%
Non-current assets held for sale	42	46	(8.7%)
Total current assets	86,339	77,277	11.7%
Non-current assets			
Investments in associates and joint ventures	9,487	9,497	(0.1%)
Trade and other receivables	32,794	32,155	2.0%
Property, plant and equipment	99,582	100,997	(1.4%)
Natural and environmental resources	43,636	42,324	3.1%
Assets by right of use	594	628	(5.4%)
Intangibles	17,543	18,147	(3.3%)
Deferred tax assets	15,274	17,219	(11.3%)
Other financial assets	558	1,564	(64.3%)
Goodwill and Other assets	6,555	6,562	(0.1%)
Total non-current assets	226,023	229,093	(1.3%)
Total assets	312,362	306,370	2.0%
Current liabilities			
Loans and borrowings	16,257	22,199	(26.8%)
Trade and other payables	43,037	19,938	115.9%
Provision for employees benefits	2,872	2,754	4.3%
Current tax liabilities	9,973	7,631	30.7%
Accrued liabilities and provisions	1,413	1,533	(7.8%)
Other liabilities	1,965	2,727	(27.9%)
Total current liabilities	75,517	56,782	33.0%
Non-current liabilities			
Loans and borrowings	100,105	92,936	7.7%
Trade and other payables	51	57	(10.5%)
Provision for employees benefits	9,439	10,212	(7.6%)
Non-current taxes	13,740	13,669	0.5%
Accrued liabilities and provisions	11,408	11,223	1.6%
Other liabilities	2,426	2,404	0.9%
Total non-current liabilities	137,169	130,501	5.1%
Total liabilities	212,686	187,283	13.6%
Equity			
Equity attributable to owners of the company	72,608	91,035	(20.2%)
Non-controlling interests	27,068	28,052	(3.5%)
Total equity	99,676	119,087	(16.3%)
Total liabilities and equity	312,362	306,370	2.0%

Table 3: Cash Flow Statement - Ecopetrol Group

Billion (COP)	1Q 2023	1Q 2022
Cash flow provided by operating activities		
Net income attributable to owners of Ecopetrol S.A.	5,660	6,573
Adjustments to reconcile net income to cash provided by operating activities		
Non-controlling interests	1,304	751
Income tax	5,593	3,884
Depreciation, depletion and amortization	3,163	2,709
Foreign exchange (gain) loss	(248)	(47)
Finance costs recognized in profit or loss	2,357	1,550
Dry wells	147	61
Loss (gain) on disposal of non-current assets	8	296
Impairment of current and non-current assets	23	26
Fair value (gain) on financial assets valuation	(58)	(41)
Gain on financial derivatives	1	(1)
Gain on assets for sale	1	(2)
(Gain) loss on share of profit of associates and joint ventures	(342)	(202)
Exchange difference on export hedges and ineffectiveness	520	135
Provisions and contingencies	201	62
Others minor items	(6)	(23)
Net changes in operating assets and liabilities	(14,290)	(10,247)
Income tax paid	(1,963)	(1,698)
Cash provided by operating activities	2,071	3,786
Cash flows from investing activities		
Investment in joint ventures	0	(32)
Investment in property, plant and equipment	(1,631)	(1,227)
Investment in natural and environmental resources	(3,317)	(1,958)
Payments for intangibles	(206)	(170)
(Purchases) sales of other financial assets	750	400
Interest received	554	159
Dividends received	104	0
Proceeds from sales of assets	8	50
Net cash used in investing activities	(3,738)	(2,778)
Cash flows from financing activities		
Proceeds (repayment of) from borrowings	3,561	(274)
Interest paid	(1,322)	(907)
Lease Payments	(125)	(91)
Dividends paid	(227)	(274)
Net cash used in financing activities	1,887	(1,546)
Exchange difference in cash and cash equivalents	(124)	(13)
Net (decrease) increase in cash and cash equivalents	96	(551)
Cash and cash equivalents at the beginning of the period	15,401	14,550
Cash and cash equivalents at the end of the period	15,497	13,999

Table 4: EBITDA Reconciliation - Ecopetrol Group

Billion (COP)	1Q 2023	1Q 2022
Net income attributable to the owners of Ecopetrol	5,660	6,573
(+) Depreciation, amortization and depletion	3,163	2,709
(+/-) Impairment of long-term assets	0	4
(+/-) Financial result, net	1,506	1,524
(+) Income tax	5,593	3,884
(+) Taxes and others	616	451
(+/-) Non-controlling interest	1,304	751
Consolidated EBITDA	17,842	15,896

Table 5: Reconciliation of EBITDA by Segment (1Q23)

Billion (COP)	Upstream	Downstream	Midstream	Energy	Eliminations	Consolidated
Net income attributable to the owners of Ecopetrol	2,690	1,298	1,447	225	0	5,660
(+) Depreciation, amortization and depletion	1,845	568	364	386	0	3,163
(+/-) Financial result, net	90	275	10	1,090	41	1,506
(+) Income tax	3,812	786	985	10	0	5,593
(+) Other taxes	256	247	40	73	0	616
(+/-) Non-controlling interest	(27)	63	340	928	0	1,304
Consolidated EBITDA	8,666	3,237	3,186	2,712	41	17,842

Table 6. Investment by Segment Ecopetrol Group (1Q23)

Million (USD)	Ecopetrol S.A.	Affiliates and Subsidiaries	Total 1Q2023
Production	422	350	773
Downstream	25	11	35
Exploration	67	17	84
Midstream*	0	56	56
Corporate**	24	0	24
Total excluding ISA	538	434	972
Energy Transmission	0	207	207
Toll Roads	0	74	74
Telecommunications	0	9	9
Total ISA	0	290	290
Total	538	724	1,262

* Includes total amount of investments in each of the subsidiaries and affiliates of Ecopetrol Group (both controlling and non-controlling interests).

** Includes investments in energy transition projects.

Ecopetrol S.A. Appendices

Following are the Income Statement and Statement of Financial Position of Ecopetrol S.A.

Table 7: Income Statement

Billion (COP)	1Q 2023	1Q 2022	Δ (%)
Local	19,426	15,205	27.8%
Exports	11,474	12,087	(5.1%)
Total revenue	30,900	27,292	13.2%
Variable costs	19,394	15,268	27.0%
Fixed costs	3,748	3,041	23.2%
Total cost of sales	23,142	18,309	26.4%
Gross income	7,758	8,983	(13.6%)
Operating expenses	1,132	794	42.6%
Operating income	6,626	8,189	(19.1%)
Financial income/loss	(808)	(668)	21.0%
Share of profit of companies	3,498	1,692	106.7%
Income before income tax	9,316	9,213	1.1%
Income tax	(3,656)	(2,640)	38.5%
Net income attributable to owners of Ecopetrol	5,660	6,573	(13.9%)
EBITDA	8,400	9,865	(14.8%)
EBITDA margin	27.2%	36.10%	(8.9%)

Table 8: Statement of Financial Position / Balance Sheet

Billion (COP)	March 31, 2023	December 31, 2022	Δ (%)
Current assets			
Cash and cash equivalents	3,986	5,788	(31.1%)
Trade and other receivables	42,968	33,573	28.0%
Inventories	7,074	7,226	(2.1%)
Current tax assets	5,726	5,617	1.9%
Other financial assets	5,002	1,428	250.3%
Other assets	1,962	1,657	18.4%
	66,718	55,289	20.7%
Non-current assets held for sale	34	34	0.0%
Total current assets	66,752	55,323	20.7%
Non-current assets			
Investments in associates and joint ventures	87,939	92,417	(4.8%)
Trade and other receivables	442	430	2.8%
Property, plant and equipment	27,968	27,503	1.7%
Natural and environmental resources	25,889	25,188	2.8%
Assets by right of use	3,038	2,989	1.6%
Intangibles	326	351	(7.1%)
Deferred tax assets	9,011	10,461	(13.9%)
Other financial assets	193	929	(79.2%)
Goodwill and other assets	1,302	1,257	3.6%
Total non-current assets	156,108	161,525	(3.4%)
Total assets	222,860	216,848	2.8%
Current liabilities			
Loans and borrowings	12,651	18,898	(33.1%)
Trade and other payables	38,729	16,323	137.3%
Provision for employees benefits	2,591	2,463	5.2%
Current tax liabilities	6,857	5,190	32.1%
Accrued liabilities and provisions	1,002	1,086	(7.7%)
Other liabilities	1,428	1,117	27.8%
Total current liabilities	63,258	45,077	40.3%
Non-current liabilities			
Loans and borrowings	68,622	61,717	11.2%
Provision for employees benefits	8,925	9,704	(8.0%)
Non-current tax liabilities	446	435	2.5%
Accrued liabilities and provisions	8,675	8,548	1.5%
Other liabilities	326	332	(1.8%)
Total non-current liabilities	86,994	80,736	7.8%
Total liabilities	150,252	125,813	19.4%
Equity			
Equity attributable to owners of the company	72,608	91,035	(20.2%)
Total equity	72,608	91,035	(20.2%)
Total liabilities and equity	222,860	216,848	2.8%

Table 9: Export Destinations - Ecopetrol Group

Crudes - mboed	1Q 2023	1Q 2022	% Share
U.S. Gulf Coast	149.2	158.9	33.8%
Asia	228.9	212.8	51.9%
Central America / Caribbean	0.0	6.1	0.0%
Others	25.4	10.0	5.8%
Europe	32.6	0.0	7.4%
U.S. West Coast	5.4	8.7	1.2%
South America	0.0	0.0	0.0%
U.S. East Coast	0.0	0.0	0.0%
Total	441.5	396.6	100.0%

Products - mboed	1Q 2023	1Q 2022	% Share
Central America / Caribbean	25.6	36.0	23.7%
U.S. Gulf Coast	45.2	8.0	41.8%
Asia	16.9	6.8	15.6%
South America	9.8	6.7	9.1%
U.S. East Coast	0.0	0.0	0.0%
Europe	5.1	0.0	4.7%
U.S. West Coast	0.0	0.0	0.0%
Others	5.5	0.5	5.1%
Total	108.1	58.0	100.0%

Note: The information is subject to change after the end of the quarter, as some destinations are reclassified according to the final result of exports.

Table 10: Local Purchases and Imports - Ecopetrol Group

Local Purchases - mboed	1Q 2023	1Q 2022	Δ (%)
Crude Oil	204.4	177.3	15.3%
Gas	4.1	1.7	141.2%
Products	3.3	3.1	6.5%
Diluent	0.0	0.0	-
Total	211.8	182.1	16.3%

Imports - mboed	1Q 2023	1Q 2022	Δ (%)
Crude Oil	70.9	28.4	149.6%
Products	80.4	132.5	(39.3%)
Diluent	28.2	35.1	(19.7%)
Total	179.6	196.0	(8.4%)

Total	391.4	378.1	3.5%
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Table 11: Exploratory Wells Detail - Ecopetrol Group

#	Quarter	Name	Block	Name	Operator/Partner	Status	TD Date
1	First	Cupiagua XD 45	SDLA	Piedemonte	Ecopetrol 100% (Operator)	Under evaluation	January 18/2023
2	First	Picabuey-1	LLA-87	Llanos Orientales	Hocol 50% Geopark 50% (Operator)	Dry	January 18/2023
3	First	Magnus-1	CPO-09	Llanos Orientales	ECP 55% (Operator) Repsol (45%)	Under evaluation	January 21/2023
4	First	Turupe-1 ST	LLA-9	Llanos Orientales	Ecopetrol 100% (Operator)	Dry	Feb 10/2023
5	First	Zorzal-1	LLA-87	Llanos Orientales	Hocol 50% Geopark 50% (Operator)	Under evaluation	Feb 11/2023
6	First	Koala-1	LLA-87	Llanos Orientales	Hocol 50% Geopark 50% (Operator)	Dry	Mar 13/2023
7	First	Leyenda-1	CPO-09	Llanos Orientales	ECP 55% (Operator) Repsol (45%)	Under evaluation	Mar 14/2023
8	First	Cusiana V 31	SDLA	Piedemonte	Ecopetrol 100% (Operator)	Under evaluation	Mar 28/2023

Table 12: HSE Performance (Health, Safety and Environment)

HSE Indicators*	1Q 2023	1Q 2022
Frequency of total registrable injuries (No. Recordable cases / Million man hours)	0.16	0.23
Environmental incidents**	1	1

* The results of the indicators are subject to change after the end of the quarter due to the fact that some of the accidents and incidents are reclassified according to the final result of the investigations. ** Environmental incidents are those hydrocarbon spills greater than 1 barrel, with environmental impact.