Trafigura

2023

Annual Report

Trafigura Group Pte. Ltd.

Performance highlights[1]

Group revenue

$244.3bn

$318.5bn in 2022
$231.3bn in 2021

Underlying EBITDA

$12.7bn

$12.1bn in 2022
$7.0bn in 2021

Net profit

$7.4bn

$7.0bn in 2022
$3.1bn in 2021

Total Group equity

$16.5bn

$15.1bn in 2022
$10.5bn in 2021

Total assets

$83.4bn

$98.6bn in 2022
$90.2bn in 2021

Total non-current assets

$15.7bn

$19.4bn in 2022
$15.1bn in 2021

Average number of employees over the year[2]

12,479

12,347 in 2022
9,031 in 2021

The companies in which Trafigura Group Pte. Ltd. directly or indirectly owns investments are each separate legal entities and should not be considered or construed otherwise.

This report refers to: (i) certain subsidiaries over which Trafigura Group Pte. Ltd. has direct or indirect control; and (ii) certain joint venture entities and arrangements where Trafigura Group Pte. Ltd. has direct or indirect joint control; and (iii) certain other investments where Trafigura Group Pte. Ltd. has neither control nor joint control and may or may not have influence. For the avoidance of doubt, references to “Trafigura”, “Trafigura Group, “the company”, “the Group”, “we”, “us”, “our” and “ourselves” may be used for convenience (not for legal) purposes to refer to Trafigura Group Pte. Ltd., its subsidiaries, and/or its joint ventures.

1 Trafigura's 2023 financial year covers the period 1 October 2022 to 30 September 2023.

2 Total employee numbers are calculated as an average over the financial year and comprise employees of businesses, operations and offices consolidated in Trafigura's balance sheet.

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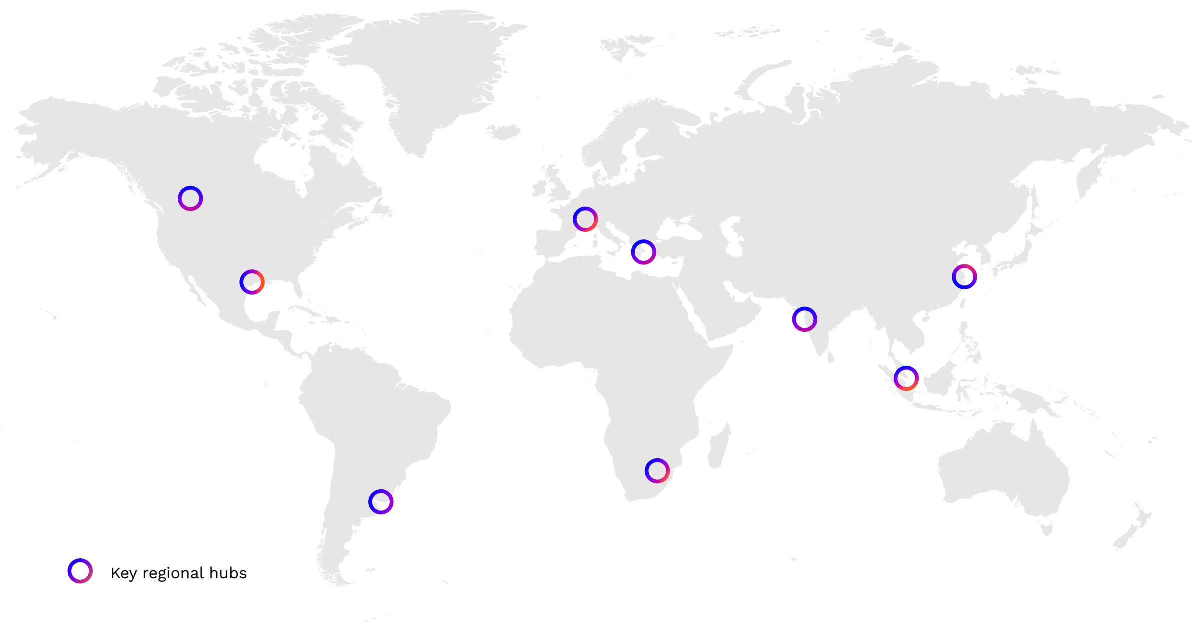
Who we are

Trafigura is a market leader in the global commodities industry. At the heart of global supply, we responsibly connect vital resources to power and build the world.

Across our global network, we deploy infrastructure, logistics and financing to connect producers and consumers, bringing greater transparency and trust to the management of complex supply chains.



12,000+
Employees

150+
Countries of activity

50+
Offices

30+
Oil and Petroleum product types supplied

30+
Metals and Minerals product types supplied

2.5GW[1]
Renewable energy portfolio generation capacity

1 50% owned by Trafigura.

Investments and operating companies

impalaterminals.com ↗

tfgmarine.com ↗

h2energy.ch ↗

nyrstar.com ↗

pumaenergy.com ↗

nalarenewables.com ↗

LOBITO ATLANTIC railway

Oil and petroleum products

Metals and minerals

Gas and power

Renewables and hydrogen

Carbon management

Supporting global supply

We provide commodity producers with access to global markets.

Shipping and transportation

We operate a modern fleet of vessels, ensuring responsible and reliable movement of commodities across continents.

Storage and blending

Through an extensive network of storage facilities, logistics assets and infrastructure, we are able to streamline and manage the movement, storage and specification of commodities for our customers.

Adding value to supply chains

We help our customers understand their carbon footprint and support their efforts to measure and reduce emissions.

Delivery and distribution

We arrange every aspect of the delivery and distribution of commodities around the world, from loading and inspection to their physical discharge.

Energy

Mobility

Electronics and manufacturing

Construction and industry

Strong performance in changing markets

Jeremy Weir
Executive Chairman and Chief Executive Officer

2023 was a very strong year of performance across the three core divisions of the Group – Oil and Petroleum Products; Metals, Minerals and Bulk Commodities; and Gas, Power and Renewables.

As anticipated in our Interim Report, profits were weighted to the first six months of our financial year, when demand for our services remained exceptionally high. Customers continued to rely on Trafigura for access to vital resources in a complex environment. Our global network and data capabilities enabled us to capture opportunities and manage risks in fast-moving markets.

Supply chain disruptions eased in the second half and these more normalised conditions have continued into our 2024 financial year.

At a divisional level, Metals and Minerals delivered a robust performance, supported by growing demand for energy transition metals and notwithstanding the impact of a major fraud in our nickel business. We continue to pursue legal action against the perpetrators of this systematic deception involving widespread falsification of documents and misrepresentations. We have also made a number of improvements to processes and controls following an internal review.

Since the financial year-end, our Battery Metals team, under new leadership, concluded an agreement to invest in a new nickel refinery in South Korea.

There was also a strong result from our Bulk Commodities business which is well positioned to meet growing demand from India for steel-making ingredients coking coal and iron ore over the next decade.

Gas, Power and Renewables had an outstanding year, emerging as a strong third pillar for the business.

In Oil and Petroleum Products, we enjoyed another good year, with all our teams making a strong contribution to profits. In particular, we have grown our business in the petrochemicals sector, increasingly an important driver of oil demand, and continued to expand in new markets such as ammonia, which we believe will be an important hydrogen-based low-carbon fuel for shipping in future years.

The strong returns recorded across the Group would not have been possible without close collaboration with our Shipping and Chartering business, which had another high performing year.

In carbon trading, we were active across both compliance and voluntary markets and we continued to develop our flagship carbon removal projects. Our newest project, Brújula Verde, broke ground this year, with the objective of planting 12 million eucalyptus trees in degraded lands in the Vichada region of Colombia.

We also continued to work towards final investment decisions on two renewable hydrogen production projects; one in Milford Haven, South Wales; and the other in Esbjerg, Denmark.

To that end, we took the decision to increase our shareholding in the company developing the projects, H2 Energy Europe, and become its majority shareholder.

Puma Energy continued to strengthen its balance sheet, sell non-core assets and reinvigorate its core downstream operations.

Nyrstar focused on implementing technologies and processes to further increase the efficiency and flexibility of its operations in the face of lower commodity prices and increased power costs. The Nyrstar team also made good progress in developing a project to construct a processing facility at the Clarksville smelter in Tennessee that could produce enough germanium and gallium to meet 80 percent of annual US demand.

Management changes

In September 2023, we restructured our senior leadership team, replacing our Management Committee with a new, streamlined Executive Committee. This structure has simplified our decision-making processes and is providing additional strategic focus across the business at a time of growth and change. As part of the changes, we established the role of Chief Risk Officer within the Executive Committee and appointed a new Chief Operating Officer.

Sustainability

We made further progress in addressing greenhouse gas emissions at our own operations and in our supply chains. This included reducing the carbon intensity of our shipping activities in line with our target of a 25 percent reduction by 2030 against the IMO 2019 baseline, and further progress towards reducing Scope 1 and 2 emissions by over 50 percent by 2032, compared to 2020. We also reduced the carbon intensity of Scope 3 upstream emissions from the metals we source and supply, in line with our 2030 target.

It is with sadness that I also have to report two fatalities at Puma Energy in separate incidents at African operations. This is unacceptable and we will continue to focus on improving the safety of workplaces across the Group through awareness programmes, training and an update to our management system. During the year, we appointed a new Head of Communities, Health, Environment, Safety and Security who is leading these initiatives.

We are also focusing on improving the quality and consistency of data reporting and collection across a wide range of ESG metrics and risks as we prepare to respond to the European Union's Corporate Sustainability Reporting Directive (CSRD).

Legal matters

Trafigura has been seeking to resolve investigations by regulatory authorities in the United States, Brazil and Switzerland into payments made via third parties approximately 10 or more years ago. We anticipate resolving the US Department of Justice investigation into payments made in Brazil shortly and have taken a provision of USD127 million. Trafigura Beheer B.V. will defend itself at court against charges brought by the Office of the Attorney General in Switzerland for failing to prevent alleged improper payments in Angola between 2009-2011.

We have made extensive efforts over many years to instil a culture of responsible conduct at Trafigura. Since the period in question, we have significantly enhanced our compliance policies and procedures. These historical incidents in no way represent the company we are today.

Outlook

Looking forward, we expect to see reduced volatility in the year ahead, however, we face uncertain times and there is no room for complacency. Low inventories, geopolitical threats, elections in nearly two-thirds of the democratic world in 2024 and brittle supply chains mean markets are fragile and vulnerable to spikes driven by sudden changes in supply and demand.

Recent experience has demonstrated that managing complex supply chains in stressed environments requires many skills and attributes. These include a strong balance sheet, access to liquidity, agile and experienced teams, and global reach. In that regard, the fact that our Group equity has more than doubled to USD16.5 billion in the past three years provides us with a strong platform for future performance.

On a personal note, I would like to thank all our staff for their hard work and dedication over the past year. The fact that we have continued to grow and branch out into new markets is a testament to their unstinting efforts and commitment as well as to the support of our stakeholders.

I believe we have the people, global network and vision to make the most of the opportunities that lie ahead as the world decarbonises but still needs affordable energy to meet the needs of a growing global population. As a result, we approach 2024 with confidence in our prospects over the medium and long term.

Robust balance sheet and access to liquidity underpinned record results

Earnings momentum slowed in the second half-year as supply chain disruptions eased.

Christophe Salmon
Chief Financial Officer

Group revenue

$244.3bn

2023	244.3bn
2022	318.5bn

Total assets

$83.4bn

2023	83.4bn
2022	98.6bn

Underlying EBITDA

$12.7bn

2023	12.7bn
2022	12.1bn

Total non-current assets

$15.7bn

2023	15.7bn
2022	19.4bn

Net profit

$7.4bn

2023	7.4bn
2022	7.0bn

Group equity

$16.5bn

2023	16.5bn
2022	15.1bn

Trafigura posted record profits for the financial year ended 30 September 2023, during which commodities markets shifted from turbulence to less stressed conditions. Net profit for the period increased five percent to USD7,398 million, up from USD7,026 million a year earlier, with strong underlying contributions recorded across all the Group.

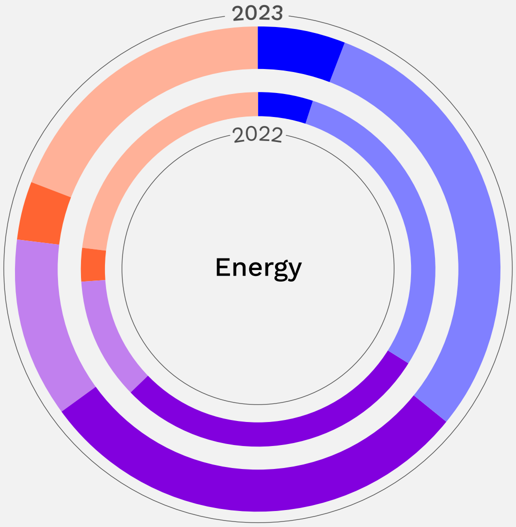
Exceptional earnings were achieved during the first half of the year as our teams provided valuable services to our customers in disrupted energy markets and captured opportunities in a volatile environment. In the second half of the year, we continued to benefit from high demand for our services, despite the easing of supply chain disruptions and market volatility.

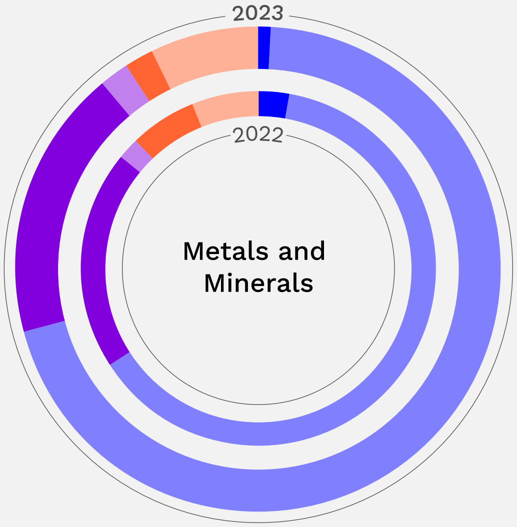
Over the year, revenues dropped 23 percent to USD244,280 million, from USD318,476 million in 2022, reflecting lower average commodity prices, while traded volumes remained broadly flat year-on-year. The Group's underlying earnings before interest tax, depreciation and amortisation (EBITDA) margin was 5.2 percent, compared to 3.8 percent in 2022, inflated by the aforementioned drop in revenue. We expect margins to return to more customary levels in 2024, should market conditions continue to normalise.

At 298.8 million tonnes in 2023, or an average of 6.3 million barrels per day[1], total traded volumes of oil and petroleum products, including natural gas and LNG, declined slightly to around five percent below previous year's level. We have now stabilised our oil volumes following the termination of long-term contracts of Russian crude oil and petroleum products with state-owned companies ahead of international sanctions which took effect in May 2022. In non-ferrous metals, volumes dropped to 21.0 million metric tonnes, compared with 23.3 million metric tonnes in 2022, while bulk minerals volumes were also a little lower at 89.9 million metric tonnes, down from 91.3 million metric tonnes.

1 For FY2023, natural gas and liquefied natural gas (LNG) traded volumes are reported separately in the Gas, Power and Renewables section on page 20. Total volumes traded per annum and average barrels traded per day for FY2022 have been adjusted to give a like-for-like comparison. Total average barrels traded per day including natural gas and LNG is 6.3 million.

Revenue by geography (%)





Energy	2023	2022
Africa	**6%**	5%
Asia & Australia	**30%**	29%
Europe	**29%**	29%
Latin America	**12%**	11%
Middle East	**4%**	3%
North America	**19%**	23%

Metals and Minerals	2023	2022
Africa	**1%**	3%
Asia & Australia	**70%**	63%
Europe	**18%**	20%
Latin America	**2%**	2%
Middle East	**2%**	6%
North America	**7%**	6%

Thanks to our strong profitability, Group equity rose by nine percent to a record USD16,495 million, up from USD15,079 million. Group equity has more than doubled since 2020, providing a solid base for further growth and the ability to weather stressed market conditions. This increase in equity was one of the drivers that maintained our financial leverage substantially below our medium-term target, with the ratio of adjusted debt to Group equity at minus 0.43x.

In terms of financing, while average utilisation was lower compared to 2022, total credit lines reached a level of USD75 billion, excluding Puma Energy, provided by a network of around 150 banks globally. This combination of a strong equity base, low leverage and ample liquidity is a point of competitive advantage, as commodity producers and consumers look to do business with reliable counterparties that have robust balance sheet and ready access to liquidity.

As previously disclosed, we recorded a charge of USD578 million related to a complex and systematic fraud in our nickel business, which is predominantly presented in the consolidated statement of income under materials, transportation and storage.

In terms of divisional performance, our Metals and Minerals segment, which includes bulk commodities, had a strong year, generating revenue of USD73,299 million and an operating profit before depreciation and amortisation of USD1,601 million, down from USD1,877 million a year earlier. However, excluding the charge related to the nickel fraud, the division would have reported an operating profit of USD2,179 million, above its last three-year average level, supported by growing energy-transition-related demand for copper, aluminium and other metals.

Our Energy segment, which includes Oil and Petroleum Products, as well as Gas, Power and Renewables, delivered another robust performance as customers turned to us to help reconfigure their supply chains in light of changing global trade flows and new regulations. Operating profit before depreciation and amortisation rose 10 percent to USD11,143 million, on revenue of USD170,981 million.

Our balance sheet reduced by 15 percent during the year to USD83,383 million from USD98,634 million, mostly driven by the decrease in the valuation of our long-term LNG contracts and related margin requirements from brokers and exchanges, as a result of the drop in natural gas prices in Europe.

Income statement

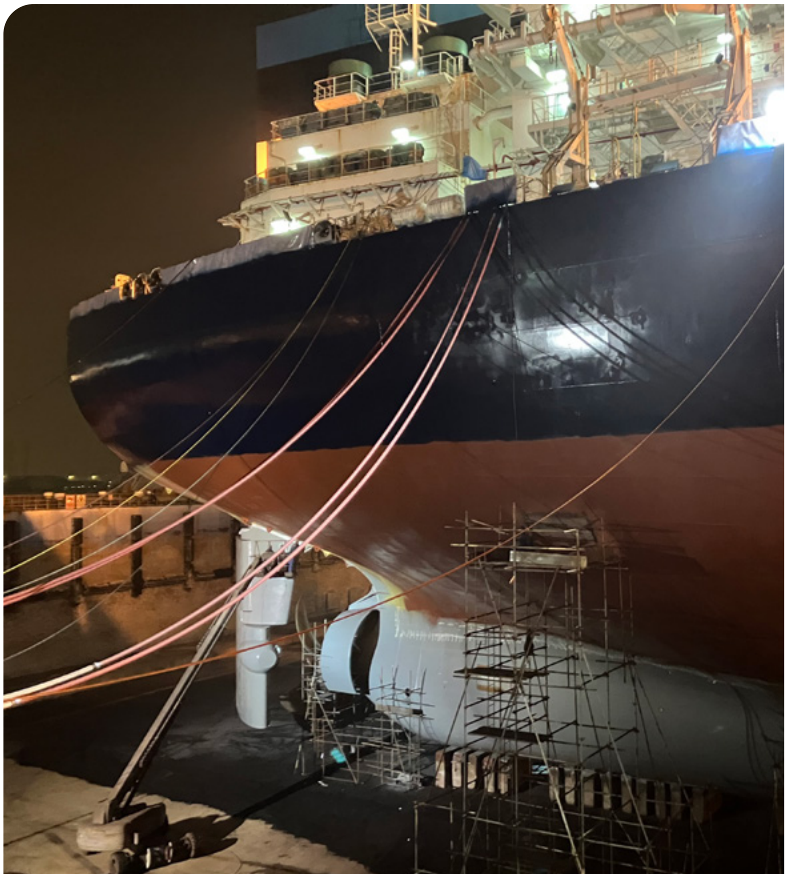
Profit for the year was USD7,398 million, an increase of five percent over USD7,026 million in 2022. Underlying EBITDA also rose five percent to USD12,686 million from USD12,089 million in 2022. Costs of materials, transportation and storage were 25 percent lower than in 2022, at USD228,057 million, reflecting the fall in commodity prices. Depreciation of right-of-use assets – mainly relating to shipping leases – increased to USD1,850 million, compared to USD1,216 million in 2022.

Impairments of fixed and financial assets totalled USD539 million, down from USD639 million a year earlier. During the year, the Group recognised impairments totalling USD257 million in relation to Nyrstar's operations in Australia and in the US, while an impairment of USD126 million was recognised against various assets and goodwill of Puma Energy. Impairments of financial assets and prepayments were USD129 million, reflecting provisions made for credit exposures.

The result from equity-accounted investees and investments was a profit of USD118 million, compared to a loss of USD42 million in 2022, mainly due to the sale of our minority interest in Tendril Ventures, while noting that the net impact of this transaction on equity was nil.

Net financing costs were USD1,622 million, slightly up from USD1,541 million. The income tax charge for the year was USD640 million compared with USD933 million in 2022, reflecting a one-off benefit from the recognition of historic tax losses and higher earnings in lower taxation jurisdictions. We expect a higher effective tax rate in the 2024 financial year.

↓ Anti-fouling silicone paint being applied to the Trafigura-owned Marlin Luanda at Qingdao Beihai shipyard in China to help reduce speed-loss and increase energy efficiency.



Balance sheet

At the end of September 2023, total assets stood at USD83,383 million, down from USD98,634 million a year earlier. Non-current assets were USD15,702 million, from USD19,433 million. This decrease was driven mainly by a reduction in the valuation of our long-term LNG contracts.

Total current assets were USD67,508 million, down from USD78,767 million, reflecting, among other factors, a sharp fall in trade and other receivables due lower average energy prices in the final quarter of the 2023 financial year. Cash and equivalents stood at USD12,387 million, down from USD14,881 million.

Due to our continued strong profitability, Group equity at the end of the period was USD16,495 million, a nine percent increase compared with USD15,079 million at the end of September 2022. Total loans and borrowings decreased by 13 percent, down to USD34,367 million.

Cashflow statement

Our robust trading performance during the year resulted in a four percent increase in operating cashflows before working capital charges to USD12,612 million, compared to USD12,125 million in 2022. We believe operating cash flow before working capital is the most reliable measure of our financial performance, because the level of working capital is predominantly driven by prevailing commodity prices and is financed under the Group's self-liquidating financing lines.

Investing activities resulted in net cash use of USD496 million, compared to USD536 million in the previous financial year. Our main investments in 2023 related to Nyrstar industrial facilities, Puma Energy retail assets network, vessels and listed equity securities including Korea Zinc and Saras. These outflows were partly offset by the receipt of the proceeds of the sale of Puma Energy's Infrastructure business to Impala Terminals Group.

Net cash used in financing activities was a net outflow of USD12,570 million. Thanks to our exceptional cash generation while working capital requirements remained stable year-on-year, we were able to decrease our use of financing lines by USD4,791 million. At the same time, we paid dividends of USD5,916 million. In accordance with our financial policy, we can announce and pay dividends subject to maintaining the Group's liquidity, equity and financial leverage at an adequate level.

Liquidity and financing

The Group further increased its access to liquidity during the 2023 financial year. Total credit lines reached USD75 billion, excluding Puma Energy, provided by a network of around 150 banks globally. As at 30 September 2023, the Group had immediate (same day) access to available cash in liquidity funds and unutilised committed corporate credit facilities of USD14.0 billion. Overall, our access to funding and liquidity position put us in a robust position should we face increased levels of market volatility.

The majority of our day-to-day trading activity is financed through uncommitted, self-liquidating trade finance facilities, while we use corporate credit facilities to finance other short-term liquidity requirements, such as margin calls or bridge financing. This funding model gives us the necessary flexibility to cope with periods of enhanced price volatility as utilisation of the trade finance facilities increases or decreases to reflect the volumes traded and underlying prices. We also maintain an active debt capital markets presence to secure longer-term finance in support of our investments.

During the 12 months ended 30 September 2023, the Group completed a number of important transactions.

In October 2022, we refinanced our Asian syndicated revolving credit facility (RCF) and term-loan facilities (TLF) at USD2.4 billion equivalent, with 28 banks participating, including three new lenders.

In March 2023, we refinanced our flagship 365-day European multi-currency syndicated revolving credit facilities totalling USD1.9 billion, while extending and increasing our USD3.5 billion three-year RCF. The new 365-day RCF was initially launched at USD1.5 billion and closed substantially oversubscribed. We structured the facilities as sustainability-linked loans, with an updated set of key performance indicators.

Also, in March 2023, we closed a USD225 million US Private Placement (USPP) across seven- and ten-year tenors. The deal was our seventh in this market following our first issuance in 2006 and was timed to refinance USD110.5 million USPP maturities.

In June 2023, we renewed our North American energy borrowing base credit facility at USD4.54 billion, which positions the Group to continue growing its market share in trading hydrocarbons, transition and renewable fuels, power and carbon credits.

During the financial year, we concluded a number of long-term financing transactions involving Export Credit Agencies (ECAs). In October 2022, we closed a USD3.0 billion four-year loan agreement guaranteed by the government of Germany through the German ECA. This loan supports a commitment by Trafigura to deliver gas to Securing Energy for Europe (SEFE) over a four-year period. In January and September 2023, we entered into a USD135 million two-year facility with Abu Dhabi Exports Office and a USD500 million three-year facility with the Saudi Export-Import Bank, respectively.

After the financial year-end, in October 2023, we entered into two RCFs, for a total combined amount of USD400 million, with insurance from the Export-Import Bank of the United States (US EXIM). These facilities will exclusively be used by Trafigura to purchase LNG cargoes from US exporters for supply to customers primarily in Europe.

Finally, in October 2023, we refinanced our Asian RCF and TLFs at USD2.7 billion equivalent, with 30 banks, including four new lenders. The new facilities comprised a 365-day USD RCF (USD620 million), a one-year CNH TLF (c. USD1,177 million equivalent) and a three-year USD TLF (USD930 million). This represented more than USD500 million in additional liquidity for the Group, thanks to the record three-year USD TLF closing amount. Similar to our previous European and Asian RCFs, we implemented a sustainability-linked loan structure in these new facilities.

Key financing milestones in FY2023:

Oct. 2022	Asian RCF refinancing	USD2,370 million
	Euler Hermes (ECA) guaranteed loan	USD3,000 million
Jan. 2023	Abu Dhabi Exports Office (ADEX) facility	USD135 million
Mar. 2023	European RCF refinancing	USD5,420 million
	US private placement	USD225 million
Jun. 2023	North American energy borrowing base	USD4,540 million
Sep. 2023	Saudi Export-Import (Saudi EXIM) Bank facility	USD500 million

Public ratings

Trafigura does not hold a corporate public credit rating. However, financial discipline is inherent to the company's business and finance model because of its reliance on debt markets for capital and liquidity.

The significant expansion of our sources of financing over the years has been achieved on the basis of the Group maintaining an acceptable and sustainable credit standing, consistent with an investment grade profile. The Group's financial discipline is reinforced by the financial covenants provided to unsecured lenders in the bank market and is underlined by the strong support we receive from our banking group and institutional investors.

Value at risk

The value at risk (VaR) metric is one of the various risk management tools that we use to monitor and limit our market risk exposure. We use an integrated VaR model which captures risk, including commodity prices, interest rates, equity prices and currency rates (see further details in Note 39).

Average market risk VaR (one-day 95%) during the 2023 financial year was USD85.1 million (0.52% of Group equity) compared to USD199.8 million (1.33% of Group equity) in FY2022. Our Executive Committee has established guidance to maintain VaR (one-day 95%) below one percent of Group equity.

Leverage and adjusted debt

As a specialist in management of physical commodity supply chains, we rely on a specific funding model. As a result, it is not appropriate to apply the same financial analysis framework to it as is used for typical industrial companies. When analysing our credit metrics, banks and investors have historically considered financial leverage after excluding some specific balance sheet items (e.g. inventories and non-recourse debt such as our securitisation programmes), resulting in the use of adjusted debt as an overall leverage metric.

Adjusted debt corresponds to the company's total non-current and current debt less cash, fully hedged readily marketable inventories (including purchased and pre-paid inventories which are being released), debt related to the Group's receivables securitisation programmes and the non-recourse portion of loans from third parties. This metric is a better measure of the Group's financial leverage than a simple gross debt metric.

In particular, the following adjustments are made:

- The receivables securitisation programmes are taken out on the basis that they are entirely distinct legal entities from Trafigura with no recourse to the Group and are only consolidated into the financial statements in accordance with the Group's accounting rules.
- Cash and short-term deposits are deducted from debt.
- Pre-sold or hedged stock, including purchased and pre-paid inventories that are being released, are deducted from debt. This reflects the great liquidity of the stock and the ease at which it could be converted to cash. As noted above, our policy is to have 100 percent of stock hedged or pre-sold at all times.
- Non-recourse invoice discounting or specific portion of loans (for example, non-recourse portions of bank lines used to extend prepayments to counterparties) are deducted from debt.

As at 30 September 2023, the ratio of adjusted debt to Group equity stood at minus 0.43x, generally in line with the level of minus 0.47x as at 30 September 2022. This limited change results from the 9 percent increase in Group equity, while the adjusted debt amount remained flat year-on-year. Our intention is to maintain this ratio up to a maximum level of 1x. Any upwards fluctuation of this ratio to 1x in the future should not be considered as a sign of any relaxation of our disciplined efforts to maintain a solid credit standing.

The Group's adjusted debt to equity ratio at the end of the reporting period is calculated as follows:

	2023 USD'M	2022 USD'M
Non-current loans and borrowings	9,314.3	9,614.5
Current loans and borrowings	25,052.8	29,663.6
Total debt	**34,367.1**	39,278.1
Adjustments		
Cash and cash equivalents	12,387.0	14,881.3
Deposits	208.7	642.0
Inventories (including purchased and pre-paid inventories)	24,617.3	23,873.6
Receivables securitisation debt	4,157.1	5,390.7
Non-recourse debt	118.0	1,607.1
Adjusted total debt	**(7,121.0)**	(7,116.6)
Group equity	**16,495.4**	15,078.6
Adjusted debt to Group equity ratio at the end of the year	**(0.43x)**	(0.47x)

Taxation

We operate in a multiple jurisdictions and adhere to applicable local and international tax law, including legislation on transfer pricing, in the countries in which we operate. The Group's tax policy is to pay appropriate tax according to work carried out in each jurisdiction, as determined by a functional analysis of operations using standard measures wherever possible, underpinned by reports prepared to fulfil local transfer pricing requirements.

Our effective tax rate – the average rate at which consolidated pre-tax profits are taxed – varies from year to year according to circumstances and, in FY2023 it was eight percent (or USD640 million) compared to 12 percent (or USD933 million) in FY2022. The reduction in FY2023 reflects a one-off benefit from the recognition of historic tax losses and higher earnings in lower tax jurisdictions. We expect a higher effective tax rate in the 2024 financial year.

Outlook

The record profitability of the Group over the past two years underlines our agility, expertise and global reach. The performance of our Gas, Power and Renewables division means we now have a strong third pillar to the business, complementing the strengths of our activities in Oil and Petroleum Products and Metals and Minerals.

We see diversity as a strategic advantage that will ensure the Group continues to thrive in the medium and long-term as structural shifts such as the energy transition play out. In the near-term, we are seeing a return to more normal market conditions as the supply chain disruptions that have characterised commodity markets linked to ease, allowing a smoother flow of goods around the world.

Therefore, we see the performance of the Group in the second half of the 2023 financial year as more representative of the result that can be expected in 2024. That being said, markets and supply chains remain fragile and prone to sudden bouts of turbulence linked to heightened geopolitical tensions, low stock levels and weak elasticity of supply. Our reach, strong balance sheet and access to liquidity mean we are well positioned to serve our customers whatever conditions prevail.

Perception and reality

Macro fears overwhelm micro fundamentals in commodity markets.

Saad Rahim
Chief Economist

“Demand for commodities might have been expected to wane. In fact, we have seen consumption climb to record highs across several markets.”

Rarely have markets seen a gap this wide between sentiment and reality. Consumer confidence globally remains at multi-year lows, with some surveys at levels even below the peak COVID-19 months. Investor sentiment has been more mixed, depending more on the asset class and geography, but sentiment with regard to commodity markets has remained subdued over the course of the year. Economic growth, however, has been more robust than expected, leading to stronger demand for commodities than prices suggested for most of our financial year.

At the beginning of October 2022, expectations were for recessions in the US[1] and Europe to occur within 12 months. Inflation metrics were still at or near peaks in Europe and the US respectively, and central banks had only just started the interest rate hike cycle. China was still in the throes of COVID-19 lockdowns, with an uncertain recovery path ahead, particularly with regards to its property sector.

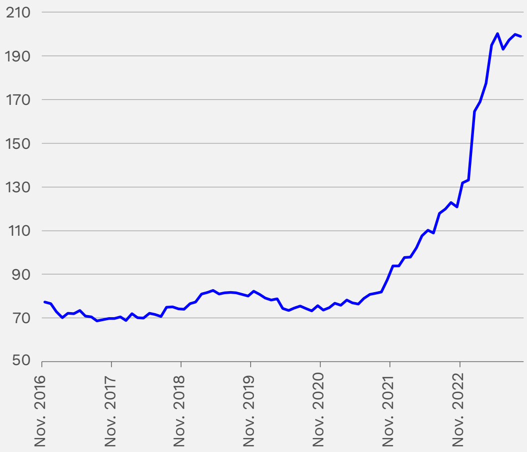
And at times over the past year, it seemed these fears were justified. European industrial production contracted sharply, with activity in Germany falling back to COVID-19-level lows, as still-elevated energy costs took their toll on heavy industry. China’s property market was markedly worse than in 2022, despite hopes for a post-lockdown rebound. And the US experienced three of the four largest bank failures in its history, while its housing sector went into stasis due to high interest rates.

Given those headwinds, demand for commodities might have been expected to wane. In fact, we have seen consumption climb to record highs across several markets. Oil demand is expected to record growth of over 2.3 million barrels a day according to the International Energy Agency, reaching a new all-time high of approximately 102 million barrels a day in 2023. Copper demand, globally, is forecast to rise by just under four percent year-on-year, in 2023 driven by 6.5 percent growth in China.

1 Source: Bloomberg Economics, *Bloomberg Economics Probability of a Recession in the next 12 months*

US construction and manufacturing sector

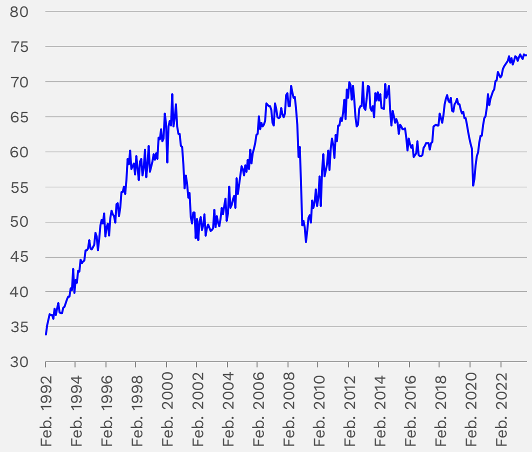
Stated in billion USD



Source: US Census Bureau

US capital goods new orders, excluding aircraft

Stated in billion USD



Source: US Census Bureau

These increases reflect the fact that economic growth held up quite well over the year. This was especially true in the US, which not only avoided the widely predicted recession but recorded GDP growth of more than five percent in Q3 2023 one of the strongest quarters of growth since the 2008 Financial Crisis.

A big part of the reason for the strength in the US is down to post-Financial Crisis and pre-COVID-19 periods. They significantly reduced debt and locked in low rates for the remainder of their loans. So, even where consumers have materially higher credit balances, their household financial obligations[2] remain at the lowest levels in over 30 years.

And while there has been significant debate on whether 'excess savings' from the pandemic have been exhausted, other key metrics show that the US consumer is retaining significant spending firepower. For example, cash holdings remain above USD4 trillion (compared to USD1 trillion average pre-pandemic)[3]; while overall household net worth is up USD37.5 trillion since 2019. All this explains why US retail sales alone are topping USD700 billion a month, close to a 40 percent increase versus 2019 levels (22 percent in real terms).

US corporate spending and investment have also risen, driven by decades of under-investment and the impacts of measures such as the Inflation Reduction Act and CHIPS Act.

The combination of higher spending across consumer and corporate sectors means that despite a rapid rise in interest rates, US growth has continued to hold up at an above-trend level.

Europe in contrast has struggled over the past year. Inflationary pressures remained higher for longer, and the European Central Bank's rate hikes have had a greater impact on consumers and businesses, which have less of a cash buffer than their US counterparts. As a result of higher energy costs, industrial production fell back to the lowest levels (ex-COVID-19) since late 2017. Services have held up much better, but there too there were signs of weakness during the summer months, with France the laggard in this instance.

China's economic health this year has been a conundrum for markets. The year began with high expectations that the reopening from the COVID-19 lockdowns of 2022 would result in strong demand growth across sectors, including the beleaguered property sector. That proved to be false hope, as residential sales fell a further 20 percent year-on-year, following the 2022 drop of 25 percent. More developer bankruptcies resulted, ensnaring even some of China's biggest developers.

Property remains a key component of China's economy as the primary driver of both wealth generation and consumer and investor sentiment. Therefore, for the investor community at large, such a weak property picture could only mean that China as a whole was experiencing very weak growth.

But while the property sector has undeniably been a major drag on growth, viewing China solely through this lens overlooks a profound shift underway in the composition of its economy.

2 Sum of all debt service payments and financial obligations (mortgage, credit cards, auto loans) relative to disposable personal income (https://www.federalreserve.gov/releases/housedebt/default.htm ↗)

3 Federal Reserve Financial Accounts Data, *US FOF Balance Sheet of Households Checkable Deposits & Currency,* June 2023

Since accession to the World Trade Organisation (WTO), China's growth has been driven primarily by building manufacturing facilities, infrastructure and property. That came at the expense of household consumption, which fell from about 48 percent of GDP pre-WTO to only about 37 percent pre-pandemic (compared to 68 percent in the US).

The government's goal now is to boost household consumption, creating a more durable base for long-term growth. To do so, household incomes will have to rise; this in turn requires moving into higher-value sectors. While technology had been one promising sector, the emphasis has now turned to renewable power, batteries and electric vehicles.

The impact on those sectors globally has been seismic. China's domestic solar panel installations jumped to 250GW this year and close to 90 percent of panels used to install the remaining 300GW of 550GW of global installations came from China.

Chinese electric vehicle production rose 43 percent, with exports of electric vehicles rising 80 percent year-on-year and taking light vehicle production of all types up by six percent and exports up by 73 percent. China is now well on its way to becoming the largest exporter of vehicles, overtaking Japan. In addition, China also controls close to 90 percent of the midstream battery supply chain, with the result that batteries have the export category that has seen the largest annual dollar increase this year.

The implications for commodity markets have been clear but underappreciated nonetheless by investors.

Take copper for example: the weakness in Chinese construction activity means copper demand from that sector is down almost 600,000 tonnes since 2021. But the growth in renewables, electric vehicles (both of which are much more copper intensive) and electrical grid spending mean that copper demand from those segments has increased by 1.4 million tonnes. In fact, copper demand in China in calendar year 2023 is set to grow by 6.5 percent. Aluminium and zinc demand were also bolstered due to demand from new growth sectors

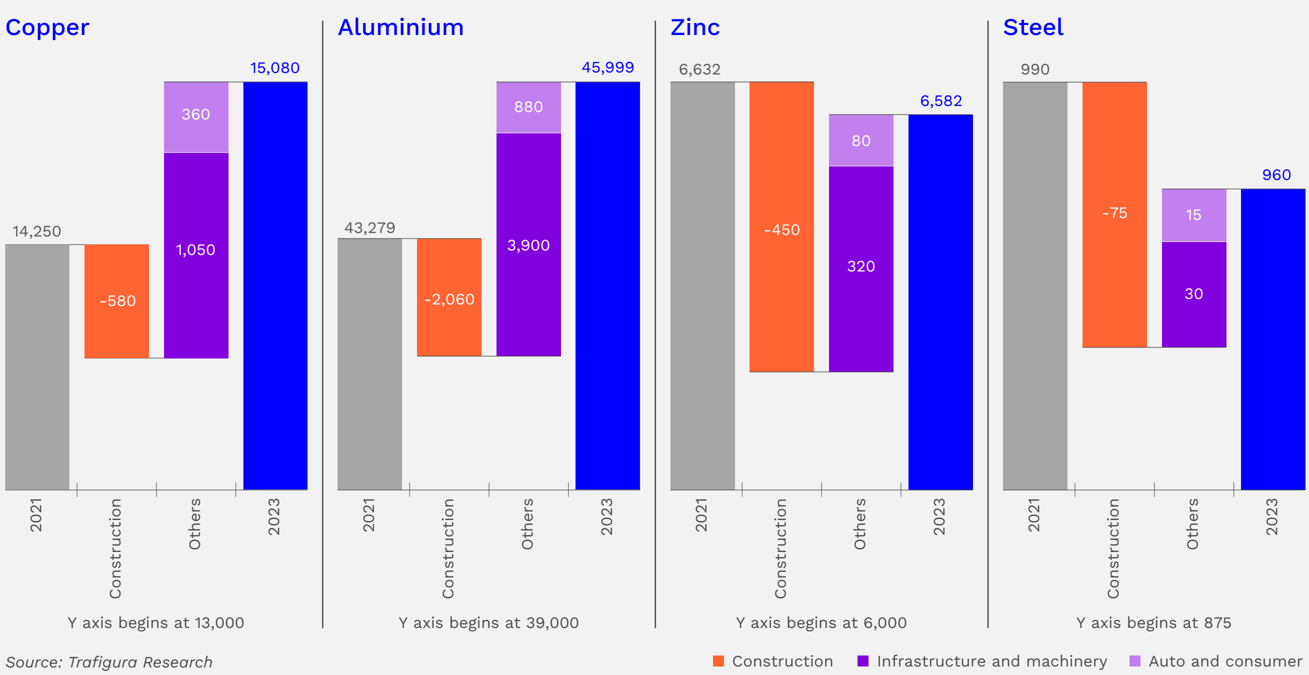
And yet the persistent market narrative has been that Chinese demand is weak.

It was a similar story for the Chinese oil market. While Chinese manufacturing has been generally weak for most of the year, affecting diesel and petrochemical demand, services have been relatively strong. Domestic air travel reached 120 percent of pre-pandemic peaks for most of the year, and road traffic surpassed 2019 levels by some distance. Consequently, gasoline and jet demand increased, pushing total oil demand up by well over 1.2 million barrels a day.

Commodity prices did not reflect this underlying strength. Brent crude started our fiscal year at about USD90 per barrel and was heading toward USD100 before plummeting 25 percent in a month by the end of December 2022. Prices then traded in a range of USD75-USD85 per barrel before a breakout higher in September 2023. This was despite OPEC+ production cuts, strong Chinese crude runs, inefficiencies due to the price cap, and inventories ex-China at levels well below recent years.

Changes in metal consumption in China, 2021-2023

Stated in kmt, except steel in mmt



Source: *Trafigura Research*

In copper, inventories did build much more than normal heading into Chinese New Year but then started to draw much earlier and more sharply, bringing stocks below even last year's record-low levels. And yet prices declined, falling from USD9,500 per tonne at the start of the year, to USD8,500-USD9,000 per tonne, and then to USD8,000-USD8,500 per tonne as the year wore on.

In our view, persistent macro-headwinds, either real or perceived, have been the critical driver for commodity prices in many markets regardless of fundamentals.

Expectations of weakening demand due to an impending recession caused by high interest rates meant that commodity prices found no support from falling inventories, supply disruptions and changing demand drivers.

Foreign exchange rates and interest rates also played a material part in commodity price dynamics over the fiscal year.

As interest rates continued to rise from near-zero levels, fears of over-tightening and a so-called hard landing led to a deeper inversion of the yield curve, widely seen as a harbinger of a recession.

The US Dollar did not benefit as much from higher rates as it did in our previous fiscal year when the US Dollar Index reached a 20-year high of 114, but it did remain at levels that were much higher than any seen since 2002.

As our fiscal year concluded, the macro narrative seems to have changed. Markets are now more concerned about when the first-rate cuts from major central banks will start. And with inflation metrics materially lower, it looks like the macro headwinds of the past few years might be reversing.

Of course, it is still possible that we will see the delayed impacts of existing rate increases, which normally take some time to filter through into tightening financial conditions and reduced economic growth. But if inflation is indeed sustainably lower, central banks can start considering reversing the rate hikes and loosening financial conditions, which should boost growth.

The flip side is that unless we see unexpectedly strong demand growth next year, prices might struggle to absorb increased supplies in some commodity markets. For example, oil markets should see further non-OPEC supply growth in 2024, as Guyana, Brazil, Canada and the US all continue to add barrels as well as incremental supplies elsewhere. In copper, we expect increased smelter capacity additions, primarily from China, leaving the refined copper market in surplus. Higher production, new terminals, ample inventories, structurally warmer weather and lower industrial demand mean gas markets might also struggle.

But other markets will see the opposite: in copper concentrates output continues to lag demand, led by the recent closure of First Quantum's Cobre Panama mine, resulting in large deficits that are likely to necessitate smelter curtailments.

Looking forward, we expect to see further progress on the journey to a low-carbon economy.

Our research indicates that renewables are being built at a much more rapid pace than almost any estimates; global renewable power capacity will shortly be larger than thermal capacity for the first time ever, albeit with lower utilisation rates and thus output. Solar capacity alone will surpass thermal generation within the next two years.

Nonetheless, our view is that demand for natural gas will also continue to grow. We expect gas to remain a key part of the energy mix for many years, as a source of reliable baseload power, given the lack of battery storage and the intermittency of renewable energy.

Electric vehicle adoption is moving much more quickly than forecast in China and Europe. On the other hand, US auto manufacturers have recently cut back investment plans in response to slower consumer uptake.

But taken together, this suggests that metals demand from renewables, electrification and electric vehicle sales will rise sharply in coming years.

We also expect oil demand to continue to grow until around 2030, when we should see demand peak and plateau, reflecting reduced demand for mobility and energy, but continued pull from the petrochemicals sector.

As such, we remain well-positioned to supply the commodities the world needs as it moves forward with this momentous transformation of the global energy system.

Oil and Petroleum Products

Another strong performance as the market returns to more normal conditions.

263.7mmt
Total volume traded
(2022: 277.6mmt*)

5.5m
Average barrels traded per day
(2022: 5.7m*)

Oil and Petroleum Products volumes traded (mmt)

	2023	2022
Biofuels	1.0	0.7
Bitumen	1.8	2.0
Condensates	2.4	2.0
Crude oil	136.4	149.0
Fuel oil	31.9	36.7
Gasoline	23.9	24.4
Liquid petroleum gas (LPG)	9.4	7.8
Middle distillates	39.9	41.4
Naphtha	17.0	13.6
Total	**263.7**	**277.6**

* For FY2023, natural gas and liquefied natural gas (LNG) traded volumes are reported separately in the Gas, Power and Renewables section on page 20. Total volumes traded per annum and average barrels traded per day for FY2022 have been adjusted to give a like-for-like comparison. Total average barrels traded per day including natural gas and LNG is 6.3 million.

Performance overview

It was another strong year for the Oil and Petroleum Products division as we continued to focus on supplying our customers with cargoes as efficiently as possible in unpredictable markets.

What was particularly pleasing was that all of our teams, from crude oil to gasoline, naphtha to distillates and fuel oil to LPG, contributed positively to our results. In particular, we grew our share of markets such as petrochemicals, where demand for products such as naphtha continues to increase.

Integral to our strong performance was close collaboration with our Shipping and Chartering division. By working closely with the Wet Freight team, we were able to successfully navigate the challenges presented by the emergence of the 'shadow fleet', which transports Russian oil and has disrupted the global shipping market.

Our volumes were broadly flat year-on-year as we replaced the Russian crude oil we no longer lift under long-term contracts with new sources of supply.

A highlight of the year was completing an exclusive supply and marketing deal with ISAB, one of the largest refineries in Europe.

Looking forward, we expect crude and product markets to remain highly uncertain because of the conflict in the Middle East, the ongoing war in Ukraine and the impact of the energy transition on fuel demand.

Oil continues to be an essential part of the global energy mix and will play an important role in the future, supporting demand during the global shift to a low-carbon economy.

As one of the world's largest independent commodity companies, we will continue to play our part in moving crude oil and petroleum products to consumers around the world – safely, reliably and efficiently.

Ben Luckock
Head of Oil

← In FY2023, we secured a deal to provide crude oil to the ISAB refinery in Sicily, Italy and to market its refined products via our global customer base.

Crude oil

Following the extreme volatility of prior financial year, the global crude oil market returned to more normal conditions in 2023 as supply chains were reconfigured and new trade flows established.

Active market management by OPEC and its allies helped keep the market broadly in balance. As a result, prices traded in a relatively narrow range, climbing briefly above USD95 a barrel after Saudi Arabia and Russia extended voluntary output cuts at the end of the financial year.

Against this backdrop, our Crude Oil team recorded solid results, despite relatively flat volumes compared to the same period in FY2022.

During the year, we consolidated our position in the US export market, supporting the introduction of US Midland West Texas Intermediate to the benchmark assessment for Brent, the global crude oil standard.

We also announced an exclusive long-term agreement to supply the ISAB refinery in Italy with crude oil, helping its new owners to run a wider slate of feedstocks and to improve margins. This transaction, which leverages our global marketing reach and shipping expertise, is a good example of the supply chain solutions we can provide for our customers.

Looking into 2024, the market is likely to become unsettled because of rising geopolitical tensions and tighter financial conditions. However, our Crude Oil team is well positioned to tackle further disruptions and manage any subsequent volatility that may arise.

Gasoline

Our Gasoline team had another strong year, expanding its European business and adapting to changing market dynamics as prices returned to more normal levels following the volatility seen in 2022.

A shortage of high-quality blending components underpinned prices over the summer months as demand weakened following the decision by Nigeria to scrap its fuel subsidy.

Alongside North America and west Africa, Nigeria is one of the top destinations for European gasoline exports. The commissioning of the large Dangote Refinery on the outskirts of Lagos will reshape trade flows in the Atlantic basin in the year ahead. We are well positioned to help our customers manage these changes.

Volatility is expected to remain elevated with both the Russia and Middle Eastern conflicts distorting relevant trade flows.

With macro headlines and government policies in flux and continuing to provide uncertainty, our strategy will be to remain nimble and to react as quickly as possible to any supply chain disruptions that may arise.

In the financial year ahead, we expect a more challenging gasoline market because of the return of many of the smaller companies who were forced to step back from the industry because of vastly increased margin funding requirements after Russia's invasion of Ukraine.

Going forward, a key focus for our Gasoline team will be continuing to grow our customer base and logistics footprint.

↑ A TFG Marine fuel bunkering operation in Singapore.

Naphtha and condensates

Geopolitics were a primary driver of market movements in 2023 as the EU embargoes on Russian products and other applicable sanctions caused significant adjustments to global trade flows.

At the same time, the petrochemical industry was weighed down by weak margins and overcapacity after the commissioning of new world-scale ethylene cracking facilities in Asia and the US. This led to naphtha oversupply while facility operating rates declined globally, most notably in Europe, which struggled with relatively high energy costs on a comparative basis.

The result was a weak market and naphtha was repriced to a level where a lot more of it could be used in gasoline blending.

Our Naphtha and Condensates team reacted quickly to these shifting flows to post strong results using our footprint, storage and shipping capacity to help balance supply and demand. Our global scale and network continue to give us the ability to work with customers to adapt to market dynamics and source product at competitive levels.

We expect the year ahead to remain volatile but maintain a level of cautious optimism based on improving conditions in petrochemicals as industry overcapacity is slowly reduced.

Fuel oil and bitumen

Following the disruptions and market volatility caused by COVID-19 and the outbreak of the war in Ukraine, the fuel oil market showed signs of returning to more stable conditions in the second half of FY2023.

Notably, the pressures caused by hedging difficulties and rising costs of finance, which forced some companies to reduce their operations and trading volumes, eased during this period. This created a much more competitive marketplace. This is particularly the case with fuel oil, where the number of tradeable barrels declined significantly, with most Russian volumes either sanctioned or shifted into the control of new entrants into the market.

Margins for refiners remained high for most of the year because of OPEC supply cuts led by Saudi Arabia. Feedstock demand was healthy for much of the year which we believe was a result of the reduction in OPEC-produced heavy sour crude oil. This in turn led to a reduction of fuel oil production coinciding with an increased appetite for heavy fuels as an alternative to crude oil. We saw a strong high-sulphur fuel oil market throughout the summer months of 2023, with elevated spreads between crude oil and wholesale petroleum products, and good utility-led demand into the Middle East. Very low sulphur fuel oil (VLSFO) was volatile as the world started to get used to intermittent supply from the Al Zour Refinery in Kuwait.

Against this backdrop, our Fuel Oil team performed well, expanding its bunkering footprint through TFG Marine, our bunkering joint venture with shipping companies Frontline and Golden Ocean. In FY2023, we continued to expand our feedstock business globally. We also further expanded our base oil business, now trading this commodity in more than 25 countries around the world.

Looking ahead, a major focus for the Fuel Oil team will be the growth of exports from new large-scale processing facilities in the Middle East and west Africa, which have the potential to reshape trade flows. Thanks to our global reach and relationship with TFG Marine, the Fuel Oil team is well placed to adapt to changing market dynamics and to deliver excellent results for our customers.

In bitumen, our performance was good despite significant headwinds. Demand was strong in the first half of the year but much weaker in the second as rising inflation forced governments to reduce spending on infrastructure projects. However the Bitumen team was able to react quickly to these changing market dynamics using our infrastructure and fleet of bitumen carriers. In 2024, we expect prices to remain volatile. Nevertheless, we are very well positioned to offer our customers reliable supply and expand our bitumen asset base in the years ahead.

Distillates and biofuels

As Russia searched for new outlets for its petroleum products, principally in India and China, and the West looked for new sources of supply, there was a reconfiguration of long-established trade routes. The market also witnessed the emergence of new participants operating outside of sanction-compliant countries.

It was another volatile year and few markets were more affected than European diesel, but despite the challenges we enjoyed strong growth across the region. France and Germany were key drivers in northwest Europe, while our exclusive supply and offtake agreement with the ISAB refinery in Italy not only highlighted our ability to offer tailored solutions but also provided a platform for growth in the Mediterranean.

Our global jet business enjoyed a strong year as we continued to expand our cargo trading activity and integrated our aviation business into the wider Group business model. Biofuels also posted strong growth as we expanded our footprint in feedstock markets.

While volume growth was a key strategy in FY2023, it was also critical that we maintained our vigilance, particularly in emerging markets that were grappling with high interest rates and currency volatility.

Looking ahead, we expect to see continued levels of heightened volatility in 2024 as new refinery start-ups and macroeconomic headwinds clash with geopolitical risk and low global inventory levels.

Liquefied petroleum gas and ammonia

Our LPG and Ammonia team delivered another strong performance in FY2023, helping to balance the global market by ensuring the efficient flow of volumes between regions.

In FY2023, we registered record LPG exports from the US. We have built a significant presence in this market by connecting a large number of small-scale producers to export markets through the domestic rail network and our Sawtooth Caverns storage joint venture.

The year was also characterised by a tight freight market. This was triggered to a large extent by a severe drought in Panama, which led to unusually long delays and restrictions along one of the world's most important trading routes. Drawing on the strength of our shipping business, we were able to avoid the worst of the disruption to trade passing through the Panama Canal.

In China, new propane dehydrogenation plants, which produce propylene for the petrochemicals industry, played a key role in increasing flows from the US to Asia. We see a broadly balanced LPG market in 2024, albeit one that is sensitive to changes in demand from China, where margins in the petrochemicals industry remain under pressure.

Elsewhere, we continued to expand our ammonia business. This came against the backdrop of a volatile market as high gas prices forced the closure of several production facilities in Europe, disrupting inter-regional trade. We also increased our ethane trading volumes.

A key focus for the LPG and Ammonia team going forward will be the introduction of ammonia-fuelled engines for maritime vessels. We see ammonia playing a key role in the decarbonisation of the shipping industry, as a low-emission alternative to bunker fuel. However, we believe its full potential will not be realised without a carbon tax to address the price gap that exists between the two fuels.

↓ LPG collection and export terminal in New Jersey on the US East Coast.

Gas, Power and Renewables

A strong year for our newly established division amid shifting market dynamics.

23.9mmt
Total volume natural gas traded
(2022: 23.7mmt)

11.2mmt
Total volume LNG traded
(2022: 13.0mmt)

Gas volumes traded (mmt)	2023	2022
Natural gas	23.9	23.7
LNG	11.2	13.0
Total	35.1	36.7

Performance overview

Over the year, we worked hard to achieve closer cooperation between our Gas and Power teams as the new division expanded its footprint in Europe and North America.

Among the highlights of 2023 was a ground-breaking deal to supply significant amounts of natural gas to Germany's national importer. When the agreement was signed in October 2022, it was worth more than USD12 billion at market prices.

The deal, which is backed by a government guaranteed loan, shows how the public and private sectors can work together to ensure security of supply and strengthen supply chains. It is also a powerful endorsement of Trafigura and our role as a reliable supplier of vital natural resources.

Meanwhile, we made further progress on our new power trading hub in Copenhagen and continued to build our presence in the US natural gas market. We also struck our first biomethane deal, working in close collaboration with our Biofuels team.

The performance of our Power Trading division was also of note. From a standing start three years ago, we are now an established participant in the physical power market, offering a range of services from renewable power purchase agreements to battery storage.

In carbon credits trading, we were active in both compliance and voluntary markets, with a particular emphasis on Europe, Australia, New Zealand and the US. At the same time, Agora, the supply chain emissions tracking platform we co-developed, extended its offering to include energy supply chains, in addition to metals and minerals. Understanding the carbon intensity of upstream oil production enables consumers to make more informed decisions about the barrels they are buying.

In green hydrogen, we continued to work toward final investment decisions at our planned flagship projects in Denmark and Wales.

Looking ahead, although 2023 brought a gradual softening of gas and power prices in Europe on the back of a mild winter, lower demand and increased LNG imports, we expect markets to remain turbulent and prone to spikes in 2024.

Our focus will remain on further integrating our activity in trading new fuels in new markets around the world and on helping our clients navigate volatility.

Richard Holtum
Head of Gas, Power and Renewables

← A long-term offtake agreement with US LNG producer Cheniere Energy adds an important source of gas to our growing supply portfolio.

Natural gas and LNG

FY2023 was characterised by fundamental changes in the way gas flowed across Europe due to the lack of Russian supply and the region's newfound dependence on liquefied natural gas (LNG).

Higher LNG imports from the US, Asia and Middle East combined with increased pipeline supplies from Africa, Azerbaijan and Norway resulted in a complete change of trade flows in Europe, which for the past 70 years have predominately flowed from east to west. This led to wide differentials in prices at key delivery points.

Against this backdrop, our strategy of building a pan-European flexible portfolio with a strong focus on storage and pipeline capacity paid dividends with our European business reporting strong results.

We expanded into markets that have previously been dependent on Russian gas, including Slovakia, Hungary, Czechia and Austria. Trafigura was one of the few companies to inject gas into Ukraine storage as EU storage approached capacity.

In the US, we continued to focus on exports by using our pipeline transportation network to carry gas from the Permian and Eagle Ford Basins to the Gulf Coast and Mexico markets. In the coming years, this is a business we expect to grow as global gas markets become more interconnected.

US natural gas prices fell substantially at the start of the year and subsequently traded in a narrow range near USD3 per million British Thermal Units (Btu) reflecting a mild winter, relatively robust supply and high storage levels.

This was in marked contrast to Europe, where prices remained volatile. After spiking to more than EUR300 per megawatt hour in the summer of 2022, prices eased as a mild autumn delayed the start of the heating season and storage sites filled up.

As it became clear that Europe would avoid a winter gas crisis, prices continued to retreat and by the spring were at the lowest level since the build up to the war in Ukraine.

However, the market remained volatile as highlighted during the summer when concerns about supply disruptions in Australia triggered a surge in prices.

In LNG, our services remained in high demand throughout the year. We brought cargoes to Europe when they were needed and diverted them away when storage was nearing capacity. In Asia, we continued to be a reliable supplier for traditional demand centres and new locations.

Our ability to adjust to changing market conditions during the year owes much to our strong presence in shipping and the close collaboration between our LNG and Natural gas teams.

Looking forward, we expect gas prices in Europe to remain unstable until a wave of new LNG projects come on stream later in the decade. Until then, Europe will have to compete with Asia for LNG cargoes. Our strategy will be to remain agile and respond to changing customers' needs by drawing on the size and scale of our operations and our integrated approach.

↑ A photovoltaic facility at Nyrstar's Budel site in the Netherlands.

Power trading

European power prices started FY2023 at near-record levels, at more than EUR250 per megawatt hour, as a result of high gas prices, which in turn reflected a risk premium for possible supply disruptions.

A particularly mild winter, meant that supply disruptions did not materialise and prices started to slowly deflate. Lower demand from industrial consumers added further downward pressure and prices were rangebound for most of the summer.

On the other side of the Atlantic, there were several weather events: a deep freeze in the Pacific Northwest, Storm Elliott on the East Coast over Christmas and record high summer temperatures in Texas. These events led to spikes in power prices in the respective regions.

We expect volatility of short-term prices to remain a feature of power markets in Europe and the US as both the supply and demand of electricity are becoming increasingly weather dependent. We are positioning the Power business so that our teams can quickly respond to these dynamics.

Overall, the Power team had a successful year, recording strong results as we successfully managed to navigate price movements in Europe and the US.

We completed a number of transactions during the year, including a tolling agreement with the developer of a European battery storage project and several offtake deals with power plants.

Trading volumes were up year-on-year as we added new products, and extended our geographic reach. We expanded our origination team through a number of new hires. We also continued to develop intraday capabilities at our 24/7 trading desk in Denmark.

Moving forward, we expect power markets in Europe and the US to remain volatile as more renewable energy projects come onstream and thermal power generation is retired. As such, our strategy will be focused on securing flexible generation and infrastructure, so that we can help our clients manage volatility and the challenges associated with intermittency, and on helping connect renewable generation plants to customers looking for low carbon energy supply.

Renewable investments

In 2019, the Group established an internal venture capital fund to invest in start-up companies and projects developing alternative and renewable energy technologies.

The focus of our investment strategy is threefold: to gain access to experienced teams and intellectual property in early stage companies working in sustainable energy and technologies; to support the conversion of their intellectual property into viable development projects; and, ultimately, to help develop new markets and business opportunities.

Since launching the fund, we have built an extensive understanding of low-carbon fuels, including ammonia, methanol, ethanol and sustainable aviation fuel.

To date, our Energy Transition Group has made 11 investments in start-ups that are developing technologies and business models targeting the decarbonisation of large, hard-to-abate sectors.

In 2023, we invested in two companies: Zero Emission Industries, a hydrogen technology company focused on the maritime industry, and OXCCU, a climate technology spin-out from the University of Oxford that is working to commercialise a technology that can produce sustainable aviation fuel from carbon dioxide and hydrogen.

Both of these investments highlight our commitment to investing in and helping incubate businesses and technologies that complement our commercial activities and energy transition strategy.

During the year, we worked hard to support our existing portfolio companies and help them deal with the challenges presented by rising inflation and higher interest rates. This was highlighted by the two top-up investments we made in 2023: in Daphne Technology, an emissions capture start-up developing technology to measure and reduce greenhouse gas emissions from industrial and maritime sources, and in OneH2, a hydrogen production company supplying customers across the US.

In May, we published a new whitepaper on low-emissions fuel supply for shipping. The publication focused on the vital role that hydrogen-based fuels will play in decarbonising shipping and the enormous potential for countries in the Global South to produce green ammonia and green methanol to satisfy growing global demand.

Areas of focus

Hydrogen and H_2-based fuels

Exploring opportunities in early stage adoption of hydrogen and project development

H2energy Europe

HY2GEN AG

ONEH2

C|ZERO

ZERO EMISSION INDUSTRIES

Long-duration storage

Exploring market gap opportunity in deployable, non-geologically constrained, competitive energy storage solutions

Quidnet Energy

MALTA

Bboxx

Carbon capture and utilisation schemes

Exploring emission capture in key sectors and utilisation pathways and monetisation for CO_2

LanzaTech

DAPHNE TECHNOLOGY

OXCCU

↑ An artist's impression of the proposed H2 Energy Europe 1GW renewable hydrogen plant in Esbjerg, Denmark.

H2 Energy Europe

Green hydrogen is a clean-burning alternative to traditional fossil fuels which we believe has the potential to support the decarbonisation of several hard-to-abate industries, including shipping, long-distance trucking cement and steelmaking.

Through H2 Energy Europe, our joint venture with Zurich-based company H2 Energy, we have been developing two renewable hydrogen projects: a 20-megawatt hydrogen production facility within the port of Milford Haven, Wales; and a one gigawatt product plant in Esbjerg, Denmark.

During the year we took the decision to increase our shareholding in H2 Energy Europe and become the majority owner of the company, as we move toward final investment decisions on both projects in 2024.

We selected COWI, an engineering and architecture consultancy, to produce the front-end engineering design for the production plant at Esbjerg and submitted a formal planning application for the Milford Haven project, which will produce hydrogen for use as a chemical feedstock and in shipping.

The Milford Haven project has already been shortlisted for funding from the UK government, as part of the UK's aim to develop up to 10 gigawatts of low-carbon hydrogen by 2030.

At Esbjerg, the proposed production plant will use renewable energy generated by offshore wind to produce green hydrogen for industrial use and for heavy-duty transportation.

At full capacity, the plant will be capable of producing up to 100,000 tonnes of green hydrogen a year, which we envisage will be delivered to northwestern Europe (primarily Germany) via pipeline.

Carbon trading

The Carbon Trading team was active across both compliance and voluntary carbon offset markets in 2023 helping our customers meet their compliance obligations and low-carbon objectives.

We continued to work hard on expanding our portfolio of carbon removal projects including our investment in Brújula Verde, a landscape restoration project on degraded lands in Colombia.

The planting of 12 million eucalyptus trees began at Brújula Verde, where we have engaged best-in-class partners to provide digital monitoring and verification and e-DNA biodiversity tracking, and to carry out a trial of native species.

Meanwhile, the use of Agora, the supply chain carbon emissions tracking and analysis platform we developed with US technology company Palantir, continued to grow. Its services are now available to the energy sector and are already being used by oil producers BP and Ecopetrol.

During the year, compliance markets continued to grow in number and scope. Indonesia and the US state of Washington launched domestic schemes, while several jurisdictions announced plans to either expand the scope of existing schemes or to adopt new ones.

In Mexico, the government is preparing to start the operational phase of its emissions trading scheme in 2024. In Europe, the EU has formally adopted a broad set of laws related to its Fit for 55 package of measures to cut carbon emissions. This includes the reform of the current EU emissions trading scheme and the expansion to the scheme to the maritime industry.

We are already working with shipowners to help them understand and meet their obligations in Europe. The EU has also agreed to launch an expanded emissions trading scheme (ETS2) in 2027 to cover emissions from buildings and road transport.

Overall, the share of global greenhouse gas emissions covered by a carbon price is set to grow further. The implementation of national carbon schemes has been proposed in Brazil, Chile, India, Japan, Malaysia, Thailand, Turkey and Vietnam.

The year also witnessed further development of Article 6 of the Paris Agreement, which allows countries to trade mitigation outcomes to achieve their climate action goals.

With the first transactions already occurring, the mechanism is on track to be fully operational in the next few years, a development that will help underpin and support global carbon markets.

Progress on Article 6 of the Paris Agreement comes in time for the launch of the first phase of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), the aviation industry's flagship carbon offsetting system. From 1 January 2024, eligible carbon credits under this scheme are required to be aligned with Paris Agreement criteria.

It was a challenging year for voluntary carbon markets where there was an increased focus on the climate credentials of so-called REDD+ projects, which focus on reducing emissions from deforestation and forest degradation in developing countries.

However, progress was made in ensuring the integrity of carbon credits through the launch of the Core Carbon Principles benchmark and assessment framework.

In FY2023, the EU launched a transitional phase of the Carbon Border Adjustment Mechanism, which requires importers to report the embedded emissions of certain carbon-intensive goods.

Also during the year, two climate laws were passed in California that define a corporate climate disclosure rule and require companies to report their carbon emissions and climate-related financial risks.

For the year ahead, the focus for the Carbon Trading team will be on strengthening its presence in established markets and expanding its offerings to the Americas.

↓ The Brújula Verde project, located in Orinoco region, Vichada, Colombia, will see the planting of 12 million trees across 10,000 hectares in its first phase, with the possibility of expanding the footprint to 30,000 hectares. The project has the potential to absorb up to 45 million tonnes of CO_2e over its lifetime.

Metals, Minerals and Bulk Commodities

A strong underlying performance as demand for energy transition metals grows.

21.0mmt
Total volume non-ferrous concentrates and refined metals traded
(2022: 23.3mmt)

89.9mmt
Total volume bulk minerals traded
(2022: 91.3mmt)

Volumes traded (mmt)	2023	2022
Non-ferrous concentrates and refined metals	21.0	23.3
Bulk minerals	89.9	91.3
Total	110.9	114.6

Performance overview

The most interesting trend of the year in metals markets was the strength of China's metal consumption in spite of the well-publicised problems in the country's property sector.

Renewable energy demand has taken up the growth mantle in China, which is now a major exporter of solar panels, electric vehicles and the batteries that power them.

As other countries seek to increase their renewable energy and battery manufacturing capacity, this sets the scene for supply-demand balances in metals to tighten – in some cases dramatically from 2026 onwards – as years of underinvestment in new mining projects start to take effect. We expect to play a key role in supplying the metals the world needs to meet this demand.

The Metals, Minerals and Bulk Commodities divisions recorded a strong underlying trading performance in FY2023, notwithstanding one-off exceptional charges in relation to the major loss from a fraudulent nickel scheme against Trafigura as well as impairments to certain Nyrstar operations, currently included within this divisional result.

In metals, a highlight of 2023 was a long-term deal to supply up to 500,000 tonnes of non-ferrous metals to Germany. To support this agreement, we raised USD800 million from a consortium of banks backed by a credit guarantee from Germany's Export Credit Agency.

In bulk minerals, it was another strong year in both coal and iron ore with our teams quick to respond to changing customer requirements and trade flows. Going forward, a key focus for our Iron ore and Coking coal teams will be India, where steel demand is tipped to grow strongly because of rising infrastructure investment.

Shortly after the end of our financial year, we announced an investment in Korea Zinc with a view to developing a new state-of-the-art nickel refinery in South Korea to produce a range of feedstocks for the rechargeable battery market.

Looking forward, we expect metals and minerals prices to be highly sensitive to macroeconomic factors in 2024, in particular the outlook for US interest rates. At the same time, we believe energy demand from the energy transition will continue to rise, helped by strong support from policymakers around the globe.

Gonzalo de Olazaval
Head of Metals, Minerals and Bulk Commodities

← Trafigura's concession agreement with the Angolan government will see the refurbishment and operation of the 1,300km Lobito rail corridor, offering a western route to market for crucial energy transition metals produced in the DRC.

Non-ferrous concentrates and refined metals

Copper

For copper, FY2023 comprised two contrasting periods. In the first half, the price of copper rose from USD7,500 per tonne in October to USD9,300 per tonne in January after China, the world's largest consumer of non-ferrous metals, scrapped its sweeping COVID-19 policies.

As re-opening elation died down and investors started to fret about China's property sector, prices declined. By the end of May, copper was back to below USD8,000 per tonne even though demand in China remained extremely healthy, driven by booming production of solar panels and grid investment.

However, a well-supplied concentrate market and excess smelting capacity meant China was able to meet this increased demand domestically without the need to expand imports of refined metal.

Prices strengthened between June and August as copper stocks held at major exchanges sunk to a 15-year low and the closure of a major EU refinery raised concerns about a supply gap.

However, the gains were fleeting and, buffeted by macro headwinds, including a strong US dollar and weak manufacturing activity in Europe, copper settled into a narrow trading range near USD8,000 per tonne.

In these conditions, our Copper team delivered a strong performance in both copper concentrates and refined metal, with our supply chain services in high demand from our global customer base.

In the African Copperbelt, we worked hard to overcome logistical hurdles and ensure the efficient movement of goods to international markets. The region's supply chains will be tested again in 2024 when production in the Democratic Republic of the Congo (DRC) is forecast to increase.

We are committed to improving transport and logistics in Africa through our involvement in the joint venture consortium that operates the 1,300km Lobito Atlantic Railway, which runs across Angola to the border with the DRC. The first copper concentrate to be exported under the new concession is intended to be dispatched by the end of the 2023 calendar year or soon thereafter.

For concentrates, we see a relatively balanced market in 2024 before new smelting projects in China and the rest of the world drive the market into deficit.

Alumina and aluminium

Aluminium was a bifurcated market in 2023, with strong demand growth in China compensating for weakness in the rest of the world.

In China, demand rose to an all-time high, driven by rising production of electric vehicles and solar panels. Combined with growth in infrastructure and transport, this more than offset lower demand from the property sector.

In the rest of the world, higher interest rates and lower consumer spending on goods resulted in lower demand. This was also reflected in the performance of aluminium prices on the London Metal Exchange, which have fallen 15 percent since the start of the 2023 calendar year. The strength of the US dollar proved to be another headwind for prices.

On the supply side, high energy prices continued to limit growth. Aluminium production is highly energy intensive and many smelters in Europe have been forced to curtail production to reduce losses. In China, continued problems with hydroelectric generation led to further smelter supply disruptions.

Meanwhile, the supply of alumina, a key ingredient needed to make the aluminium, continued to grow strongly.

Following the decision by the government of Indonesia to ban bauxite ore exports, new refining projects are expected to be developed in the coming years. China is also building more refining capacity in coastal provinces, although it is increasingly relying on Guinean bauxite to produce alumina. Indeed, one of every three tonnes of aluminium produced worldwide is made using Guinean bauxite.

Our focus in the year ahead will be on helping our customers navigate difficult and constantly changing market conditions.

More widely, the drive to a low-carbon economy is having a clear impact on the aluminium market, with more than seven percent of global demand now coming from products linked to the energy transition.

As China continues to produce the vast majority of solar and wind generation equipment, the outlook for consumption in the world's second largest economy is strong.

Nickel, cobalt and lithium

Increased mining capacity, predominantly in Indonesia and the DRC, led to oversupplied nickel and cobalt markets in 2023.

The lithium market also fell into surplus because of increased recycling and higher production of low-quality lepidolite ore in China, which can be processed into higher-grade battery material.

The market surpluses of nickel, cobalt and lithium raw materials combined with slowing battery electric vehicle (BEV) sales momentum led to a build-up in stocks throughout the supply chain that will take some time to work through.

While current prices for nickel, cobalt and lithium are depressed, demand for these materials is expected to grow rapidly over the long term. For example, we expect battery electric vehicles to account for close to 50 percent of new car sales by 2030.

As such, we see opportunity to work with the automotive industry to solve its procurement challenges. One way to do this is by helping to develop new sources of supply.

In 2022, we first announced an investment in Korea Zinc with a view to developing an all-in-one nickel refinery in South Korea.

A deal was recently signed to build the plant, which will see us supply 20,000 to 40,000 tonnes of nickel feedstock per year. We have also secured offtake rights in relation to the feedstock agreement.

Looking ahead, policies such as the US Inflation Reduction Act and the European Critical Raw Materials Act will create further opportunities for our teams in nickel, cobalt and lithium.

Our focus is on building our business in the fast-moving battery metals market, while continuing to serve our traditional clients in the stainless steel industry.

↑ Refined zinc at Nyrstar's zinc smelter in Hobart, Tasmania.

Zinc and lead

The refined zinc market was tightly correlated with European power prices during the first quarter of FY2023. As smelters across the region either closed or were forced to curb production because of rising energy costs, the refined zinc price rose and went on to hit USD3,500 per tonne in January.

The price then drifted lower as China increased domestic production and reduced imports. This resulted in an oversupplied global market (outside of China), with zinc eventually bottoming out at USD2,300 a tonne in August.

It was a different story in zinc concentrates, where the market was in deficit because of mine disruptions and a recovery in smelter output in the second half of the year.

Meanwhile, lead was the top-performing major metal on the London Metal Exchange, rising by more than 15 percent over FY2023, supported by its inclusion in a commodity index widely followed by financial institutions.

In spite of the challenges presented by the power crisis in Europe, our Lead and Zinc teams delivered solid results and continued to add customers.

Volumes of refined zinc were down year-on-year, reflecting reduced output at Nyrstar sites in Belgium, France and the Netherlands, but lead volumes rose following the acquisition of the Stolberg smelter in Germany.

The Stolberg deal has helped change the focus of our lead business, which is now supported by an advanced smelter capable of producing technical alloys for customers.

The outlook for the year ahead is uncertain and we will be monitoring closely how global consumption develops, particularly for zinc. However, there is a clear global push for renewable energy which will be positive for both zinc (wind turbines) and lead (battery storage) in the medium-term.

Bulk commodities

Coal

In metallurgical coal, used in steel-making, supply increased although it was lower than forecast because of adverse weather conditions and labour constraints in Australia. Demand also increased, particularly during the second half of the year in India and Indonesia.

The upshot was a broadly balanced market, albeit one with low inventories, which contributed to price volatility throughout the year.

After trading at nearly USD400 per tonne in the first quarter of 2023, high-quality Australian metallurgical coal dropped to USD180 per tonne as China's economy slowed. As demand from Indonesia and India kicked in during the second half, prices recovered to around USD370 per tonne at the end of the financial year. Looking forward, we see India as a key growth market for metallurgical coal as their steel industry expands production and also Indonesia, where the commodity is needed to feed new coke plants.

It was a different story for thermal coal, which is burnt in power stations to generate electricity. The market was oversupplied for much of the year because of weak demand in Europe caused by a mild winter and then energy-intensive industries curtailing production.

On the supply side, Indonesia increased production and exports. This material and other excess supply were absorbed in China, leading to expanding inventory levels.

As a result, prices slumped from more than USD400 per tonne in October for high-grade material to USD120 per tonne in June. Towards the end of FY2023, prices started to stabilise, helped by a recovery in industry activity, particularly in Asia Pacific and India.

Against this volatile backdrop, our Coal team had another active and profitable year, helping customers adapt to new trade flows as a result of the sanctions imposed on Russian supply.

One highlight is our South African business, which has played an important role in supplying coal to Europe and Japan.

Looking forward, we see India as a key growth market for metallurgical coal as their steel industry expands production and also Indonesia to feed new coke plants.

Iron ore

In FY2023, the iron ore market saw an increase in supply from Australia and Brazil, as well as India after export tariffs were scrapped. This was balanced by strong steel production in China in spite of weak downstream margins.

Prices briefly touched USD80 per tonne in October before rebounding as China, the world's largest steel producer and consumer of iron ore, retreated from its sweeping zero-Covid policy.

In the re-opening euphoria iron ore went on to reach USD130 per tonne before retreating as China's economy lost momentum.

From there, prices consolidated and traded in range between USD100 and USD130 per tonne.

For our Iron ore team, it was another 12 months of progress. We saw continued growth at Porto Sudeste, a joint venture Brazilian iron ore terminal. Throughput should increase further in 2024 as our Tico-Tico mine increases production following construction and commissioning.

Outside of Brazil, we are looking to increase third-party tonnage to provide greater alternatives for our global customers.

↓ Vessels loading iron ore at the Porto Sudeste export facility, Brazil.

Shipping and Chartering

Trafigura Maritime Logistics provides shipping and freight services for our in-house activities and for third-party clients.

5,324

Shipping and Chartering voyages (2022: 5,124)

2023 Wet and Dry Freight activity

	Dry	Wet
Number of voyages	1,317 (2022: 1,344)	4,007 (2022: 3,780)
Average number of vessels under time-charter	55-60 (2022: 60-65)	225-230[1] (2022: 210-230)

1 A vessel on hire for more than three months (excludes LNG carriers).

Dry freight shipping

In dry freight shipping, FY2023 witnessed more normal trading conditions as the disruptions that had unsettled the market since the global pandemic eased and commodities started to move with greater efficiency around the globe.

This was reflected in the performance of the Baltic Dry Index, widely regarded as a key barometer of the industry's health. It dropped sharply in the six months to March as the unwinding of pandemic-related congestion and inefficiency meant a higher availability of ships and a steep imbalance between ships supply and cargo movement demand.

In addition, the container market eased significantly through this period and a number of cargoes which had been moving in bulk carriers at the height of the pandemic moved back to containers. The result was less cargo moving on bulk vessels.

In the second half of the year, demand for cargo movement improved and with it freight rates on the back of strong iron ore shipments globally, robust coal exports from Indonesia and a bumper soybean crop in Brazil.

Additionally, a severe drought in Panama led to unusually long delays for dry freight vessels transiting the Panama Canal, which forced ships to sail alternate routes, thereby increasing vessel demand. The Panama Canal is one of the world's most important trade routes and we expect it to remain a potential disruptive factor to the market in the next 12 months, with congestion being a constant issue.

In spite of the less volatile backdrop, the Dry Freight team continued to record strong results, with our work to build a broader customer base across both internal and third-party charterers and shipowners paying dividends. Volumes were flat year-on-year while fixtures were slightly down on 2022.

With shipping joining the EU Emissions Trading Scheme from 2024 and increasing regulation around emissions, we believe that the coming years will see significant opportunity as the cost of ensuring compliance and managing the complexity of these regulations will be a source of competitive advantage for companies such as Trafigura.

Alan Cumming
Head of Dry Freight Shipping

Wet freight shipping

2023 was another volatile year in wet freight as the re-routing of Russian crude and petroleum products and the emergence of non-western aligned ‘shadow fleets’ led to a much tighter market for oil tankers.

Against this backdrop, our Wet Freight team delivered a strong performance, achieving a number of milestones. This included increased volumes transported, number of third-party customers and fleet size under management.

During the year, the team expanded its portfolio through a series of deals in the open market and long-term charter agreements. Our large fleet and our access to insurance and derivative markets in order to hedge risk allowed us to take on more business and provide cover to our ship-owning partners.

A key focus in 2023 was preparing for new regulations, including the EU Emissions Trading System. To this end, we consistently ensure that our sustainability and technical teams have the resources needed to comply with new rules and regulations and aim to play a leading role in the decarbonisation of the shipping industry.

We have also retrofitted a number of our owned vessels with new technology and energy-saving innovations such as heat recovery systems and silicon hull paint, to improve efficiency and reduce emissions.

In LPG shipping, our team had a strong year on the back of booming US exports, strong demand from new propylene plants in China and delays in the Panama Canal as a result of low water levels, which added a premium to our offerings. Similar market conditions are expected in 2024.

It was also a high performing year for LNG carriers. However, we forecast a softer market in 2024 as new vessels come into service, outweighing new liquefaction capacity.

As for oil, the global tanker market is expected to remain well supported by new trade routes with longer haulage, as well as issues associated with an ageing fleet – there are very few new vessels due for delivery over the next 24 months. If OPEC production curbs are reversed and consolidation continues, there is good reason to believe that freight rates will remain high.

However, increasing geopolitical risks and slowing global growth present very real dangers to this positive outlook. As such, successfully managing risk has never been as important. As a result of our size and global reach, in the years to come we are ideally positioned to help both internal and external clients, from refineries to third-party shipowners, around the world.

Andrea Olivi
Head of Wet Freight Shipping

↓ The Bellavista Explorer, built in 2021 and leased by Trafigura, is one of the largest LPG carriers in the world.

Assets and Investments

In FY2023, strategic assets and investments continued to further extend the scope of our activities and services offered.

Assets and Investments

To complement our core supply chain services, we also invest in assets and entities that can help facilitate the production, processing and distribution of vital resources around the world.

Our assets and investments include Puma Energy, a downstream fuel supplier, Impala Terminals, a terminal, warehousing and logistics joint venture with IFM Investors, and Nyrstar, an international producer of critical metals and minerals essential for a low-carbon future that has a market-leading position in zinc and lead.

These assets are independently run businesses with their own dedicated management teams and resources.

In addition, Trafigura is the majority owner of TFG Marine, a provider of bunkering services to the shipping industry.

In October 2023, just after our financial year end, we took a controlling stake in H2 Energy Europe, which is developing renewable hydrogen projects in Denmark and the UK.

We are also a significant shareholder in the Lobito Atlantic Corridor consortium that has been awarded a 30-year concession to operate and improve the 1,300km Lobito railway, which runs across Angola to the border with the Democratic Republic of the Congo.

We own three zinc mines: two in the Americas and one in Canada. Production from these assets was either above or in line with expectations during 2023, although margins were squeezed by weak zinc prices, rising costs and broader inflationary pressures.

The Group also owns Galena Asset Management, a regulated investment firm.

→ Puma Energy's first rural service station was opened in Chifunabuli in Zambia in summer 2023 as part of the company's commitment to support energy access.

Puma Energy

Puma Energy is a downstream energy company operating in 34 markets around the world, supplying and distributing refined oil products, such as gasoline and jet fuel, lubricants and bitumen. It operates around 2,000 retail sites, owns a number of bitumen terminals and offers refuelling services at over 100 airports.

In the 2023 financial year, Puma Energy continued to focus on strengthening its balance sheet, streamlining its portfolio of assets and reinvigorating its core downstream operations. It has also made progress in diversifying its activities by supplying lower-carbon fuels and offering solar energy solutions to customers. In spite of macroeconomic headwinds, the company delivered solid results for the year to date.

In line with its strategy to focus on its core downstream activities, Puma Energy completed the divestment of most of its storage and terminal infrastructure assets with the sale of an asset in El Salvador to the Impala Terminals joint-venture, in the second quarter of 2023. The company also sold its retail and LPG business in Senegal.

Going forward, Puma Energy's focus is on prudent investments in its downstream business. To this end, the company has completed a number of transactions in high-potential growth markets, such as the acquisition of BP aviation fuel assets in Mozambique and LPG supplier, OGAZ, in Zambia.

During the year, Puma Energy obtained consent from its bondholders to buy back USD410 million of its US dollar-denominated Senior Notes due in 2024 and EUR30 million of its Euro-denominated Amortising Senior Notes due in 2024. The company intends to buy back all remaining 2024 Senior Notes by the end of the year barring any unforeseen events.

In addition, Puma Energy updated its approach to environmental, social and governance risks, setting out its strategy in the company's 2023 Sustainability Report. This was underpinned by a series of commitments to reduce greenhouse gas emissions and support access to energy, such as the launch of its rural service station roll out in Zambia.

As part of this commitment to sustainability, in March, Puma Energy launched its first Sustainability Linked Revolving Credit Facility and Term Loan. The two facilities were closed in May with commitments of USD847.5 million – the highest amount secured over the past five years.

The sustainability-linked facilities will see margins adjusted subject to Puma Energy achieving independently verified key performance indicators relating to greenhouse gas emissions reduction as well as security and human rights.

Looking ahead to 2024, Puma Energy will focus on strengthening its position in key markets and segments. The company remains cautiously optimistic as it continues to navigate the market volatility that characterised 2023.

Case Study

Investing in rural service stations

In line with Puma Energy's commitment to support energy access, the company launched its rural service station programme in Zambia in 2023. The first service station was opened in Chifunabuli with an additional planned for Zambia over the next few years. This connection of services allows for innovative development, such as facilitating the purchase of LPG and cooking stoves backed by micro-finance loans from the bank partner operating on the Chifunabuli retail station site. Each household that buys LPG and a stove contributes to reducing deforestation by avoiding the use of wood and charcoal as a cooking fuel. In turn this has a positive impact on public health and the environment.

Prior to the opening of the new station in Chifunabuli, the nearest service station was over 40 kilometres away. In fact, a large proportion of Zambia's rural population does not have ready access to transportation and cleaner cooking fuels due to the lack of nearby service stations. Access to fuel and energy is a prerequisite for prosperity and economic growth, and by significantly expanding its rural service station network, Puma Energy hopes to have a positive impact on the lives of people across rural Zambia and unlock new economic opportunities.

↑ In 2023, Trafigura completed the acquisition of the Stolberg multi-metals smelter in Germany, now managed by Nyrstar.

Nyrstar

Nyrstar is an international producer of critical metals and minerals vital to the energy transition. With a market-leading position in zinc and lead, the company has mining, smelting and other operations located in Europe, the US and Australia and employs close to 4,000 people.

Since its acquisition by Trafigura Group in 2019 and the subsequent completion of its financial restructuring, Nyrstar has been implementing a transformation programme. This has included significant investments to modernise and improve the company's assets and operations, a process which continued over the past 12 months in spite of tough market conditions.

During the 2023 financial year, Nyrstar's sites in Europe were impacted by a range of external factors which resulted in periods of planned shutdowns and maintenance at its Budel (Netherlands) and Auby (France) smelters, and reduced output at its Balen (Belgium) facility.

Despite these challenges, the company continued to focus on implementing technologies and processes to further increase the efficiency and operational flexibility of its key European assets.

At Nyrstar Auby, after a record 48 years of operation, a new roaster was successfully installed in October 2022.

The Nyrstar Balen and Pelt sites implemented a series of continuous improvement projects, further increasing efficiency and supporting employee engagement. They also added a new alloy to their product portfolio and completed a number of capital expenditure projects.

Nyrstar Budel took significant steps to mitigate the impact of volatile energy prices by reducing its electricity use per tonne of zinc produced.

At all three of Nyrstar's European zinc smelters, work continues on the potential for investments in a 'virtual battery' concept, which would not only help balance the local grid and support renewable energy use but also bring down costs and increase efficiencies.

A key focus for the year was the integration of the Nyrstar Stolberg multi-metals facility in Germany. Trafigura completed the acquisition of the Stolberg site in February 2023, after which management of the business was turned over to Nyrstar and the plant was quickly restarted.

In Australia, further maintenance work took place at the Port Pirie multi-metals site to improve performance and reduce emissions. Work also progressed on a project for a new low-carbon electric zinc plant to increase zinc fume recovery and reduce carbon emissions on site.

However, operational challenges led to a USD226.9 million impairment charge against the value of Australian assets.

In June, Nyrstar and Trafigura published a whitepaper, titled 'Critical metals: Australia's opportunity in the energy transition', which focused on the role of processing to support the increasing demand for critical minerals both domestically and for the country's international partners.

Initial studies on germanium and indium recovery in Australia were also undertaken as part of Nyrstar's wider global focus on critical minerals.

At the Hobart site in Tasmania, a successful maintenance period was completed and refined zinc production increased throughout the year. Both the Australian and Tasmanian governments signed grant funding deeds for the new electrolysis plant project at Hobart.

In June, Nyrstar received a five-year environmental license from the South Australian Environment Protection Authority for the Port Pirie site. Previously this had been an annual license, and this new license reflects the work done in recent years by the Nyrstar team to reduce lead-in-air emissions and continue to meet environmental standards. Work also commenced on a new product recycling facility at Port Pirie that will further reduce lead in air concentrations in the community.

Also during the year, the South Australian Government provided a grant for further studies into battery recycling at Nyrstar and Nyrstar's training programme was a finalist in the South Australian Training Awards for 2023.

In the US, Nyrstar's Clarksville Tennessee operations delivered a significant operational improvement over the year and are now running at a stable level. The company also continued to advance the business case for a state-of-the-art germanium and gallium recovery and processing facility at Clarksville. Germanium and gallium, which are used in microchips, electric vehicles and a range of other high-tech goods, are by-products of the zinc-sulphides mined at Nyrstar's Tennessee Mines. The proposed investment would include an autoclave and hydrometallurgical refining equipment.

The facility could produce enough germanium and gallium to meet 80 percent of annual US demand, enhancing security of supply and stimulating domestic production of goods that are currently imported.

The project would also increase the recovery and production of zinc and will reduce waste. This would enable Nyrstar to process stored by-products and increase recycling capabilities.

At the end of October 2023, Nyrstar announced a temporary pause in production at Nyrstar's Middle Tennessee mines. During this temporary pause in production operations, Nyrstar plans to conduct drilling to explore and define additional zinc, germanium, and gallium resources to position the company to increase the supply to Nyrstar's Clarksville smelter upon completion of the planned investment to enable on-site germanium and gallium recovery.

Production at Middle Tennessee mines will resume as soon as it is economically viable or once the proposed gallium and germanium production capacity at Nyrstar Clarksville comes on line in the next few years. Nyrstar Clarksville is not expected to be affected by the temporary pause in production at the Middle Tennessee Mines' operations.

There is significant potential to produce additional essential minerals and metals at Nyrstar sites in Europe, Australia and the US, based on the mineral feeds the company is currently processing and depending on local demand and government support. In order to leverage this potential, Nyrstar is exploring business cases for possible metals recovery facilities.

These activities underpin Nyrstar's role as a responsible and reliable producer of strategic and critical minerals and metals to further advance the energy transition.

Looking ahead to 2024, Nyrstar will continue to seek to stabilise production across its operations. However, headwinds facing the business remain significant, particularly in the form of high energy costs, general inflationary pressures and depressed prices.

↓ Nyrstar Hobart's new remote controlled devices enabling automation of the cell cut-out and cut-in process, eliminating critical safety risks and increasing efficiency.

↑ The newly-commissioned 200,000cbm Impala Terminals energy import, storage and distribution terminal in Kwinana, Australia.

Impala Terminals Group

Impala Terminals is a 50:50 joint venture between Trafigura and Australian pension fund management group IFM Investors. Impala Terminals has two pillars of activity: owner and operator of key infrastructure in 19 countries and asset manager of third-party assets in eight countries.

In the former, Impala Terminals designs, develops and operates key infrastructure and logistics assets across multiple modes of transport. This includes the safe, reliable handling of dry bulk and liquid cargoes to and from inland sites of production and consumption, through deep sea ports. In total, the joint venture has 28 operations trading under the Impala Terminals brand across 19 countries.

In the latter, the joint venture also manages a number of Trafigura-owned port logistics, storage and transportation assets. In this way, it plays a key supporting role in Trafigura's activities and third-party trade flows in the Americas, Europe, the Middle East and Africa.

Joint venture assets

After the acquisition of 19 energy infrastructure assets in 10 countries in 2022, Impala Terminals has been focusing on integrating these terminals into its existing portfolio. The new and diversified platform of assets will enable Impala Terminals to grow in both dry bulk and liquid markets.

During FY2023, Impala Terminals continued to deliver growth across various business lines, adding value to its customers and their global supply chains. Health and safety remain at the core of all its operations and a key milestone was an updated health, safety, environment and community framework.

In April of this year, Impala Terminals proudly celebrated the commissioning of a new 200,000cbm energy import, storage and distribution terminal in Kwinana, Australia. This state-of-the-art facility will bring fuel distributors alternatives to serve Perth and the surrounding region, creating a more resilient energy market and greater supply security to the people of Western Australia.

In May, Impala Terminals opened a dry bulk storage facility to provide export services for the emerging mining sector in Ecuador.

Non joint-venture assets

In Colombia, Impala Terminals operates an inland port at Barrancabermeja and a barging operation from two ports on the Atlantic Ocean. In addition, a new connection line has been established between the terminal and a refinery in Barrancabermeja to further increase the efficiency of the facility. The company handled a number of new commodities during the year at the Barrancabermeja port terminal, including non-ferrous concentrates, helping to grow its container transportation business unit. Impala Terminals is continuing to work with a broader customer base, including container liners, providing greater flexibility to import and export different products to and from Colombia by barge instead of truck, generating an important reduction in CO_2 emissions.

In Bolivia and Chile, Impala Terminals continues to deliver a robust performance with its assets handling increased volumes of copper, lead and zinc concentrates, benefiting from strong demand and increased mining production. In both locations, the Group looks to expand its offering, locations, services and customer base.

At the Impala Terminals Burnside facility in the US state of Louisiana, the focus continued on diversification, including a deal to sell additional land for a new energy production site. Separately, Impala Terminals Burnside has signed a long-term storage and bulk-loading contract for biomass. This demonstrates how Burnside, historically known for its role in the petcoke and coal business, is diversifying into storing and handling more sustainable fuels.

Impala Terminals' assets in the DRC, Zambia and Tanzania continued growing their services and cargo-handling volumes in particular for imports destined for the mines around the terminals. The amount of cargoes dispatched via rail to South Africa and Tanzania has nearly doubled during this year, reducing cargoes dispatched by trucks. Impala Terminals' freight-forwarding business volumes, which oversees the movement of goods on behalf of importers and exporters grew by 30 percent largely from third-party volumes.

Nala Renewables

Nala Renewables is a renewable energy development and investment platform and is a 50:50 joint venture between Trafigura Group and IFM Investors established in September 2020 with the aim of investing in onshore wind, solar PV and power storage projects. Since inception, the joint-venture has expanded its pipeline of assets under development, construction and operation. Nala Renewables has a portfolio of renewable energy generation and storage assets in Belgium, Chile, France, Greece, Lithuania, Netherlands, Poland, Spain, and the US. To date, the company has grown its renewable energy asset portfolio to approximately 2.5GW and is well on track to meet its 4GW target by the end of 2025.

Nala Renewables continued to strengthen its presence in its key geographies over the last twelve months with a focus on increasing its portfolio. With the acquisition of the Wayu platform, Nala Renewables now has access to advanced commercial and industrial solar projects in Southeast Asia, including three assets that are already under construction.

During the year Nala Renewables continued to focus on strengthening its team, acquiring late-stage assets and securing new development partnerships for greenfield projects in countries where it already has a presence.

Since 2020, Nala Renewables has identified Chile as a strategic market for expansion. From the company's initial portfolio acquisitions of 110MWp and 70MWp of assets in the country, it has grown its total pipeline of Chilean assets to 282MWp over the last year, which now comprises 93MWp of assets in construction and operation. The regional office in Santiago acts as a hub from where it oversees its activities in Latin America and provides local expertise to its assets in construction and operation.

In Europe, Nala Renewables has secured development approval from its shareholders for the development of 600MWp of solar photovoltaic projects in Romania and 200MW of battery storage (BESS) projects in Greece. It continues to build its presence in Spain and Poland with several acquisitions planned. As Nala Renewables continues to grow in these geographies it will establish a local presence, with offices expected to open in Spain and Greece during 2024.

One of Nala Renewables' flagship projects, the Balen battery project, involves the development of one of Belgium's largest battery energy storage systems at Nyrstar's zinc smelting facility. Nala Renewables is overseeing the testing and commissioning of the project and expects it to enter commercial operations in the first half of 2024. The 100-megawatt hour battery project will be able to store 25MW for over four hours and will provide stability and balancing services for the Belgian grid, as well as help shift renewable energy production into high energy demand periods.

The company has overseen substantial progress of its assets in construction during the last financial year, including a 106MWp portfolio of solar PV assets in Greece, and renewable generation and battery storage assets in Belgium, solar photovoltaic in Chile and Lithuania. It is anticipated that in several of these countries where assets are in construction, all will convert into operating assets during 2024.

With several of the company's assets heading into operations and Nala's focus on a long-term hold strategy, one of Nala Renewables key objectives is to grow its asset management capabilities.

↓ Nala Renewables photovoltaic field, Castilla, Chile.

↑ The TFG Marine-chartered Pearl Kate marine fuel supply barge in Singapore.

TFG Marine

Founded in 2020, TFG Marine is a bunker fuel supply and procurement joint venture between Trafigura and two of the world's largest shipowners, Frontline and Golden Ocean.

The partnership brings together three companies that are market leaders in their respective fields, each with complementary strengths.

The combined demand from Trafigura Marine Logistics, Frontline and Golden Ocean, which collectively boast a fleet of more than 700 owned and chartered vessels, have laid the foundation for TFG Marine to become a leading supplier of bunker fuel in just three years. It is now operational in around 35 key hubs along the world's major shipping routes.

TFG Marine delivered another strong performance over the financial year to the end of September 2023. Volumes increased as it added new bunkering stations, expanded its logistics footprint and grew its customer base in the key shipping hub of Singapore.

During the year, it continued to focus on innovative technology and decarbonisation initiatives; in particular, its digital portal, which provides customers with information including quotes and certificates of quality.

The portal also uses data gathered by TFG Marine's mass flow metering systems, which help measure fuel supplies more accurately.

More widely, the company is pleased to see its advocacy of mass flow meters delivering real results, with the ports of Antwerp and Amsterdam mandating their use from 2026.

Another highlight of the year was the decision of Singapore's Maritime and Port Authority to introduce electronic bunker delivery notes (e-BDN), a move that will boost efficiency and transparency.

In terms of decarbonisation, TFG Marine is aiming to support its customers as they switch to lower-carbon shipping fuel. To this end, it has already ordered six methanol refuelling barges for delivery in 2025-26.

Galena Asset Management

Galena Asset Management is a wholly owned and regulated investment subsidiary of Trafigura. It manages internal capital in several funds that are also available to third-party investors. The investment strategies run by Galena Asset Management leverage Trafigura's insight into metals, mining, energy and renewables.

As anticipated, FY2023 witnessed continued market turbulence against a backdrop of macroeconomic uncertainty.

The fight against inflation was the main focus for global central banks (outside of China) and tighter financial conditions meant a higher risk-premia for commodity derivatives.

The inversion of the US Treasury yield curve – whereby short-term borrowing costs exceed long-term equivalents – made it more difficult to finance commodities in storage.

Physical commodity traders typically run lower inventories as short-term funding becomes more expensive. Consequently, market volatility increases as storage buffers run down.

This created a situation where physical commodity markets functioned on a low spare capacity and disconnected from derivatives, on which the Galena Multistrategy Fund focuses. In particular, its Macro strategy Fund, which trades all asset classes associated with commodities underperformed.

This challenging environment pushed Galena Asset Management to focus on its private credit strategy, the Galena Structured Credit Resources Fund, launched in March 2022. The company has grown the number of underlying transactions and diversified the portfolio to include Asia, West Africa and North America. It also started to expand into base metals.

It also improved its liquidity management by setting up a segregated account to hold high-quality corporate debt, including Trafigura commercial paper. The fund continued attracting internal and external investors seeking more stable yields and mitigating, to a certain extent, interest rate risk.

In private equity, there were no new investments during the year and the team focused on current portfolio companies.

Galena Asset Management sees further instability and volatility in the year ahead. The focus will be on geopolitical risk, the energy transition and the performance of the Chinese economy.

Lobito Atlantic Railway

Trafigura is a significant shareholder in the Lobito Atlantic Railway, a joint venture company that has been awarded a 30-year concession to operate and renovate the 1,300-kilometre Lobito railway and an associated mineral port terminal.

Running from the port of Lobito, Angola to Katanga in the African Copperbelt mining region in the DRC, the rail corridor is a strategically important project for the region.

The upgraded line will provide a more efficient and lower-carbon route to market for copper, cobalt and other metals crucial to the energy transition.

At the same time, the project will also enable the investment in other industrial and agricultural projects along the line which will result in further social and economic development in the region.

The project to refurbish the line represents an investment of more than USD500 million over the lifetime of the concession. The investment will enable the renovation of sections of the railway line and associated infrastructure, in addition to securing more than 1,500 wagons and 35 locomotives.

The concession for rail services was formally transferred to Lobito Atlantic Railway in July 2023 at a ceremony in Lobito attended by the Presidents of Angola, the DRC and Zambia.

The importance of the rail corridor was also recognised by the US government at the G7 meeting in May where it was highlighted as a priority project for the Partnership for Global Infrastructure and Investment (PGI).

Towards the end of the year, the US, the EU and several African nations announced their intention to fund a feasibility study for a potential extension of the railway into Zambia, which has abundant reserves of copper and other strategic metals.

As the year draws to a close, the project is at a critical stage. Trial exports are intended to start before the end of December with the shipment of up to 10,000 tonnes of copper concentrate from the Kamoa-Kakula mine in the DRC through January 2024. A financing package, which includes a potential USD250 million investment by the US International Development Finance Corporation (DFC), is under discussion.

Sustainability review

Recognising the important role we play in connecting vital resources, we place a strong focus on responsible business practices and sustainability across our operations.

Sustainability is integral to our business. We are committed to operating safely, managing our impacts and supporting positive outcomes for society and the environment. Our governance structure and management systems support compliance across our operations and seek to address the environmental, social and governance risk associated with our activities.

Our business facilitates a stable supply of critical metals for the energy transition and enables the efficient flow of resources around the world. We supply vital commodities to meet current and future energy needs, help our customers secure critical metals and minerals, work with counterparts to improve environmental and social standards, seek to bring greater transparency to commodity supply chains and responsibly manage our own operations.

Climate change continues to be a key topic. Our investments in low-carbon hydrogen, solar, battery storage and emission-reduction technologies create more sustainable energy options for our customers. We invest in high-quality nature-based carbon removal projects and provide companies with a comprehensive range of carbon offset products tailored to their climate strategies and sustainability goals.

In particular key areas of focus include:

- Climate change and environment
- People and communities
- Health, safety and security
- Governance and conduct

Over the past year, we continued to place a strong focus on:

- Reducing our operational Scope 1 and 2 emissions
- Enhancing our responsible sourcing function
- Furthering our efforts in green shipping and transition metals
- Enhancing transparency in our supply chains, in particular related to Scope 3 greenhouse gas emissions
- Investing in our venture capital and joint ventures in renewables and low-carbon hydrogen
- Revamping our health and safety approach
- Enhancing our approach to our people and communities

Our sustainability performance is subject to external assurance by independent external provider, ERM CVS, in relation to:

- Scope 1, Scope 2 and Scope 3 greenhouse (GHG) emissions reporting conformance to the GHG Protocol.
- Alignment of our responsible sourcing programme with international guidance on sustainable procurement (ISO 20400:2017).
- Progress towards compliance with the Voluntary Principles on Security and Human Rights across our industrial assets.
- Lost-time injury frequency rates across the business.[1]

1 This is the first year in which we have sought external assurance over safety data across the broader Trafigura Group companies. A number of issues with data consistency and quality were identified that we are working to resolve in FY2024. As a result, ERM CVS is not able to form an assurance conclusion on the FY2023 LTIR figure and have therefore expressed a Disclaimer of Conclusion.

Selected associations and collaborations

Performance review

Climate change and environment

Targets and initiatives	FY2023 Update	Measures taken
Over 50% reduction in Scope 1 and 2 greenhouse gas (GHG) emissions by the end of FY2032	We met our initial 2023 target of reducing our Scope 1 and Scope 2 GHG emissions by 30% against FY2020 baseline, which supports our ambition to achieve carbon neutrality by 2050.	• 1,260GWh of green electricity was procured, equal to 30% of total electricity consumption. • Invested in onsite solar power. For example, at our Campana Terminal, and a host of Puma Energy aviation storage depots and retail stations. • Invested in energy efficiency and industrial decarbonisation measures at our Bahia Blanca and ManRef refineries in Latin America.
10% reduction in Scope 3 upstream emissions intensity of non-ferrous metals sourced and supplied by the end of FY2030[1]	On track to reduce the GHG intensity of non-ferrous metals against FY2020 baseline.	• Reduced the purchase of higher-carbon intensity metals. • Continued to encourage suppliers to reduce their emissions. • Piloted engagements with producers to understand their GHG footprint and identify reduction opportunities.
25% reduction in GHG intensity of our shipping operations by the end of FY2030 (against the 2019 IMO benchmark)	Through our modern fleet and range of lower carbon efforts, we achieved a 19% reduction.[2]	• Invested in a modern, energy efficient fleet. • Worked towards converting six vessels, (18 percent of our owned fleet), to use zero-emissions fuels by FY2030. • Continued to invest in clean technologies such as ammonia fuelled shipping engines. • Advocated for emissions reductions and carbon pricing in the shipping sector. • Published whitepapers to highlight opportunities for lower-carbon fuels.
Develop a renewable energy asset portfolio with a cumulative target capacity of 4GW by end of FY2025	We continued our investments in solar and battery storage that provide sustainable energy solutions for our customers.	• Supported Nala Renewables develop its portfolio of projects in Latin America and Europe.
Invest in renewable hydrogen projects with a total production capacity of 3GW by end of FY2030	We continued our strategic, targeted investments in low-carbon hydrogen technologies.	• Our efforts are focused on the development of two large-scale projects in Denmark and the United Kingdom, powered by wind power.
Zero severe environmental incidents (such as a hydrocarbon spill of over 50 barrels)	There were five significant hydrocarbon spills (over 50 barrels).	• Continued to apply industry good practices and maintained robust spill preparedness and response processes. • Engaged with stakeholders, including service providers, regulatory agencies and emergency response providers, to support rapid responses and remediation measures.

Other highlights:

- Extended our Agora platform, which is aimed increasing transparency in supply chain carbon intensity, to cover energy in addition to metals.
- Integrated Puma Energy's high risk sites within our environmental and social sensitivity risk assessment platform, TESSA.
- Undertook physical climate change risks assessments at our extractive sites in Peru and US and developed mitigation strategies.

1 Against a baseline of 6.97 tCO_2e/tmetalEq.

2 Whilst we are pleased with the strong reductions to date in our shipping GHG intensity reduction, we note there are a range of market uncertainties and new policy measures entering force in the coming years that could result in short-term swings in greenhouse gas performance.

People and communities

Targets and initiatives	FY2023 Update	Measures taken
Improve workforce diversity, including at the recruitment phase, through targeted outreach initiatives	We operate in 156 countries, with 81 nationalities across the Group. Women represent 19% of the Group's global workforce (18% in FY2022), which includes a strong industrial footprint. In Trafigura, 35% of the workforce are women, and 29% are people managers.[1] Approximately 3,450 employees were hired in FY2023, of which 23% of were female. This increases to 36% for Trafigura.[1]	• Strengthened our early career talent pipeline by building strategic alliances with leading universities, holding career days and developing our trader, graduate and apprenticeship programmes. • Focused on building our pipeline of talent, in particular for commercial staff where women are typically under-represented across the industry. • Developed opportunities for middle- and back-office staff.
Enhance our staff development opportunities, expanding our skills and career progression-focused training framework	Across the Group, 309 colleagues were provided with career development opportunities through relocation to different countries. Approximately 288,700 training hours were provided.	• Offered a range of coaching and capacity building programmes designed to help our employees enhance their skills.
Support our communities through our Corporate Social Investments (CSI) and the Trafigura Foundation	The Trafigura Foundation donated c. USD10m, and revamped its strategy focusing on resilient communities and ecosystems across global supply chains. Trafigura separately supported over 260 initiatives across our regions through financial and in-kind via our Corporate Social Investments.	• Trafigura Foundation shifted its focus to programmatic and catalytic grant making, whilst enhancing management of the existing philanthropic portfolio. • Our CSI continues to be employee led, and focus on impactful support to our communities.

Other highlights:

- Piloted a community impact assessment programme and reviewed performance at key sites globally.

1 When excluding the operating companies.

Health, safety and security

Targets and initiatives	FY2023 Update	Measures taken
Zero fatalities	Two fatalities reported in FY2023.	• Took onboard lessons learned from the fatalities and reinforced systems to minimise risks of recurrence. • Implemented a new communities, health, environment, safety and security (CHESS) ambition and framework. • Mapped our highest-risk activities by cause across our assets and developed 12 fatal critical risk standards.
30% reduction of our lost time incident rate (LTIR) by the end of FY2025	LTIR 2023 performance will be published in our 2023 Sustainability Report.	• Strengthened our capabilities, refreshed our ambition and built a plan through to 2027, focusing on risk capacity, systems, culture and learning. • Undertook 6,691 hours of HSEC training across all our assets.
Align our operations with the Voluntary Principles on Security and Human Rights (VPSHR) by the end of FY2024	Progress on track at the end of FY2023.	• Extended the roll out of the VPSHR to our Nyrstar and Puma Energy facilities.

Other highlights:

- Rebaselined data for previous years (after consolidating Puma Energy and deconsolidating Impala Terminals JV entity performance data).
- Gained important knowledge from our Voluntary Principles on Security and Human Rights alignment programme.

Governance and conduct

Targets and initiatives	FY2023 Update	Measures taken
Full alignment of our responsible sourcing programme for metals with applicable requirements of ISO 20400:2017 Sustainable Procurement guidelines by the end of FY2023	Achieved full alignment with ISO 20400:2017.	• Worked with value chain partners to promote adherence to the ISO and wider international standards. • Provided support and capacity-building to key suppliers. • Continued to engage proactively with clients to understand and integrate their ESG requirements.
Extend screening of counterparts under the responsible sourcing due-diligence process	192 counterparty diligence reviews were initiated by our responsible sourcing team (FY2022: 156 diligence reviews). Of these, 56 counterparties were active in conflict-affected and high-risk areas (CAHRAs) (FY2022: 89).	• Strengthened our responsible sourcing capability, through additional resource in Latin America, Africa and Asia, and increased our engagement with value chain partners and key clients. • Improved the responsible sourcing counterparty due-diligence assessment process, making it more transparent, efficient and effective. • Launched our Origin software tool, which facilitates and improves our responsible sourcing practices.
Maintained and enhanced our compliance policies and procedures in line with international standards	We carried out 10,697 KYC checks (FY2022: 9,229). The total number of compliance training courses completed was 19,374 (FY2022: 9,842). Reconfirmed that our compliance programme meets international standards through a third-party review.	• Focused on trade sanctions and vessel screening, and continued our alignment to international standards. • Continued to enhance our KYC monitoring and assessment processes.

Other highlights:

- Maintained the focus on building out our compliance infrastructure and updating our approach in key areas such as sanctions and the assessment of high-risk jurisdictions.
- Launched the Trafigura country risk-screening tool to help strengthen due diligence and determine high-risk and conflict-affected countries.
- Further progressed our responsible sourcing programme, which takes into account the OECD Due Diligence Guidance for Responsible Supply Chains; EU's Conflict Minerals Regulation; LME regulations; US Dodd-Frank Act; and wider standards developed by industry associations.
- Updated our compliance training framework to include guidance on the use of modern communication tools and related risks and expectations.

Board of Directors and Committees

Trafigura is owned by its senior employees. This ownership model is structured to encourage a focus on long-term sustainable value creation.

Read our leadership biographies:
www.trafigura.com/who-we-are/leadership ↗

Board of Directors

The principal oversight body for the Group is the Board of Directors, which has overall responsibility for the strategic direction and management of the Group, including commercial and financing strategy and stakeholder relations. The Board also assumes responsibility for matters relating to the nomination of Executive Directors, the Executive Committee and senior employees and succession planning.

The directors with executive responsibilities are also members of the Executive Committee and sub-committees as outlined below. Management of the Group is characterised by short reporting lines, flat structures, clear delineation and segregation of responsibilities, and personal accountability.

Employee remuneration is linked to Group performance and individual contribution. Around 1,400 senior employees are shareholders of the Group. Each has a strong personal incentive for the Group's long-term success, promoting management depth and stability and encouraging prudent risk management.

Board Sub-Committees

The ESG Committee is responsible for assisting the Board of Directors with the management of the Group's environmental, social and governance strategy and performance.

The Audit Committee is responsible for assisting the Board of Directors in fulfilling its oversight responsibilities for the financial reporting process, the system of internal controls and the audit process.

The Risk and Compliance Committee is responsible for assisting the Board of Directors in supervising the Group's risk management capabilities and policy, and the implementation and development of the Group's compliance programme.

The Remuneration Committee assists and advises the Board of Directors on matters relating to the remuneration strategy for the Executive Committee and other senior employees of the Group.

Executive Committee

In September 2023, the Management Committee was replaced by the new eight-member Executive Committee, including new Chief Operating and Chief Risk Officers. This was done to further strengthen leadership and focus across the Group's global activities during a period of exceptional success and growth and to reflect the retirement of outgoing COO Mike Wainwright.

The Executive Committee sits below the Board of Directors and includes two Trafigura Executive Directors. It is responsible for the execution of our business strategy, including management of the trading, commercial and operational functions and the investment portfolio.

Corporate Committees

The Executive Committee is supported by the three following corporate committees, illustrated on the opposite page:

- Finance Committee
- Operational HSEC Steering Committee
- Commercial ESG Steering Committee

From FY2024, the Operational HSEC and Commercial ESG Steering committees have been combined to form a new ESG Steering Committee, chaired by the Chief Operating Officer.

Corporate governance overview

Audit Committee

Risk and Compliance Committee

Board of Directors

Executive Committee

ESG Committee

Remuneration Committee

Corporate Committees

Finance Committee

Operational HSEC Steering Committee

Commercial ESG Steering Committee

Leadership

Board of Directors

Non-executive Directors

Mark Irwin
Director

Pierre Lorinet
Director

Sipko Schat
Director

Andrew Vickerman
Director

Executive Directors

Jeremy Weir
Executive Chairman and Chief Executive Officer

Jose Maria Larocca
Executive Director

Executive Committee

Gonzalo De Olazaval
Head of Metals, Minerals and Bulk Commodities

Richard Holtum
Head of Gas, Power and Renewables

Ben Luckock
Head of Oil

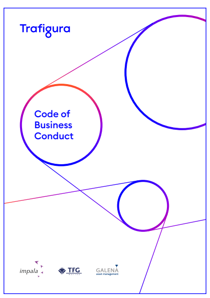
Ignacio Moyano
Chief Risk Officer

Christophe Salmon
Chief Financial Officer

Emma Stroud
Chief Operating Officer

How we manage risk

A rigorous and conservative approach to risk management is an integral element and central focus of our business.



trafigura.com/corporate-responsibility-policy ↗

We have developed rigorous risk management and governance systems designed to address the risks to which we are exposed. These systems apply multiple lines of oversight to verify compliance with applicable laws and regulations by all employees. The Group actively manages and mitigates, wherever possible, identifiable and foreseeable risks inherent to its activity.

The Board of Directors, via the Risk and Compliance Committee, has principal oversight responsibility, sets the risk management framework, determines the overall risk appetite of the business and creates the appropriate structures and processes to manage each category of risk in an appropriate manner.

The Executive Committee is responsible for the management of the Group's general activities and implementing the business plan approved by the Board, including the management of risks.

The committees of the Board provide additional oversight. In particular, the Risk and Compliance Committee is responsible for supervision of the Group's risk management framework and policies, including in respect of market and counterparty risk, compliance, financial, legal, operational, IT and cyber security, and business continuity risks.

trafigura.com/business-principles-on-hsec ↗

trafigura.com/code-of-business-conduct ↗

Risk governance overview

Board and Executive Committees

Risk and Compliance Committee | Audit Committee | ESG Committee | Remuneration Committee

Policy and oversight

1. The Risk and Compliance Committee is responsible for assisting the Board of Directors in supervising the Group's risk management capabilities and policy, and the implementation and development of the Group's compliance programme.
2. The Audit Committee is responsible for assisting the Board of Directors in fulfilling its oversight responsibilities for the financial reporting process, the system of internal controls and the audit process.
3. The ESG Committee is responsible for assisting the Board of Directors with the management of the Group's environmental, social and governance strategy and performance.
4. The Remuneration Committee assists and advises the Board of Directors on matters relating to the remuneration strategy for the Executive Committee and other senior employees of the Group.

Organisational structure

1. Short and direct channels of communication and control.
2. The Chief Risk Officer and internal controls function are independent from the trading teams.
3. Risk exposure monitoring and hedging execution are carried out by Deals Desk.
4. Risk management and trading teams are automatically notified whenever a book nears its risk limits.
5. The Finance team is involved from the earliest stages in the process and can veto any transaction.
6. The Compliance department operates independently from but in co-operation with commercial teams to ensure controls are relevant and effective.

Rule-based procedures and limits

1. The Group follows a comprehensive internal limit framework (e.g. market and credit). Market risk limits are applied at multiple levels within the organisation: on individual, commodity, desk and Group levels.
2. Focus on aggregate risk, term structure, intra commodity spreads and risk concentrations.
3. Systematic flat price exposure hedging.
4. Our Code of Business Conduct and associated policies set out the high standards of responsible behaviour required of every employee, individually and collectively.
5. The mandatory Compliance training programme ensures employee awareness of key internal and external requirements.

Risk management system

Key risks

Mitigation and actions

Markets and prices

Volatility in commodity prices, spreads, interest and exchange rates.

Fluctuations in the supply of or demand for commodities.

- Our policy is to hedge index price exposure related to physical transactions on a deal-by-deal basis.
- Our stock is generally pre-sold or the index price is hedged.
- Despite such hedging, we remain exposed to basis risk, i.e., the risk of changes in the difference between the price of the commodity being hedged and the hedging instrument. The Group carefully monitors its hedging positions on a daily basis to avoid excessive basis risk resulting from these imperfect correlations (including the use of VaR metrics).
- The majority of sales and purchases are denominated in US dollars. Exposure to other currencies is hedged as appropriate and financing raised in currencies other than US dollars is generally swapped into US dollars.
- Our policy is to borrow short-term working capital at floating rates, with any rate changes passed through to our customers, and to fix rates for medium- and long-term financing via the swaps market.
- Freight costs and bunker costs are hedged by our Shipping and Chartering team via forward-freight agreements and bunker fuel swaps.
- The diversification of our business, trading a wide range of commodities with varying and uncorrelated market dynamics across a large number of countries and geographical regions, is an important factor in reducing our overall exposure to any individual market, price, geopolitical or other risk.

Finance and liquidity

- We rely on a deep pool of financing from banks and investors to support its business. This structure has three pillars:

  (i) Transactional facilities

  (ii) Securitisation

  (iii) Corporate credit facilities
- For longer-term capital needs, we raise funds on public bond markets or through private placements with institutional investors. We follow a strict policy of matching the maturity of our assets and liabilities.
- We take a conservative approach to managing our funding liquidity, with more than one-third of committed facilities unutilised at all times under normal market conditions, and immediately available cash of at least USD2 billion always on hand.
- Our transactional financing base allows the underlying assets to be marked-to-market, matching liquidity needs for any related margin calls.

Compliance, internal controls and sanctions

- Our Compliance department oversees Group activities to verify that we operate appropriately and that our controls are relevant and robust. It focuses on promoting a sound compliance culture across the organisation in which everyone recognises their personal responsibility for meeting our compliance objectives. The team adopts a risk-based approach, allocating energy and resources to the issues that matter most to our core business and our stakeholders. The company is fully aware of reputation risk for its business and takes a proactive approach to mitigate it.
- The Department's activities include counterparty due diligence (KYC); anti-money-laundering; sanctions and trade restrictions; anti-bribery and corruption; and financial market conduct.
- The Compliance department ensures that obligations with regard to applicable international sanctions are respected across all our business activities and that we fulfil the applicable undertakings on sanctions included in our credit facilitates. This is a key focus for the trading teams, which receive support from the Compliance, Legal and Finance departments.

Legal, taxation and regulation

- We are focused on managing legal, taxation and regulatory risks across the multiple jurisdictions in which we operate. The Group adheres to applicable local and international tax laws, including legislation on transfer pricing.
- Moreover, we routinely engage in discussions with regulatory bodies around sector market developments and financial stability, emphasising our credibility in the industry. We are always open to sharing our knowledge of and expertise in the commodity markets.

Key risks	Mitigation and actions
Counterparty, country and credit	• We use internal credit limits established by the Credit department to reduce counterparty and credit risk. The Group prides itself on having had an extremely low incidence of credit losses throughout its history. • We reduce political risk in relation to certain countries below a certain risk rating by purchasing political risk insurance. • Credit limits reflect our limited appetite for credit risk and are based on a credit analysis of the client as well as the size of the relevant transaction when compared to our balance sheet. • We pay particular attention to screening our portfolio of prepayment agreements with producers for credit risk. • We manage certain credit exposure through coverage in the insurance or bank markets.
Operational safety, and Environmental, Social and Governance (ESG)	• The Board ESG Committee sets and oversees the strategic direction of the Group's sustainability strategy and its corporate policies and guidelines. • Our Corporate Responsibility Policy and Business Principles articulate the leadership team's priorities and commitments across operational safety and ESG for the Group. At the operational level, they outline what is expected from everyone in the Group, its divisions and operating companies. • The Board ESG Committee receives regular updates from managers across the business to discuss HSEC performance and future targets, and their approach to managing ESG risks and opportunities. The Committee receives the minutes of the Operational HSEC and Commercial ESG Steering Committee meetings and internal HSEC management reports. The Board Committee and Operational HSEC and Commercial ESG Steering Committees also receive presentations from internal and external subject matter experts to stay abreast of emerging ESG expectations, policies and leading practice. • A particular focus has been placed on meeting our sustainability targets, driving good practice across the Group, and preparing for a range of new sustainability focused standards and regulations, including the EU Corporate Sustainability Reporting Directive.
Digital infrastructure/ cyber-security	• We have invested significantly in state-of-the-art scalable and resilient systems residing on highly available and disaster recovery resilient infrastructure. Our applications are designed for front-to-back processing with integrated controls. • The commodities industry is a focus for sophisticated cyber threat actors ranging from nation states to high-tech criminal gangs. Motivations range from fraud to data theft. The impact of a breach in our corporate or industrial digital infrastructure has the potential to seriously disrupt our operations. • To counter any cyber threat, we actively manage the risk by deploying and continuously upgrading state-of-the-art cyber defences. We employ multiple layers of advanced threat detection mechanisms, together with active automated countermeasures. We run regular exercises in partnership with the most sophisticated industry specialists to test our detection and response capability to cyber-attacks. • Management has paid particular attention to promoting a culture of security awareness. Cyber-security is a mandatory and on-going component of staff training, underpinned by a comprehensive set of defined Technology and Security Policies.

Financing to meet diverse business needs

Access to diverse, scalable and flexible sources of funding is essential to purchase commodities and finance their onward distribution to our end customers.

Continued access to capital

Our activities require substantial amounts of capital. We source, store, blend and deliver commodities around the globe. We invest in terminals, logistics and physical infrastructure to improve the efficiency of our trading operations.

Our diversified funding model allows us to continue to operate effectively and successfully in different market conditions. The scalability and structure of our model protects the business from market shocks and provides flexibility and the ability to capitalise on opportunities as they arise.

We have put in place a global programme of flexible, short-term secured facilities to finance our day-to-day operations and a programme of longer-term corporate facilities to finance our asset investments and other corporate requirements.

Available funding exceeds our everyday requirements. This provides headroom for unusual market conditions. We also maintain substantial cash balances to ensure that we will always meet day-to-day capital commitments, even in unexpected circumstances.

Our approach to funding

Diversification improves competitiveness and access to capital

We diversify both the sources and the structure of our financing to minimise risk and maximise operational effectiveness.

We raise funds in a variety of markets in the US, Europe, Middle East and Asia-Pacific. We have lending arrangements in place with around 150 banks around the world. Therefore, we are not constrained by credit restrictions for specific financial institutions, sectors or regions.

We raise capital with a range of repayment schedules, from very short-term facilities to maturities greater than 10 years. This spreads our exposure across the yield curve.

We ensure that all funding arrangements are in compliance with applicable sanction laws and regulation.

Matching funding with collateral reduces credit risk

We have established a three-pillar funding structure which allows us to match the type of financing to the business requirement.

We use short-term financing for trading. These loans are secured against the underlying physical commodities. Lines are frequently marked-to-market so the level of financing tracks the value of the underlying collateral as prices change. We raise longer-term debt to finance fixed assets and investments.

Transparency promotes stability

As a private company relying on debt to finance its operations, our performance is closely scrutinised by a large group of banks and investors worldwide. Members of the Finance team regularly meet with our lenders' representatives. These meetings often include operationally focused personnel (e.g. from Credit, Compliance, Market Risk and our commercial teams) who provide additional insight into our business model. As an issuer of publicly listed debt, we also meet the transparency requirements of our bond investors. Our interim and full-year reports are published online. We hold regular calls and presentations to update investors and to respond to specific queries directly.

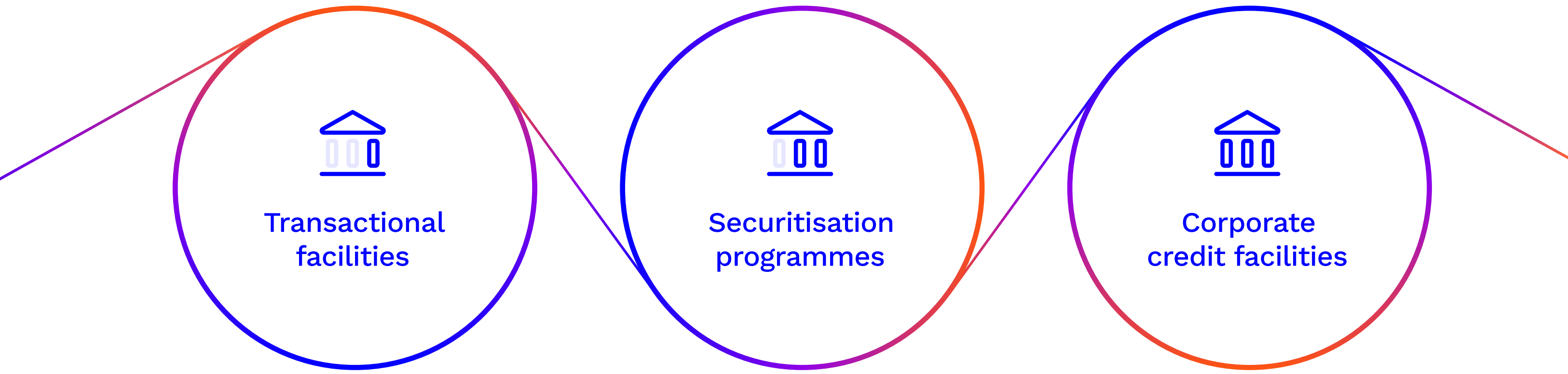
Public credit ratings

We do not hold a public rating and we do not seek to obtain one. The Group focuses on strengthening its balance sheet through long-term value creation.

We obtain our funding from stakeholders who understand our business model in detail and whose investment decisions are not driven by external ratings. We have significantly expanded our sources of financing over the years by maintaining a sustainable credit standing that is consistent with an investment-grade profile.

Likewise, the absence of a rating means that our business and investment decisions are not taken on the basis of maintaining a particular rating level, something that becomes particularly important at times of high market volatility.

Our three-pillar funding structure



All transaction-based lending is fully collateralised. We fund day-to-day trading mostly through bilateral agreements with individual banks and borrowing bases with syndicates of banks.

Most transactions start with a bank issuing a letter of credit on behalf of Trafigura in favour of a commodity supplier to secure due payment. The bank takes security over the physical commodity being purchased.

When payment is due, we draw on a transactional loan to pay the supplier, such loan being secured against the commodity. The loan is frequently marked-to-market until maturity so that the amount being financed always corresponds to the value of the underlying commodity.

Once the commodity is sold to the end-buyer, a receivable is created and assigned to the bank until the cash settlement is used to repay the secured loan.

Alternatively, the loan can be repaid earlier if the receivable is sold to one of the trade receivables securitisation programmes operated by the Group.

We manage two trade receivables securitisation programmes through separately capitalised special purpose vehicles: TSF and Argonaut. The programmes further diversify our funding sources by enabling access to bank-sponsored conduits and ABS investors and, thanks to TSF's investment-grade ratings from Moody's and S&P, are cost-effective financing mechanisms.

Physical commodities are typically financed on a trade-by-trade basis with secured loans granted by trade finance banks. Once a commodity cargo is sold by us to a counterpart and risk transferred has occured, an invoice is raised. The receivable attached to such invoice, can be sold to our trade receivables programmes (subject to their eligibility criteria) and the payment proceeds from the sale are then used to repay the initial secured loan. Securitising our receivables accelerates the rotation of existing credit lines, since transactional secured loans can be repaid faster with the programmes' proceeds.

We also operate an inventory securitisation programme (TCF/TGCF) that enables us to sell and repurchase eligible inventories, together with related hedging instruments.

We invest in fixed assets to support our trading activity. We finance these with long-term debt adhering to our policy of matching durations of assets and liabilities. We issue debt securities and negotiate lending facilities in diverse markets.

Funding sources include bonds, perpetual bonds, revolving credit facilities, private placements and term loans. These instruments are also used to manage daily funding requirements in relation to our hedging instruments, such as initial margin deposits and margin calls with hedge brokers.

Consolidated financial statements

Auditors Report

Report of the Auditor to the Shareholders and the Board of Directors of Trafigura Group Pte. Ltd. Singapore

Report on the audit of the consolidated financial statements

Opinion

We have audited the consolidated financial statements of Trafigura Group Pte. Ltd. and its subsidiaries (collectively, the "Group"), which comprise the consolidated statement of income and the consolidated statement of other comprehensive income for the year ended 30 September 2023, the consolidated statement of financial position as at 30 September 2023, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 30 September 2023 and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those provisions and standards are further described in the "Auditor's responsibilities for the audit of the consolidated financial statements" section of our report.

We are independent of the Group in accordance with the provisions of the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our audit approach

Overview

Overall Group materiality: USD 307 million

We performed full scope audit work at 6 components, audited specific balances at 29 components and performed specified procedures at 2 components. Our audit scope addressed approximately 69% of the Group's revenue and 77% of the Group's total assets.

As key audit matters, the following areas of focus have been identified:

- Impairment considerations for Puma Energy Holdings Pte. Ltd. (Puma Energy) and Nyrstar Netherlands (Holdings) B.V. (Nyrstar)
- Valuation of LNG off-take agreements

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Materiality

The scope of our audit was influenced by our application of materiality. Our audit opinion aims to provide reasonable assurance that the consolidated financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the consolidated financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall Group materiality for the consolidated financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate, on the consolidated financial statements as a whole.

Overall Group materiality	USD 307 million
Benchmark applied	Three-year average profit before tax
Rationale for the materiality benchmark applied	In our view, the materiality benchmark applied above is the benchmark against which the performance of the Group is most commonly measured, and it is a generally accepted benchmark. We used a three-year average to allow for the volatility in earnings normally encountered in the commodity trading markets.

We agreed with the Audit Committee that we would report to them misstatements above USD 15.3 million identified during our audit as well as any misstatements below that amount which, in our view, warranted reporting for qualitative reasons.

Audit scope

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the consolidated financial statements as a whole, taking into account the structure of the Group, the accounting processes and controls, and the industry in which the Group operates.

The Group financial statements are a consolidation of almost 600 legal entities. These are accounted for in over 1,000 financial ledgers, which we have defined as "components" for audit scoping purposes, other than Puma Energy Holdings Pte. Ltd. and Nyrstar Netherlands (Holdings) B.V. sub-consolidations which are treated as a single component each for the purpose of the audit of specific account balances.

We identified 6 components that, in our view, required an audit of their financial information due to their size or risk characteristics. For these 6 components, the audit work was performed either centrally by the Group audit team in Switzerland or by another PwC network firm at one of the Group's global service centres located in Mumbai, India or Montevideo, Uruguay under the direct guidance of the Group audit team. Additionally, we identified 31 components that, in our view, required either an audit of specific balances or specified procedures to be performed due to the significant or higher risk areas and to achieve appropriate coverage over material amounts. Of these 31 components, there were 2 components where the work was not performed directly by ourselves or through our direct supervision at the Group's global services centres, including 1 component where the work was performed by a non-PwC network audit firm. In addition, we instructed the same non-PwC network audit firm to report to us on the results of specified procedures performed with respect to impairment testing relating to Puma Energy. As a result, our audit scope addressed approximately 69% of the Group's revenue and 77% of the Group's total assets.

For these 2 components as well as for the specific procedures performed with respect to impairment testing relating to Puma Energy, we issued specified procedures instructions to the component auditors and reviewed the results of their work with them for our audit. We determined the level of our involvement in the audit work performed by the component auditors to be able to conclude whether sufficient appropriate audit evidence had been obtained as a basis for our opinion on the consolidated financial statements as a whole.

We verified that the audit teams both at Group and at the component levels included the appropriate skills and competencies necessary for the audit of the Group's consolidated financial statements, including specialists in the areas of information technology, valuation and taxes. The Group audit team was in regular communication during the year with the local teams to discuss the audit approach, progress of the audit and observations or findings, if any. To facilitate our direct review, local PwC teams in India and Uruguay documented their audit work directly in the Group audit team's files. The Group audit team also performed audit procedures over Group functions and the risk of fraud and non-compliance with laws and regulations.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Impairment considerations for Puma Energy Holdings Pte. Ltd. (Puma Energy) and Nyrstar Netherlands (Holdings) B.V. (Nyrstar) (Refer to Note 14)

Key audit matter	How our audit addressed the key audit matter
The acquisition of Puma Energy during 2021 resulted in the recognition of a goodwill balance of USD 1,074.1 million. This goodwill was allocated to 13 out of 25 separate Cash Generating Units (CGUs) which represent individual countries and/or businesses. Annual impairment test of this goodwill resulted in the Group recognizing a USD 28.4 million impairment loss in the consolidated statement of income. In addition, as a result of the same impairment assessment, the Group recognized in the consolidated statement of income an impairment of USD 96.4 million relating to Property, plant and equipment of Puma Energy. Further, impairment triggers were identified for Nyrstar Australian smelting operations and Nyrstar United States operations with impairment tests resulting in the Group recognising an impairment of USD 226.9 million and USD 30.5 million, respectively, in the consolidated statement of income. The significance of the estimates and judgments used in making these impairment assessments is considered a key audit matter.	We obtained the valuation models and met with management to gain an overview of the market, operational factors and key assumptions included within the individual impairment assessments. We issued instructions to the non-PwC network audit firm to report to us on the forecasted cash flows used in the impairment valuation models relating to Puma Energy. We also issued instructions to PwC component auditors to report to us on an impairment valuation model relating to the Nyrstar operations. We performed a detailed review of the work performed by the non-PwC network firm and PwC component auditors. With the assistance of valuation specialists, where applicable, the following procedures were performed: • Checked the appropriateness of the inputs and significant assumptions. • Re-performed certain valuation calculations, benchmarked the valuation model with generally accepted valuation techniques. • Performed an independent sensitivity analysis calculation on significant assumptions including discount rate, EBITDA (for Puma Energy) and metal prices (for Nyrstar) to assess their relationships and impact on the models. • Assessed the appropriateness of disclosures included in the financial statements. Based on the work performed, we were able to conclude that the significant judgements and estimates used in the valuation models were reasonable and appropriate.

Valuation of LNG off-take agreements (Refer to Note 40)

Key audit matter	How our audit addressed the key audit matter
The Group continues to use derivative financial instruments to hedge certain transportation, bareboat and time charters and long-term liquefied natural gas ("LNG") off-take agreements. A net asset was recorded for these agreements totalling USD 697.5 million as at 30 September 2023 which primarily relates to the LNG hedge relationship. USD 552.1 million was fair valued using unobservable inputs and categorised as Level 3 in the fair value hierarchy. The total hedge ineffectiveness recorded in the consolidated statement of income for the year ended 30 September 2023 was a gain of USD 554.9 million. The fair valuation of the hedged LNG agreements involves significant estimates, especially when the Group is required to use unobservable inputs, adopt market-based assumptions or make comparisons to similar instruments. These judgements become more significant in less liquid markets or for longer dated contracts. These fair values are calculated and managed manually. These cumulative factors are why this is considered a key audit matter.	We evaluated the Group's processes and controls for capturing and reviewing the inputs into the fair value estimates, including the relevant IT systems. We included specialists directly in our team to evaluate management's approach to estimating the fair values and performed the following: • Assessed the reasonableness of management's assumption that there is no readily available LNG market to classify these arrangements as financial instruments under IFRS. • Verified the consistent application of the accounting treatment of LNG contracts across the hedged population. Where manual calculations were involved, we tested the mathematical accuracy of the models. • Verified the inputs into the price curves to external sources on a sample basis. • Assessed the appropriateness of disclosures included in the consolidated financial statements. Based on the work performed, we were able to conclude that the significant judgements and estimates used in the hedged item valuation were reasonable and appropriate.

Other information in the annual report

The Board of Directors is responsible for the other information in the annual report. The other information comprises all the information included in the annual report but does not include the consolidated financial statements of the Group and our auditor’s reports thereon.

Our opinion on the consolidated financial statements does not cover the other information in the annual report, and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information in the annual report and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Board of Directors' responsibilities for the consolidated financial statements

The Board of Directors is responsible for the preparation of the consolidated financial statements, which give a true and fair view in accordance with IFRS as issued by the IASB, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Auditor’s responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor’s report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.
- Conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Board of Directors or its relevant committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Board of Directors or its relevant committee with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with the Board of Directors or its relevant committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

PricewaterhouseCoopers SA

/s/ TRAVIS RANDOLPH	/s/ EWA ANSELM-JEDLINSKA
Travis Randolph	Ewa Anselm-Jedlinska

Geneva, 7 December 2023

A. Consolidated Statement of Income

For the financial year ended 30 September 2023

	Note	2023 USD'M	2022 USD'M
Revenue	9	244,280.2	318,476.4
Materials, transportation and storage	10	(228,057.1)	(302,899.4)
Employee benefits	11	(1,548.5)	(1,443.9)
Services and other	12	(2,076.4)	(2,151.3)
Operating profit or (loss) before depreciation and amortisation	6	**12,598.2**	11,981.8
Depreciation (right-of-use assets)	13	(1,849.8)	(1,216.3)
Depreciation and amortisation (PP&E and intangible fixed assets)	13	(667.1)	(584.2)
Impairments (fixed assets)	14	(409.9)	(535.9)
Impairments (financial assets and prepayments)	14	(128.9)	(103.3)
Operating profit or (loss)		**9,542.5**	9,542.1
Share of profit/(loss) of equity-accounted investees	15	(11.8)	54.2
Disposal results and impairments of equity-accounted investees	15	127.6	(51.6)
Income/(expenses) from investments	15	1.8	(44.3)
Result from equity-accounted investees and investments		**117.6**	(41.7)
Finance income	16	2,198.8	739.6
Finance expense	16	(3,820.3)	(2,280.5)
Result from financing activities		**(1,621.5)**	(1,540.9)
Profit before tax		**8,038.6**	7,959.5
Income tax	17	(640.4)	(933.3)
Profit for the year		**7,398.2**	7,026.2
Profit attributable to			
Owners of the Company		7,393.2	6,994.2
Non-controlling interests		5.0	32.0
Profit for the year		**7,398.2**	7,026.2

See accompanying notes.

B. Supplementary Statement of Income Information

For the financial year ended 30 September 2023

	Note	2023 USD'M	2022 USD'M
Operating profit or (loss) before depreciation and amortisation	6	**12,598.2**	11,981.8
Adjustments	18	87.6	106.8
Underlying EBITDA	18	**12,685.8**	12,088.6

See accompanying notes.

C. Consolidated Statement of Other Comprehensive Income

For the financial year ended 30 September 2023

	Note	2023 USD'M	2022 USD'M
Profit for the year		**7,398.2**	7,026.2
Other comprehensive income			
Items that are or may be reclassified to profit or loss:			
Gain on cash flow hedges	40	24.9	204.2
Effect from hyperinflation adjustment	43	43.6	23.5
Tax on other comprehensive income	17	13.7	(70.7)
Exchange loss on translation of foreign operations	31	(51.2)	(310.0)
Share of comprehensive loss from associates		(4.1)	(26.5)
Recycling of foreign currency translation reserve on disposal of equity accounted investee	15	(176.6)	–
Recycling of cash flow hedge reserve on disposal of equity-accounted investee	15	55.1	–
Items that will not be reclassified to profit or loss:			
Net change in fair value through other comprehensive income, net of tax	23	6.8	(45.1)
Defined benefit plan actuarial gains/(losses), net of tax		1.2	26.4
Other comprehensive loss for the year, net of tax		**(86.6)**	(198.2)
Total comprehensive income for the year		**7,311.6**	6,828.0
Total comprehensive income attributable to:			
Owners of the Company		7,314.5	6,796.1
Non-controlling interests		(2.9)	31.9
Total comprehensive income for the year		**7,311.6**	6,828.0

See accompanying notes.

D. Consolidated Statement of Financial Position

As at 30 September 2023

	Note	30 September 2023 USD'M	30 September 2022 USD'M
Assets			
Property, plant and equipment	19	4,375.3	4,377.1
Intangible fixed assets	20	1,544.5	2,112.7
Right-of-use assets	21	4,668.2	3,904.5
Equity-accounted investees	22	969.5	979.6
Prepayments	23	1,107.8	1,534.1
Loans receivable	23	791.6	307.5
Other investments	23	997.5	595.5
Derivatives	40	410.2	1,125.2
Deferred tax assets	17	120.3	210.4
Other non-current assets	24	716.6	4,285.9
Total non-current assets		**15,701.5**	**19,432.5**
Inventories	25	22,969.7	22,583.6
Trade and other receivables	26	23,413.8	27,630.5
Derivatives	40	4,153.3	7,179.0
Prepayments	23	2,930.6	2,117.2
Income tax receivable	17	296.1	311.4
Other current assets	28	1,148.4	3,422.3
Deposits	29	208.7	642.0
Cash and cash equivalents	29	12,387.0	14,881.3
Total current assets		**67,507.6**	**78,767.3**
Assets classified as held for sale	30	173.4	434.1
Total assets		**83,382.5**	**98,633.9**
Equity			
Share capital	31	1,503.7	1,503.7
Capital securities	31	666.3	654.1
Reserves	31	(661.0)	(537.5)
Retained earnings	31	14,833.9	13,288.4
Equity attributable to the owners of the Company		**16,342.9**	**14,908.7**
Non-controlling interests		152.5	169.9
Total group equity		**16,495.4**	**15,078.6**
Liabilities			
Loans and borrowings	32	9,314.3	9,614.5
Long-term lease liabilities	21	3,085.9	2,817.1
Derivatives	40	283.6	2,723.7
Provisions	33	567.6	474.2
Other non-current liabilities	34	632.7	521.9
Deferred tax liabilities	17	295.7	380.4
Total non-current liabilities		**14,179.8**	**16,531.8**
Loans and borrowings	32	25,052.8	29,663.6
Short-term lease liabilities	21	1,705.4	1,170.1
Trade and other payables	35	21,734.4	25,649.5
Current tax liabilities	17	1,019.6	1,037.9
Other current liabilities	36	1,201.2	1,562.1
Derivatives	40	1,785.2	7,910.9
Total current liabilities		**52,498.6**	**66,994.1**
Liabilities classified as held for sale	30	208.7	29.4
Total group equity and liabilities		**83,382.5**	**98,633.9**

See accompanying notes.

E. Consolidated Statement of Changes in Equity

For the financial year ended 30 September 2023

		Equity attributable to the owners of the Company									
USD'M	Note	Share capital	Currency translation reserve	Revaluation reserve	Cash flow hedge reserve	Capital securities	Retained earnings	Profit for the year	**Total**	Non-controlling interest	**Total Group equity**
Balance at 1 October 2022		1,503.7	(420.2)	(79.9)	(37.4)	654.1	6,294.2	6,994.2	**14,908.7**	169.9	**15,078.6**
Profit for the year		–	–	–	–	–	–	7,393.2	7,393.2	5.0	7,398.2
Other comprehensive income		–	(224.0)	6.8	93.7	–	44.8	–	(78.7)	(7.9)	(86.6)
Total comprehensive income for the year		–	(224.0)	6.8	93.7	–	44.8	7,393.2	**7,314.5**	(2.9)	**7,311.6**
Profit appropriation		–	–	–	–	–	6,994.2	(6,994.2)	–	–	–
Dividend	31	–	–	–	–	–	(5,916.4)	–	(5,916.4)	(21.2)	(5,937.6)
Acquisition of non-controlling interest in subsidiary		–	–	–	–	–	(1.6)	–	(1.6)	(6.4)	(8.0)
Share-based payments	11	–	–	–	–	–	87.6	–	87.6	–	87.6
Purchase of capital securities	31	–	–	–	–	(5.0)	–	–	(5.0)	–	(5.0)
Capital securities (currency translation)	31	–	–	–	–	20.1	(20.1)	–	–	–	–
Capital securities dividend	31	–	–	–	–	–	(48.5)	–	(48.5)	–	(48.5)
Divestment and deconsolidation of subsidiary		–	–	–	–	–	–	–	–	13.0	13.0
Other		–	–	–	–	(2.9)	6.5	–	3.6	0.1	3.7
Balance at 30 September 2023		1,503.7	(644.2)	(73.1)	56.3	666.3	7,440.7	7,393.2	**16,342.9**	152.5	**16,495.4**

		Equity attributable to the owners of the Company									
USD'M	Note	Share capital	Currency translation reserve	Revaluation reserve	Cash flow hedge reserve	Capital securities	Retained earnings	Profit for the year	**Total**	Non-controlling interest	**Total Group equity**
Balance at 1 October 2021		1,503.7	(79.4)	(34.9)	(175.2)	1,173.9	4,814.8	3,100.0	**10,302.9**	242.7	**10,545.6**
Profit for the year		–	–	–	–	–	–	6,994.2	6,994.2	32.0	7,026.2
Other comprehensive income		–	(340.8)	(45.1)	137.8	–	50.0	–	(198.1)	(0.1)	(198.2)
Total comprehensive income for the year		–	(340.8)	(45.1)	137.8	–	50.0	6,994.2	**6,796.1**	31.9	**6,828.0**
Profit appropriation		–	–	–	–	–	3,100.0	(3,100.0)	–	–	–
Dividend	31	–	–	–	–	–	(1,721.2)	–	(1,721.2)	(14.6)	(1,735.8)
Acquisition of non-controlling interest in subsidiary		–	–	–	–	–	(36.3)	–	(36.3)	(29.0)	(65.3)
Share-based payments	11	–	–	–	–	–	106.8	–	106.8	–	106.8
Repayment of capital securities	31	–	–	–	–	(479.2)	–	–	(479.2)	–	(479.2)
Capital securities (currency translation)	31	–	–	–	–	(45.1)	45.1	–	–	–	–
Capital securities dividend	31	–	–	–	–	–	(64.3)	–	(64.3)	–	(64.3)
Divestment and deconsolidation of subsidiary		–	–	–	–	–	–	–	–	(66.1)	(66.1)
Capital contribution from the minority shareholders		–	–	–	–	–	–	–	–	2.3	2.3
Other		–	–	0.1	–	4.5	(0.7)	–	3.9	2.7	6.6
Balance at 30 September 2022		1,503.7	(420.2)	(79.9)	(37.4)	654.1	6,294.2	6,994.2	**14,908.7**	169.9	**15,078.6**

See accompanying notes.

F. Consolidated Statement of Cash Flows

For the financial year ended 30 September 2023

	Note	2023 USD'M	2022 USD'M
Cash flows from operating activities			
Profit before tax		8,038.6	7,959.5
Adjustments for:			
Depreciation and amortisation	13	2,516.9	1,800.5
Impairments (included in operating profit or loss)	14	538.8	639.2
Result from equity-accounted investees and investments	15	(117.6)	41.7
Result from financing activities	16	1,621.5	1,540.9
Equity-settled share-based payment transactions	11	87.6	106.8
Provisions	33	(28.4)	66.0
(Gain)/loss on sale of fixed assets (included in services and other)		(45.6)	(29.6)
Operating cash flows before working capital changes		**12,611.8**	12,125.0
Changes in:			
Inventories	25	(295.5)	7,070.1
Trade and other receivables and derivatives	26	13,761.6	(12,870.8)
Prepayments	23	(558.0)	(160.2)
Trade and other payables and derivatives	35	(12,813.0)	9,791.1
Cash generated from/(used in) operating activities		**12,706.9**	15,955.2
Interest paid		(3,784.8)	(2,259.9)
Interest received		2,177.6	708.9
Dividends (paid)/received		45.5	26.1
Tax (paid)/received		(636.1)	(685.4)
Net cash flows from/(used in) operating activities		**10,509.1**	13,744.9
Cash flows from investing activities			
Acquisition of property, plant and equipment	19	(799.5)	(658.3)
Proceeds from sale of property, plant and equipment	19	141.9	92.4
Proceeds from disposal of assets/liabilities held for sale	30	1104.0	34.9
Acquisition of intangible assets	20	(97.4)	(571.2)
Proceeds from sale of intangible assets	20	0.3	–
Acquisition of equity-accounted investees	22	(93.9)	(150.9)
Proceeds from disposal of equity-accounted investees	22	0.9	714.9
Loans receivable and advances granted	23	(392.4)	(57.6)
Repayment of loans receivable and advances granted	23	9.2	27.6
Acquisition of other investments	23	(355.8)	(42.2)
Proceeds from disposal of other investments	23	86.0	74.7
Acquisition of subsidiaries, net of cash acquired	7	(36.8)	–
Net cash flows from/(used in) investing activities		**(433.5)**	(535.7)
Cash flows from financing activities			
Payment of capital securities dividend	31	(29.3)	(58.8)
Dividend and payments in relation to the share redemption by the direct parent company	31	(5,916.4)	(1,713.5)
Repayment of capital securities	31	(5.0)	(479.2)
Proceeds from capital contributions to subsidiaries by non-controlling interests		(3.9)	2.3
Dividends paid to non-controlling interest		(16.4)	–
Increase in long-term loans and borrowings	32	4,549.8	2,994.2
(Decrease) in long-term loans and borrowings	32	(495.5)	(1,841.7)
Payment of leases	21/32	(1,808.3)	(1,230.6)
Net increase/(decrease) in short-term bank financing	32	(8,844.9)	(6,678.1)
Net cash flows from/(used in) financing activities		**(12,569.9)**	(9,005.4)
Net increase/(decrease) in cash and cash equivalents		**(2,494.3)**	4,203.8
Cash and cash equivalents at 1 October		14,881.3	10,677.5
Cash and cash equivalents at 30 September	29	**12,387.0**	14,881.3

See accompanying notes.

G. Notes to the Consolidated Financial Statements

1. Corporate information

The principal business activities of Trafigura Group Pte. Ltd. ('Trafigura' or the 'Company') and its subsidiaries (the 'Group') are trading in crude and petroleum products, power and renewables, non-ferrous concentrates, refined metals and bulk commodities such as coal and iron ore. The Group also invests in assets, including through investments in associates, which have strong synergies with its core trading activities. These include storage terminals, service stations, metal warehouses, industrial facilities and mines.

The Company is incorporated in Singapore and its principal business office is at 10 Collyer Quay, Ocean Financial Centre, #29-01/05, Singapore, 049315.

The Company's immediate holding company is Trafigura Beheer B.V., a company incorporated in the Netherlands. Trafigura Beheer B.V. is ultimately controlled by Farringford Foundation, which is established under the laws of Panama.

The consolidated financial statements for the year ended 30 September 2023 were authorised for issue by the Board of Directors on 7 December 2023.

2. Basis of preparation

2.1 Statement of compliance

The Company's consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS®) as issued by the International Accounting Standards Board (IASB).

2.2 Basis of measurement

The consolidated financial statements have been prepared under the historical cost convention except for inventories, derivatives and certain other financial instruments that have been measured at fair value, and assets held for sale that are measured at the lower of carrying amount and fair value less costs to sell. The consolidated financial statements have been prepared on a going concern basis.

2.3 No change in accounting policies for financial year 2023

The accounting principles applied in the preparation of the consolidated financial statements are consistent with those described in the Trafigura 2022 Annual Report.

Several IFRS amendments apply for the first time in the 2023 financial year. However, these do not materially impact the Group's consolidated financial statements.

For an overview of the estimated effect of issued, but not yet effective, new and amended IFRS standards and IFRICs on the Group, refer to note 4 – Adoption of new and revised standards.

2.4 Functional and presentation currency

The Group's presentation currency is the US dollar (USD) and all values are rounded to the nearest tenth of a million (USD'M 0.1) unless otherwise indicated. The US dollar is the functional currency of most of the Group's principal operating subsidiaries. Most of the markets in which the Group is involved are USD denominated.

2.5 Going concern

Trafigura assessed the going-concern assumptions during the preparation of the Group's consolidated financial statements. The Group believes that no events or conditions, including those related to the war in Ukraine, give rise to doubt about the ability of the Group to continue operating in the next reporting period. This conclusion is drawn based on the knowledge of the Group, the estimated economic outlook and identified risks and uncertainties in relation thereto.

Furthermore, this conclusion is based on review of the current cash balance and expected developments in liquidity and capital. The Group has sufficient cash and headroom in its credit facilities. Therefore, it expects that it will be able to meet contractual and expected maturities and covenants. Consequently, it has been concluded that it is reasonable to apply the going-concern concept as the underlying assumption for the financial statements.

3. Significant accounting policies

The Group's significant accounting policies are described in the relevant individual notes to the consolidated financial statements or otherwise stated below.

3.1 Basis of consolidation

The consolidated financial statements include the assets, liabilities and results of operations of all subsidiaries and branch offices, which the Company, either directly or indirectly, controls. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. When the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee.

Subsidiaries

Subsidiaries are consolidated from the date on which control is obtained by the Company and cease to be consolidated from the date on which control is transferred to a person or entity outside of the control of the Company. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

Changes in the Company's interests in subsidiaries that do not result in a loss of control are accounted for as equity transactions, with any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received being recognised directly in equity and attributed to equity holders of the Company.

Non-controlling interests

Non-controlling interests in subsidiaries are identified separately from the Company's equity and are initially measured either at fair value or at the non-controlling interests' proportionate share of the fair value of the acquiree's identifiable net assets. Subsequent to acquisition, the carrying amount of non-controlling interests is the amount of those interests at initial recognition plus the non-controlling interests' share of subsequent changes in equity. Total comprehensive income is attributed to non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Loss of control

If the Group loses control, the Group derecognises the assets and liabilities of the subsidiary, any non-controlling interests and the other components of equity related to the subsidiary. The parent's share of components previously recognised in other comprehensive income is reclassified to profit and loss or retained earnings, as would be required if the Group had directly disposed of the related assets or liabilities. Any surplus or deficit arising on the loss of control is recognised in the Consolidated Statement of Income. If the Group retains any interest in the previous subsidiary, then such interest is measured at fair value at the date that control is lost. Subsequently, it is accounted for as an equity-accounted investee or as an equity investment depending on the level of influence retained.

3.2 Current versus non-current classification

The Group presents assets and liabilities in the Consolidated Statement of Financial Position based on current/non-current classification. An asset is current when it is:

- Expected to be realised or intended to be sold or consumed in the normal operating cycle;
- Held primarily for the purpose of trading; and
- Expected to be realised within 12 months after the reporting period.

All other assets are classified as non-current.

A liability is current when:

- It is expected to be settled in the normal operating cycle;
- It is held primarily for the purpose of trading; and
- It is due to be settled within 12 months after the reporting period.

The terms of the liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

The Group classifies all other liabilities as non-current. Deferred tax assets and liabilities are classified as non-current assets and liabilities.

3.3 Foreign currency

3.3.1 Foreign currency transactions

Subsidiaries, joint ventures and equity-accounted investees record transactions in the functional currency of the economic environment in which they operate. Transactions in currencies other than the functional currency of the subsidiary, joint ventures and equity investees are recorded at the rates of exchange prevailing at the date of the transaction.

Monetary assets and liabilities in currencies other than the functional currency are translated at the rates of exchange prevailing at the balance sheet date and gains and losses are reported in the Consolidated Statement of Income.

3.3.2 Foreign operations

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition, are translated to USD at exchange rates at the reporting date. The income and expenses of foreign operations, excluding foreign operations in hyperinflationary economies, are translated to USD at the average rate for the year that is considered as the best estimate of transaction dates. The resulting exchange differences are recorded in equity through other comprehensive income and are included in the Consolidated Statement of Income upon sale or liquidation of the underlying foreign operation.

3.3.3 Reporting in hyperinflationary economies

Group entities for which the functional currency is the currency of a hyperinflationary economy first restate their financial statements in accordance with IAS 29, Financial Reporting in Hyperinflationary Economies (refer to 'Reporting in hyperinflationary economies' below). The related income, costs and balance sheet amounts are translated at the foreign exchange rate at the balance sheet date.

Please refer to note 43.

4. Adoption of new and revised standards

4.1 New and amended standards or interpretations adopted

In the 2023 financial year, the Group adopted the following new and amended standards or interpretations:

Standard/interpretation	Name of standard/interpretation or amendments	Date of publication	Effective as of
Amendments to IAS 16	Property, Plant and Equipment (Proceeds before Intended Use)	14 May 2020	1 January 2022
Amendments to IAS 37	Provisions, Contingent Liabilities and Contingent Assets (Onerous Contracts, Settlement Costs from Contracts)	14 May 2020	1 January 2022
Amendments to IFRS 3	Business Combinations (Amendment to References to the Conceptual Framework)	14 May 2020	1 January 2022
Annual improvements to IFRS 2018-2020	Amendments to: • IFRS 1 (Subsidiary as a First-Time Adopter) • IFRS 9 (Fees in the “10% Test” Regarding Derecognition of Financial Liabilities) • IFRS 16 (Lease Incentives) • IAS 41 (Taxation in Fair Value Measurements)	14 May 2020	1 January 2022
Amendments to IAS 12	International Tax Reform – Pillar Two Model Rules Paragraphs 4A and 88A	23 May 2023	Immediately

The amendments shown in the table had no material effect on the consolidated financial statements.

4.2 New standards, amendments and interpretations not yet adopted

Certain new accounting standards and interpretations have been published that are not mandatory for 30 September 2023 reporting periods and have not been adopted early by the Group:

Standard/interpretation	Name of standard/interpretation or amendments	Date of publication	Expected date of initial application (financial years starting as of)
Amendments to IFRS 17	Insurance Contracts (including amendments to the standard)	25 June 2020	1 January 2023
Amendments to IAS 1	Presentation of Financial Statements (Classification of Liabilities as Current or Noncurrent) (including Deferral of Effective Date)	23 January 2020 (15 July 2020)	1 January 2024
Amendments to IAS 1 and IFRS Practice Statement 2	Presentation of Financial Statements and Making Materiality Judgements (Presentation of Key Accounting Policies)	12 February 2021	1 January 2023
Amendments to IAS 8	Accounting Policies, Changes in Accounting Estimates and Errors (Definition of Changes in Accounting Policies and Accounting Estimates)	12 February 2021	1 January 2023
Amendments to IAS 12	Income Taxes (Deferred Tax Related to Assets and Liabilities Arising from a Single Transaction)	7 May 2021	1 January 2024
Amendments to IFRS16	Lease Liability in a Sale and Leaseback	22 September 2022	1 January 2024
Amendments to IAS 1	Non-current liabilities with Covenants	31 October 2022	1 January 2024
Amendments to IAS 7 and IFRS 7	Supplifier Finance Arrangements	25 May 2023	1 January 2024
Amendments to IAS 12	International Tax Reform – Pillar Two Model Rules Paragraphs 88B–88D	23 May 2023	1 January 2023
Amendments to IAS 21	Lack of Exchangeability	15 August 2023	1 January 2025

Other than for amendments relating to IAS 12 Pillar Two international tax reform, the Group does not expect that these new standards, amendments and interpretations not yet adopted will have a material effect on the consolidated financial statements

For amendments relating to IAS 12 Pillar Two international tax reform, the Group is currently assessing the impact on the consolidated financial statements

G. Notes to the Consolidated Financial Statements

5. Key accounting estimates and judgements

Preparing the consolidated financial statements in compliance with IFRS requires management to make judgements, estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities affected in future periods.

In the process of applying the Group's accounting policies, management has made various judgements. Those which management has assessed to have the most significant effect on the amounts recognised in the consolidated financial statements have been discussed in the individual notes of the related financial statement line items.

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date and that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are also described in the individual notes of the related financial statement line items below. The Group based its assumptions and estimates on parameters available when the consolidated financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change as a result of market changes or circumstances arising that are beyond the control of the Group. Such changes are reflected in the assumptions when they occur.

The Group has identified the following areas as being critical to understanding its financial position as they require management to make complex and/or subjective judgements and estimates about matters that are inherently uncertain:

- Useful life and residual value of property, plant and equipment (note 13 – Depreciation and amortisation);
- Impairment tests (note 14 – Impairments);
- Taxation (note 17 – Income Tax);
- Discount rates (note 21 – Leases);
- Determining the term of a lease contract (note 21 – Leases);
- Determination of control of subsidiaries and joint arrangements (note 22 – Equity-accounted investees);
- Assets held for sale (note 30 – Assets classified as held for sale and discontinued operations);
- Provisions (note 33 – Provisions);
- Restoration, rehabilitation and decommissioning costs (note 33 – Provisions); and
- Valuation of financial assets, including derivative and level 3 instruments (note 40 – Hedging activities and derivatives).

6. Operating segments

Accounting policy

The segment reporting is in accordance with IFRS 8 Operating Segments. The segments reported reflect the reporting lines and structures used by the Group's Chief Executive Officer, who has been identified as the chief operating decision-maker, to allocate resources and assess the performance of Trafigura.

Operating segments have been aggregated if they have similar economic characteristics and are similar in the nature of products and services, production services, distribution methods and customer types or classes. In addition, aggregation has been applied for segments that do not merit disclosure by virtue of their size, based on a 10 percent threshold of combined revenue, profit or assets of all operating segments.

The accounting policies of the operating segments are the same as those described throughout the notes where relevant. The Group accounts for inter-segment sales and transfers where applicable as if the sales or transfers were to third parties. Geographical data is presented according to the management view.

Segment assets, liabilities, income and results are measured based on our accounting policies and include items directly attributable to a segment, as well as those that can be allocated on a reasonable basis. Transactions between segments are conducted on an arm's length basis.

The Group's operating businesses are organised and managed separately according to the nature of the products, with each segment representing a strategic unit that offers different products and serves different markets. The reportable segments comprise:

- The Energy segment is engaged in trading of oil and petroleum products and related freight activities, the Puma Energy activities, and trading and investing in power and renewable energy. Oil and Petroleum concerns the sourcing, provision and storage of oil, at all stages from crude to finished products such as naphtha and gasoline. This includes the blending required to make gasoline in the various grades suitable for the different specifications relevant in different countries. Puma Energy activities include the sale and distribution of petroleum products.
- The Metals and Minerals segment trades copper, lead, zinc, aluminium, nickel, cobalt, iron ore and coal in all forms, including ores, concentrates and refined metals. The segment is involved in all the various stages, from mining and smelting to the production of finished metals. This segment also includes mining activities, Nyrstar and Impala activities. In addition to trading activities, the activities performed in this segment include the blending of metal concentrates, iron ore, coal and alumina; the smelting of zinc and lead concentrates; and warehousing and transportation. The Metals and Minerals segment also includes related freight activities.
- All other segments include holding companies, securitisation programmes, group financing facilities and some smaller operating companies.

Information regarding the results of each reportable segment is included below. Performance is measured based on the segment's operating profit or loss before depreciation and amortisation. Management believes that such information is the most relevant in evaluating the results of certain segments relative to other entities that operate within these industries.

Metals and Minerals was impacted by a fraud involving misrepresentation and presentation of false documentation perpetrated against Trafigura. The fraud is isolated to a specific line of business. Trafigura believed it had paid for a significant quantity of LME grade nickel but subsequent inspections have indicated otherwise. Legal proceedings have been commenced against the counterparties involved. The Group has recorded a USD578 million write-off, which is predominantly presented under Materials, transportation and storage in the consolidated statement of income for the year ending 30 September 2023, and primarily relates to inventory.

G. Notes to the Consolidated Financial Statements

Reconciliations of reportable segment revenues, results, assets and liabilities, and other material items are as follows:

	2023				2022			
	Energy	Metals and Minerals	Corporate and Other	Total	Energy	Metals and Minerals	Corporate and Other	Total
	USD'M	USD'M	USD'M	USD'M	USD'M	USD'M	USD'M	USD'M
Sales revenue from external customers	167,311.2	72,684.7	–	239,995.9	211,981.2	103,526.7	–	315,507.9
Service revenue from external customers	3,670.2	614.1	–	4,284.3	2,196.7	771.8	–	2,968.5
Revenue	**170,981.4**	**73,298.8**	**–**	**244,280.2**	**214,177.9**	**104,298.5**	**–**	**318,476.4**
Operating expenses	(159,838.7)	(71,697.4)	(145.9)	(231,682.0)	(204,051.7)	(102,421.7)	(21.2)	(306,494.6)
Operating profit or (loss) before depreciation and amortisation	**11,142.7**	**1,601.4**	**(145.9)**	**12,598.2**	**10,126.2**	**1,876.8**	**(21.2)**	**11,981.8**
Depreciation (right-of-use assets)	(1,709.9)	(124.9)	(15.0)	(1,849.8)	(1,097.1)	(114.0)	(5.2)	(1,216.3)
Depreciation and amortisation (PP&E and intangible fixed assets)	(372.9)	(282.2)	(12.0)	(667.1)	(297.6)	(287.0)	0.4	(584.2)
Impairments (PP&E and intangible fixed assets)	(152.5)	(257.5)	0.1	(409.9)	(284.1)	(251.1)	(0.7)	(535.9)
Impairments (financial assets and prepayments)	99.8	(223.4)	(5.3)	(128.9)	72.1	(175.4)	–	(103.3)
Operating profit or (loss)	**9,007.2**	**713.4**	**(178.1)**	**9,542.5**	**8,519.5**	**1,049.3**	**(26.7)**	**9,542.1**
Result from equity-accounted investees and investments	131.4	(26.1)	12.3	117.6	(24.7)	(16.6)	(0.4)	(41.7)
Result from financing activities				(1,621.5)				(1,540.9)
Profit before tax				**8,038.6**				**7,959.5**
Income tax				(640.4)				(933.3)
Profit for the year				**7,398.2**				**7,026.2**

	As at 30 September 2023				As at 30 September 2022			
	Energy	Metals and Minerals	Corporate and Other	Total	Energy	Metals and Minerals	Corporate and Other	Total
	USD'M	USD'M	USD'M	USD'M	USD'M	USD'M	USD'M	USD'M
Segment assets and liabilities								
Equity-accounted investees	236.3	709.8	23.4	969.5	215.3	742.0	22.3	979.6
Other non-current assets	9,968.3	4,108.1	655.6	14,732.0	12,917.7	4,933.5	601.7	18,452.9
Net assets classified as held for sale	–	(35.3)	–	(35.3)	404.7	–	–	404.7
Total assets	44,938.5	27,647.1	10,796.9	83,382.5	57,574.1	27,634.9	13,424.9	98,633.9
Total liabilities	30,459.3	19,543.7	16,675.4	66,678.4	45,669.5	21,878.5	15,977.9	83,525.9
Other segment information								
Capital expenditure	705.7	340.4	81.9	1,128.0	821.5	334.5	69.9	1,225.9

Geographical information

The following table sets out information about the geographical location of the Group's revenue from external customers:

	2023			2022		
	Energy	Metals and Minerals	Total	Energy	Metals and Minerals	Total
	USD'M	USD'M	USD'M	USD'M	USD'M	USD'M
Revenue from external customers						
Europe	50,092.3	13,218.8	63,311.1	62,426.8	20,464.1	82,890.9
Asia	49,376.7	50,238.0	99,614.7	60,471.3	63,932.4	124,403.7
North America	33,377.9	5,570.1	38,948.0	48,513.4	6,111.6	54,625.0
Latin America	20,683.7	1,573.0	22,256.7	23,256.4	2,181.0	25,437.4
Africa	9,589.2	536.3	10,125.5	11,367.4	3,438.7	14,806.1
Australia	1,585.1	849.7	2,434.8	963.6	1,898.4	2,862.0
Middle East	6,276.5	1,312.9	7,589.4	7,179.0	6,272.3	13,451.3
Total	**170,981.4**	**73,298.8**	**244,280.2**	**214,177.9**	**104,298.5**	**318,476.4**

7. Business combinations and non-controlling interests

Accounting policy

The Company accounts for its business combinations under the acquisition method at the acquisition date, which is the date on which control is transferred to the Group. The cost of an acquisition is measured as the aggregate of the consideration transferred, which is measured at acquisition date fair value, and the amount of any non-controlling interests in the acquiree. Transaction costs, other than those associated with the issue of debt or equity securities, which the Group incurs in connection with a business combination are expensed as incurred.

If a business combination is achieved in stages, any previously held equity interest is remeasured at its acquisition date fair value and any resulting gain or loss is recognised in the Consolidated Statement of Income, except when measured at fair value through other comprehensive income. The remeasured stake is then considered in the determination of goodwill.

If the consideration transferred for a business combination exceeds the fair values attributable to the Group's share of the identifiable net assets, the difference is treated as goodwill, which is not amortised but is reviewed annually for impairment or when there is an indication of impairment. If a business combination results in a negative goodwill, the Group reassesses whether it has correctly identified and measured all assets acquired and all liabilities assumed. If the negative goodwill remains after the reassessment, it is recognised as a gain in the Consolidated Statement of Income.

Any contingent consideration payable is measured at fair value at the acquisition date. If the contingent consideration is classified as equity, then it is not remeasured and settlement is accounted for within equity. Otherwise, subsequent changes in the fair value of the contingent consideration are recognised in the Consolidated Statement of Income.

7.1 Financial year 2023

7.1.1 Acquisition of Ecobat Resources Stolberg GmbH

In February 2023, the Group completed the acquisition of the Ecobat Resources Stolberg GmbH (ERS) business following the satisfaction of customary conditions precedent including the receipt of regulatory approvals. ERS is a multi-metals processing plant and was acquired for a purchase price of EUR34 million (USD36.8 million). Neither the acquisition accounting, nor the subsequent consolidation of both the balance sheet and the statement of income of ERS, had a material impact on the consolidated financial statements of the Group.

7.2 Financial year 2022

7.2.1 Acquisition of additional shareholding in Puma Energy

Trafigura's share in Puma Energy increased from 93.4 percent to 96.7 percent as per 30 September 2022 as Cochan Holdings LLC ceased to be a shareholder in Puma Energy in December 2021.

8. Deconsolidation of subsidiaries

There was no significant deconsolidations of subsidiaries and non-controlling interests for the financial years ended 30 September 2023 and 30 September 2022.

9. Revenue

Accounting policy

Revenue recognition

Revenue is derived principally from the sale of goods and in some instances the goods are sold on Cost and Freight (CFR) or Cost, Insurance and Freight (CIF) Incoterms. When goods are sold on a CFR or CIF basis, the Group is responsible for providing these services (shipping and insurance) to the customer, sometimes after the date at which the Group has lost control of the goods. Revenue is recognised when the performance obligations have been satisfied, which is once control of the goods and/or services has transferred from the Group to the buyer.

Revenue is measured based on consideration specified in the contract with a customer and excludes amounts collected on behalf of third parties. The same recognition and presentation principles apply to revenues arising from physical settlement of forward sale contracts that do not meet the own use exemption. Revenue related to the sale of goods is recognised when the product is delivered to the destination specified by the customer, which is typically the vessel on which it is shipped, the destination port or the customer's premises, and the buyer has gained control through their ability to direct the use of and obtain substantially all the benefits from the asset. Where the sale of goods is connected with an agreement to repurchase goods at a later date, revenue is recognised when the repurchase terms are at prevailing market prices, the goods repurchased are readily available in the market, and the buyer gained control of the goods originally sold to them. Should it be determined that control has not transferred or the buyer does not have the ability to benefit substantially from ownership of the asset, revenue is not recognised and any proceeds received are accounted for as a financing arrangement.

For certain commodities, the sales price is determined on a provisional basis at the date of sale as the final selling price is subject to movements in market prices up to the date of final pricing, normally ranging from 30 to 90 days after initial booking (provisionally priced sales). Revenue on provisionally priced sales is recognised based on the estimated fair value of the total consideration receivable. The revenue adjustment mechanism embedded within provisionally priced sales arrangements has the character of a commodity derivative. Accordingly, the fair value of the final sales price adjustment is re-estimated continuously. In all cases, fair value is estimated by reference to forward market prices.

Revenue related to the provision of shipping and insurance-related activities is recognised over time as the service is rendered.

	2023 USD'M	2022 USD'M
Sales of goods	239,995.9	315,507.9
Rendering of services	4,284.3	2,968.5
Total	**244,280.2**	318,476.4

G. Notes to the Consolidated Financial Statements

10. Materials, transportation and storage

Accounting policy

Materials, transportation and storage includes purchases of commodities and material, as well as the associated costs of purchasing, storing and transporting the products. It also includes the change in mark-to-market valuation of inventories, all derivatives and forward contracts.

	2023 USD'M	2022 USD'M
Energy	158,163.3	202,283.0
Metals and Minerals	69,893.8	100,616.4
Total	**228,057.1**	302,899.4

11. Employee benefits

Accounting policy

Short-term employment benefits

Wages, salaries, social security contributions, annual leave and sickness absenteeism, incentives and non-monetary benefits are recognised in the year in which the associated services are rendered by employees.

Post-employment benefits

Pensions and other post-employment benefits are accrued in the period in which the associated services are rendered by employees of the Group. The cost of providing benefits under the defined benefit plans is determined separately for each plan using the projected unit credit method. Unvested past service costs are recognised as an expense on a straight-line basis over the average period until the benefits become vested. Past service costs are recognised immediately if the benefits have already vested immediately following the introduction of, or changes to, a pension plan.

When a settlement (eliminating all obligations for benefits already accrued) or a curtailment (reducing future obligations as a result of a material reduction in the scheme membership or a reduction in future entitlement) occurs, the obligation and related plan assets are remeasured using current actuarial assumptions and the resultant gain or loss is recognised in profit or loss during the period in which the settlement or curtailment occurs.

The interest element of the defined benefit cost represents the change in present value of scheme obligations resulting from the passage of time, and is determined by applying the discount rate to the opening present value of the benefit obligation, considering material changes in the obligation during the year. The expected return on plan assets is based on an assessment made at the beginning of the year of long-term market returns on plan assets, adjusted for the effect on the fair value of plan assets of contributions received and benefits paid during the year. Actuarial gains and losses are recognised in full within other comprehensive income in the year in which they occur.

The defined benefit pension plan surplus or deficit in the Consolidated Statement of Financial Position comprises the total for each plan at the present value of the defined benefit obligation (using a discount rate based on high-quality corporate bonds), less the fair value of plan assets out of which the obligations are to be settled directly. Fair value is based on market price information and, in the case of quoted securities, is the published bid price. Contributions to defined contribution schemes are recognised in Consolidated Statement of Income in the period in which they become payable.

Employee share incentive plan and employee share trust

Employees of the Group receive remuneration in the form of shares of the immediate holding company Trafigura Beheer B.V. as consideration for services rendered. This is considered an equity settled share scheme as the Company neither has a present legal nor constructive obligation to settle in cash, nor has a past practice or stated policy of settling in cash.

The cost of the equity-settled transactions is measured at fair value at the grant date considering the terms and conditions upon which the shares were granted. This fair value is expensed over the vesting period with a corresponding credit to equity. For shares that immediately vest, the fair value is expensed in the accounting period corresponding to the date of grant.

11.1 Employee benefits

	2023 USD'M	2022 USD'M
Salaries and bonuses	1,312.3	1,206.7
Social security costs	108.4	89.8
Pension costs	40.2	40.6
Subtotal	**1,460.9**	1,337.1
Share-based payments	87.6	106.8
Employee benefits	**1,548.5**	1,443.9

The average number of employees split by geography is as follows:

	2023 USD'M	2022 USD'M
North, Central and South America	4,885	4,917
Europe and Africa	4,068	3,912
Asia, Middle East and Australia	3,526	3,518
Total	**12,479**	12,347

11.2 Equity participation plan

The immediate parent of the Company, Trafigura Beheer B.V., has an equity participation plan (EPP) that is open to employees of the Group. Shares issued to employees are preference shares of Trafigura Beheer B.V., which give rights to economic benefits with limited voting rights. The Board of Directors of Trafigura Control Holdings Pte. Ltd., a parent company of Trafigura Beheer B.V., in consultation with the Board of Directors of the Company, decide on the share awards to be issued to employees. Annual remuneration (which includes the equity participation awards) is subject to review by the remuneration committee of the Group.

The value of the shares is based on the net asset value of an ordinary share as set out in the Articles of Association of Trafigura Beheer B.V., which management believe is a fair approximation of the fair value. Shares awarded under the EPP may vest immediately or over a period of several years.

Employees do not have the right to freely sell shares that have vested unless Trafigura Control Holdings Pte. Ltd. has granted approval and has refrained from its right to nominate a prospective purchaser and make a purchase offer. Upon termination of employment, employees must transfer all of their shares at the direction of Trafigura Control Holdings Pte. Ltd. or hold the shares subject to further directions of Trafigura Control Holdings Pte. Ltd.

Neither Trafigura Beheer B.V. nor the Group have a legal or constructive obligation to settle the shares held by employees in cash. If employment is ceased prior to the end of the vesting period, the shares will be forfeited unless otherwise determined by Trafigura Control Holdings Pte. Ltd.

The Group's EPP is classified as an equity-settled plan in the Group's financial statements; the fair value of the shares granted, determined at the grant date, is recorded in the Consolidated Statement of Income rateably over the vesting period of the shares.

In the financial year 2023, the shares were split on a 1:1,000 basis.

During the 2023 financial year, 658,480 immediately vesting shares were granted to employees representing a value of USD6.6 million (FY2022: 6,384 shares representing a value of USD18.4 million) and 4,005,480 shares were granted with a vesting period of one to five years representing a value of USD40.1 million (FY2022: 17,079 shares representing a value of USD49.2 million).

Compensation in respect of share-based payments recognised in staff costs for the financial year ended 30 September 2023 amounted to USD87.6 million (FY2022: USD106.8 million).

Unrecognised staff costs in respect of rateably vesting shares expected to be recognised from FY2024 to FY2028 amounted to USD73.7 million at 30 September 2023 (30 September 2022: USD121.9 million for the period from FY2023 to FY2027).

12. Services and other

Accounting policy

Services and other expenses are recognised in the Consolidated Statement of Income when incurred.

	2023 USD'M	2022 USD'M
Energy	1,079.9	1,169.1
Metals and Minerals	981.2	986.5
Corporate and Other	15.3	(4.3)
Total	**2,076.4**	2,151.3

Services and other expenses include items such as energy costs, IT services, legal and advisory fees, insurance, commissions, foreign exchange gains and losses, and movements in provisions.

G. Notes to the Consolidated Financial Statements

13. Depreciation and amortisation

Accounting policy

Depreciation on property, plant and equipment

Items of property, plant and equipment are depreciated on a straight-line basis over the estimated useful lives of each component. They are depreciated from the date that they are installed and are ready for use. Land and assets under construction are not depreciated.

Depreciation of assets held under finance leases is calculated over the shorter of the lease term or the estimated useful life of the asset.

Unit of production basis

For mining properties and development assets and certain mining equipment, the economic benefits from the asset are consumed in a pattern which is linked to the production level. Such assets are depreciated on a unit of production basis. However, assets within mining operations for which production is not expected to fluctuate significantly from one year to another or which have a physical life shorter than the related mine are depreciated on a straight-line basis as noted above.

In applying the unit of production method, depreciation is normally calculated using the quantity of material extracted from the mine in the period as a percentage of the total quantity of material to be extracted in current and future periods based on proved and probable reserves and, for some mines, other mineral resources. Such non-reserve material may be included in depreciation calculations in circumstances where there is a high degree of confidence in its economic extraction.

Where parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items of property, plant and equipment.

Critical spare parts purchased for particular items of plant are capitalised and depreciated on the same basis as the plant to which they relate.

Depreciation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

Depreciation on right-of-use assets

For the accounting policies related to the amortisation of rights-of-use assets recognised in relation to the leases of the Group, please refer to note 21.

Amortisation of intangible fixed assets

Intangible fixed assets with finite life are amortised over their useful economic life and assessed for impairment whenever there is an indication that the intangible fixed asset may be impaired. The amortisation period and the amortisation method for an intangible fixed asset with a finite useful life are reviewed at least at each reporting date. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are accounted for by changing the amortisation period or method, as appropriate, and treated as changes in the accounting estimates.

Key accounting estimate and judgement

Useful life and residual value of property, plant and equipment

The useful life and residual value determined by the Group based on estimates and assumptions have a major impact on the measurement and determination of results of property, plant and equipment. The useful life of property, plant and equipment is partly estimated based on their useful productive lives, experiences related to such assets, the maintenance history and the period during which the Group has the economic benefits from the utilisation of the assets. Periodic reviews show whether changes have occurred in estimates and assumptions as a result of which the useful life and/or residual value need to be adjusted. Such an adjustment will be made prospectively.

The estimated useful lives for the current and comparative years of significant items of property, plant and equipment are as follows:

- Buildings 20-50 years
- Machinery and equipment 3-50 years
- Barges and vessels 10-20 years
- Other fixed assets 1-10 years

	2023 USD'M	2022 USD'M
Depreciation of right-of-use assets	1,849.8	1,216.3
Depreciation of property, plant and equipment	550.9	466.2
Amortisation of intangible fixed assets	116.2	118.0
Total	**2,516.9**	**1,800.5**

For further details on the composition of depreciation and amortisation (per category), please refer to notes 19, 20 and 21.

14. Impairments

Accounting policy

Impairments on non-financial assets

Investments in associates and other investments, property, plant and equipment and intangible fixed assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable or at least annually for goodwill. If it is determined that assets are impaired, the carrying amounts of those assets are written down to their recoverable amount, which is the higher of fair value less costs of disposal and value in use.

Impairments on (non-derivative) financial assets and prepayments

The Group assesses the expected credit losses associated with its debt instruments, prepayments and trade receivables carried at amortised cost and fair value through other comprehensive income. The impairment provisions for financial assets and prepayments (disclosed below and in note 23) are based on assumptions about risk of default and expected loss rates.

Loans receivable and prepayments

Over the term of the loans and the prepayments, the Group manages its credit risk by appropriately providing for expected credit losses on a timely basis. The Group classifies its loans receivable and prepayments in categories that reflect their credit risk as follows:

Category	Group definition of category	Basis for recognition of expected credit loss provision
Performing	Customers have a low risk of default and a strong capacity to meet contractual cash flows	12 month expected losses. Where the expected lifetime of an asset is less than 12 months, expected losses are measured at its expected lifetime.
Underperforming	A significant increase in credit risk is noted (see definition below)	Lifetime expected losses
Non-performing	The loan meets the definition of default (see below)	Lifetime expected losses
Write-off	Based on observable data the interest and/or principal will not be collected	Asset is written off through profit or loss to extent of expected loss

A significant increase in credit risk is presumed if interest and/or principal repayments are 30 days past due or if there are other indicators of a significant increase in the probability of default. A default is defined when a counterparty structurally fails to perform under a financial contract with a Trafigura Group company and such failure is not expected to be cured shortly.

The Group assesses the expected credit loss of these loans and prepayments individually based on the discounted product of probability of default (PD), exposure at default (EAD) and loss given default (LGD) as defined below:

- PD represents the likelihood of a borrower defaulting on its financial obligation, either over the next 12 months or over the remaining lifetime of the obligation.
- EAD is based on the amounts the Group expects to be owed at the time of default. For most cases, this represents the carrying amount of the financial asset.
- LGD represents the Group's expectation of the extent of loss on a defaulted exposure. LGD varies by type of counterparty, seniority of claim and available collateral or other credit support. LGD is expressed as a percentage loss per unit of exposure at the time of default.

The expected credit loss is determined by projecting PD, LGD, EAD for each future month and for each exposure. These three components are multiplied together and discounted at the original effective interest rate of the loan and the prepayment. The PD and LGD are developed by utilising historical default studies, forward-looking information and publicly available data.

Trade receivables

The Group applies the simplified approach to providing for expected credit losses, which permits the use of the lifetime expected loss provision for all trade receivables.

Impairment reversal

Impairments, except those related to goodwill, are reversed as applicable to the extent that the events or circumstances that triggered the original impairment have changed.

Write-off

The Group reduces the gross carrying amount of a financial asset when there is no reasonable expectation of recovering a financial asset in its entirety or a portion thereof. A write-off constitutes a derecognition event.

G. Notes to the Consolidated Financial Statements

Key accounting estimate and judgement

Impairments on non-financial assets

An asset is impaired when its carrying amount exceeds its recoverable amount. When performing an impairment test, the Group assesses whether the cash-generating unit will be able to generate positive net cash flows that are sufficient to support the value of the intangible fixed assets, property, plant and equipment, and financial assets.

For value in use, future cash flow estimates are used to calculate the asset's fair value. These estimates are based on expectations about future operations, primarily comprising estimates about production and sales volumes; commodity prices; operating, rehabilitation and restoration costs; and capital expenditures. Changes in such estimates could impact the recoverable values of these assets. Estimates are reviewed regularly by management.

Value-in-use is determined as the amount of estimated risk-adjusted discounted future cash flows. For this purpose, assets are grouped into Cash-Generating Units (CGUs) based on separately identifiable and largely independent cash flows. The most recent approved financial budgets and (five-year) business plans are the basis for the future cash flow estimates. The valuation model uses the most recent volume and revenue estimates, relevant costs assumptions based on past experience and, where possible, market forecasts of commodity prices. This methodology inherently includes elements of judgement and estimations in relation to projected sales volumes and unit margins. Deterioration or improvement in the volume and pricing outlook may result in additional impairments or reversals. Cash flow estimates are risk adjusted and discounted to reflect local conditions as appropriate.

These key assumptions are based on the current facts and circumstances and information available to management. By nature, these assumptions are subject to developments and change in later periods. This could potentially lead to (the reversal of) impairments of individual assets going forward.

Impairments on (non-derivative) financial assets

Loans receivable and prepayments

The Group considers the probability of default upon initial recognition of an asset and whether there has been a significant increase in credit risk on an ongoing basis throughout each reporting period. To assess whether there is a significant increase in credit risk, the Group compares the risk of a default occurring on the asset as at the reporting date with the risk of default as at the date of initial recognition. It considers available reasonable and supportive forwarding-looking information. The following indicators in particular are incorporated: internal credit rating, external credit rating (as far as available), significant changes in the value of the collateral supporting the obligation, significant changes in the expected performance and behaviour of the borrower including changes in the payment status of borrowers in the group and changes in the operating results of the borrower.

Macroeconomic information (such as market interest rates or growth rates) is incorporated as part of the internal rating model.

Trade receivables

In calculating the expected credit loss rates for trade receivables, the Group considers historical loss rates for each category of counterparties and adjusts for macroeconomic information (such as market interest rates or growth rates).

	2023 USD'M	2022 USD'M
Impairments of property, plant and equipment	379.2	424.5
(Reversal of) Impairments of right-of-use assets	(0.3)	20.7
Impairments of intangible fixed assets	31.0	90.7
Impairments of fixed assets	**409.9**	**535.9**
(Reversal of) Impairments of financial assets	(23.5)	80.1
Impairments of prepayments	152.4	23.2
Impairments of financial assets and prepayments	**128.9**	**103.3**
Total impairments – included in operating profit or loss	**538.8**	**639.2**
(Reversal of) Impairments of equity-accounted investees	(6.1)	34.9
(Reversal of) Impairments of equity-accounted investees	**(6.1)**	**34.9**
Total impairments	**532.7**	**674.1**

As a result of the periodic assessment, the following significant impairment charges and fair value adjustments were recorded:

14.1 Impairment of fixed assets

14.1.1 Nyrstar Australian smelting operations (property, plant and equipment)

The Australian smelting operations of the Group include a zinc smelter in Tasmania and an integrated multi-metals recovery plant in Port Pirie. There is a symbiosis between the two industrial facilities, whereby cross-facility optimisation is done to maximise value recovery (e.g. exchange of intermediate products for onward processing) and to minimise waste of the combined operations. Given the significant operational, economic, and managerial integration between the sites, the Australian smelting operations are treated as one CGU for impairment testing purposes.

Financial year 2023

The gradual operational improvements achieved towards the end of the previous financial year did not continue throughout 2023 as the Port Pirie operations faced new operational challenges which prevented the plant to meet its operational production targets. In addition to lower production volumes, the operational challenges resulted in increased maintenance and material handling costs which were incurred to support plant operations during the year. Paired with inflationary pressure impacting the cost base of both sites, and increasing maintenance and repair costs incurred to sustain operation of the ageing electrolysis plant in Tasmania, this resulted in financial underperformance compared to budget levels and were considered as an indication for potential impairment. The recoverable amount of the CGU is determined based on value-in-use calculations using nominal cash flow projections from approved financial budgets and consumption/production plans covering a five-year period, applying a pre-tax discount rate of 10.9 percent.

Whilst management remains confident and expects to achieve operational stability during 2024, the challenges that were faced during financial year 2023 resulted in a more gradual ramp-up profile in the five-year plans as well as a downward adjustment to the outer year production assumptions. Furthermore, the cost profile assumed in the five-year plans have been updated to reflect the inflationary pressure, which is only partly offset by operational efficiencies following stabilisation of operations. The current performance and renewed business outlooks resulted in a decrease in the CGU's recoverable amount. As the carrying value of the underlying business exceeded the estimated recoverable amount of the CGU, the Group recognised an impairment of USD226.9 million. This amount is allocated to property, plant and equipment.

The key assumptions used in the calculation of the value-in-use calculation mostly relate to the discount rate and macro assumptions. The sensitivity analyses on the value-in-use calculation show that an increase/decrease in the discount rate of +/-0.5 percentage points has an impact on the recoverable amount of minus USD34 million/plus USD39 million. Sensitivities from changes in other key assumptions are as follows:

- A change in metal prices by five percent affect the recoverable amount by USD175 million in each case;
- A change in treatment charges by five percent affect the recoverable amount by USD69 million; and
- An increase/decrease in the AUD/USD foreign exchange rate by five percent has an impact on the recoverable amount of minus USD296 million/plus USD293 million.

Financial year 2022

Continuing efforts to improve the operational stability of the operations resulted in an improvement to operational performance towards the end of the financial year 2022. Still, the processed feedstock and production of metals remained below planned levels which was considered as an indication for potential impairment. The recoverable amount based on value-in-use calculation was determined using a pre-tax discount rate of 11.2 percent. The impairment test resulted in a recoverable amount below the carrying value of the CGU, the Group consequently recognised an impairment of USD177.1 million. The amount was allocated to property, plant and equipment.

14.1.2 Nyrstar US operations (Goodwill and Property, plant and equipment)

The Group operates a zinc smelter in Clarksville, Tennessee, and the Middle Tennessee ('MTN') and East Tennessee ('ETN') mining complexes both consisting of underground zinc mines and processing plants. All outputs from the ETN and MTN mining complexes is processed in the Clarksville smelter, the only primary zinc smelter in the US. Considering the vertical integration of the smelter and the mines, and the economic interdependencies, the US operations are considered as one cash generating unit ('CGU') for impairment testing purposes.

Financial year 2023

During financial year 2023 the performance of the US operations was impacted by macro-economic headwinds, operational challenges leading to lower production volumes for both the mines and the smelter, and escalating cost levels notably on maintenance and mining operations. The significantly weakened market conditions and inflationary impacts on input costs and operating margins led to the decision to temporarily pause the ETN operations as from 30 November 2023. The combination of the above were considered as an indication for potential impairment. The recoverable amount of the CGU is determined based on value-in-use calculations using nominal cash flow projections from approved financial budgets and consumption/production plans covering a five-year period, applying a pre-tax discount rate of 10.6 percent.

Whilst the operational challenges which temporarily reduced the production volumes at the smelter during the first half of financial year 2023 have been resolved, and the operation returned to normalised production levels in the second half of the year, it is expected that the inflationary pressure and suboptimal market conditions for the MTN operations continue into the new financial year. This resulted in a revision to the profitability forecast of the operations in their current configuration, and consequently in a decrease of the CGU's recoverable amount. As the carrying value of the underlying business exceeded the estimated recoverable amount of the CGU, the Group recognised an impairment of USD30.5 million. This amount is allocated to goodwill (USD2.2 million) and property, plant and equipment (USD28.3 million).

The key assumptions used in the calculation of the value-in-use calculation mostly relate to the discount rate and macro assumptions. Sensitivities of the recoverable amount from changes in key assumptions are as follows:

- An increase of the discount rate by +/-0.5 percentage points impact the recoverable amount by minus USD27 million/plus USD31 million respectively;
- A change in metal prices by 5 percent affect the recoverable amount by USD105 million in each case.

Financial year 2022

No impairment triggers were identified in financial year 2022.

G. Notes to the Consolidated Financial Statements

14.1.3 Puma Energy (property, plant and equipment, and intangible fixed assets including goodwill)

The acquisition of Puma Energy as per 30 September 2021 resulted in the recognition of a goodwill balance of USD1,074.1 million. This goodwill was allocated to the individual countries and businesses that, based on the integration of the activities, were considered separate CGUs. The total number of CGUs identified was 25 and the goodwill acquired was allocated to 13 CGUs. As of 30 September 2023, 12 CGUs remain with goodwill allocated to them.

The recoverable amounts of the net assets tested are determined based on a value-in-use calculation. This method uses cash flow projections based on financial budgets approved by the Board of Directors covering a five-year period.

The key assumptions used in the value-in-use calculations relate to EBITDA, growth rates, and the discount rate. Discount rates represent the current market assessment of the risks specific to each CGU, regarding the time value of money and individual risks of the underlying assets that have not been incorporated in the cash flow estimates. The discount rate calculation is based on the specific circumstances of the Group and its operating segments and derived from its weighted average cost of capital.

Financial year 2023

The impairment testing procedures resulted in a total impairment of USD125.8 million, out of which USD28.4 million was allocated to goodwill (two CGUs), and USD96.4 million to property, plant and equipment and intangible fixed assets (three CGUs). The impairments were recognised in relation to the operations in Botswana, Colombia, Estonia, Ghana, and Lesotho. The decrease in value was primarily driven by the performance of the business compared to the assumptions made at the time of the acquisition and reduction in growth expectations (e.g. Botswana, Colombia, Ghana and Lesotho), while Estonia is impacted by reduced throughput.

Within the value-in-use calculation, the unweighted average of the pre-tax discount rates applied for the 12 CGUs to which goodwill was allocated is 12.6 percent per annum. The discount rates of the 12 CGUs are within a range between 8.7 percent and 17.9 percent.

Sensitivities of the recoverable amount from changes in key assumptions are as follows:

An increase of the discount rate by 0.5 percentage points would result in:

- An increase in goodwill impairment by USD7.8 million to a total of USD35.9 million. Such increase would affect the same two CGUs for which the current impairment is recognised;
- An increase in the impairment on PP&E by USD16.4 million to a total of USD112.9 million. Under this scenario the number of CGUs affected by the impairment will increase from five to six.

A decrease of the discount rate by 0.5 percentage points would result in:

- A decrease in goodwill impairment by USD9.1 million to a total of USD19.1 million. Such decrease would affect the same two CGUs for which the current impairment is recognised;
- A decrease in the impairment on PP&E by USD10.4 million to a total of USD86.1 million. Such decrease would affect the same five CGUs for which the current impairment is recognised.

Financial year 2022

The impairment testing procedures resulted in a total impairment of USD190.8 million, out of which USD87.8 million was allocated to goodwill (four CGUs), USD100.8 million to property, plant and equipment (PP&E) and USD2.2 million to intangible fixed assets. The largest impairments were recognised in relation to the operations in Papua New Guinea (USD61.6 million on PP&E) and El Salvador (USD52.7 million on goodwill). The impairment in Papua New Guinea was mostly driven by a strategic reorientation of the country's business model. The decrease in value in El Salvador was driven by the performance of the business compared to the assumptions made at the time of the acquisition.

Within the value-in-use calculation, the unweighted average of the pre-tax discount rates applied for the 13 CGUs to which goodwill was allocated is 14.1 percent per annum. The discount rates of the 13 CGUs are within a range between 8.6 percent and 19.8 percent.

14.1.4 Magdalena River supply chain operation (property, plant and equipment)

The Group operates a multimodal supply chain operation in Colombia, which includes an inland port at Barrancabermeja and a barging operation providing multimodal logistics services linking the industrial heartland to the Atlantic ports of Cartagena and Barranquilla via the Magdalena River. The prospects of this operation are partly dependent on the activities of the Government of Colombia to improve the longer-term navigability of the Magdalena River.

However, there is a delay in the dredging and diking programme as the Colombian government decided to replace the original construction company, which was initially awarded the concession, with another. A tender process started in 2021, but was declared void in June 2022 when no bids were received, partly due to COVID-19 pandemic. Meanwhile, during 2023, the government has reconfirmed the importance of dredging the river and civil works to canalise the river and guarantee its navigability. Dredging activities are now expected to start as from January 2024, and will continue up to 2026. The delay has been a trigger for impairment of the Group's fixed assets in Colombia that form part of the supply chain operation requiring an impairment test to be performed.

For impairment testing purposes, the Colombian multimodal supply chain business is treated as one CGU because the specific assets that form part of this business typically do not generate independent cash flows. The value-in-use calculation includes all aspects of the Colombian supply chain business.

Financial year 2023

A key assumption in the value-in-use calculation is the commencement of the dredging activities. Based on the current assumptions, it is expected that the river draft will gradually improve to 7.0 feet by 2029 onwards and the business reaching maturity in 2031. This translates to a gradual ramp-up of expected revenues as well as operating costs with no growth after 2031. Based on the projections until 2044, which correspond to the current end of the port concession and do not include an expected extension, the estimated recoverable amount of the CGU is USD417 million. As a result, no impairment was recognised in financial year 2023.

The operation specific pre-tax discount rate in the valuation was 7.5 percent. Sensitivities of the recoverable amount from changes in key assumptions are as follows:

- An increase of the discount rate by +/-0.5 percentage points impact the recoverable amount by minus USD23 million/plus USD24 million respectively;
- A change in oil prices by 10 percent affect the recoverable amount by USD50 million in each case.
- A change in container prices by 10 percent affect the recoverable amount by USD9 million in each case.
- A change in oil volumes by 10 percent affect the recoverable amount by USD49 million in each case.
- A change in container volumes by 10 percent affect the recoverable amount by USD12 million in each case.
- In the event that, as a result of a further delay of the dredging activities, maturity is reached one or two years later than currently assumed, this has a negative impact on the recoverable amount of USD40 million and USD77 million respectively.

Financial year 2022

The impairment assessment resulted in an impairment of the Colombian assets by USD75 million in financial year 2022.

The operation specific pre-tax discount rate used in the valuation was 7.1 percent.

G. Notes to the Consolidated Financial Statements

14.2 Impairments of financial assets and prepayments

Please refer to note 23.1 for the loss provision on prepayments, note 23.2 for the loss provision on loans receivable and note 26 for the loss provision on trade receivables.

15. Result from equity-accounted investees and investments

Accounting policy

Gains on the sale of assets and the divestment of interests in other entities are deemed realised at the time the benefits and the risks of the assets are substantially borne by the buyer and there is no uncertainty as to whether the agreed payment will be received. Gains on the sale of subsidiaries, joint ventures and associates are realised at the time control, joint control or significant influence is no longer exercised.

Dividend income from investments is recognised when the shareholder's right to receive payment has been established (provided that it is probable that the economic benefits will flow to the Group and the amount of income can be measured reliably).

	2023 USD'M	2022 USD'M
Share of profit/(loss) of equity-accounted investees	**(11.8)**	**54.2**
Disposal results of equity-accounted investees	121.5	(16.7)
(Reversal of) Impairments of equity-accounted investees	6.1	(34.9)
Disposal results and impairments of equity-accounted investees	**127.6**	**(51.6)**
Income/(expenses) from equity-accounted investees	**115.8**	**2.6**
Gain/(loss) on fair value through profit and loss instruments	(18.7)	(41.5)
Gain/(loss) on divestment of subsidiaries	–	(7.5)
Gain/(loss) from disposal of other investments	(8.6)	–
Dividend income	29.1	4.7
Income/(expenses) from investments	**1.8**	**(44.3)**
Result from equity-accounted investees and investments	**117.6**	**(41.7)**

15.1 Income/(expenses) from equity-accounted investees

15.1.1 Share of profit/(loss) of equity-accounted investees

Please refer to note 22.

15.1.2 Disposal results of equity-accounted investees

In January 2023, the Group completed the sale of its investment in Tendril Ventures Pte. Ltd. to Hara Capital Sarl for a consideration of USD168.9 million. Hara Capital is a wholly owned subsidiary of Mareterra Group Holding, an energy investment group with a focus on energy and carbon efficiency infrastructure. Upon the disposal of the investment, the Group recycled the related FCTR and cashflow hedge reserve balances from Consolidated Statement of Other Comprehensive Income to the Consolidated Statement of Income. Although the net impact on equity is nil, this resulted in a USD121.5 million gain on the Consolidated Statement of Income in the financial year 2023.

15.2 Income/(expenses) from investments

15.2.1 Gain/(loss) on fair value through profit and loss instruments

The loss on fair value through profit and loss instruments includes various fair value movements on other investments, including a USD9.9 million positive fair value movement of the debt securities related to the investment in Porto Sudeste (FY2022: a negative fair value movement of USD44.1 million).

The listed debt securities consist of a financial instrument related to the investment in Porto Sudeste, which is accounted for under equity-accounted investees. These instruments are held to collect cash flows and are designated as fair value through profit and loss, since the payments are dependent on the port's throughput. Since the free float of these listed debt instruments is extremely thin and no active market exists (the value of the average daily traded volume was less than USD1,000), the fair value is determined using a level 3 valuation. The fair value of this instrument is based on the port's discounted cash flow model in which the business plan of Porto Sudeste is reflected. Revenue is calculated over a period ending in 2064 and throughput volumes are held constant from the end of 2029 onwards. In this calculation, management used an annual discount rate of 16.2 percent (FY2022: 14.2 percent) to calculate a net present value. As a result of the limited marketability of the listed securities, a further flat discount factor of 25 percent is applied on the net present value amount (FY2022: 33 percent).

During the year, the level 3 valuation of the debt securities resulted in the recognition of a gain of USD9.9 million (FY2022: loss of USD44.1 million), increasing the valuation of the debt securities to USD212.6 million as at 30 September 2023 (30 September 2022: US202.8 million). The debt securities are treated as being part of the net investment in Porto Sudeste. In accordance with IAS28, subsequent to the equity-accounted investee being recorded at nil value, the Group's share in Porto Sudeste's losses has been recorded as reduction in the value of the debt securities.

The sensitivity analysis on this valuation shows that an increase/decrease of the port's throughput of five percent has an impact of USD22 million (FY2022: USD20 million) on the valuation, and an increase/decrease of the discount rate by 0.5 percentage points or 50 bps has an impact of USD12 million (FY2022: USD13 million) on the valuation. A change in the discount rate due to lack of marketability by five percentage points or 500 bps has an effect of USD21 million (FY2022: USD20 million) on the valuation.

16. Result from financing activities

Accounting policy

Interest income and interest expense are recognised on a time-proportion basis using the effective interest rate (EIR) method.

	2023 USD'M	2022 USD'M
Finance income	2,198.8	739.6
Finance expense	(3,820.3)	(2,280.5)
Total	**(1,621.5)**	(1,540.9)

The increase in the result from financing activities is primarily because of rising base rates throughout the year.

17. Income tax

Accounting policy

Income tax expense comprises current and deferred tax. Current and deferred tax are recognised in the Consolidated Statement of Income except to the extent that it relates to a business combination, or items recognised directly in equity or in other comprehensive income.

Current income tax

Current income tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years. The charge for taxation includes Singaporean and foreign corporate income taxation. Due to the different statutory rates applicable and non-deductible expenses, the Group effective tax charge differs from the statutory tax rate applicable in Singapore.

Deferred tax

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes, and the amounts used for taxation purposes. The measurement of deferred tax reflects the tax consequences that would follow the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, using tax rates enacted or substantively enacted at the reporting date.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis, or their tax assets and liabilities will be realised simultaneously.

A deferred tax asset is recognised for unused tax losses, tax credits and deductible temporary differences to the extent that it is probable that future taxable profits will be available against which they can be utilised. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

Tax exposure

In determining the amount of current and deferred tax the Group takes into account the impact of uncertain tax positions and whether additional taxes and interest may be due. The Group believes that its accruals for tax liabilities are adequate for all open tax years based on its assessment of many factors, including interpretations of tax law and prior experience. This assessment relies on estimates and assumptions and may involve a series of judgements about future events. New information may become available that causes the Group to change its judgement regarding the adequacy of existing tax liabilities; such changes to tax liabilities will impact the tax expense in the period that such a determination is made.

G. Notes to the Consolidated Financial Statements

Key accounting estimate and judgement

Deferred tax assets are recognised only to the extent it is considered probable that those assets will be recoverable. This involves an assessment of when those deferred tax assets are likely to reverse, and a judgement as to whether or not there will be sufficient taxable profits available to offset the tax assets when they do reverse. These judgements are subject to risk and uncertainty and hence, to the extent assumptions regarding future profitability change, there can be an increase or decrease in the amounts recognised in the Consolidated Statement of Income in the period in which the change occurs. The recoverability of deferred tax assets, including the estimates and assumptions contained therein, are reviewed regularly by management.

17.1 Tax expense

Income tax expense recognised in the Consolidated Statement of Income consists of the following:

	2023 USD'M	2022 USD'M
Current income tax expense	869.3	994.2
Adjustments in relation to current income tax of previous year	(221.6)	(73.6)
Deferred tax expense/(income)	(17.7)	1.3
Withholding tax in the current year	10.4	11.4
Total	**640.4**	933.3

17.2 Tax recognised in other comprehensive income

The tax credit/(charge) relating to components of other comprehensive income is as follows:

	2023 USD'M	2022 USD'M
Tax (expense)/income on cash flow hedges	13.7	(70.7)
Tax (expense)/income on defined benefit plan actuarial gains/(losses)	0.4	–
Total	**14.1**	(70.7)

17.3 Reconciliation of effective tax rate

The Group's operations are subject to income taxes in various foreign jurisdictions. The statutory income tax rates vary between 10 percent and 35 percent, which results in a difference between the weighted average statutory income tax rate and Singapore's statutory tax rate of 17 percent (FY2022: 17 percent).

The change to the statutory blended tax rate is a consequence of a change in the mix of profits and losses generated in the various countries in which the Group operates. The change to the effective tax rate is a consequence of a change in the mix of taxable profits and losses generated in the various countries in which the Group operates.

The reconciliation between tax expense and the result of accounting profit multiplied by the Company's statutory income tax rate for the years ended 30 September 2023 and 2022 is as follows:

	2023 USD'M	2023 %	2022 USD'M	2022 %
Profit before tax	8,038.6		7,959.5	
Income tax expense at statutory blended tax rate	1,095.3	13.6%	1,516.5	19.1%
Tax effect of adjustments to arrive at the effective income tax rate:				
Effect of unused tax losses, not recognised as deferred tax assets	118.7		43.2	
Non-taxable income or subject to specific tax holidays	(438.9)		(593.6)	
Non-deductible expenses	76.4		25.2	
Adjustments in relation to income tax of previous year	(221.6)		(73.6)	
Tax rate changes	0.1		4.0	
Withholding tax	10.4		11.6	
Effective tax rate	**640.4**	**8.0%**	933.3	11.7%

17.4 Deferred tax assets and liabilities

The breakdown of deferred tax assets and liabilities in significant components as well as the movement between 1 October 2022 and 30 September 2023 of these components is as follows:

	Opening Balance	Recognised in Consolidated Statement of Income	Other Comprehensive Income	Acquired in business combination	FX and Other	**Closing Balance**	Deferred tax assets	Deferred Tax (Liabilities)
Property, plant and equipment	(143.4)	22.3	–	(25.3)	(51.7)	**(198.1)**	51.3	(249.4)
Investment in subsidiaries and associates	2.5	–	–	–	–	**2.5**	2.5	–
Other temporary differences (including intangible assets)	(18.8)	7.4	11.8	–	2.7	**3.1**	105.5	(102.4)
Provisions	(25.1)	(25.5)	–	0.3	37.3	**(13.0)**	17.7	(30.7)
Derivatives	(36.9)	10.8	2.2	–	(0.3)	**(24.2)**	(2.7)	(21.5)
Tax losses carried forward and tax attributes	51.7	2.7	–	–	(0.1)	**54.3**	50.9	3.4
Total deferred tax position	(170.0)	17.7	14.0	(25.0)	(12.1)	**(175.4)**	**225.2**	**(400.6)**
Set-off deferred tax positions							(104.9)	104.9
Net deferred tax position							**120.3**	**(295.7)**

Deferred tax assets are recognised for temporary differences and unused tax losses to the extent that realisation is probable as sufficient taxable profit is expected in the countries where the deferred tax assets are originated. The majority of the reported deferred taxes will be settled after 12 months from the balance sheet date.

No significant deferred tax liability has been recognised in respect of undistributed earnings of subsidiaries. This is because the Group is able to control the timing of the reversal of the temporary differences and it is probable that such differences will not reverse in the foreseeable future.

Unrecognised tax losses carry forward and tax attributes	2023 USD'M
Losses expiring in 2024	57.6
Losses expiring in 2025	78.1
Losses expiring in 2026	315.4
Losses expiring in 2027	31.3
Losses expiring in 2028	54.5
Losses expiring in 2029	66.0
Losses expiring in 2030	95.2
Losses expiring after 2030	765.4
Losses that do not expire	934.1
Total	**2,397.6**

	2022 USD'M
Losses expiring in 2023	80.2
Losses expiring in 2024	78.6
Losses expiring in 2025	99.0
Losses expiring in 2026	501.6
Losses expiring in 2027	9.3
Losses expiring in 2028	15.6
Losses expiring in 2029	26.6
Losses expiring after 2029	1,147.3
Losses that do not expire	819.6
Total	**2,777.8**

At 30 September 2023, the amount of deductible temporary differences for which no deferred tax asset has been recognised in the balance sheet is USD1,471 million (2022: USD1,123 million).

The unrecognised deferred tax assets for losses and tax attributes relate to entities for which it is not probable that taxable profit will be available to offset against these losses and attributes.

17.5 Tax uncertainties

The Group operates in numerous jurisdictions worldwide resulting in cross border intercompany transactions whereby the transfer pricing rules applied in one country have an impact on the results in another country. In order to reduce transfer pricing uncertainties, transfer pricing studies are performed and reports are prepared to fulfil local transfer pricing requirements. Because of the complexity of tax rules, interpretation by local taxing authorities can differ from the Group's interpretation based on opinions provided by local tax counsel. The Group believes that it has sufficiently provided for financial consequences (if any).

In countries where the Group starts new operations or alters business models, the issue of permanent establishment and profit allocation thereto may arise. The risk is that taxing authorities in multiple jurisdictions claim taxation rights over the same profit.

18. Underlying EBITDA

Accounting policy

The Group believes that the supplemental presentation of underlying EBITDA provides useful information on the Group's financial performance, its ability to service debt and its ability to fund capital expenditures as well as providing a helpful measure for comparing its operating performance with that of other companies.

Underlying EBITDA, when used by Trafigura, means operating profit or loss before depreciation and amortisation excluding share-based payments and other adjustments. In addition to share-based payments, the adjustments made to arrive at underlying EBITDA are considered exceptional and/or non-operational from a management perspective based on their size or nature. They can be either favourable or unfavourable. These items include for example:

- Significant restructuring costs and other associated costs arising from significant strategy changes that are not considered by the Group to be part of the normal operating costs of the business;
- Significant acquisition and similar costs related to business combinations such as transaction costs;
- Provisions that are considered to be exceptional and/or non-operational in nature and/or size to the financial performance of the business; and
- Various legal settlements that are significant to the result of the Group.

From time to time, it may be appropriate to disclose further items as exceptional or non-operational items in order to reflect the underlying performance of the Group.

Underlying EBITDA is not a defined term under IFRS and may therefore not be comparable with similarly titled profit measures and disclosures reported by other companies. It is not intended to be a substitute for, or superior to, GAAP measures.

	2023 USD'M	2022 USD'M
Operating profit or (loss) before depreciation and amortisation	**12,598.2**	11,981.8
Adjustments		
Share-based payments	87.6	106.8
Adjustments	**87.6**	106.8
Underlying EBITDA	**12,685.8**	12,088.6
As percentage of revenue	5.2%	3.8%

Share-based payments have been excluded because of their non-cash nature. Please refer to note 11 for more details. There were no non-recurring adjustments during the financial years ending 30 September 2023 and 2022.

G. Notes to the Consolidated Financial Statements

19. Property, plant and equipment

Accounting policy

Recognition and measurement

Property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment losses. The initial cost of an asset comprises its purchase price or construction cost, any costs directly attributable to bringing the asset into operation, the initial estimate of any decommissioning obligation, if any, and, for qualifying assets, borrowing costs. The purchase price or construction cost is the aggregate amount paid and the fair value of any other consideration given to acquire the asset.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components). The costs of major repairs and maintenance (dry-docking or turnarounds) are capitalised and depreciated over their useful life.

Gains or losses on disposal of an item of property, plant and equipment are recorded in the Consolidated Statement of Income in services and other expenses.

The carrying amount of property, plant and equipment is reviewed for impairment whenever events or changes in circumstances indicate the carrying amount may not be recoverable.

Assets in the course of construction are capitalised as a separate component of property, plant and equipment, included within other fixed assets. Upon completion, the cost of construction is transferred to the appropriate category.

Mineral properties and mine development costs

The costs of acquiring mineral reserves and mineral resources are capitalised in the Consolidated Statement of Financial Position as incurred. Capitalised costs representing mine development costs include costs incurred to bring the mining assets to a condition of being capable of operating as intended by management. Mineral reserves and in some instances mineral resources and capitalised mine development costs are depreciated from the commencement of production using, generally, the unit of production basis. They are written off if the property is abandoned.

Exploration and evaluation assets

Exploration and evaluation expenditure relate to costs incurred in the exploration and evaluation of potential mineral reserves and resources, and includes costs such as exploratory drilling and sample testing and the costs of pre-feasibility studies. Exploration and evaluation expenditure for each area of interest, other than that acquired from the purchase of another mining company, is capitalised as an asset provided that one of the following conditions is met:

- Such costs are expected to be recouped in full through successful development and exploration of the area of interest or alternatively, by its sale; or
- Capitalised exploration and evaluation assets are transferred to mine development assets once the work completed to date supports the future development of the property and such development receives appropriate approvals.

Acquired mineral rights comprise identifiable exploration and evaluation assets, including mineral reserves and mineral resources, which are acquired as part of a business combination and are recognised at fair value at the date of acquisition. The acquired mineral rights are reclassified as “mineral properties and mine development costs” from commencement of development and depreciated on a unit of production basis, when commercial production commences.

Subsequent costs

Subsequent expenditure is capitalised only when it is probable that the future economic benefits associated with the expenditure will flow to the Group.

Major cyclical maintenance expenditure

Group entities recognise in the carrying amount of an item of plant and equipment, the incremental cost of replacing a component part of such an item when that cost is incurred if it is probable that the future economic benefits embodied within the item will flow to the Group entity, the cost incurred is significant in relation to the asset and the cost of the item can be measured reliably. Accordingly, major overhaul expenditure is capitalised and depreciated over the period in which benefits are expected to arise (typically three to four years). Any remaining book value of a maintenance component of property, plant and equipment to which the major maintenance is applied is derecognised at that point in time. All other repairs and maintenance are charged to the Consolidated Statement of Income during the financial period in which the costs are incurred.

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets (i.e. assets that necessarily take a substantial period of time to get ready for their intended use or sale) are calculated using the EIR method and are capitalised as part of the cost of those assets. The capitalisation of such borrowing costs ceases when the assets are substantially ready for their intended use or sale. Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs capitalised.

All other borrowing costs are expensed in the period in which they are incurred. Borrowing costs consist of interest and other costs that an entity incurs directly in connection with the borrowing of funds.

USD'M	Land and buildings	Machinery and equipment	Barges and vessels	Mine property and development	Other fixed assets	**Total**
Cost						
Balance at 1 October 2022	2,254.8	3,140.1	703.1	113.6	1,224.2	**7,435.8**
Additions	152.0	111.2	112.5	13.7	520.4	**909.8**
Acquired in business combination/remeasurements	4.0	3.3	–	–	3.4	**10.7**
Reclassifications	462.0	(11.4)	10.3	47.5	(347.3)	**161.1**
Effect of movements in exchange rates, including hyperinflation adjustment	2.7	49.0	0.4	0.7	0.8	**53.6**
Disposals	(21.9)	(27.6)	(105.6)	–	(4.3)	**(159.4)**
Divestment of subsidiaries	(7.9)	(30.9)	–	–	(3.2)	**(42.0)**
Balance at 30 September 2023	**2,845.7**	**3,233.7**	**720.7**	**175.5**	**1,394.0**	**8,369.6**
Depreciation and impairment losses						
Balance at 1 October 2022	781.3	1,393.7	312.8	21.5	549.4	**3,058.7**
Depreciation	124.8	274.8	41.1	17.6	92.6	**550.9**
Impairment losses	108.4	208.5	–	23.9	38.4	**379.2**
Reclassifications	323.8	(291.5)	4.6	31.0	11.7	**79.6**
Effect of movements in exchange rates, including hyperinflation adjustment	3.3	(7.5)	0.4	0.1	(1.2)	**(4.9)**
Disposals	(7.9)	(21.6)	(15.1)	–	(3.3)	**(47.9)**
Divestment of subsidiaries	(3.4)	(16.7)	–	–	(1.2)	**(21.3)**
Balance at 30 September 2023	**1,330.3**	**1,539.7**	**343.8**	**94.1**	**686.4**	**3,994.3**
Net book value at 30 September 2023	**1,515.4**	**1,694.0**	**376.9**	**81.4**	**707.6**	**4,375.3**

USD'M	Land and buildings	Machinery and equipment	Barges and vessels	Mine property and development	Other fixed assets	**Total**
Cost						
Balance at 1 October 2021	2,271.8	3,079.7	619.5	64.6	1,038.8	**7,074.4**
Additions	25.5	86.5	385.7	16.7	517.2	**1,031.6**
Reclassifications	241.4	324.1	44.9	35.5	(268.6)	**377.3**
Effect of movements in exchange rates, including hyperinflation adjustment	(117.8)	(203.7)	(1.1)	(3.2)	(38.8)	**(364.6)**
Disposals	(59.3)	(73.7)	(336.5)	–	(11.4)	**(480.9)**
Divestment of subsidiaries	(106.8)	(72.8)	(9.4)	–	(13.0)	**(202.0)**
Balance at 30 September 2022	**2,254.8**	**3,140.1**	**703.1**	**113.6**	**1,224.2**	**7,435.8**
Depreciation and impairment losses						
Balance at 1 October 2021	593.1	973.1	295.4	–	450.9	**2,312.5**
Depreciation	99.1	256.3	29.8	11.3	69.7	**466.2**
Impairment losses	132.1	231.3	0.2	–	60.9	**424.5**
Reclassifications	117.6	98.9	(2.3)	11.2	(6.7)	**218.7**
Effect of movements in exchange rates, including hyperinflation adjustment	(39.7)	(32.4)	(1.1)	(1.0)	(6.2)	**(80.4)**
Disposals	(40.7)	(74.8)	(3.3)	–	(10.2)	**(129.0)**
Divestment of subsidiaries	(80.2)	(58.7)	(5.9)	–	(9.0)	**(153.8)**
Balance at 30 September 2022	**781.3**	**1,393.7**	**312.8**	**21.5**	**549.4**	**3,058.7**
Net book value at 30 September 2022	**1,473.5**	**1,746.4**	**390.3**	**92.1**	**674.8**	**4,377.1**

G. Notes to the Consolidated Financial Statements

19.1 Financial year 2023

Total additions for the year (USD909.8 million) mainly relate to investments in the Nyrstar industrial facilities (USD250.9 million), Puma Energy retail assets network (USD130.4 million), vessels (USD112.5 million), and various individually smaller projects. The investments in Nyrstar predominantly relate to sustaining capital expenditures, with investments split across the Group's global operations.

Included in the Other fixed assets category are assets under construction, which relates to assets not yet in use, and some Nyrstar related assets. Net book value as at 30 September 2023 amounted to USD343.2 million. Once the assets under construction come into operation they are reclassified to the appropriate asset category and from that point they are depreciated.

Certain items of property, plant and equipment are pledged as collateral for an amount of USD195.1 million.

Depreciation is included in depreciation and amortisation. Impairment charges are separately disclosed in the Consolidated Statement of Income. Please refer to note 14 for details on impairments.

During the 2023 financial year, the Group capitalised borrowing costs of a total amount of USD3.3 million under other fixed assets.

19.2 Financial year 2022

Total additions for the year (USD1,031.6 million) mainly relate to investments in the Nyrstar industrial facilities and mines (USD275.5 million), vessels (USD384.1 million) and various individual smaller projects. The investments in Nyrstar predominantly relate to sustaining capital expenditures of USD252.4 million, with investments split across the Group's global operations.

The USD351.9 million disposals mainly relate to the sale of vessels, which were subsequently leased back for a period between five and seven years.

Included in the Other fixed assets category are assets under construction, which relates to assets not yet in use, and some Nyrstar related assets. Net book value as at 30 September 2022 amounted to USD415.4 million. Once the assets under construction come into operation they are reclassified to the appropriate asset category and from that point they are depreciated.

Certain items of property, plant and equipment are pledged as collateral for an amount of USD375.4 million.

Depreciation is included in depreciation and amortisation. Impairment charges are separately disclosed in the Consolidated Statement of Income.

During the 2022 financial year, the Group capitalised borrowing costs of a total amount of USD5.2 million under other fixed assets.

20. Intangible fixed assets

Accounting policy

Goodwill

Goodwill that arises on the acquisition of subsidiaries is presented with intangible fixed assets. For the measurement of goodwill at initial recognition refer to note 7 – Business combinations and non-controlling interests.

Goodwill is measured at cost less accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's Cash-Generating Units (CGUs) or group of CGUs that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

Where goodwill has been allocated to a CGU and part of the operation within that unit is disposed of, the goodwill associated with the disposed operation is included in the carrying amount of the operation when determining the gain and loss on disposal. Goodwill disposed in these circumstances is measured based on the relative values of the disposed operation and the portion of the GCU retained.

In respect of equity-accounted investees, the carrying amount of goodwill is included in the carrying amount of the investment, and any impairment loss is allocated to the carrying amount of the equity-accounted investee as a whole.

Brand name and customer relationships

Brand name and customer relationships (acquired in business combination) are measured at fair value at the date of acquisition. They are amortised evenly over their estimated useful economic life, primarily being between 10 and 20 years.

Environmental emission credits and allowances held for own use (included in other intangible assets)

Environmental emission credits and allowances held for own use are acquired for the purpose of settling emissions in the ordinary course of business. These credits and allowances are classified as intangible fixed assets at cost less accumulated impairment losses. Credits and allowances that will be retired within the next 12 months are classified as current intangible fixed assets, and are included within other current assets. The related cash flow is classified as an operating cash flow.

An obligation to deliver environmental emission credits and allowances arises due to emissions in our operations or as per the regulatory triggers. This obligation is reported as an expense within Materials, transportation and storage and a liability within accruals under Trade and other Payables. This liability is valued in the amount at which it is expected to be settled.

Licences and other intangible fixed assets

Licences and other intangible fixed assets include software development costs and certain long-term concession rights related to land usage. These items are stated at cost, less accumulated amortisation and accumulated impairment losses. Licences are amortised over the term of the licence, generally not exceeding 10 years. The long-term concession rights have useful lives ranging from 33 to 99 years.

An intangible fixed asset acquired as part of a business combination is measured at fair value at the date of acquisition and is recognised separately from goodwill if the asset is separable or arises from contractual or other legal rights.

Gains or losses on disposal of intangible fixed assets are recorded in the Consolidated Statement of Income in Services and other.

USD'M	Goodwill	Brand name & customer relationships	Other intangible assets	Total
Cost				
Balance at 1 October 2022	1,203.7	427.6	1,209.1	**2,840.4**
Additions	4.9	–	200.4	**205.3**
Acquired in business combination/remeasurements	–	–	2.2	**2.2**
Reclassifications	(4.2)	–	(63.3)	**(67.5)**
Effect of movements in exchange rates, including hyperinflation adjustment	(6.9)	(14.7)	1.4	**(20.2)**
Disposals	–	–	(309.3)	**(309.3)**
Divestment of subsidiaries	(14.1)	–	(1.4)	**(15.5)**
Balance at 30 September 2023	1,183.4	412.9	1,039.1	**2,635.4**
Amortisation and impairment losses				
Balance at 1 October 2022	196.9	39.4	491.4	**727.7**
Amortisation	–	36.3	79.8	**116.1**
Impairment losses	30.6	–	0.4	**31.0**
Effect of movements in exchange rates, including hyperinflation adjustment	(0.4)	–	(1.1)	**(1.5)**
Reclassifications	1.0	–	(3.0)	**(2.0)**
Disposals	–	–	(2.8)	**(2.8)**
Divestment of subsidiaries	–	–	(0.2)	**(0.2)**
Balance at 30 September 2023	228.1	75.7	564.5	**868.3**
Net book value at 30 September 2023	955.3	337.2	474.6	**1,767.1**
Non-current	955.3	337.2	252.0	1,544.5
Current	–	–	222.6	222.6
Balance at 30 September 2023	955.3	337.2	474.6	**1,767.1**

USD'M	Goodwill	Brand name & customer relationships	Other intangible assets	Total
Cost				
Balance at 1 October 2021	1,233.8	437.8	691.4	**2,363.0**
Additions	–	–	567.7	**567.7**
Reclassifications	–	–	(2.2)	**(2.2)**
Effect of movements in exchange rates, including hyperinflation adjustment	(30.1)	(10.2)	(16.0)	**(56.3)**
Disposals	–	–	(10.8)	**(10.8)**
Divestment of subsidiaries	–	–	(21.0)	**(21.0)**
Balance at 30 September 2022	1,203.7	427.6	1,209.1	**2,840.4**
Amortisation and impairment losses				
Balance at 1 October 2021	108.4	–	439.3	**547.7**
Amortisation	–	39.4	78.6	**118.0**
Impairment losses	88.5	–	2.2	**90.7**
Effect of movements in exchange rates, including hyperinflation adjustment	–	–	(10.0)	**(10.0)**
Reclassifications	–	–	3.2	**3.2**
Disposals	–	–	(0.9)	**(0.9)**
Divestment of subsidiaries	–	–	(21.0)	**(21.0)**
Balance at 30 September 2022	196.9	39.4	491.4	**727.7**
Net book value at 30 September 2022	1,006.8	388.2	717.7	**2,112.7**

G. Notes to the Consolidated Financial Statements

Goodwill is the only intangible fixed asset with an indefinite life. All other intangible fixed assets are amortised as follows:

- Brand name and customer relationships (acquired in business combination) are amortised evenly over their estimated useful economic life, primarily being between 10 and 20 years.
- Other intangible fixed assets are amortised evenly over their estimated useful economic life. Other intangibles mainly consist of:
  - Environmental emission credits and allowances held for own use acquired for the purpose of settling emissions in the ordinary course of business amounting to USD222.6 million (30 September 2022: USD490.9 million).
  - Licence fees paid are amortised evenly over their respective periods, for which the licences have been granted, generally not exceeding 10 years; and
  - Software amounting to USD171.4 million (30 September 2022: USD154.8 million) that is amortised over five years and payments made under exclusivity contracts with clients for petroleum fuels and lubricants that are amortised over the contractual period.

Disposals of other intangible assets are predominantly made up of the retirement of certain environmental emission credits and allowances (USD306.2 million). These credits and allowances are derecognised based on usage in operations or as per the regulatory triggers.

Amortisation expenses are included in depreciation and amortisation. Impairment charges are separately disclosed in the Consolidated Statement of Income. Intangible fixed assets with finite lives are tested for impairment when impairment indicators exist. For the purpose of impairment testing, goodwill is allocated to the CGUs or groups of CGUs.

Goodwill impairment

Total goodwill impairment charges recognised for the 2023 financial year amount to USD30.6 million (FY2022: USD88.5 million). These impairment charges primarily relate to business of Puma Energy. For further information on these goodwill impairments, refer to note 14.

21. Leases

Accounting policy

When the Group is the lessee

As a lessee, at inception of a contract the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the Group assesses whether:

- The contract involves the use (explicitly or implicitly) of an identified asset;
- The Group has the right to obtain substantially all of the economic benefits throughout the period of use; and
- The Group has the right to direct the use of the asset.

This policy is applied to all lease contracts except for short-term leases and leases of low-value assets. If a contract is, or contains a lease, the Group accounts a lease component separately from non-lease components. As a lessee, the Group allocates the consideration in the contract based on the relative stand-alone price of components and the aggregate stand-alone price of the non-lease components (if applicable).

For all leases, the Group recognises a right-of-use (ROU) asset and a corresponding liability at the date at which the leased asset is available for use. Assets and liabilities arising from a lease are initially measured on a present value basis. The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be determined, the lessee's incremental borrowing rate is used, being the rate of interest that the lessee would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the ROU asset in a similar economic environment. Generally, the Group uses its incremental borrowing rate as the discount rate. The incremental borrowing rate is determined using recent third-party financing received adjusted for both changes in financing conditions since third party financing was received and for terms specific to leases.

In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option or not to exercise a termination option. Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated).

Lease payments included in the measurement of the lease liability include the following:

- Fixed payments (including in-substance fixed payments), less any lease incentives receivables;
- Variable lease payment that are based on an index or a rate;
- Amounts expected to be payable by the lessee under residual value guarantees;
- The exercise price of a purchase option if the lessee is reasonably certain to exercise that option; and
- Payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option.

The ROU asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, any initial direct costs and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

Subsequent to initial recognition, the lease liability is measured at amortised cost using the effective interest method, and the ROU asset is depreciated on a straight-line basis, from the commencement date to the earlier of the end of the useful life of the ROU asset, or the end of the lease term.

The lease liability is remeasured when:

- There is a change in future lease payments arising from changes in an index or rate;
- There is a change in the Group's assessment of whether it will exercise an extension option; or
- There are modifications in the scope or the consideration of the lease that were not part of the original term.

The lease liability is remeasured with a corresponding adjustment to the ROU asset or is recorded in profit or loss if the carrying amount of the ROU asset has been reduced to zero.

When the Group is the (intermediate) lessor

Subleases

When the Group acts as an intermediate lessor, it accounts for its interest in the head lease and the sub-lease separately. The classification of the sub-lease is assessed with reference to the ROU asset of the head lease and not the underlying asset. If a head lease is a short-term lease and the exemption below has been applied, the sub–lease is classified as an operating lease. If the sub-lease is classified as a finance lease, the Group derecognises the ROU asset and instead recognises a finance lease receivable at the amount of its net investment, which is the present value of all remaining lease payments. Any difference between the ROU asset and the finance lease receivable is recognised in profit or loss, when the finance lease receivable is recognised. Lease liability relating to the head lease is retained in the Consolidated Statement of Financial Position, which represents the lease payments owed to the head lessor.

For any arrangements that contain lease and non-lease components, as an intermediate lessor, the Group allocates the consideration in the contract based on a relative stand-alone selling basis.

Subsequent to initial recognition, the Group, as intermediate lessor, accrues interest income on the net investment. The receipts under the lease are allocated between the receivable and the finance income to produce a constant rate of return on the net investment.

The Company, as a lessor, assesses the risk with respect to leased assets as limited and not material. Lease agreements do not impose any covenants, but leased assets may not be used as security for borrowing purposes. Any allowances for expected credit losses are recognised against finance lease receivables as required by IFRS 9, if applicable.

G. Notes to the Consolidated Financial Statements

Key accounting estimate and judgement

Discount rates

The Group cannot readily determine the interest rate implicit in the lease, therefore, it uses its incremental borrowing rate (IBR) to measure lease liabilities. The IBR is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The IBR therefore reflects what the Group 'would have to pay', which requires estimation when no observable rates are available (such as for subsidiaries that do not enter into financing transactions) or when they need to be adjusted to reflect the terms and conditions of the lease (for example, when leases are not in the subsidiary's functional currency). The Group estimates the IBR using observable inputs (such as market interest rates) when available and is required to make certain entity-specific estimates when applicable (such as the subsidiary's stand-alone credit rating). A single IBR may be applied to a portfolio of leases, which are similar in nature and lease term.

Determining the term of a lease contract

Extension and termination options are included in most lease contracts held by the Group. These options are used to maximise operational flexibility in terms of managing the assets used in the Group's operations. The majority of extension and termination options held are exercisable only by the Group and not by the respective lessor.

In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option, or to not exercise a termination option. Extension options (or period after termination option) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated).

For lease contracts, the following factors are normally the most relevant:

- Remaining useful live of the assets depending on the lease term of the lease contract;
- Remaining duration of long-term customer contracts;
- The amount of the penalties to terminate (or not to extend);
- Other factors including historical lease durations and the costs and business disruption that is expected to be incurred to replace the leased asset.

The lease term is reassessed if an option is actually exercised (or not exercised) or the Group becomes obliged to exercise (or not exercise) it. The assessment of reasonable certainty is only revised if a significant event or a significant change in circumstances occurs, which affects this assessment, and that is within the control of the lessee.

No other material estimates and judgements are applied by the Group with regard to leases.

The Group leases various assets including land and buildings, and plant and equipment. Leases are negotiated on an individual basis and contain a wide range of different terms and conditions, including termination and renewal rights. The Group, as a lessor, only has finance leases.

The lease agreements do not impose any covenants, but leased assets may not be used as security for borrowing purposes.

21.1 Right-of-use assets

USD'M	Freight	Storage	Land and buildings	Service stations	Other	Total
Balance at 1 October 2022	2,544.7	521.2	295.2	155.8	387.6	**3,904.5**
Additions/remeasurements	2,320.4	403.3	49.5	52.8	20.4	**2,846.4**
Reclassifications	–	–	–	–	(1.5)	**(1.5)**
Disposals	(230.8)	–	(0.2)	–	(0.2)	**(231.2)**
Impairment losses	–	–	–	–	0.3	**0.3**
Depreciation	(1,531.7)	(124.2)	(40.5)	(28.3)	(125.1)	**(1,849.8)**
Effect of movement in exchange rates	–	(0.8)	(2.1)	(0.9)	0.5	**(3.3)**
Other	3.0	0.3	1.1	–	(1.6)	**2.8**
Balance at 30 September 2023	3,105.6	799.8	303.0	179.4	280.4	**4,668.2**

USD'M	Freight	Storage	Land and buildings	Service stations	Other	Total
Balance at 1 October 2021	1,588.1	114.3	338.6	174.9	190.3	**2,406.2**
Additions/remeasurements	2,239.5	458.0	15.1	17.2	314.5	**3,044.3**
Reclassifications	(0.1)	1.3	10.3	–	17.7	**29.2**
Disposals	(306.0)	–	(1.7)	(0.1)	–	**(307.8)**
Impairment losses	–	–	(0.1)	0.1	(20.7)	**(20.7)**
Depreciation	(976.1)	(49.1)	(51.0)	(29.3)	(110.8)	**(1,216.3)**
Effect of movement in exchange rates	–	(4.3)	(10.9)	(5.1)	(2.6)	**(22.9)**
Other	(0.7)	1.0	(5.1)	(1.9)	(0.8)	**(7.5)**
Balance at 30 September 2022	2,544.7	521.2	295.2	155.8	387.6	**3,904.5**

Both additions and disposals in the Freight category primarily relate to vessels.

The Other category mainly includes assets located in Corpus Christi, Texas, that enable the transportation, storing, processing and vessel loading of crude oil and crude oil products.

G. Notes to the Consolidated Financial Statements

21.2 Lease liabilities

	2023 USD'M	2022 USD'M
Opening balance	**3,987.2**	2,572.1
Interest	235.5	134.7
Additions/remeasurements	2,920.9	3,067.9
Disposals	(316.5)	(314.6)
Payments	(2,044.8)	(1,438.9)
Effect of movement in exchange rates	6.7	(48.3)
Other	2.3	14.3
Closing balance	**4,791.3**	3,987.2
Current	1,705.4	1,170.1
Non-current	3,085.9	2,817.1
Closing balance	**4,791.3**	3,987.2

The following table sets out a maturity analysis of the lease liabilities at 30 September 2023 and 2022, indicating the undiscounted lease amounts to be paid:

	2023 USD'M	2022 USD'M
Less than one year	1,986.3	1,355.3
Later than one year and less than five years	2,864.2	2,558.4
Later than five years	808.9	604.1
Total undiscounted lease payable	**5,659.4**	4,517.8
Future finance costs	(868.1)	(530.6)
Lease liabilities included in the statement of financial position	**4,791.3**	3,987.2
Of which are:		
Current	**1,705.4**	1,170.1
Non-current	**3,085.9**	2,817.1

21.3 Amounts relating to leases recognised for the reporting period

The following amounts are recognised in profit and loss:

	2023 USD'M	2022 USD'M
Depreciation on right-of-use assets	1,849.8	1,216.3
Interest expense on lease liabilities	235.5	134.7
Impairments of right-of-use assets	(0.3)	20.7
Expenses relating to short-term leases	1,012.0	760.1
Expenses related to variable lease payments not included in the measurement of the lease liability	1,023.2	535.1
Gain or losses on sale and leaseback	(14.5)	27.2
Foreign exchange/other	10.0	(25.4)
Net (income)/expenses related to leases	**4,115.7**	2,668.7

At 30 September 2023, the Group is committed to USD480.1 million of short-term lease payments (30 September 2022: USD515.7 million).

Total cash out flow included in net cash from operating and financing activities in the 2023 financial year was USD4,080.0 million (FY2022: USD2,734.1 million).

22. Equity-accounted investees

Accounting policy

Associates and joint ventures (together 'Associates') in which the Group exercises significant influence or joint control are accounted for using the equity method. Significant influence is the power to participate in the financial and operating policy decisions of the investee but not control those policies. Joint control is established by contractual agreement and requires unanimous consent for strategic financial and operating decisions. The considerations made in determining significant influence or joint control are similar to those necessary to determine control over subsidiaries.

Under the equity method, the investment in an Associate is initially recognised at cost. The carrying amount of the investment is adjusted to recognise changes in the Group's share in the net assets of the Associate since acquisition date. Goodwill relating to the Associate is included in the carrying amount of the investment and is neither amortised nor individually tested for impairment. The Consolidated Statement of Income reflects the Group's share of the results of operations of the Associate. Any change in the other comprehensive income (OCI) of those investees is presented as part of the Group's OCI. In addition, when there has been a change recognised directly in the equity of the Associate, the Group recognises its share of any changes, when applicable, in the Consolidated Statement of Changes in Equity.

Unrealised gains and losses resulting from transactions between the Group and the Associate are eliminated to the extent of the interest in the Associate, unless the sale or contribution of assets constitute a business in which case the gains and losses are recognised in full. The aggregate of the Group's share of profit or loss of equity-accounted investees is shown on the face of the Consolidated Statement of Income and represents profit or loss after tax and non-controlling interests in the subsidiaries of the Associate.

The Group determines at each reporting date whether there is any objective evidence that the investment in the Associate is impaired. The financial statements of the Associates are prepared for the same reporting period as the Group, unless otherwise indicated.

Changes in the Group's interest in Associates are accounted for as a gain or loss on disposal with any differences between the amount by which the carrying amount of the Associate is adjusted and the fair value of the consideration received being recognised directly in the Consolidated Statement of Income.

Key accounting estimate and judgement

Determination of control of subsidiaries and joint arrangements

Judgement is required to determine whether the Group controls an entity, and consequently, whether it needs to consolidate that entity into the consolidated financial statements. Specifically, the Group assesses whether it has the power over the relevant activities of the entity, exposure to its variable returns or the ability to use power to impact returns of the entity.

The Group has certain investments in companies, which are not consolidated and whose results are accounted for in the Group's consolidated financial statements based on their equity share ownership. The most significant of the Group's investments is the 50 percent investment in ITG S.à r.l., parent company of Impala Terminals Group (ITG).

	2023 USD'M	2022 USD'M
Opening balance	**979.6**	842.2
Effect of movements in exchange rates	(3.0)	(34.2)
Additions	93.9	150.9
Disposals	(8.1)	(10.4)
(Impairments)/reversals	6.2	(34.9)
Share of net profit/(loss)	(11.8)	54.2
Dividends/Repayment of capital	(86.1)	(21.4)
Reclassification to assets held for sale	–	(9.4)
Other	(1.2)	42.6
Total	**969.5**	979.6

22.1 Financial year 2023

Additions for the year consist of an investment of USD50.0 million in the Lobito corridor project in Angola, a further investment in Nala Lux Holdco S.à r.l of USD35.0 million and various other investments.

During the year, Nala Lux Holdco S.à r.l transferred its stake in Swift Current Energy to Trafigura which was settled via repayment of capital (USD69.7 million). Trafigura's pro-rata share of Swift Current Energy was subsequently sold to Buckeye Partners, L.P., the majority owner of Swift Current Energy.

During the 2023 financial year, the Group received USD14.5 million in dividends from various equity-accounted investees.

The share of profit/(loss) from equity-accounted investees amounts to a loss of USD11.8 million. This is predominantly the share of losses of Empresa Minera del Caribe S.A. (a loss of USD34.0 million), ITG S.à r.l. (a loss of USD17.5 million), partly offset by the share of profits from Guangxi Jinchuan (USD28.1 million).

22.2 Financial year 2022

The additions to equity-accounted investees amounted to USD150.9 million. As Nala Renewables expanded, a new holding company was incorporated, Nala Lux HoldCo S.à r.l., and additional investments were made (USD112.0 million). In addition, various other investments were made during the 2022 financial year.

The share of net profit from investments amounted to USD54.2 million. This was predominantly the result of profits in ITG S.à r.l. (USD25.7 million), Atalaya Mining PLC (USD23.4 million) and Guangxi Jinchuan (USD17.1 million), and partly offset by Porto Sudeste do Brasil (a loss of USD23.6 million).

During the 2022 financial year, the Group received USD21.4 million in dividends from various equity-accounted investees.

G. Notes to the Consolidated Financial Statements

22.3 Equity-accounted investee-related balances and participations

The tables below depict participations and balances related to equity-accounted investees:

Name	Place of incorporation/ registration	Activities	Percentage of equity attributable to the Group 2023	Percentage of equity attributable to the Group 2022
Atalaya Mining PLC	Cyprus	Mining	22.0%	22.0%
Empresa Minera del Caribe S.A.	Caribbean	Mining	49.0%	49.0%
Guangxi Jinchuan Non-ferrous Metals Co., Ltd	China	Smelter	30.0%	30.0%
ITG S.à r.l.	Luxembourg	Multimodal logistics, warehousing and storage	50.0%	50.0%
Lobito Atlantic Railway, S.A.	Angola	Provision of rail services and logistics support	49.5%	–
Lobito Atlantic International Sàrl	Switzerland	Provision of rail services and logistics support	50.0%	–
Mineração Morro do Ipê S.A.	Brazil	Mining	50.0%	50.0%
Nala Lux HoldCo S.à. r.l. (Nala Renewables)	Luxembourg	Renewable energy projects	50.0%	50.0%
Porto Sudeste do Brasil S.A.	Brazil	Port services	49.6%	49.6%
Sawtooth Caverns LLC	United States	Storage of oil products	50.0%	50.0%
Trafigura Liaoning Port International trading (Liaoning) Co. Ltd.	China	Oil Trading	50.0%	50.0%

	2023 USD'M	2022 USD'M
Energy:		
Nala Lux HoldCo S.à. r.l. (Nala Renewables)	68.4	98.7
Trafigura Liaoning Port International trading (Liaoning) Co. Ltd.	30.7	30.2
Sawtooth Caverns LLC	27.0	26.8
Others	60.5	59.6
Total	**186.6**	215.3
Metals and Minerals:		
ITG S.à r.l.	296.1	314.6
Guangxi Jinchuan Non-ferrous Metals Co., Ltd	212.8	208.8
Atalaya Mining PLC*	118.8	108.0
Mineração Morro do Ipê S.A.	64.3	58.5
Lobito Atlantic Railway, S.A.	49.7	–
Empresa Minera del Caribe S.A.	5.9	39.9
Others	11.8	12.2
Total	**759.4**	742.0
All other segments:		
Others	23.5	22.3
Total	**969.5**	979.6
*** Listed investments. Fair value as of 30 September:**		
Atalaya Mining PLC	127.9	65.5

The table below presents the key financial information of ITG S.à r.l.

ITG S.à r.l.	2023 USD'M	2022 USD'M
Non-current asset assets	1,449.2	1,392.7
Current assets	393.7	249.5
Non-current liabilities	1,097.9	157.7
Current liabilities	360.9	1,061.6
Revenue	999.4	715.9
Profit/(loss) for the year	(35.0)	51.6
Dividends paid	0.8	(1.5)
Other comprehensive income	(0.7)	6.8
Total comprehensive income	**(35.7)**	58.4
Net assets	384.1	422.9
Trafigura's ownership interest	50.0%	50.0%
Fair value adjustment as a result of partial sale and other adjustments	104.1	103.2
Carrying value	296.1	314.6

The condensed information of the other associates is shown below.

Other associates	2023 USD'M	2022 USD'M
Assets	4,436.0	4,031.4
Liabilities	2,371.9	1,652.8
Revenue	7,124.6	8,032.9
Profit or (loss) for the year	69.3	18.4

Corporate guarantees in favour of associates and joint ventures as at 30 September 2023 amount to USD87.8 million (30 September 2022: USD151.1 million).

23. Prepayments and financial assets

Accounting policy

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Prepayments

The Group enters into prepayment agreements where purchases of commodities are prepaid. When the prepayment agreement can be settled in cash or another financial asset, it is classified at amortised cost in line with IFRS 9. When settlement of the prepayment agreement solely occurs by having the commodities physically delivered, these agreements are not classified as financial instruments as they do not meet the definition of a financial asset. For the clauses in the contracts which might result in cash settlement instead of physical delivery, the objective of the contract and the economic reality of such clauses determine the classification. Interest received on prepayment agreements is presented in finance income in the Consolidated Statement of Income.

Financial assets

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income, and fair value through profit or loss.

The classification depends on the Group's business model for managing the financial assets and the contractual terms of the cash flows. For investments in debt instruments, this will depend on the business model in which the investment is held. For investments in equity instruments, this will depend on whether the Group has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income.

Subsequent measurement of debt instruments depends on the Group's business model for managing the asset and the cash flow characteristics of the asset.

The Group reclassifies debt investments only when its business model for managing those assets changes. Reclassification takes place on the first day of the financial year following the financial year in which the business model changes.

At initial recognition, the Group measures a financial asset at its fair value plus, in the case of a financial asset at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at fair value through profit or loss are expensed in profit or loss as incurred.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognised on the trade date (i.e. the date that the Group commits to purchase or sell the asset).

The Group derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. Any interest in such transferred financial assets that is created or retained by the Group is recognised as a separate asset or liability.

Financial assets at fair value through other comprehensive income

Where Group management has elected to present fair value gains and losses on equity investments in other comprehensive income, there is no subsequent reclassification of fair value gains and losses to the Consolidated Statement of Income. Dividends from such investments continue to be recognised in the Consolidated Statement of Income as income/(expenses) from investments when the Group's right to receive payments is established. There are no impairment requirements for equity investments measured at fair value through other comprehensive income.

Financial assets at fair value through profit or loss

The Group classifies the following financial assets at fair value through profit or loss:

- Equity investments that are held for trading;
- Equity investments for which the entity has not elected to recognise fair value gains and losses through other comprehensive income;
- Debt investments that do not qualify for measurement at amortised cost;
- Debt investments that do not qualify for measurement at fair value through other comprehensive income; and
- Debt investments that have been designated at fair value through profit or loss.

Financial assets at fair value through profit or loss are carried in the Consolidated Statement of Financial Position at fair value with net changes in fair value presented as income or expenses from investments in the Consolidated Statement of Income. Interests, dividends and gain or loss on foreign exchange on financial assets at fair value through profit or loss are included separately in finance income or expense, or services and other expenses, respectively.

Amortised cost

The Group classifies its financial assets as at amortised cost only if both of the following criteria are met:

- The asset is held within a business model with the objective of collecting the contractual cash flows; and
- The contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal outstanding.

Financial assets at amortised cost include loans receivable, trade and other receivables, and other financial assets that are held with the objective of collecting contractual cash flows. After initial measurement at fair value, the financial assets are measured at amortised cost using the EIR method, less impairment.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance income in the Consolidated Statement of Income. The losses arising from impairment are recognised in the Consolidated Statement of Income in impairments of financial assets and prepayments.

G. Notes to the Consolidated Financial Statements

23.1 Prepayments

	2023 USD'M	2022 USD'M
Current	2,930.6	2,117.2
Non-current	1,107.8	1,534.1
Total	**4,038.4**	3,651.3

Prepayments relate to prepayments of commodity deliveries and are split into non-current prepayments (due > 1 year) and current prepayments (due < 1 year). A significant portion of the non-current prepayments and current prepayments are either financed on a non-recourse basis or insured. As at 30 September 2023, an amount of USD599.0 million (30 September 2022: USD483.5 million) of prepayments has been discounted. This amount has been derecognised as the Group has transferred substantially all the risks and rewards of ownership of the prepayment with non-recourse.

Out of the total current prepayments balance, an amount of USD1.6 billion (30 September 2022: USD1.3 billion) relates to prepayments that are made for specifically identified cargos.

The contractually outstanding prepayments amount decreases in size with each cargo that is delivered, until maturity. Once the contractually agreed total cargo has been fully delivered, the prepayment agreement falls away leaving no remaining contractual obligations on Trafigura or the supplier.

The Group monitors the commodity prices in relation to the prepayment contracts and manages the credit risk together with its financial assets as described in note 39. A portion of the long-term prepayments and short-term prepayments is financed on a limited-recourse basis. Interest on the prepayments is added to the prepayment balance.

Based on the individual analysis of the prepayments, the cumulated expected credit losses on these prepayments recorded by the Group amount to USD343.4 million (30 September 2022: USD133.3 million). The following table explains the movements of the expected credit loss between the beginning and the end of the reporting period and the gross carrying amounts of the prepayments by credit risk category:

	2023			2022		
	Performing 12-months ECL USD'M	Underperforming Lifetime ECL USD'M	Total USD'M	Performing 12-months ECL USD'M	Underperforming Lifetime ECL USD'M	Total USD'M
Expected credit loss (ECL) provision						
Opening balance – 1 October	44.0	89.3	**133.3**	24.7	99.4	**124.1**
Transfer to underperforming	–	11.0	11.0	–	–	–
ECL on prepayments recognised during the year	2.5	–	2.5	3.9	12.4	16.3
ECL on prepayments derecognised during the year	(0.4)	(24.6)	(25.0)	–	(0.5)	(0.5)
Changes in PD/LGD/EAD	5.9	215.7	221.6	15.4	(22.0)	(6.6)
Closing balance at 30 September	52.0	291.4	**343.4**	44.0	89.3	**133.3**
Carrying amount at 30 September						
Current	2,663.2	267.4	2,930.6	2,060.9	56.3	2,117.2
Non-current	379.7	728.1	1,107.8	385.0	1,149.1	1,534.1
Total	3,042.9	995.5	**4,038.4**	2,445.9	1,205.4	**3,651.3**

23.2 Loans and other receivables

	2023 USD'M	2022 USD'M
Loans to associates and related parties	52.9	43.2
Other non-current loans receivable	738.7	264.3
Total	**791.6**	307.5

Other non-current loans receivables include various loans that are granted to counterparties that the Group trades with. This line also includes the debt agreement with the Ministry of Finance of Angola, which relates to compensation for iron ore investments made by the Group following the liquidation of a consolidated Angolan subsidiary in 2016. In 2019, the original debt agreement was renegotiated with a new redemption schedule in place. In 2020 and 2021, due to the economic situation in Angola, with collapsing oil prices, a lack of liquidity and COVID-19, it had not been possible for the Ministry of Finance to honour all of its obligations. In financial year 2022, the Ministry of Finance started regular payments of the debt and continued to fulfil its repayment obligations during financial year 2023. The gross amount outstanding as at 30 September 2023 amounts to USD198.9 million. Based upon these recent developments the effect on the ECL provision is a gain of USD84.9 million, which has been recorded as gain in the Consolidated Statement of Income.

In addition, this line also includes a series of financial instruments provided to Wolverine Fuels LLC (Wolverine) with a carrying value of USD460.6 million (30 September 2022: USD87.9 million). During the 2023 financial year a senior secured loan of USD343 million was granted to Wolverine and interest over 2023 has been accrued.

Based on the individual analysis of these loans, the recorded expected credit losses on these loans amount to USD229.9 million (30 September 2022: USD282.7 million), the difference being mostly explained by the above-mentioned reversal of impairment on the receivable from the Ministry of Finance of Angola. The following table explains the movements of the expected credit loss between the beginning and the end of the reporting period and the gross carrying amounts of the loan receivables by credit risk category:

	2023			2022		
	Performing 12-months ECL USD'M	Underperforming Lifetime ECL USD'M	Total USD'M	Performing 12-months ECL USD'M	Underperforming Lifetime ECL USD'M	Total USD'M
Expected credit loss (ECL) provision						
Opening balance – 1 October	3.1	279.6	**282.7**	2.4	134.2	**136.6**
Transfer to underperforming	–	4.9	4.9	–	–	–
ECL on new loans originated during the year	11.7	20.2	31.9	–	56.6	56.6
ECL on loans derecognised during the year	(1.2)	–	(1.2)	–	–	–
Changes in PD/LGD/EAD	2.3	(90.7)	(88.4)	0.7	88.8	89.5
Closing balance at 30 September	15.9	214.0	**229.9**	3.1	279.6	**282.7**
Carrying amount at 30 September						
Current (note 26)	198.9	134.7	333.6	211.1	3.8	214.9
Non-current (note 23)	487.2	304.4	791.6	144.9	162.6	307.5
Total	686.1	439.1	**1,125.2**	356.0	166.4	**522.4**

G. Notes to the Consolidated Financial Statements

23.3 Other investments

Investments included in the Consolidated Statement of Financial Position as at 30 September 2023 and 2022 can be broken down as follows:

	2023 USD'M	2022 USD'M
Listed equity securities – Fair value through OCI	0.5	0.9
Listed equity securities – Fair value through profit or loss	361.8	63.2
Listed debt securities – Fair value through profit or loss	247.4	203.0
Unlisted equity investments – Fair value through profit or loss	182.0	130.1
Unlisted equity investments – Fair value through OCI	205.8	198.3
Total	**997.5**	595.5

The Group's long-term investments consist of listed equity securities, listed debt securities and unlisted equity securities. The listed equity securities have no fixed maturity or coupon rate. The fair values of listed equity investments are based on quoted market prices, while the fair value of the unlisted equity securities is determined based on a level 3 valuation as prepared by management.

Additions in listed equity securities for financial year 2023 primarily consist of investments in Korea Zinc Company Limited (USD148.5 million), Saras S.p.A (USD125.7 million) and various other investments.

24. Other non-current assets

	2023 USD'M	2022 USD'M
Non-financial hedged items	275.9	3,821.6
Restricted deposit	34.8	94.7
Other	405.9	369.6
Total	**716.6**	4,285.9

For further information on the non-financial hedged items, refer to note 40.2. The restricted deposits mainly represent amounts placed on deposit accounts relating to Puma Energy and Nyrstar mining operations.

Other primarily relates to long-term deposits.

25. Inventories

Accounting policy

Trading-related inventories are measured at fair value less costs to sell. Fair value movements are included in the Consolidated Statement of Income in materials, transportation and storage. Inventories of non-trading related products, including work-in-progress, are measured at the lower of cost or net realisable value. Costs comprise all costs of purchases and other costs incurred.

Environmental emission allowances held for trading

Allowances held for trading are acquired to take advantage of market fluctuations. These allowances are classified as inventory at fair value less costs to sell. When there is an active market, fair value is based on quoted prices (level 1), otherwise fair value measurement is derived from an observable market price (level 2). The change in fair value observed over the year is recorded in the Consolidated Statement of Income.

	2023 USD'M	2022 USD'M
Storage inventories	12,697.7	11,477.7
Floating inventories	9,031.3	10,194.8
Work-in-progress inventories	707.2	752.9
Supplies and other	533.5	158.2
Total	**22,969.7**	22,583.6

Trafigura policy provides that the inventory (except the item Supplies and other) has either been pre-sold or hedged. Part of the inventory has been pledged for securitisation purposes. Please refer to note 27.2.

Work-in-progress inventories predominantly relate to intermediate inventories being processed at the Nyrstar smelters.

For information on the write-off related to the fraud within Metals and Minerals, reference is made to note 6.

26. Trade and other receivables

Accounting policy

Trade receivables

Trade receivables are amounts due from customers for services rendered in the ordinary course of business. Trade and other receivables are recognised initially at fair value. The Group holds trade receivables with the primary objective to collect the contractual cash flows, which are subsequently measured at amortised cost using the effective interest method, except for those subject to certain dedicated financing facilities, which would be held for collection of contractual cash flows and for selling the financial asset and therefore should be measured at fair value through other comprehensive income. As trade receivables are generally due for settlement within 30 days both measurement methods would result in the same carrying value as the amortised cost would approximate the fair value.

The Group applies the simplified approach to measuring expected credit losses that uses a lifetime expected loss allowance for all trade receivables and contract assets.

Trade receivables are written off (impaired) when objective evidence indicates that there is no reasonable expectation of recovery. This is based on an individual review for impairment due to an increase of the credit risk of the customer and/or past due amounts, and taking into account any retention right on product stored for this customer.

The creation and release of a provision for impaired trade receivables are recognised under Impairments of financial assets and prepayments in the Consolidated Statement of Income.

Provisional pricing features

Trade and other receivables and trade and other payables related to commodity contracts, including provisional pricing features, are measured at fair value through profit or loss applying a level 2 valuation. The related net changes in fair value are presented under material, transportation and storage.

Accrued turnover

Accrued turnover relates to sales made before the end of the year that have not been invoiced at the balance sheet date. Reasons for such delays include the need to determine final pricing, quantity and quality analysis. All are typical of the industry in which the Group operates.

	2023 USD'M	2022 USD'M
Trade debtors	11,000.4	10,472.6
Provision for bad and doubtful debts	(125.4)	(94.2)
Accrued turnover	7,581.6	8,638.0
Broker balances	2,664.7	2,550.5
Other debtors	921.0	3,965.8
Loans to third parties	209.4	185.9
Loans to related parties	124.2	29.0
Other taxes	823.2	545.9
Other balances due from related parties	214.7	1,337.0
Total	**23,413.8**	27,630.5

All financial instruments included in trade and other receivables are held to collect the contractual cash flows. Furthermore, the cash flows that the Group receives on these instruments are solely payments of principal and interest except for trade and other receivables related to contracts including provisional pricing features.

The Group entered into a number of dedicated financing facilities, which finance a portion of its receivables. Part of these facilities meet the criteria of derecognition of the receivables according to IFRS.

As at 30 September 2023, an amount of USD4,987.9 million (30 September 2022: USD8,147.3 million) of trade debtors was discounted. Of this amount, USD4,451.6 million (30 September 2022: USD6,566.0 million) was derecognised, as the Group transferred substantially all the risks and rewards of ownership of the financial asset with non-recourse. The remaining part of discounted receivables that does not meet the criteria for derecognition amounting to USD536.3 million (30 September 2022: USD1,581.2 million) continues to be recognised as trade debtors. For the received amount of cash of these items the Group recognised a liability under current loans and borrowings.

Of USD11,000.4 million trade debtors (30 September 2022: USD10,472.6 million), USD3,448.9 million was sold on a non-recourse basis under the securitisation programme (30 September 2022: USD4,095.1 million). Of the USD214.5 million receivables from related parties (30 September 2022: USD1,337.0 million), USD11.9 million was sold on a non-recourse basis under the securitisation programme (30 September 2022: USD30.9 million). Please refer to note 27.

As at 30 September 2023, 10.9 percent (30 September 2022: 10.7 percent) of receivables were between 1-60 days overdue and 5.4 percent (30 September 2022: 4.9 percent) were greater than 60 days overdue. Trafigura applied the simplified method in assessing expected credit losses. The accounts receivables were divided in aging buckets and based on an analysis on historical defaults and recovery rates, and considering forward looking information, a percentage for expected credit losses was determined. Trafigura manages to limit credit losses by renegotiating contracts in the case of a default.

From the above analysis, an expected credit loss as at 30 September 2023 amounting to USD3.3 million (30 September 2022: USD3.8 million) has been recorded. The loss allowance provision as at 30 September 2023 amounts to USD125.4 million (30 September 2022: USD94.2 million). The provision mostly relates to demurrage claims and commercial disputes with our clients. Accrued turnover represents receivable balances for sales which have not yet been invoiced. They have similar risks and characteristics as trade debtors. Trade debtors and accrued turnover have similar cash flow characteristics and are therefore considered to be a homogeneous group of financial assets.

Total trade and other receivables related to contracts including provisional pricing features amount to USD7.0 billion (30 September 2022: USD6.5 billion).

Other debtors primarily relate to collateral for OTC derivatives.

As per 30 September 2022, Other balances due from related parties included an amount receivable from ITG S.à r.l. in relation to sale of the Puma Energy's Infrastructure business (USD896.6 million). Please refer to note 42.

G. Notes to the Consolidated Financial Statements

27. Securitisation programmes

The Group operates various securitisation programmes: Trafigura Securitisation Finance plc. (TSF) and Argonaut Receivables Company S.A. (Argonaut) enable the Group to sell eligible receivables, and an inventory securitisation programme, through Trafigura Commodities Funding Pte. Ltd. (TCF), and Trafigura Global Commodities Funding Pte. Ltd. (TGCF), enables Trafigura to sell and repurchase eligible inventories. These securitisation vehicles are consolidated and consequently the securitised receivables and inventories are included within the consolidated trade debtor and inventory balances.

27.1 Receivables securitisation

Over time, the external funding of TSF has increased significantly in size, mostly through Variable Funding Notes (VFN) purchased by bank sponsored conduits, while incorporating a longer-term committed funding element, in the form of Medium Term Notes (MTN).

Argonaut is funded through short-term VFN only.

The available external funding of the receivables securitisation programmes consists of:

	Interest rate	Maturity	2023 USD'M	2022 USD'M
TSF AAA MTN	SOFR + 0.53%	2024 – July	139.5	139.5
TSF AAA MTN	1.09%	2024 – July	139.5	139.5
TSF BBB MTN	1.79%	2024 – July	21.0	21.0
TSF AAA VFN	Various	Various throughout the year	3,757.9	4,798.3
TSF BBB VFN	Various	Various throughout the year	282.8	361.2
Argonaut Receivables Securitisation	Various	Various throughout the year	300.0	300.0
TSF senior subordinated debt		2026 – March	240.5	225.7
Total			**4,881.2**	5,985.2

The rate of interest applied to the TSF AAA and BBB VFN is principally determined by the demand for commercial paper issued by 10 bank-sponsored conduits and the liquidity of the interbank market. The Group benchmarks the rate provided against SOFR rates. The maturity of the TSF AAA and BBB VFNs has been staggered to diversify the maturity profile of the notes. This is aimed at mitigating the 'liquidity wall' risk associated with a single maturity date for a significant funding amount.

27.2 Inventory securitisation

The available external funding of the inventory securitisation programmes consists of:

	Interest rate	Maturity	2023 USD'M	2022 USD'M
TCF/TGCF VFN	SOFR + 1.0%	2023 – November	355.0	465.0
TCF/TGCF MLF	SOFR + 0.5%	2023 – November	45.0	50.0
Total			**400.0**	515.0

28. Other current assets

	2023 USD'M	2022 USD'M
Non-financial hedged items	591.8	3,064.9
Prepaid expenses	329.2	326.7
Current intangible assets	222.6	–
Other	4.8	30.7
Total	**1,148.4**	3,422.3

Refer to note 40.2 for further information on the non-financial hedged items. Prepaid expenses relate to prepayments other than those made for physical commodities.

Refer to note 20 for further information on intangible assets.

29. Cash and cash equivalents, and deposits

Accounting policy

Cash and short-term deposits in the Consolidated Statement of Financial Position comprise cash at banks and on hand and short-term highly liquid deposits with a maturity of three months or less that are readily convertible to a known amount of cash and subject to an insignificant risk of changes in value.

For the purpose of the Consolidated Statement of Cash Flows, cash and cash equivalents consist of all cash on hand and short-term highly liquid investments such as deposits with original maturities of three months or less.

	2023 USD'M	2022 USD'M
Cash at bank and in hand	10,351.2	11,766.6
Short-term deposits	2,035.8	3,114.7
Cash and cash equivalents	**12,387.0**	14,881.3

Cash at bank earns interest at floating rates based on daily bank deposit rates. Short-term deposits are made for varying periods between one day and three months depending on the immediate cash requirements of the Group and earn interest at the respective short-term deposit rates. The fair value of cash and cash equivalents approximates the carrying value.

An amount of USD34.5 million (30 September 2022: USD102.4 million) of cash at bank is restricted, including restrictions that require the funds to be used for a specified purpose and restrictions that limit the purpose for which the funds can be used, unless fixed asset construction invoices are presented to the banks.

As at 30 September 2023, the Group had USD15.5 billion (30 September 2022: USD12.7 billion) of committed unsecured syndicated loans, of which USD6.5 billion (30 September 2022: USD6.3 billion) remained unutilised. The Group had USD7.5 billion (30 September 2022: USD8.6 billion) of immediately (same day) available cash in liquidity funds. Therefore, the Group had immediate access to available liquidity balances from liquidity funds and corporate facilities in excess of USD14.0 billion (30 September 2022: USD14.9 billion).

29.1 Deposits

Short-term deposits made for periods longer than three months are shown separately in the Consolidated Statement of Financial Position and earn interest at the respective short-term deposit rates.

30. Assets classified as held for sale and discontinued operations

Accounting policy

Non-current assets and disposal groups are classified as held for sale if their carrying amounts will be recovered principally through a sales transaction rather than through continuing use. Non-current assets and disposal groups classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell. Costs to sell are the incremental costs directly attributable to the disposal of an asset (disposal group), excluding finance costs and income tax expense.

The criteria for held-for-sale classification is regarded as met only when the sale is highly probable and the asset or disposal group is available for immediate sale in its present condition. Actions required to complete the sale should indicate that it is unlikely that significant changes to the sale will be made or that the decision to sell will be withdrawn. Management must be committed to the plan to sell the asset and the sale expected to be completed within one year from the date of the classification.

At the moment an equity-accounted investee meets the criteria to be classified as held for sale, equity accounting is discontinued. An equity-accounted investee held for sale is measured at the lower of its existing carrying amount and fair value less costs to sell. In the situation where the equity-accounted investee ceases to be classified as held for sale, the equity method is applied retrospectively and comparative amounts disclosed for periods since the classification as held for sale are restated.

Property, plant and equipment and intangible fixed assets are not depreciated or amortised once classified as held for sale.

Assets and liabilities classified as held for sale are presented separately as current items in the Consolidated Statement of Financial Position.

Discontinued operations are excluded from the results of continuing operations and are presented as a single amount as profit or loss after tax from discontinued operations in the Consolidated Statement of Income.

All other notes to the financial statements include amounts for continuing operations, unless indicated otherwise.

Key accounting estimate and judgement

At the end of the reporting date, the Group has to assess if the value of the assets will be recovered principally through a divestment transaction rather than through continued use, and what the likelihood is that an asset will be divested within a year. This assessment is based on the facts and circumstances at that date. These facts and circumstances may change and could result in a situation where assets are divested, which were not classified as held for sale at end of the year. When classifying non-current assets as held for sale, the Group makes estimates for their fair value (sales price and expected costs to sell). Depending on the nature of the non-current assets, the estimated fair value may be associated with uncertainty and possibly adjusted subsequently.

G. Notes to the Consolidated Financial Statements

	2023 USD'M	2022 USD'M
Assets classified as held for sale	173.4	434.1
Liabilities classified as held for sale	(208.7)	(29.4)
Net assets/(liabilities) classified as held for sale	**(35.3)**	404.7

The decrease in the net assets classified as held for sale compared to previous year predominantly relates to the sale of the Group's equity investment in Tendril Ventures (Nayara) and the sale of the remaining part of the Puma Infrastructure division. Not all infrastructure terminals of Puma were eventually sold. Some have been transferred back into Puma Energy's operations, and as a result, an appropriate catch-up depreciation charge of these terminals' property, plant and equipment has been recorded.

Puma Energy decided to divest its Infrastructure division at the end of the 2021 financial year, resulting in its classification as held for sale as per 30 September 2021 (USD1,189.1 million). This asset held for sale was based on its fair value less cost of disposal as part of the purchase price allocation. During the 2022 financial year, the Group signed a Share Sales Agreement with ITG S.à r.l., parent company of Impala Terminals Group (ITG). Before completion, Puma's Infrastructure business was required to be carved out into a separate entity. Given the different pace of progress in the various jurisdictions, completion of the transaction has been staggered such that the majority of the terminals would be transferred at the so-called 'Main Completion' date, with the remaining terminals being transferred at a subsequent completion date.

At 30 September 2022, all of the completion conditions for Main Completion were satisfied. As a consequence, the assets held for sale related to Main Completion were derecognised. A receivable from ITG totalling the net proceeds of USD896.6 million was reported under other balances due from related parties within Trade and other receivables, and remaining expected disposal costs are reported within accruals under Trade and other payables. The impact of the derecognition as per 30 September 2022 on the Group's Consolidated Statement of Income was nil.

Reference is made to note 15 for further information on the sale of Nayara.

31. Capital and reserves

31.1 Share capital

As at 30 September 2023 and 2022, the share capital of the Company comprises 25,000,000 issued ordinary shares with a total paid up capital of USD1,503.7 million. During the financial year ended 30 September 2023, no changes took place in the outstanding and issued share capital.

The holders of ordinary shares are entitled to receive dividends as and when declared by the Company. All ordinary shares carry one vote per share without restriction. The ordinary shares have no par value.

31.2 Capital securities

As part of the financing of the Company and its subsidiaries, the Company has two capital securities instruments with a total carrying value of USD666.3 million as at 30 September 2023 (30 September 2022: two capital securities instruments with a total carrying value of USD654.1 million). These two capital securities have a par value of EUR262.5 million and USD400.0 million respectively (30 September 2022: EUR262.5 million and USD400.0 million respectively).

These two capital securities are perpetual in respect of which there is no fixed redemption date. The distribution on the capital securities is payable semi-annually in arrears from the date of issue. The Company may elect to defer (in whole but not in part except for the USD400.0 million capital security where partial interest deferral is allowed) any distribution in respect of these capital securities by providing no more than 30 or less than five business days' notice, unless a compulsory interest payment event has occurred, including amongst others the occurrence of a dividend payment in respect of subordinated obligations of the Company. Any interest deferred shall constitute arrears of interest and shall bear interest.

In the event of a winding-up, the rights and claims of the holders in respect of the capital securities shall rank ahead of claims in respect of the Company's shareholders, but shall be subordinated in right of payment to the claims of all present and future senior obligations, except for obligations of the Company that are expressed to rank pari passu with, or junior to, its obligations under the capital securities.

The EUR262.5 million capital security was issued on 31 July 2019 and is listed on the Singapore Stock Exchange. The distribution on the capital security is 7.5 percent per annum until the distribution payment date in July 2024. The capital security may be redeemed at the Company's option in whole, but not in part, in the period starting 90 calendar days before, and ending at, the distribution payment date in July 2024 or any distribution date thereafter upon giving not less than 30 nor more than 60 days' notice to the holders. The early redemption amount payable by the Company shall be the principal amount of the capital security, together with any interest accrued to the date fixed for redemption, all arrears of interest and all additional interest amounts.

The USD400.0 million capital security was issued on 24 September 2021 and is listed on the Singapore Stock Exchange. The distribution on the capital security is 5.875 percent per annum until the distribution payment date in September 2027. The capital security may be redeemed at the Company's option in whole, but not in part, in the period starting 90 calendar days before, and ending at, the distribution payment date in September 2027 or any distribution date thereafter upon giving not less than 30 nor more than 60 days' notice to the holders. The early redemption amount payable by the Company shall be the principal amount of the capital security, together with any interest accrued to the date fixed for redemption, all arrears of interest and all additional interest amounts.

31.3 Currency translation reserve

The currency translation reserve comprises all foreign currency differences arising from the translation of the financial statements of foreign operations, as well as from the translation of liabilities that hedge the Group's net investments in foreign operations.

For the impact of hyperinflation accounting, please refer to note 43.

31.4 Revaluation reserve

The revaluation reserve comprises the movements in fair value measurements of the equity investments that are accounted for at fair value through other comprehensive income. On realisation of these gains or losses (for example, the sale of an equity instrument), the cumulative amounts of this reserve are transferred to retained earnings. Included in the revaluation reserve is a loss of USD73.1 million (30 September 2022: a loss of USD79.9 million) related to the mark-to-market valuation of equity investments.

31.5 Cash flow hedge reserve

The Group has elected not to apply the cost of hedging option. A change in the fair value of derivatives designated as a cash flow hedge is initially recognised as a cash flow hedge reserve in other comprehensive income. The deferred amount is then released to the Consolidated Statement of Income in the same period during which the hedged transaction affects the Consolidated Statement of Income.

Included in the cash flow hedge reserve is a gain of USD56.3 million (30 September 2022: a loss of USD37.4 million) related to the effective portion of the changes in fair value of cash flow hedges, net of tax. These cash flow hedges predominantly relate to hedging of interest and currency exposure on corporate loans, currency exposure on future capital and operational expenditures, expected electricity consumption, and price exposure on highly probable future production, purchases and sales of commodities. The cash flow hedge positions on hedging derivatives currently shown in the cash flow hedge reserve will be recycled to the Consolidated Statement of Income in the period where the hedged item are recognised. Over time, the overall net impact of the hedged items and hedging instruments together to the Consolidated Statement of Income and other comprehensive income will be minimal.

The cash flow hedge reserves as at 30 September 2023 includes a positive reserve of USD3.0 million relating to the Group's share in the cash flow hedge reserves of equity-accounted investees (30 September 2022: USD52.2 million negative).

31.6 Dividends

The value of the dividends declared on the ordinary shares amount to USD5,916.4 million (FY2022: USD1,721.2 million), representing USD236.7 per share (FY2022: USD68.8 per share). Dividend payments are mostly made in relation to the share redemption by the direct parent company.

32. Loans and borrowings

Accounting policy

Loans and borrowings are recognised initially at fair value net of directly attributable transaction costs. After initial recognition, these items are subsequently measured at amortised cost, applying the effective interest method unless the interest rate has been converted in a hedge relation from fixed into floating by means of a fair value hedge. In that case, the carrying amount is adjusted for the fair value changes caused by the hedged risk.

Borrowings are removed from the Consolidated Statement of Financial Position when the obligation specified in the contract is discharged, cancelled or expired.

When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the Consolidated Statement of Income.

Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the drawdown occurs. To the extent there is no evidence that some or all of the facility is likely to be drawn down, the fee is capitalised as pre-payment for liquidity services and amortised on a straight-line basis over the period of the facility to which it relates.

This note provides information about the contractual terms of the Group's interest-bearing loans and borrowings, which are measured at amortised cost. For more information about the Group's exposure to interest rate, foreign currency and liquidity risk, refer to note 39.

	2023 USD'M	2022 USD'M
Non-current		
Committed unsecured syndicated loans	5,204.1	3,933.7
Private placements	1,223.5	1,052.2
Listed bonds	1,100.8	1,134.2
Securitisation programmes	240.5	300.0
Puma Energy financing*	1,053.0	1,459.1
Other loans	492.4	1,735.3
Total non-current	**9,314.3**	**9,614.5**
Current		
Committed unsecured syndicated loans	2,408.9	1,263.0
Private placements	107.4	118.1
Listed bonds	60.1	635.7
Securitisation programmes	4,101.1	5,191.5
Puma Energy financing*	88.2	652.3
Other loans	2,134.7	1,313.6
Current bank borrowings	16,152.4	20,489.4
Total current	**25,052.8**	**29,663.6**
Total	**34,367.1**	**39,278.1**

* Loans and borrowings issued by Puma Energy have not been guaranteed by other Trafigura entities.

G. Notes to the Consolidated Financial Statements

Net debt reconciliation	Non-current debt USD'M	Current debt USD'M	Lease Liabilities USD'M	Cash and cash equivalents USD'M	Net lease liabilities and debt USD'M
At 1 October 2022	(9,614.5)	(29,663.6)	(3,987.2)	14,881.3	(28,384.0)
Cashflow movements	(4,054.3)	8,844.9	2,044.8	(2,494.3)	4,341.1
Additions/(reductions)	–	–	(2,839.9)	–	(2,839.9)
Currency translation gains/(losses)	(42.6)	20.6	(6.7)	–	(28.7)
Reclassifications from long term to short term	4,265.4	(4,265.4)	–	–	–
Other movements	131.7	10.7	(2.3)	–	140.1
At 30 September 2023	(9,314.3)	(25,052.8)	(4,791.3)	12,387.0	(26,771.4)
At 1 October 2021	(10,911.6)	(34,269.5)	(2,572.1)	10,677.5	(37,075.7)
Cashflow movements	(1,152.5)	6,678.1	1,438.9	4,203.8	11,168.3
Additions/(reductions)	–	–	(2,888.0)	–	(2,888.0)
Currency translation gains/(losses)	328.9	88.7	48.3	–	465.9
Reclassifications from long term to short term	2,159.9	(2,159.9)	–	–	–
Other movements	(39.2)	(1.0)	(14.3)	–	(54.5)
At 30 September 2022	(9,614.5)	(29,663.6)	(3,987.2)	14,881.3	(28,384.0)

During the financial year ended 30 September 2023, the Group completed a number of important transactions:

- Refinancing of its Asian syndicated revolving credit and term loan facilities of USD2.4 billion-equivalent in October 2022, comprised of a 365-day USD RCF (USD685 million), a one-year CNH TLF (c. USD1,217 million equivalent) and a three-year USD TLF (USD469 million). The facilities include a sustainability-linked loan structure, with an updated set of key performance indicators (KPIs);
- Closing of a USD3.0 billion four-year loan agreement, guaranteed by the Government of Germany, acting through the German Export Credit Agency in October 2022;
- Closing of a USD135 million two-year facility with Abu Dhabi Exports Office (ADEX), the export financing arm of Abu Dhabi Fund for Development in January 2023;
- Refinancing of its 365-day European multi-currency syndicated revolving credit facility totalling USD1.9 billion as well as the extension and increase of its USD3.5 billion three-year facility in March 2023. The facilities include a sustainability-linked loan structure, with an updated set of KPIs;
- Closing of a USD225 million US Private Placement across seven- and ten-year tenors in March 2023;
- Refinancing of its North American energy borrowing base credit facility in June 2023, a 2-year syndicated facility of USD4.5 billion;
- Closing of a three-year credit facility of USD500 million with the Saudi Export-Import (Saudi EXIM) Bank in September 2023.

The Group was in compliance with all its corporate and financial covenants as at 30 September 2023.

32.1 Terms and debt repayment schedule

The terms and conditions of the outstanding debt (excluding short-term bank borrowings) as at 30 September 2023 are as follows:

Principal		Interest rate	Maturity	Floating/fixed rate debt	< 1 year USD'M	1-5 years USD'M	> 5 years USD'M	Total USD'M
CNH	1,571.6	CNH HIBOR + 0.90%	2023 – October	Floating	215.5	–	–	215.5
CNH	7,261.6	3.25%	2023 – October	Fixed	995.4	–	–	995.4
USD	288.0	SOFR + 1.20%	2023 – October	Floating	288.0	–	–	288.0
USD	810.5	SOFR + 1.20%	2024 – October	Floating	–	810.5	–	810.5
USD	135.0	SOFR + 1.15%	2025 – January	Floating	–	135.0	–	135.0
USD	120.0	SOFR + 0.80%	2025 – January	Floating	–	120.0	–	120.0
USD	30.0	SOFR + 0.45%	2025 – January	Floating	–	30.0	–	30.0
USD	135.0	SOFR + 1.25%	2025 – January	Floating	–	135.0	–	135.0
USD	15.0	SOFR + 0.95%	2025 – January	Floating	–	15.0	–	15.0
JPY	84,750.0	JPY TONA + 0.85%	2025 – March	Floating	–	567.2	–	567.2
JPY	9,000.0	JPY TONA + 1.00%	2025 – March	Floating	–	60.2	–	60.2
USD	469.0	SOFR + 1.20%	2025 – October	Floating	–	469.0	–	469.0
USD	3,000.0	SOFR + 1.50%	2026 – October	Floating	750.0	1,875.0	–	2,625.0
USD	800.0	SOFR + 1.15%	2027 – September	Floating	160.0	480.0	–	640.0
USD	375.0	SOFR + 1.40%	2027 – September	Floating	–	375.0	–	375.0
EUR	125.0	EURIBOR + 0.90%	2027 – September	Floating	–	132.2	–	132.2
Committed unsecured syndicated loans					**2,408.9**	**5,204.1**	**–**	**7,613.0**
EUR	101.5	3.50%	2024 – February	Fixed	107.4	–	–	107.4
CNH	700.0	5.00%	2024 – December	Fixed	–	96.0	–	96.0
USD	35.0	4.01%	2025 – March	Fixed	–	35.0	–	35.0
USD	67.0	5.72%	2025 – May	Fixed	–	67.0	–	67.0
USD	37.5	3.87%	2026 – April	Fixed	–	37.5	–	37.5
EUR	8.5	4.00%	2026 – February	Fixed	–	9.0	–	9.0
USD	83.0	4.17%	2027 – March	Fixed	–	83.0	–	83.0
USD	48.5	4.41%	2028 – April	Fixed	–	48.5	–	48.5
USD	20.0	5.86%	2028 – May	Fixed	–	20.0	–	20.0
USD	400.0	6.00%	2030 – January	Fixed	–	–	400.0	400.0
USD	85.0	4.60%	2030 – March	Fixed	–	–	85.0	85.0
USD	81.0	7.21%	2030 – March	Fixed	–	–	81.0	81.0
USD	117.5	4.89%	2031 – April	Fixed	–	–	117.5	117.5
USD	144.0	7.34%	2033 – March	Fixed	–	–	144.0	144.0
Private placements					**107.4**	**396.0**	**827.5**	**1,330.9**
CHF	55.0	3.25%	2024 – September	Fixed	60.1	–	–	60.1
USD	500.0	5.88%	2025 – September	Fixed	–	493.2	–	493.2
EUR	500.0	3.88%	2026 – February	Fixed	–	528.0	–	528.0
USD	130.9	–	2026 – July	Fixed	–	79.6	–	79.6
Listed bonds					**60.1**	**1,100.8**	**–**	**1,160.9**
USD	355.0	SOFR + 1.00%	2023 – November	Floating	173.6	–	–	173.6
USD	45.0	SOFR + 0.50%	2023 – November	Floating	10.0	–	–	10.0
USD	139.5	SOFR +0.53%	2024 – July	Floating	139.5	–	–	139.5
USD	139.5	1.09%	2024 – July	Fixed	139.5	–	–	139.5
USD	21.0	1.79%	2024 – July	Fixed	21.0	–	–	21.0
USD	4,581.2	Various	Various	Floating	3,617.5	240.5	–	3,858.0
Securitisation programmes					**4,101.1**	**240.5**	**–**	**4,341.6**
EUR	50.0	2.65%	2024 – May	Fixed	2.8	–	–	2.8
USD	600.0	5.13%	2024 – October	Fixed	–	154.7	–	154.7
USD	175.0	SOFR + 2.00%	2025 – May	Floating	–	175.0	–	175.0
USD	750.0	5.00%	2026 – January	Fixed	–	722.2	–	722.2
USD	104.1	Various	Various	Various	36.2	1.1	–	37.3
Other short term loans					49.2	–	–	49.2
Puma Energy Financing (not guaranteed by other Trafigura entities)					**88.2**	**1,053.0**	**–**	**1,141.2**
Other Loans					2,134.7	468.1	24.3	2,627.1
Total					**8,900.4**	**8,462.5**	**851.8**	**18,214.7**

For non-current assets pledged under loans and borrowings agreements, refer to note 19.

G. Notes to the Consolidated Financial Statements

33. Provisions

Accounting policy

The Group recognises provisions for liabilities and onerous contracts that have been incurred as of the balance sheet date and can be reliably estimated. A provision is recognised when (i) the Group has a present obligation (legal or constructive) as a result of a past event; (ii) it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and (iii) an estimate can be made of the amount of the obligation.

Claims, disputes and legal proceedings

Provisions for claims, disputes and legal proceedings are recorded if it is probable that the Group will be liable in a proceeding, for the estimated amount at which the liability can be settled. If no reliable estimate can be made, a disclosure will be made for claims, disputes or legal proceedings, for which the amount to be settled is expected to be significant.

Restoration, rehabilitation and decommissioning

Restoration, rehabilitation and decommissioning costs arising from the installation of plant and other site preparation work, discounted to their net present value, are provided for and capitalised at the time such an obligation arises. The costs are charged to the Consolidated Statement of Income over the life of the operation through depreciation of the asset and the unwinding of the discount on the provision.

Onerous contracts

A provision for onerous contracts is recognised when the expected benefits to be derived by the Group from a contract are lower than the unavoidable cost of meeting its obligations under the contract. The provision is measured at the present value of the lower of the expected cost of terminating the contract and the expected net cost of continuing with the contract. Before a provision is established, the Group recognises any impairment loss on the assets associated with that contract.

Key accounting estimate and judgement

Provisions

The amount recognised as a provision, including tax, legal, restoration and rehabilitation, contractual and other exposures or obligations, is the best estimate of the consideration required to settle the related liability, including any related interest charges, taking into account the risks and uncertainties surrounding the obligation. The Group assesses its liabilities and contingencies based upon:

- Best information available (for example, relating to timing and scope of the obligation, future cost level, legal assessment and established precedents),
- Relevant tax laws, and
- Other appropriate requirements.

Refer also to note 38 – Commitments and contingencies.

Restoration, rehabilitation and decommissioning costs

A provision for future restoration, rehabilitation and decommissioning costs requires estimates and assumptions to be made around the relevant regulatory framework, the magnitude of the possible disturbance and the timing, extent and costs of the required closure and rehabilitation activities. To the extent that the actual future costs differ from these estimates, adjustments will be recorded and the Consolidated Statement of Income could be affected. The provisions, including the estimates and assumptions contained therein, are reviewed regularly by management.

	Decommissioning, rehabilitation and restoration	Employee benefits	Other	Total
	USD'M	USD'M	USD'M	USD'M
Balance at 1 October 2022	253.1	32.8	188.3	474.2
Additions	11.6	2.0	170.2	183.8
Reversals	(6.1)	(1.0)	(47.1)	(54.2)
Additions through business combinations	–	10.7	–	10.7
Amounts charged against provisions	(14.4)	(2.9)	(37.6)	(54.9)
Unwind of discount	8.5	–	0.3	8.8
Remeasurements and other movements	0.9	(1.0)	(0.1)	(0.2)
Divestment of subsidiaries	–	(0.1)	(0.5)	(0.6)
Balance at 30 September 2023	**253.6**	**40.5**	**273.5**	**567.6**
Non-current	243.6	31.5	83.2	358.3
Current	10.0	9.0	190.3	209.3

Provisions for decommissioning, rehabilitation and restoration costs are recognised as a result of the environmental commitment the Group has made with local authorities and its obligations to undertake site reclamation and remediation in connection with its mining and downstream activities.

Included in Other are provisions for litigation and disputes, and onerous contracts.

Trafigura has been seeking to resolve investigations by regulatory authorities in the U.S., Brazil and Switzerland into payments made by former employees via third parties approximately 10 or more years ago. Trafigura anticipates resolving the investigation by the US Department of Justice shortly and has recorded a provision of USD127 million for the use by Trafigura Beheer B.V., the parent company during that period.

34. Other non-current liabilities

	2023 USD'M	2022 USD'M
Non-financial hedged items	2.3	5.4
Other	630.4	516.5
Total	**632.7**	521.9

For further information on the non-financial hedged items, please refer to note 40.2.

As per 30 September 2023 and 2022, Other includes various non-current payables.

35. Trade and other payables

Accounting policy

Trade and other payables represent liabilities for goods and services provided by suppliers to the Group prior to the end of the financial year that are unpaid. They are presented as current liabilities unless payment is not due within 12 months after the reporting period.

Trade and other payables are initially recognised at their fair value and subsequently measured at amortised cost using the effective interest method.

Accrued costs and expenses

Accrued cost and expenses relate to purchases and expenses made before the year end that have not been invoiced at the balance sheet date. Reasons for such delays include the need to determine final pricing, quantity and quality analysis. All are typical of the industry in which the Group operates.

Provisional pricing features

Trade and other receivables and trade and other payables related to commodity contracts, including provisional pricing features, are measured at fair value through profit or loss applying a level 2 valuation. The related net changes in fair value are presented under material, transportation and storage.

	2023 USD'M	2022 USD'M
Trade creditors	4,413.8	5,367.9
Accrued costs and expenses	15,129.9	17,192.2
Broker balances	43.7	–
Related parties	65.5	107.9
Other creditors	2,081.5	2,981.5
Total	**21,734.4**	25,649.5

The Group's exposure to currency and liquidity risk related to trade and other payables is disclosed in note 39.3 and note 39.5.

Total trade and other payables related to contracts including provisional pricing features amount to USD8.0 billion (30 September 2022: USD8.7 billion).

Other creditors primarily relate to collateral for OTC derivatives.

36. Other current liabilities

	2023 USD'M	2022 USD'M
Non-financial hedged items	167.8	89.5
Deferred revenue	454.9	679.3
Other	578.5	793.3
Total	**1,201.2**	1,562.1

Please refer to note 40.2 for further information on the non-financial hedged items.

As per 30 September 2023 and 2022, Other includes payables relating to the receipt of certain commodities that are due to be repaid within one year.

G. Notes to the Consolidated Financial Statements

37. Offsetting of financial assets and liabilities

Accounting policy

Financial assets and liabilities are offset and the net amount presented in the Consolidated Statement of Financial Position if, and only if, the Group has a legal right to offset the amounts and intends either to settle on a net basis or to realise the asset and settle the liability simultaneously.

In accordance with IAS 32, the Group reports financial assets and liabilities on a net basis in the Consolidated Statement of Financial Position only if there is a legally enforceable right to set off the recognised amounts and there is intention to settle on a net basis, or to realise the asset and settle the liability simultaneously. The financial assets and liabilities subject to offsetting, enforceable master netting and similar agreements as at 30 September 2023 and 2022 were as follows:

	Amounts eligible for set off under netting agreements			Amounts not subject to netting agreements	Total presented in the Consolidated Statement of Financial Position
	Gross amount	Amounts offset	Net amount		
2023	USD'M	USD'M	USD'M	USD'M	USD'M
Related parties	361.4	(146.7)	214.7	–	214.7
Derivative assets	5,444.1	(1,848.6)	3,595.5	968.0	4,563.5
Related parties	(212.2)	146.7	(65.5)	–	(65.5)
Derivative liabilities	(3,191.4)	1,848.6	(1,342.8)	(726.0)	(2,068.8)

	Amounts eligible for set off under netting agreements			Amounts not subject to netting agreements	Total presented in the Consolidated Statement of Financial Position
	Gross amount	Amounts offset	Net amount		
2022	USD'M	USD'M	USD'M	USD'M	USD'M
Related parties	1,415.1	(78.1)	1,337.0	–	1,337.0
Derivative assets	11,358.4	(5,899.9)	5,458.5	2,845.7	8,304.2
Related parties	(186.0)	78.1	(107.9)	–	(107.9)
Derivative liabilities	(15,000.7)	5,899.9	(9,100.8)	(1,533.8)	(10,634.6)

For the financial assets and liabilities subject to enforceable master netting or similar arrangements above, each agreement between the Group and the counterparty allows for net settlement of the relevant financial assets and liabilities in the ordinary course of business. Where practical reasons may prevent net settlement, financial assets and liabilities may be settled on a gross basis. However, each party to the master netting or similar agreement will have the option to settle all such amounts on a net basis in the event of default of the other party.

38. Commitments and contingencies

The Company and its subsidiaries are party to a number of legal claims and proceedings arising out of their business operations. The Company believes that the ultimate resolution of these claims and proceedings will not, in the aggregate, have a material adverse effect on the Group's financial position, income or cash flows. Such legal claims and proceedings, however, are subject to inherent uncertainties and the outcome of individual matters is unpredictable. It is possible that the Group could be required to make expenditures, in excess of established provisions, in amounts that cannot be reasonably estimated.

The total contingent liabilities related to trade finance instruments, such as letters of credit and guarantees, as at 30 September 2023 amount to USD7,579.4 million (30 September 2022: USD9,980.7 million).

The Group had outstanding commitments at the end of 30 September 2023 and 30 September 2022 as follows:

	2023 USD'M	2022 USD'M
Service arrangement contracts	1,512.6	1,880.1
Long-term lease commitments – Not yet started	394.7	476.8
Short-term lease contracts	480.1	515.7
Subtotal commitments	**2,387.4**	2,872.6
Assets under construction	84.5	114.4
Total commitments	**2,471.9**	2,987.0

	2023 USD'M	2022 USD'M
Less than one year	1,003.5	995.1
Later than one year and less than five years	1,008.1	1,301.3
Later than five years	375.8	576.2
Commitments excluding assets under construction	**2,387.4**	2,872.6

Guarantees include guarantees to trading partners in the normal course of business.

39. Financial risk management objectives and policies

The Group is exposed to a number of different financial risks arising from normal business exposures as well as its use of financial instruments, including market risks relating to commodity prices, foreign currency exchange rates, interest rates and equity prices; credit risk; and liquidity risk.

Prudently managing these risks is an integral element of the Group's business and has been institutionalised since the Group's foundation. Risk management guidelines are established at senior management level. The various risks the Group is exposed to are managed through a combination of internal procedures, such as strict control mechanisms and policies, as well as external third parties such as the derivative, insurance and bank markets. As a rule, the Group actively manages and lays off where possible a large majority of the risks inherent to its activity. The Group's conservative risk management process is designed to:

- Provide a full and accurate awareness of risks throughout the Group;
- Professionally evaluate and monitor these risks through a range of risk metrics;
- Limit risks via a dynamic limit setting framework;
- Manage risks using a wide range of hedging instruments and strategies; and
- Ensure a constant dialogue between trading desks, risk managers and senior management.

The three main reinforcing components of the Group's risk management process are the Chief Risk Officer, the Risk and Compliance Committee and the trading teams.

The Chief Risk Officer is independent of the revenue-producing units and is a member of the Executive Committee. The Chief Risk Officer has primary responsibility for assessing and monitoring the Group's market risks. The Chief Risk Officer's team liaises directly with the trading teams to analyse new opportunities and ensure that risk assessments adapt to changing market conditions. The Chief Risk Officer's team also ensures the Group's risk management capabilities incorporate ongoing advances in technology and risk management modelling capabilities.

The Risk and Compliance Committee, which comprises two Executive Directors of the Board, two Non-executive Directors, the Chief Risk Officer, the Chief Financial Officer and the Chief Compliance Officer, is responsible for assisting the Board of Directors to seek assurance on the Group's risk management capabilities and policy, and the implementation and development of the Group's compliance programme. In the reporting period, the Risk and Compliance Committee met at least weekly to discuss and set risk and concentration limits, review changing market conditions and analyse new market risks and opportunities.

The Group's trading teams provide deep expertise in hedging and risk management in the specific markets each team operates in. While the trading teams have front line responsibility for managing the risks arising from their activities, the Group's process ensures a strong culture of escalation and accountability, with well-defined limits, automatic notifications of limit overages and regular dialogue with the Chief Risk Officer and the Risk and Compliance Committee.

39.1 Market risk

Market risk is the risk of loss in the value of the Group's positions as a result of changes in market prices. The Group holds positions primarily to ensure the Group's ability to meet physical supply commitments to the Group's customers, to hedge exposures arising from these commitments and to support the Group's investment activities. The Group's positions change due to changing customer requirements and investment opportunities. The value of the Group's positions is accounted for at fair value and therefore fluctuates on a daily basis due to changes in market prices. Categories of market risk the Group is exposed to include:

- Commodity price risk, resulting from exposures to changes in spot prices, forward prices and volatilities of commodities, such as crude oil, petroleum products, natural gas, base metals, coal and iron ore.
- Currency rate risk, resulting from exposures to changes in spot prices, forward prices and volatilities of currency rates.
- Interest rate risk, resulting from exposures to changes in the level, slope and curvature of yield curves, the volatilities of interest rates, and credit spreads.
- Equity price risk, resulting from exposures to changes in prices and volatilities of individual equities and equity indices.

The Group hedges a large majority of price risks arising from its activities. When there is a difference in the characteristics of available hedging instruments and the corresponding commodity price exposures, the Group remains exposed to a residual price risk referred to as basis risk. Dynamically managing the basis risk that arises from the Group's activities requires specialist skills and is a core focus of the Group's trading and risk management teams.

Value at Risk

Value at Risk (VaR) is a statistical estimate of the potential loss in value of the Group's positions and unsold in-transit material due to adverse market movements. The Group calculates VaR over a one-day time horizon with a 95 percent confidence level. The Group uses an integrated VaR model that captures risks including commodity prices, interest rates, equity prices and currency rates. The Group's integrated VaR model facilitates comparison of VaR across portfolios comprised of a range of different risk exposures. The Group believes average VaR over the year reflects the most representative understanding of the Group's sensitivity to such risks.

Average market risk VaR (one-day 95 percent) during the year was USD85.1 million (0.52 percent of Group equity) compared to USD199.8 million in the previous financial year (1.33 percent of Group equity, above target due to extreme volatility following the start of the war in Ukraine). The Group's Executive Committee has set a target of maintaining VaR (one-day 95 percent) below one percent of Group equity.

The Group is aware of the inherent limitations to VaR and therefore uses a variety of risk measures and risk management techniques to create a robust risk management process. Limitations of VaR include:

- VaR does not estimate potential losses over longer time horizons where the aggregate moves may be extreme.
- VaR does not take account of the liquidity of different risk positions and therefore does not estimate the losses that might arise if the Group liquidated large positions over a short period of time.
- VaR is based on statistical analysis of historical market data. If this historical data is not reflective of futures market prices movements, VaR may not provide accurate predictions of future possible losses.

The Group's VaR calculation covers its trading businesses in the crude oil, refined oil products, petrochemical, natural gas, metals, concentrates, coal, iron ore and freight markets, and assesses the open-priced positions that are those subject to price risk, including inventories of these commodities. The Group's VaR model is based on historical simulations, with full valuation of more than 5,000 market risk factors.

VaR is calculated based on simultaneously shocking these risk factors. More recent historical price data is more heavily weighted in these simulations, which enables the VaR model to adapt to more recent market conditions and improves the accuracy of the Group's estimates of potential losses.

The Group's VaR model utilises advanced statistical techniques that incorporate the non-normal price dynamics that are an important feature of commodity markets. The Group's VaR model is continuously and automatically calibrated and back-tested to ensure that its out-of-sample performance adheres to well-defined targets. In addition, the Group's VaR model is regularly updated to ensure it reflects the current observed dynamics of the markets the Group is active in.

The Group has made a significant, ongoing investment in risk management systems, including a reporting system that automatically distributes customised risk reports throughout the Group on a daily basis. These reports provide up-to-date information on each team's risk position using industry standard measures, including 95 percent and 99 percent VaR and performance indicators such as Sharpe ratios.

All trading books have well-defined VaR risk limits. Management and the trading teams are automatically notified whenever a book nears its risk limit, as well as whenever a VaR limit breach occurs. In addition, the Group's deals desk management team is automatically notified whenever statistically anomalous changes occur in the profit and loss of any deal.

For senior management, the daily reports provide a comprehensive view of the Group's risk, classified according to various risk factors. These reports emphasise the risk diversification created by the Group's varied activities and highlight any excessive risk concentrations.

39.2 Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument or physical contract fails to meet its contractual obligations, and arises principally from the Group's receivables from customers and investment in debt and equity securities.

The Group has a formalised credit process with credit officers in key locations around the world. Strict credit limits are set up for each counterparty on the basis of detailed financial and business analysis. These limits are constantly monitored and revised in light of counterparty or market developments and the amount of exposure relative to the size of the Group's Consolidated Statement of Financial Position. The Group makes extensive use of the banking and insurance markets to cover any counterparty or country risks that are in excess of its credit limits.

The risk management monitoring and decision-making functions are centralised and make extensive use of the Group's integrated bespoke IT system. The Group conducts transactions with the following major types of counterparties:

- Physical commodity counterparties spread across the vertical chains for both oil and bulk (e.g. producers, refiners/smelters and end-users). Sales to investment grade and non-investment grade counterparties are made on open terms up to internally approved credit limits. Exposures above such limits are subject to payment guarantees.
- Payment guarantee counterparties (e.g. prime financial institutions from which the Group obtains payment guarantees).
- Hedge counterparties comprising a number of prime financial institutions and physical participants in the relevant markets. There is no significant concentration of risk with any single counterparty or group of counterparties. Collateral is obtained from counterparties when the Group's exposure to them exceeds approved credit limits. It is the Group's policy to have ISDA Master Agreements or ISDA-based Long-Form Confirmation Agreements in place with all hedging counterparties.

The Group trades in all major geographic regions. Where appropriate, guarantees, insurance and letters of credit are used to reduce payment or performance risk. The Group has gross credit exposure in locations across the world with a concentration in emerging markets. Most of this exposure is transferred to third parties, while the Group retains between 10 percent and 20 percent on average of the individual exposures.

The Group's maximum exposure to credit risk, without considering netting agreements or without taking into account of any collateral held or other credit enhancements, is equal to the carrying value of its financial assets as indicated in the Consolidated Statement of Financial Position plus the guarantees to third parties and associates.

The Group has amounts and guarantees outstanding related to countries that are affected by sanctions currently imposed by the United States and the European Union. The Group analysed the sanctions and exposures and concluded that these do not materially impact the Group's positions.

39.2.1 Concentration of credit risk

Concentrations of credit risk exist when changes in economic, industry or geographical factors similarly affect the Group's counterparties whose aggregate credit exposure is significant in relation to the Group's total credit exposure. The carrying amount of financial assets represents the maximum credit exposure. The Group determines concentrations of credit risk by monitoring the country profile of its third-party trade receivables on an on-going basis.

The Group has a diverse customer base, with no customer representing more than 2.2 percent of its revenues over the 2023 financial year (FY2022: 1.8 percent).

Please refer to note 26 for the aging of trade and other receivables at the reporting date.

39.2.2 Financial assets that are not past due

Trade and other receivables that are not past due are creditworthy debtors with good payment records with the Group. Cash and cash equivalents and derivatives that are not past due are placed with or entered into with reputable financial institutions or companies with high credit ratings and no history of default. The credit quality of trade and other receivables is assessed based on a strict credit policy. The Group has monitored customer credit risk by grouping trade and other receivables based on their characteristics.

Based on the Group's monitoring of customer credit risk, the Group believes that, except as indicated in note 26, no material expected credit loss allowance is necessary in respect of trade receivables not past due.

39.2.3 Impairment of financial assets

Information regarding impairment of financial assets is disclosed in note 14 (Impairment) and note 26 (Trade and other receivables).

39.2.4 Guarantees

The Group's policy is to provide financial guarantees only to wholly owned subsidiaries and trading partners in the normal course of business. As part of the Group's ordinary physical commodity trading activities, Trafigura Group Pte. Ltd. may act as guarantor by way of issuing guarantees accepting responsibility for subsidiaries' contractual obligations.

G. Notes to the Consolidated Financial Statements

39.3 Liquidity risk

Liquidity risk is the risk that the Group is unable to meet its payment obligations when due or that it is unable, on an on-going basis, to borrow funds in the market on an unsecured or secured basis at an acceptable price to fund actual or proposed commitments.

The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient cash and cash equivalents and ready sources of committed funding available to meet anticipated and unanticipated funding needs. Sound financial management with a focus on liquidity has been instrumental to the Group's success. The Group has demonstrated the ability to raise the appropriate types of financing to match the needs of the business and to tap various investor bases (e.g. syndicated loan markets, trade finance markets, bond markets, private placement markets, securitisation), maturities and geographies.

The Group manages its treasury and liquidity risks maintaining a strong liquidity position through the following:

- Targeting immediately available cash on hand of a minimum of USD2.0 billion under normal conditions (higher in the case of extreme volatility);
- Maintaining transactional lines which allow the Group to mark-to-market financings to the value of the underlying physical assets. Mark-to-market financing is performed weekly (or intra-weekly in the case of extreme volatility) and provides an additional source of liquidity that is not available to competitors, which are financed purely from revolving credit facilities and/or capital markets securities;
- Committed unsecured credit facilities;
- Maintaining headroom under transactional trade finance lines and committed revolving credit facilities; and
- Reasonable distribution of profit (in order to generate retained earnings) and subordination of repurchased, but not yet paid, equity.

The maturity analysis of the Group's financial liabilities based on the contractual terms is as follows:

30 September 2023	< 1 year USD'M	1-5 years USD'M	> 5 years USD'M	Total USD'M
Financial liabilities				
Current and non-current loans and borrowings	25,052.8	8,462.5	851.8	34,367.1
Trade and other payables	21,890.2	–	–	21,890.2
Expected interest payments on committed lines until maturity	782.7	751.9	105.6	1,640.2
Derivative financial liabilities	1,785.2	272.9	10.7	2,068.8
Total	49,510.9	9,487.3	968.1	**59,966.3**

30 September 2022	< 1 year USD'M	1-5 years USD'M	> 5 years USD'M	Total USD'M
Financial liabilities				
Current and non-current loans and borrowings	29,663.6	8,802.3	812.2	39,278.1
Trade and other payables	25,649.5	–	–	25,649.5
Expected interest payments on committed lines until maturity	554.8	736.6	84.6	1,376.0
Derivative financial liabilities	7,910.9	2,710.7	13.0	10,634.6
Total	63,778.8	12,249.6	909.8	**76,938.2**

39.4 Interest rate risk

Despite borrowing mostly floating rate debt, the Group is not exposed to significant interest rate risk because most of its debt is short term (ranging from a few weeks to a few months) and each new commercial transaction is priced based on current interest rate levels. Interest rate risk of the Group is mainly applicable to the long-term debt of the Group, which is mostly floating rate.

From time to time, the Group enters into interest rate derivative transactions to lock in current interest rate levels. For instance, interest rate swaps provide a method of reducing the Group's exposure to floating interest rates. To realise the desired matching of derivative results with the hedged interest rate payments, cash flow hedge accounting is applied and the derivatives are designated as hedging instruments. The derivatives are carried on balance and their effectiveness is tested on a quarterly basis.

39.5 Currency risk

The Group has few exposures to foreign currency risk on its trading activities and those that do exist are hedged out. The Group does not use financial instruments to hedge the translation risk related to equity and earnings of foreign subsidiaries and non-consolidated companies.

The Group uses cross-currency swaps to hedge currency risk on the principal and related payments of foreign currency denominated loans and bonds for which cash flow hedge accounting is applied. The hedge relationship is expected to be highly effective due to the matching of critical terms between the underlying hedged item and the associated hedge instrument.

The periods when the cash flows are expected to occur are similar to the periods when the cash flows on the foreign currency denominated loans and bonds occur as indicated in notes 31 and 39.3. Ineffectiveness may arise (i) if the underlying interest reference rate is divergent to the underlying reference rate in the Group's debt agreements; (ii) to the extent that the hedging instrument is already in the money or out of the money at the point of designation (compared to the hypothetical derivative that must be created on market); (iii) when the timing of the hedging instrument goes beyond the hedged item and it is not considered highly probable that the hedged item will be refinanced beyond its current maturity date; or (iv) if the hedging instrument is for an amount greater than the hedged item.

39.6 Capital management

The Group's policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business.

The Company’s immediate parent, Trafigura Beheer B.V., is exclusively owned by employees of the Group. This shareholding arrangement leads to an alignment of the long-term interests of the Group and its management team. By virtue of having its own capital at risk, senior and middle management are incentivised to take a long-term view of the Group's overall performance and to protect its capital.

The Group's capital management aims to ensure that it meets financial covenants attached to the interest-bearing loans and borrowings that define capital structure requirements. Breaches in meeting the financial covenants would permit the lenders to immediately call loans and borrowings. There have been no breaches in the financial covenants of any loans and borrowing in the current period.

The Group monitors its capital adequacy using an adjusted debt-to-equity ratio, which is adjusted debt divided by the Group's equity. For this purpose, the adjusted debt metric represents the Group's total non-current and current debt less cash, deposits, readily marketable inventories (including purchased and pre-paid inventories which are being released), debt related to the Group's receivables securitisation programme and the non-recourse portion of loans from third parties.

The Company’s long-term average target adjusted debt-to-equity ratio is 1.0x. A negative adjusted debt figure means that the combined adjustments are larger than the debt amount. The Company’s adjusted net debt-to-equity ratio at the end of the reporting period was as follows:

	2023 USD’M	2022 USD’M
Non-current loans and borrowings	9,314.3	9,614.5
Current loans and borrowings	25,052.8	29,663.6
Total debt	**34,367.1**	39,278.1
Adjustments		
Cash and cash equivalents	12,387.0	14,881.3
Deposits	208.7	642.0
Inventories (including purchased and pre-paid inventories)	24,617.3	23,873.6
Receivables securitisation debt	4,157.1	5,390.7
Non-recourse debt	118.0	1,607.1
Adjusted total debt	**(7,121.0)**	(7,116.6)
Group equity	**16,495.4**	15,078.6
Adjusted debt to Group equity ratio at the end of the year	**(0.43x)**	(0.47x)

40. Hedging activities and derivatives

The Group utilises derivative financial instruments (shown separately in the Consolidated Statement of Financial Position) to hedge its primary market risk exposures, which are primarily risks related to commodity price movements and, to a lesser extent, exposure to foreign currency exchange rates and interest rate movements. Commodity derivative contracts may be utilised to hedge against commodity price risk exposures in relation to physical purchase and sales contracts, including inventory. Commodity swaps, options and futures are used to manage price and timing risks in conformity with the Group’s risk management policies.

G. Notes to the Consolidated Financial Statements

Accounting policy

Derivative financial instruments

Derivative instruments, such as physical contracts to sell or purchase commodities that do not meet the own use exemption, are initially recognised at fair value when the Group becomes a party to the contractual provisions of the instrument, and are subsequently remeasured at fair value at the end of each reporting period. Any attributable transaction costs are recognised in the Consolidated Statement of Income as incurred. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

Gains and losses on derivative instruments for which hedge accounting is not applied are recognised in materials, transportation and storage costs.

Hedge accounting

Generally, the Group does not apply hedge accounting, but in some instances, it may elect to apply hedge accounting. Those derivatives qualifying and designated as hedges are either:

(i) A **cash flow hedge** of the change in cash flows to be received or paid relating to a recognised asset or liability or a highly probable transaction, or

(ii) A **fair value hedge** of the change in fair value of a recognised asset or liability or an unrecognised firm commitment.

At the inception of a hedge relationship, the Group formally designates and documents the hedge relationship to which it wishes to apply hedge accounting and the risk management objective and strategy for undertaking the hedge.

The documentation includes identification of the hedging instrument, the hedged item, the nature of the risk being hedged and how the Group will assess whether the hedging relationship meets the hedge effectiveness requirements (including the analysis of sources of hedge ineffectiveness and how the hedge ratio is determined). A hedging relationship qualifies for hedge accounting if it meets all of the following effectiveness requirements:

- There is 'an economic relationship' between the hedged item and the hedging instrument.
- The effect of credit risk does not 'dominate the value changes' that result from that economic relationship.
- The hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Group actually hedges and the quantity of the hedging instrument that the Group actually uses to hedge that quantity of hedged item.

If the hedge ratio for risk management purposes is no longer optimal but the risk management objective remains unchanged and the hedge continues to qualify for hedge accounting, the hedge relationship will be re-calibrated by adjusting either the volume of the hedging instrument or the volume of the hedged item so that the hedge ratio aligns with the ratio used for risk management purposes. Any hedge ineffectiveness is calculated and accounted for at the time of the hedge relationship re-calibration.

Cash flow hedge

The effective portion of the gain or loss on the hedging instrument is recognised in other comprehensive income in the cash flow hedge reserve, while any ineffective portion is recognised immediately in the Consolidated Statement of Income. The cash flow hedge reserve is adjusted to the lower of the cumulative gain or loss on the hedging instrument and the cumulative change in fair value of the hedged item.

The Group uses forward currency contracts as hedges against its exposure to foreign currency risk in forecast transactions and firm commitments, interest rate swaps as hedges against its exposure to volatility in interest rates as well as forward commodity contracts for its exposure to volatility in the commodity prices. The ineffective portion relating to foreign currency contracts and interest rate swaps is recognised in finance income and expense. The ineffective portion related to commodity contracts is recognised in materials, transportation and storage costs.

The amounts accumulated in other comprehensive income are accounted for depending on the nature of the underlying hedged transaction. If the hedged transaction subsequently results in the recognition of a non-financial item, the amount accumulated in equity is removed from the separate component of equity and included in the initial cost or other carrying amount of the hedged asset or liability. This is not a reclassification adjustment and will not be recognised in other comprehensive income for the period. This also applies where the hedged forecast transaction of a non-financial asset or non-financial liability subsequently becomes a firm commitment for which fair value hedge accounting is applied.

For any other cash flow hedges, the amount accumulated in other comprehensive income is reclassified to profit or loss as a reclassification adjustment in the same period or periods during which the hedged cash flows affect profit or loss.

If cash flow hedge accounting is discontinued, the amount that has been accumulated in other comprehensive income must remain in accumulated other comprehensive income if the hedged future cash flows are still expected to occur. Otherwise, the amount will be immediately reclassified to profit or loss as a reclassification adjustment. After discontinuation, once the hedged cash flow occurs, any amount remaining in accumulated other comprehensive income must be accounted for depending on the nature of the underlying transaction as described above.

Fair value hedge

The Group elects to apply fair value hedge accounting to hedge certain risk components of non-financial hedged items. When applicable, the Group designates derivative hedging instruments as fair value hedges in relationship to the hedged item. The hedged item may be individual risk components, which are separately identifiable and reliably measurable or maybe valued in entirety, considering all the risk components of the hedged item for the designated period.

The hedged item is accounted for at fair value through profit and loss, and reflected in the Consolidated Statement of Financial Position as either a recognised asset or liability or an unrecognised firm commitment. Each identified risk component of the hedged item will be revalued at each period with its corresponding benchmark accounted for at fair value and recognised through profit and loss. Further, it is reflected on the Consolidated Statement of Financial Position as either a recognised asset or liability or an unrecognised firm commitment.

A change in the fair value of derivatives designated as a fair value hedge is reflected together with the change in the fair value of the hedged item in the Consolidated Statement of Income.

If the hedged item is derecognised, the unamortised fair value is recognised immediately in profit or loss.

Current versus non-current classification

Derivative instruments are classified as current or non-current, or separated into current and non-current portions based on an assessment of the facts and circumstances (i.e. the underlying contractual cash flows).

Key accounting estimate and judgement

Valuation of financial assets, including derivative and level 3 instruments

Derivative instruments are carried at fair value and the Group evaluates the quality and reliability of the assumptions and data used to measure fair value in the three hierarchy levels (levels 1, 2 and 3) as prescribed by IFRS 13. Fair values are determined in the following ways: externally verified via comparison to quoted market prices in active markets (level 1); by using externally verifiable reference prices (level 2); or by using alternative procedures such as comparison to comparable instruments and/or using models including unobservable market inputs requiring the Group to make market-based assumptions (level 3). For more details, please refer to note 41, which includes an overview of the fair value hierarchy and applied valuation methods.

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

The overview derivatives are as follows:

	2023 USD'M	2022 USD'M
Physical forwards	2,803.3	5,550.3
OTC derivatives	818.0	1,052.5
Futures, cleared swaps, cleared options	85.1	66.6
Interest-rate swaps	289.1	263.5
Cross-currency swaps	12.9	2.2
Foreign-exchange swaps and forwards	429.4	1,369.1
Other financial derivatives	125.7	–
Derivative assets	**4,563.5**	8,304.2
Non-current	410.2	1,125.2
Current	4,153.3	7,179.0
Derivative assets	**4,563.5**	8,304.2

	2023 USD'M	2022 USD'M
Physical forwards	725.7	5,899.1
OTC derivatives	565.2	3,190.6
Futures, cleared swaps, cleared options	108.6	91.8
Interest-rate swaps	4.2	39.2
Cross-currency swaps	290.4	281.2
Foreign-exchange swaps and forwards	271.8	1,132.7
Other financial derivatives	102.9	–
Derivative liabilities	**2,068.8**	10,634.6
Non-current	283.6	2,723.7
Current	1,785.2	7,910.9
Derivative liabilities	**2,068.8**	10,634.6

40.1 Cash flow hedge accounting

In some instances, the Group has applied cash flow hedge accounting to certain highly probable cash flows. These cash flows relate to the following hedged items:

- Purchases of electricity consumed in the smelting process and redelivery for electricity not consumed;
- Sales of mining production; and
- Operating expenditure, interest payments, repayment of foreign currency corporate loans and other forecasted purchases and sales.

The designated hedge derivatives are recognised at fair value. Movements in the fair value of the hedge derivatives are being deferred through other comprehensive income to the extent that they are deemed to be entered in an effective hedge relationship with cash flows that are yet to be reflected in the Consolidated Statement of Income. Any fair value movements that are not considered to be an effective hedge are recognised directly through the Consolidated Statement of Income.

The effectiveness of the economic relationship between the hedging instruments and the hedged item has been assessed at the inception of the hedge accounting designation and is reassessed at least on an annual basis. The hedge ratio is determined by the ratio that provides a strong relationship between movements in the fair value of the hedged item and hedging instruments at the inception of the hedge accounting relationship and reassessed at least annually. Ineffectiveness will occur due to time spread between the hedged item and the hedging instrument as well as due to the basis risk.

G. Notes to the Consolidated Financial Statements

The overview of the cash flow hedges is as follows:

	Maturity	Equivalent	2023 Notionals	2022 Notionals	2023 USD'M Fair values	2022 USD'M Fair values
Cross-currency/interest swaps hedging interest payments	0-5 years	USD'M	11,307.3	4,918.5	(192.2)	(177.0)
Gas and fx futures/swaps hedging future purchases and sales of LNG	0-1 year	various	–	–	–	–
Fx swaps hedging future non-USD loan transaction and opex payments	0-3 years	USD'M	3,364.1	2,309.6	(128.5)	(273.2)
Fx swaps hedging future non-USD Capex payments	0-1 year	USD'M	78.6	–	(2.8)	–
LME futures hedging future sales and mining production	0-2 years	DMT	12,413.5	9,425.0	8.3	(17.0)
Commodity swaps hedging future sales of metals	0-3 years	DMT	2,568.0	3,504.0	(28.0)	(41.2)
Electricity swaps hedging future redelivery of electricity	0-1 year	EUR'M	–	148.1	–	24.0
Electricity swaps hedging future purchase of electricity	0-1 year	EUR'M	30.9	470.7	(13.3)	55.0
Electricity swaps hedging future purchase of electricity	0-7 years	AUD'M	408.8	–	20.3	–
Total					**(336.2)**	(429.4)

	Ineffectiveness recognised through statement of income		Gain/(loss) on cash flow hedges through other comprehensive income	
	2023 USD'M	2022 USD'M	**2023 USD'M**	2022 USD'M
Cross-currency/interest swaps hedging interest payments	(1.8)	1.8	(57.1)	230.1
Gas and fx futures/swaps hedging future purchases and sales of LNG	–	–	–	6.2
Fx swaps hedging future non-USD loan transaction and opex payments	(4.0)	(1.3)	133.2	(213.1)
Fx swaps hedging future non-USD Capex payments	(0.9)	–	(1.9)	–
LME futures hedging future sales and mining production	0.4	3.9	1.2	(2.2)
Commodity swaps hedging future sales of metals	(6.7)	–	19.9	(16.2)
Electricity swaps hedging future redelivery of electricity	(2.5)	–	(18.9)	–
Electricity swaps hedging future purchase of electricity	(0.8)	5.6	(51.5)	199.4
Total	**(16.3)**	10.0	**24.9**	204.2
Cash flow hedge reserve on equity-accounted investees			55.1	4.3
Tax on cash flow hedge reserve			13.7	(70.7)
Cash flow hedge reserve movement in statement of changes in equity			**93.7**	137.8

40.2 Fair value hedge accounting

In some instances, the Group elects to apply fair value hedge accounting to certain physical forward contracts described in the table below (the hedged items) and the corresponding paper hedge positions (the hedging instruments). Under the strict rules of hedge accounting, the Group is required to match each paper hedge position with the corresponding physical contract position. The intention is that a movement in fair value of a physical contract is accounted against the corresponding (and opposite) movement in fair value of the related paper hedges: both movements (increase and decrease) are recorded in the Consolidated Statement of Income (specifically to the line materials, transportation and storage), leading to an offsetting result. It is important to note that the fair value of the physical contracts does not include any trading margin or any form of potential profit of the physical contracts.

The Group has elected to apply fair value hedge accounting to non-financial hedged items or certain risk components of non-financial hedged items. These non-financial hedged items relate to firm commitments with respect to tolling agreements, a transportation agreement, offtake agreements and bareboat charter and time charter agreements, among others.

	Transportation agreements	Offtake agreements	Bareboat and Time charter agreements
Nature of forward contract (=hedged item)	Transport crude from Permian Basin to Gulf Coast	Offtake LNG in the US, Middle East and Asia	Freight lease agreement
Main counterparty of forward contract/Types of contracts	Cactus II Pipeline LLC	Cheniere Marketing LLC; Freeport LNG Marketing LLC; Brunei Energy Services and Trading SDN BHD; Oman LNG LLC; Petronas LNG LTD; and others	Asset classes: Very Large Crude Carriers, Suexmax, Aframax and Long Range vessels
Maturity of forward contract	Ranging from FY2024 to FY2025	Ranging from FY2024 to FY2033	Ranging from FY2024 to FY2035
Trading strategy	Transport crude from Permian Basin to Gulf Coast	Purchase LNG, transport, transform back into natural gas, and/or sell natural gas in Europe/Asia	Freight lease agreement to generate freight income from external counterparties
Nature of paper hedge (=hedging instrument)	Hedging spread exposure (Permian Basin crude vs Gulf Coast crude) with futures and swaps	1) Hedging spread exposure (LNG in the US vs natural gas in Europe/Asia) with futures and swaps 2) Hedging Gas Slope with futures and swaps	Hedging freight routes with Freight Forward Agreements

40.2.1 Hedged items

The Group previously applied fair value hedge accounting on its tolling agreements as non-financial hedged items, which the Group had entered into for fractionation services to convert crude feedstock into various crude refined products. The derivative hedging instruments (hedges consisting of futures and swaps) were entered into to hedge the spread exposures, referred to as the hedged risk, between the purchase of crude feedstock and the sale of crude refined products. Following the decline in volume of hedged tolling agreements due to change in market structure, the fair value hedge accounting was discontinued during the year.

The Group's transportation agreement represents a non-financial hedged item, which the Group has entered into for the transportation of crude oil from the Permian Basin of Texas to the Gulf Coast. The derivative hedging instruments (hedges consisting of futures and swaps) are entered into to hedge the spread exposures, referred to as the hedged risk, between the purchase of inland crude oil barrels and the sale of those barrels on the Gulf Coast.

The Group's offtake agreements represent a non-financial hedged item, which the Group has entered into for the purchase of liquefied natural gas (LNG) from the United States with a number of counterparties. The derivative hedging instruments (hedges consisting of futures and swaps) are entered into to hedge the spread exposures, referred to as the hedged risk, between purchasing LNG from the US and selling LNG to its expected destination markets. Additionally, some Asian and Middle East LNG supply contracts that also represent a non-financial hedged item are further covered in the scope of hedge accounting. The LNG price in these contracts is indexed to Brent against a coefficient. The coefficient is referred to as the Gas Slope and is driven by the correlation between Brent and Asian LNG market. The derivative hedging instruments (hedges consisting of futures and swaps) are entered into to hedge the Gas Slope, referred to as the hedged risk.

The Group's bareboat and time charter agreements represent non-financial hedged items, which the Group has entered into for the purpose of transporting commodities and generating freight revenue. The derivative hedging instruments are entered to hedge freight exposure on the different bareboat and time charter contracts.

The identified hedged items are accounted for at fair value and recognised in materials, transport and storage within the Consolidated Statement of Income. The fair value is reflected in the Consolidated Statement of Financial Position as either a recognised asset or liability. The fair value is determined using benchmarks best representing the designated hedged item. Specifically, in the case of LNG, the fair value of the hedged item also considers unobservable inputs.

40.2.2 Hedging instruments

When applicable, the Group designates derivative hedging instruments as fair value hedges in relationship to the associated hedged items. The maturity profiles of the hedging instruments are as follows:

- Transportation agreement: varies from one month to two years.
- Offtake agreements: varies from one month to five years.
- Bareboat and time charter agreements: varies from one month to four years.

The designated hedge derivatives are accounted for at fair value through profit and loss.

40.2.3 Economic relationship

IFRS 9 requires the existence of an economic relationship between the hedged item and the hedging instrument. At designation and at the start of each reporting period, critical terms of both hedged items and hedge instruments in a hedge relationship are reviewed to ascertain the expectation that the value of the hedging instrument and the value of the hedged item would move in opposite directions as a result of the common underlying and therefore meet the risk management objective of the hedge relationship.

40.2.4 Hedge effectiveness assessment

At each reporting date or on significant changes in circumstances a quantitative hedge effectiveness assessment is performed. The fair values of both hedged items and hedging instruments are measured and the net difference of the changes is the hedge ineffectiveness amount. The hedge ineffectiveness amount is analysed by its various sources (for example: basis differences, location differences, timing differences, quantity or notional amount differences, currency basis and forward points, credit risk or other risks) where applicable. Specific factors that may affect ineffectiveness are a mismatch in the designated hedge period and the maturity period of the hedging instrument and a differential of the various benchmarks for the pricing of the hedging instruments and the hedged items.

In the case of LNG specifically, a material portion of the hedge ineffectiveness can be attributed to the release from the realisation of positions on which large ineffectiveness was recognised in the prior year due to fact that physical LNG was pricing at a higher discount against the TTF price index than compared to the historic trend. This difference in pricing was driven by the relative lower liquidity of the TTF index since the war in Ukraine, which led to significant price moves, sometimes decorrelated with the underlying physical market. Further in LNG, the hedged item designated includes foreign currency exposure. However, the foreign currency hedges have not been designated into the hedge relationship, giving rise to additional ineffectiveness. The fair value of the foreign exchange hedges that have not been designated can be seen in the table below.

The ineffectiveness in the 2023 financial year amounted to a gain of USD554.9 million (FY2022: loss of USD1,076.0 million).

G. Notes to the Consolidated Financial Statements

The fair value adjustment on the non-financial hedged items is presented in the Consolidated Statement of Financial Position under the following categories:

	30 September 2023 USD'M		30 September 2022 USD'M	
	Other non-current assets (note 24)	Other current assets (note 28)	Other non-current assets (note 24)	Other current assets (note 28)
Non-financial hedged items – Tolling agreements	–	–	–	24.4
Non-financial hedged items – Transportation agreement	–	–	–	–
Non-financial hedged items – Offtake agreements	266.8	558.6	3,795.1	2,897.4
Non-financial hedged items – Bareboat charter agreements	9.1	33.2	26.5	143.1
Non-financial hedged items – Storage agreements	–	–	–	–
Closing balance of the hedged item	**275.9**	**591.8**	3,821.6	3,064.9

	30 September 2023		30 September 2022	
	USD'M	USD'M	USD'M	USD'M
	Other non-current liabilities (note 34)	Other current liabilities (note 36)	Other non-current liabilities (note 34)	Other current liabilities (note 36)
Non-financial hedged items – Tolling agreements	–	–	–	–
Non-financial hedged items – Transportation agreement	0.7	5.6	3.9	77.3
Non-financial hedged items – Offtake agreements	–	144.0	–	–
Non-financial hedged items – Bareboat charter agreements	1.6	18.2	1.5	10.0
Non-financial hedged items – Storage agreements	–	–	–	2.2
Closing balance of the hedged item	**2.3**	**167.8**	5.4	89.5
Net balance of the hedged item (+ = asset/ - = liability)	**697.5**		6,791.6	

The following table summarises the movements in the non-financial hedged items and the related derivatives recognised in the Consolidated Statement of Income:

	2023 USD'M	2022 USD'M
Opening balances of the derivatives marked as hedges	**(7,464.1)**	**(2,397.0)**
Fair value movement included in the hedge relationship	4,997.6	(8,668.4)
Hedges for which hedge relationship matured	1,868.6	3,582.8
Hedges not designated in hedge relationship	78.1	18.5
Closing balance of the derivatives marked as hedges	**(519.8)**	(7,464.1)
Opening balance of the hedged item	**6,791.6**	**2,452.6**
Fair value movement included in the hedge relationship	(4,442.7)	7,592.1
Release of fair value adjustment due to matured hedge relationship	(1,651.4)	(3,253.1)
Closing balance of the hedged item	**697.5**	6,791.6
Lifetime to date net gain/(loss)	177.7	(672.5)
Year to date net gain/(loss)	850.2	(728.1)

41. Fair value

Accounting policy

The Group measures financial instruments, such as derivatives and certain non-derivative financial assets, at fair value at each balance sheet date.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability, or
- In the absence of a principal market, in the most advantageous market for the asset or liability.

The principal or the most advantageous market must be accessible by the Group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

Level 1 — Quoted (unadjusted) market prices in active markets for identical assets or liabilities.

Level 2 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable.

Level 3 — Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by reassessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

For the purpose of fair value disclosures, the Group has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy as explained above.

41.1 Fair values versus carrying amounts

The fair values of inventories, financial assets and liabilities, together with the carrying amounts shown in the Consolidated Statement of Financial Position, are as follows:

	30 September 2023		30 September 2022	
	Carrying value USD'M	Fair value USD'M	**Carrying value USD'M**	Fair value USD'M
Assets				
Listed equity securities – Fair value through OCI	0.5	0.5	0.9	0.9
Listed equity securities – Fair value through profit or loss	361.8	361.8	63.2	63.2
Listed debt securities – Fair value through profit or loss	247.4	247.4	203.0	203.0
Unlisted equity investments – Fair value through profit or loss	182.0	182.0	130.1	130.1
Unlisted equity investments – Fair value through OCI	205.8	205.8	198.3	198.3
Loans receivable (*)	791.6	791.6	307.5	307.5
Inventories – Storage inventories	12,697.7	12,697.7	11,477.7	11,477.7
Inventories – Floating inventories	9,031.3	9,031.3	10,194.8	10,194.8
Trade and other receivables (*)	23,413.8	23,413.8	27,630.5	27,630.5
Non-financial hedged items	867.7	867.7	6,886.5	6,886.5
Derivatives	4,563.5	4,563.5	8,304.2	8,304.2
Deposits (*)	208.7	208.7	642.0	642.0
Cash and cash equivalents (*)	12,387.0	12,387.0	14,881.3	14,881.3
Total financial assets and inventories	**64,958.8**	**64,958.8**	80,920.0	80,920.0
Liabilities				
Loans and borrowings				
Floating rate borrowings (*)	29,597.9	29,597.9	33,708.4	33,708.4
Fixed rate borrowings	4,769.2	4,389.3	5,569.7	5,262.4
Trade and other payables (*)	21,890.2	21,890.2	25,649.5	25,649.5
Non-financial hedged items	170.1	170.1	94.9	94.9
Derivatives	2,068.8	2,068.8	10,634.6	10,634.6
Total financial liabilities	**58,496.2**	**58,116.3**	75,657.1	75,349.8

* Management has determined that these carrying amounts reasonably approximate their fair values because these are mostly short-term in nature and are re-priced regularly.

G. Notes to the Consolidated Financial Statements

41.2 Fair value hierarchy

The table below analyses financial instruments and other assets and liabilities carried at fair value, by valuation method. The different levels have been defined as follows:

- **Level 1:** quoted prices (unadjusted) in active markets for identical assets or liabilities.
- **Level 2:** inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- **Level 3:** inputs for the asset or liability that are not based on observable market data (unobservable inputs).

Regarding financial instruments: Level 1 classifications primarily include futures, cleared swaps, cleared options and natural gas physical forwards with a maturity of less than one year. Level 2 classifications primarily include foreign-exchange, interest-rate, cross-currency and commodity swaps and physical forward transactions which derive their fair value primarily from exchange quotes and readily observable broker quotes. Level 3 classifications primarily include physical forward transactions which derive their fair value predominately from calculations that use broker quotes and applicable market-based estimates surrounding location, quality and credit differentials. In circumstances where Trafigura cannot verify fair value with observable market inputs (Level 3 fair values), it is possible that a different valuation model could produce a materially different estimate of fair value.

It is Trafigura's policy to hedge significant market risk, therefore sensitivity to fair value movements is limited. Trafigura manages its market risk using the Value at Risk (VaR) as disclosed in note 39.1.

	30 September 2023				30 September 2022			
	Level 1	Level 2	Level 3	**Total**	Level 1	Level 2	Level 3	**Total**
Financial assets and inventories	USD'M	USD'M	USD'M	**USD'M**	USD'M	USD'M	USD'M	**USD'M**
Listed equity securities – Fair value through OCI	0.5	–	–	0.5	0.9	–	–	0.9
Listed equity securities – Fair value through profit or loss	361.8	–	–	361.8	63.2	–	–	63.2
Listed debt securities – Fair value through profit or loss	34.8	–	212.6	247.4	0.3	–	202.7	203.0
Unlisted equity investments – Fair value through profit or loss	–	–	182.0	182.0	–	–	130.1	130.1
Unlisted equity investments – Fair value through OCI	–	–	205.8	205.8	–	–	198.3	198.3
Futures, cleared swaps, cleared options	85.1	–	–	85.1	66.6	–	–	66.6
OTC derivatives	–	761.6	56.4	818.0	–	969.1	83.4	1,052.5
Physical forwards	1,453.4	776.5	573.4	2,803.3	2,924.6	798.2	1,827.5	5,550.3
Cross-currency swaps	–	12.9	–	12.9	–	2.2	–	2.2
Interest-rate swaps	–	289.1	–	289.1	–	263.5	–	263.5
Foreign-exchange swaps and forwards	–	429.4	–	429.4	–	1,369.1	–	1,369.1
Non-financial hedged items	–	315.5	552.2	867.7	–	3,264.3	3,622.2	6,886.5
Other financial derivatives	124.7	1.0	–	125.7	–	–	–	–
Inventories – Storage inventories	–	12,697.7	–	12,697.7	–	11,477.7	–	11,477.7
Inventories – Floating inventories	–	9,031.3	–	9,031.3	–	10,194.8	–	10,194.8
Total	2,060.3	24,315.0	1,782.4	**28,157.7**	3,055.6	28,338.9	6,064.2	**37,458.7**

	30 September 2023				30 September 2022			
	Level 1	Level 2	Level 3	**Total**	Level 1	Level 2	Level 3	**Total**
Financial liabilities	USD'M	USD'M	USD'M	**USD'M**	USD'M	USD'M	USD'M	**USD'M**
Futures, cleared swaps, cleared options	108.6	–	–	108.6	91.8	–	–	91.8
OTC derivatives	–	475.2	90.0	565.2	–	3,162.2	28.4	3,190.6
Physical forwards	201.5	66.3	457.9	725.7	4,206.4	1,077.1	615.6	5,899.1
Cross-currency swaps	–	290.4	–	290.4	–	281.2	–	281.2
Interest-rate swaps	–	4.2	–	4.2	–	39.2	–	39.2
Foreign-exchange swaps and forwards	–	271.8	–	271.8	–	1,132.7	–	1,132.7
Non-financial hedged items	–	100.8	69.3	170.1	–	94.9	–	94.9
Other financial derivatives	60.0	–	42.9	102.9	–	–	–	–
Fixed-rate borrowings	–	4,769.2	–	4,769.2	–	5,569.7	–	5,569.7
Total	370.1	5,977.9	660.1	**7,008.1**	4,298.2	11,357.0	644.0	**16,299.2**
Net financial assets/(liabilities) and inventories	1,690.2	18,337.1	1,122.2	**21,149.5**	(1,242.6)	16,981.9	5,420.2	**21,159.5**

The movements in the level 3 hierarchy can be summarised as follows:

	Physical forwards/ Derivatives USD'M	Equity/Debt securities USD'M	Firm commitments USD'M	Other investments USD'M	**Total USD'M**
Balance at 1 October 2022	1,266.9	531.1	3,622.2	–	**5,420.2**
Invested	–	18.9	–	–	**18.9**
Total gain/(loss) recognised in Consolidated Statement of Income	(267.6)	(6.3)	(2,530.3)	–	**(2,804.2)**
Total gain/(loss) recognised in OCI	2.1	7.4	–	–	**9.5**
Disposals	–	(1.0)	–	–	**(1.0)**
Reclassification	–	50.3	–	–	**50.3**
Total realised	(962.5)	–	(609.0)	–	**(1,571.5)**
Balance at 30 September 2023	38.9	600.4	482.9	–	**1,122.2**

	Physical forwards/ Derivatives USD'M	Equity/Debt securities USD'M	Firm commitments USD'M	Other investments USD'M	**Total USD'M**
Balance at 1 October 2021	106.9	622.6	2,081.3	862.3	**3,673.1**
Invested	–	28.6	–	–	**28.6**
Total gain/(loss) recognised in Consolidated Statement of Income	1,180.6	(37.1)	4,153.0	628.3	**5,924.8**
Total gain/(loss) recognised in OCI	166.7	(43.8)	–	–	**122.9**
Disposals	–	(36.7)	–	–	**(36.7)**
Reclassification	–	(2.5)	–	112.0	**109.5**
Total realised	(187.3)	–	(2,612.1)	(1,602.6)	**(4,402.0)**
Balance at 30 September 2022	1,266.9	531.1	3,622.2	–	**5,420.2**

There were no transfers between fair value hierarchy levels in the financial year ended 30 September 2023 (or in the financial year ended 30 September 2022). Materially all level 3 physical forwards are settled in the next year. See note 23.3 for equity/debt securities and other investments.

G. Notes to the Consolidated Financial Statements

The overview of the fair value hierarchy and applied valuation methods can be specified as follows:

Listed equity securities – Fair value through OCI		2023 USD'M	2022 USD'M
Level 1	Assets	0.5	0.9
	Liabilities	–	–
Valuation techniques and key inputs:	Quoted prices in an active market.		
Significant unobservable inputs:	None.		

Equity securities – Fair value through profit or loss		2023 USD'M	2022 USD'M
Level 1	Assets	361.8	63.2
	Liabilities	–	–
Valuation techniques and key inputs:	Quoted prices in an active market.		
Significant unobservable inputs:	None.		

Listed debt securities – Fair value through profit or loss		2023 USD'M	2022 USD'M
Level 1	Assets	34.8	0.3
	Liabilities	–	–
Valuation techniques and key inputs:	Quoted prices in an active market.		
Significant unobservable inputs:	None.		

Futures, cleared swaps, cleared options		2023 USD'M	2022 USD'M
Level 1	Assets	85.1	66.6
	Liabilities	108.6	91.8
Valuation techniques and key inputs:	Quoted prices in an active market.		
Significant unobservable inputs:	None.		

Physical forwards		2023 USD'M	2022 USD'M
Level 1	Assets	1,453.4	2,924.6
	Liabilities	201.5	4,206.4
Valuation techniques and key inputs:	Quoted prices in an active market.		
Significant unobservable inputs:	None.		

Other financial derivatives		2023 USD'M	2022 USD'M
Level 1	Assets	124.7	–
	Liabilities	60.0	–
Valuation techniques and key inputs:	Quoted prices in an active market.		
Significant unobservable inputs:	None.		

OTC derivatives		2023 USD'M	2022 USD'M
Level 2	Assets	761.6	969.1
	Liabilities	475.2	3,162.2
Valuation techniques and key inputs:	Reference prices. Inputs include observable quoted prices sourced from traded reference prices or recent traded price indices in an active market for identical assets or liabilities.		
Significant unobservable inputs:	None.		

Physical forwards		2023 USD'M	2022 USD'M
Level 2	Assets	776.5	798.2
	Liabilities	66.3	1,077.1
Valuation techniques and key inputs:	Reference prices. Inputs include observable quoted prices sourced from traded reference prices or recent traded price indices in an active market for identical assets or liabilities.		
Significant unobservable inputs:	None.		

Cross-currency swaps		2023 USD'M	2022 USD'M
Level 2	Assets	12.9	2.2
	Liabilities	290.4	281.2
Valuation techniques and key inputs:	Discounted cash flow model. Inputs include observable quoted prices sourced from exchanges or recent traded price indices in an active market for identical assets or liabilities. Prices are adjusted by a discount rate that captures the time value of money and counterparty credit considerations.		
Significant unobservable inputs:	None.		

Interest-rate swaps		2023 USD'M	2022 USD'M
Level 2	Assets	289.1	263.5
	Liabilities	4.2	39.2
Valuation techniques and key inputs:	Discounted cash flow model. Inputs include observable quoted prices sourced from exchanges or recent traded price indices in an active market for identical assets or liabilities. Prices are adjusted by a discount rate that captures the time value of money and counterparty credit considerations.		
Significant unobservable inputs:	None.		

Foreign-exchange swaps and forwards		2023 USD'M	2022 USD'M
Level 2	Assets	429.4	1,369.1
	Liabilities	271.8	1,132.7
Valuation techniques and key inputs:	Reference prices. Inputs include observable quoted prices sourced from traded reference prices or recent traded price indices in an active market for identical assets or liabilities. Valuations are adjusted by a discount rate that captures the time value of money and counterparty credit considerations.		
Significant unobservable inputs:	None.		

Non-financial hedged items		2023 USD'M	2022 USD'M
Level 2	Assets	315.5	3,264.3
	Liabilities	100.8	94.9
Valuation techniques and key inputs:	Reference prices. Inputs include observable quoted prices sourced from traded reference prices or recent traded price indices in an active market for identical assets or liabilities.		
Significant unobservable inputs:	None.		

Other financial derivatives		2023 USD'M	2022 USD'M
Level 2	Assets	1.0	–
	Liabilities	–	–
Valuation techniques and key inputs:	Discounted cash flow model. Inputs include observable quoted prices sourced from exchanges or traded reference indices in an active market for identical assets or liabilities. Prices are adjusted by a discount rate that captures the time value of money and counterparty credit considerations.		
Significant unobservable inputs:	None.		

Inventories		2023 USD'M	2022 USD'M
Level 2	Assets	21,729.0	21,672.5
	Liabilities	–	–
Valuation techniques and key inputs:	Reference prices. Quoted prices in an active market, adjusted with a premium/discount for quality and/or location.		
Significant unobservable inputs:	None.		

Fixed rate borrowings		2023 USD'M	2022 USD'M
Level 2	Assets	–	–
	Liabilities	4,769.2	5,569.7
Valuation techniques and key inputs:	Discounted cash flow model. Cash flows discounted at current borrowing rates for similar instruments.		
Significant unobservable inputs:	None.		

Listed debt securities – Fair value through profit or loss		2023 USD'M	2022 USD'M
Level 3	Assets	212.6	202.7
	Liabilities	–	–
Valuation techniques and key inputs:	Discounted cash flow model The resultant asset is a discounted cash flow of the underlying throughput.		
Significant unobservable inputs:	- Forecast throughput - Discount rates using weighted average cost of capital - Market illiquidity - Operating cost and capital expenditures		

Unlisted equity investments – Fair value through profit or loss		2023 USD'M	2022 USD'M
Level 3	Assets	182.0	130.1
	Liabilities	–	–
Valuation techniques and key inputs:	Valuations obtained from the asset managers of the funds.		
Significant unobservable inputs:	- Market illiquidity		

Unlisted equity investments – Fair value through OCI		2023 USD'M	2022 USD'M
Level 3	Assets	205.8	198.3
	Liabilities	–	–
Valuation techniques and key inputs:	Valuations obtained from the asset managers of the funds.		
Significant unobservable inputs:	- Market illiquidity		

OTC derivatives		2023 USD'M	2022 USD'M
Level 3	Assets	56.4	83.4
	Liabilities	90.0	28.4
Valuation techniques and key inputs:	Reference prices considered with adjustment to valuation for unobservable inputs.		
Significant unobservable inputs:	Total load consumption forecast, scaling factor, transmission losses and capacity interruptions, volatilities in case of options.		

Physical forwards		2023 USD'M	2022 USD'M
Level 3	Assets	573.4	1,827.5
	Liabilities	457.9	615.6
Valuation techniques and key inputs:	Valuation model based on market assumptions and reference prices. Key input is the definition of the observable risk position that forms the basis for the valuation of these physical forwards.		
Significant unobservable inputs:	The definition of the observable risk position.		

Non-financial hedged items		2023 USD'M	2022 USD'M
Level 3	Assets	552.1	3,622.2
	Liabilities	69.3	–
Valuation techniques and key inputs:	Valuation model based on market assumptions and reference prices. Key input is the market liquefaction fee curve that is defined using (1) observable quoted prices sourced from traded reference prices or recent traded price indices in an active market for identical assets or liabilities, (2) assumption on observable risk positions, and (3) assumptions on ratios attributed to the different observable risk positions.		
Significant unobservable inputs:	The identification of observable risk positions and ratios attributed to them.		

Other financial derivatives		2023 USD'M	2022 USD'M
Level 3	Assets	–	–
	Liabilities	42.9	–
Valuation techniques and key inputs:	Valuation model based on market assumptions and reference prices. Key inputs are the assumptions on the observable risk position that forms the basis for the valuation of these embedded derivatives.		
Significant unobservable inputs:	The definition of the observable risk position.		

G. Notes to the Consolidated Financial Statements

42. Related parties

In the normal course of business, the Group enters into various transactions with related parties, including fixed price commitments to sell and to purchase commodities, forward sale and purchase contracts, agency agreements and management service agreements. Outstanding balances at period end are unsecured and settlement occurs in cash. There have been no guarantees provided or received for any related-party receivables or payables.

All transactions between the Company and its subsidiaries are eliminated on consolidation along with any unrealised profits and losses between its subsidiaries, associates and joint ventures.

42.1 Transactions with key management personnel

42.1.1 Key management personnel compensation

In addition to their salaries, the Group also provides non-cash benefits to directors and executive officers. Executive officers also participate in the Group's equity participation plan (please refer to note 11). Compensation of key management personnel, including all members of the Board of Directors and the Executive Committee, comprised the following:

	2023 USD'M	2022 USD'M
Short-term employee benefits	6.6	5.3
Post-employment benefits	0.7	0.6
Share-based payments	20.0	16.3
Total	**27.3**	22.2

42.1.2 Key management personnel and director transactions

As at 30 September 2023, loans receivable from the members of the Board of Directors and the Executive Committee total USD1.6 million (FY2022: USD15.9 million). Interest is charged on the loans at three-month term SOFR plus 0.26 percent (credit adjustment spread) plus 1.5 percent and loans are repayable within one to three years.

42.2 Other related party transactions

The table below summarises the related-party receivables and payables:

	2023 USD'M	2022 USD'M
Trafigura Control Holdings Pte. Ltd.	4.7	3.2
Porto Sudeste do Brasil S.A.	(93.8)	(48.8)
Guangxi Jinchuan Non-ferrous Metals Co., Ltd	134.5	200.3
Empresa Minera del Caribe S.A. (Emincar)	223.3	226.6
Trafigura Beheer B.V.	32.7	15.1
ITG S.à r.l.	190.7	1,041.2
Terrafame Oy	122.6	132.9
Trafigura Liaoning Port International trading (Liaoning) Co. Ltd.	(30.9)	(71.7)
Others	63.0	83.5
Total	**646.8**	1,582.3

The table below summarises the impact of related parties on the Consolidated Statement of Income:

	2023 USD'M	2022 USD'M
Sales	3,885.8	3,218.6
Purchases	3,239.1	3,682.2
Interest income	62.2	24.4
Cost recharge income/(expense)	(20.3)	(12.0)

Transactions between related parties are made on commercial terms.

The table below summarises the nature of relationship and nature of transactions entered with the related party:

Party	Nature of relationship	Nature of transaction
Empresa Minera del Caribe S.A. (Emincar)	Equity-accounted investee	Financing and trading agreement
ITG S.à r.l.	Equity-accounted investee	Multimodal logistics, warehousing and storage
Guangxi Jinchuan Non-ferrous Metals Co., Ltd	Equity-accounted investee	Trading agreement
Terrafame Oy	Associate	Financing and trading agreement
Porto Sudeste do Brasil S.A.	Equity-accounted investee	Loans and cost recharges
Trafigura Beheer B.V.	Parent company	Loans and cost recharges
Trafigura Liaoning Port International trading (Liaoning) Co. Ltd.	Equity-accounted investee	Trading agreement
Trafigura Control Holdings Pte. Ltd.	Parent company	Equity participation plan

43. Hyperinflationary economies

Accounting policy

When the economy of a country in which the Group operates is deemed hyperinflationary and the functional currency of a Group entity is the currency of that hyperinflationary economy, the financial statements of such Group entities are adjusted so that they are stated in terms of the measuring unit current at the end of the reporting period. This involves restatement of income and expenses to reflect changes in the general price index from the start of the reporting period and restatement of non-monetary items in the statement of financial position to reflect current purchasing power as at the period end using a general price index from the date when they were first recognised. Comparative amounts are not adjusted. Any differences arising were recorded in equity on adoption.

The Group is primarily exposed to hyperinflationary economy in Argentina. The financial statements of the subsidiaries in this country are first adjusted for the effect of inflation with any gain or loss on the net monetary position recorded in the related functional lines in the Consolidated Statement of Income and then translated into USD.

With the effect from 1 July 2018, the Argentine economy is considered to be hyperinflationary in accordance with the criteria in IAS 29, Financial reporting in hyperinflationary economies. Accordingly, the financial statements include restatements for changes in the general purchasing power of the Argentine peso. These restatements are made for all Group entities that have the Argentine peso as the functional currency.

On the application of IAS 29, the Group used a conversion coefficient derived from official wholesale price and consumer price indices published by the National Institute of Statistics and Censuses (INDEC, in its Spanish acronym). The index rates and corresponding conversion coefficients applied are as follows:

Year	Index, % (December 2010 = 100)	Conversion coefficient
30 September 2021	1,565.7	435.5
30 September 2022	2,861.5	238.3
30 September 2023	6,818.5	100.0

Monetary assets and liabilities are not restated because they are already expressed in terms of the monetary unit current as at 30 September 2023. Non-monetary assets and liabilities (items that are not already expressed in terms of the monetary unit as at 30 September 2023) are restated by applying the above index.

The impact, a gain of USD43.6 million was recorded in other comprehensive income (FY2022: a gain of USD23.5 million), of which the most significant impact is from Argentina. The pre-tax gain for the year of USD51.5 million is included in finance income (FY2022: gain of USD17.1 million).

44. Consolidated subsidiaries

Principal consolidated operating subsidiaries	Location	2023 % Owned	2022 % Owned
C.I. Trafigura Petroleum Colombia S.A.S.	Colombia	100.0%	100.0%
Catalina Huanca Sociedad Minera S.A.C.	Peru	100.0%	100.0%
Cortes Holding S.à r.l.	Luxembourg	100.0%	100.0%
Cortes Investments S.à r.l.	Luxembourg	100.0%	100.0%
Edenfield Procurement DMCC	United Arab Emirates	100.0%	100.0%
Energy Infrastructure Investments S.A.R.L	Luxembourg	96.7%	96.7%
Galena Asset Management B.V.	The Netherlands	100.0%	100.0%
Galena Asset Management SA	Switzerland	100.0%	100.0%
Impala Holdings Limited	Malta	100.0%	100.0%
Impala Middle East General Warehousing L.L.C.	United Arab Emirates	100.0%	100.0%
Impala Terminals Burnside LLC	United States	100.0%	100.0%
Impala Terminals Colombia S.A.S	Colombia	100.0%	100.0%
Impala Terminals Middle East FZE	United Arab Emirates	100.0%	100.0%
Impala Terminals UK Ltd.	United Kingdom	100.0%	100.0%
IWL (Luxembourg) S.à r.l.	Luxembourg	100.0%	100.0%
IWL Holdings (Luxembourg) S.à r.l.	Luxembourg	100.0%	100.0%
Leeuwin Trading Sàrl	Switzerland	100.0%	100.0%
Lykos (China) Co., Ltd.	China	100.0%	100.0%
Myra Falls Mine Ltd.	Canada	100.0%	100.0%
NGL Equipments, S.A. de C.V.	Mexico	100.0%	100.0%
NN2 Newco Limited	United Kingdom	100.0%	100.0%
Nyrstar Belgium NV	Belgium	100.0%	100.0%
Nyrstar Budel BV	The Netherlands	100.0%	100.0%
Nyrstar Canada (Holdings) Ltd	Canada	100.0%	100.0%
Nyrstar Clarksville Inc	United States	100.0%	100.0%
Nyrstar Finance International AG	Switzerland	100.0%	100.0%
Nyrstar France SAS	France	100.0%	100.0%
Nyrstar Hobart Pty Ltd	Australia	100.0%	100.0%
Nyrstar Holdings PLC	Malta	100.0%	100.0%
Nyrstar Netherlands (Holdings) BV	The Netherlands	100.0%	100.0%
Nyrstar Port Pirie Pty Ltd	Australia	100.0%	100.0%
Nyrstar Sales & Marketing AG	Switzerland	100.0%	100.0%
Nyrstar Tennessee Mines – Gordonsville LLC	United States	100.0%	100.0%
Nyrstar Tennessee Mines – Strawberry Plains LLC	United States	100.0%	100.0%
Petromining S.A.	Argentina	100.0%	100.0%
Puma Energy (Australia) Assets Holdings Pty Ltd	Australia	96.7%	96.7%
Puma Energy (Australia) Bitumen Pty Ltd	Australia	96.7%	96.7%
Puma Energy B.V.	The Netherlands	96.7%	96.7%
Puma Energy Bahamas S.A.	Bahamas	96.7%	96.7%
Puerto Rico Energy LLC (formerly known as Puma Energy Caribe LLC)	United States	96.7%	96.7%
Puma Energy Holdings (Luxembourg) S.à r.l	Luxembourg	96.7%	96.7%
Puma Energy Holdings Pte Ltd	Singapore	96.7%	96.7%
Puma Energy Investments Holdings Pte. Ltd.	Singapore	96.7%	96.7%
Puma Energy PNG Limited	Papua New Guinea	96.7%	96.7%
Puma Energy PNG Refining Limited	Papua New Guinea	96.7%	96.7%
Puma Energy Supply & Trading Pte. Ltd.	Singapore	96.7%	96.7%
Puma International Financing S.A.	Luxembourg	96.7%	96.7%
Seal Sands Gas Transportation Limited	United Kingdom	100.0%	100.0%
Shipstern Holdings S.à r.l.	Luxembourg	100.0%	100.0%
Sociedad Portuaria Impala Terminals Barrancabermeja S.A.	Colombia	100.0%	100.0%
Teesside Gasport Limited	United Kingdom	100.0%	100.0%
TFG Marine ApS	Denmark	75.0%	75.0%
TFG Marine Pte. Ltd.	Singapore	75.0%	75.0%
TPTE Holding Limited	Malta	100.0%	100.0%
Trafigura Argentina S.A.	Argentina	100.0%	100.0%
Trafigura Asia Trading Pte. Ltd.	Singapore	100.0%	100.0%
Trafigura Canada Limited	Canada	100.0%	100.0%

G. Notes to the Consolidated Financial Statements

Principal consolidated operating subsidiaries	Location	2023 % Owned	2022 % Owned
Trafigura Chile Limitada	Chile	100.0%	100.0%
Trafigura Commodities Sàrl	Switzerland	100.0%	100.0%
Trafigura Energy (Zhejiang) Co., Ltd.	China	100.0%	100.0%
Trafigura Environmental Solutions Sàrl	Switzerland	100.0%	100.0%
Trafigura Funding S.A.	Luxembourg	100.0%	100.0%
Trafigura Hamriyah FZE	United Arab Emirates	100.0%	100.0%
Trafigura Holding Sàrl	Switzerland	100.0%	100.0%
Trafigura Holdings Limited	Malta	100.0%	100.0%
Trafigura Holdings Pte. Ltd.	Singapore	100.0%	100.0%
Trafigura Hydrogen (Australia) Pty Ltd	Australia	100.0%	100.0%
Trafigura India Private Limited	India	100.0%	100.0%
Trafigura Investment (China) Co., Ltd.	China	100.0%	100.0%
Trafigura Limited	United Kingdom	100.0%	100.0%
Trafigura Maritime Logistics Pte. Ltd.	Singapore	100.0%	100.0%
Trafigura Maritime Ventures Limited	Malta	100.0%	100.0%
Trafigura Metales Basicos S.A.C.	Peru	100.0%	100.0%
Trafigura Mexico, S.A. de C.V.	Mexico	100.0%	100.0%
Trafigura Nat Gas Limited	Malta	100.0%	100.0%
Trafigura PE Holding Limited	Malta	100.0%	100.0%
Trafigura Peru S.A.C.	Peru	100.0%	100.0%
Trafigura Pte Ltd	Singapore	100.0%	100.0%
Trafigura Renewables S.à r.l.	Luxembourg	100.0%	100.0%
Trafigura Services Australia Pty Ltd	Australia	100.0%	100.0%
Trafigura Services South Africa (Pty) Ltd	South Africa	100.0%	100.0%
Trafigura Smelting Investments Limited	Malta	100.0%	100.0%
Trafigura Storage Investments Ltd	Malta	100.0%	100.0%
Trafigura Trading (Europe) Sàrl	Switzerland	100.0%	100.0%
Trafigura Trading (Hainan) Co., Ltd.	China	100.0%	100.0%
Trafigura Trading (UK) Limited	United Kingdom	100.0%	100.0%
Trafigura Trading (Yangshan) Co., Ltd.	China	100.0%	100.0%
Trafigura Trading LLC	United States	100.0%	100.0%
Trafigura US Inc.	United States	100.0%	100.0%
Trafigura Ventures Trading Ltd	Mauritius	100.0%	100.0%
Trafigura Ventures V B.V.	The Netherlands	100.0%	100.0%
Urion Holdings (Malta) Limited	Malta	100.0%	100.0%

45. Subsequent events

Accounting policy

If the Group receives information after the reporting period, but prior to the date of authorisation for issue, about conditions that existed at the end of the reporting period, the Group will assess if the information affects the amounts that it recognises in the Group's Consolidated Financial Statements. The Group will adjust the amounts recognised in its financial statements to reflect any adjusting events after the reporting period and update the disclosures that relate to those conditions in the light of the new information. For non-adjusting events after the reporting period, the Group will not change the amounts recognised in its Consolidated Financial Statements but, if material, will disclose the nature of the non-adjusting event and an estimate of its financial effect, or a statement that such an estimate cannot be made, if applicable.

Trafigura Beheer B.V. will defend itself at court against charges brought, after financial year end, by the Office of the Attorney General in Switzerland for failing to prevent alleged improper payments in Angola between 2009-2011.

46. Board of Directors

The Board of Directors	
Mark Irwin	José Larocca
Pierre Lorinet	Sipko Schat
Andrew Vickerman	Jeremy Weir

Singapore, 7 December 2023.

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