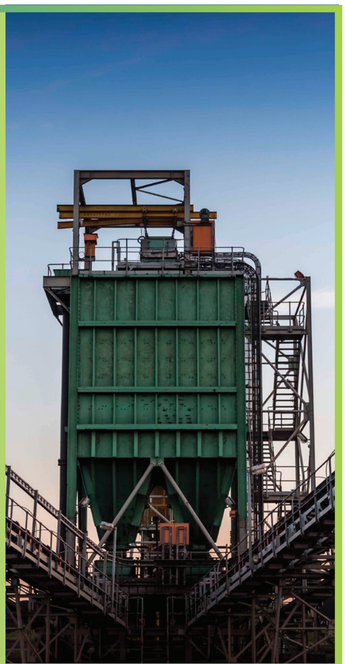
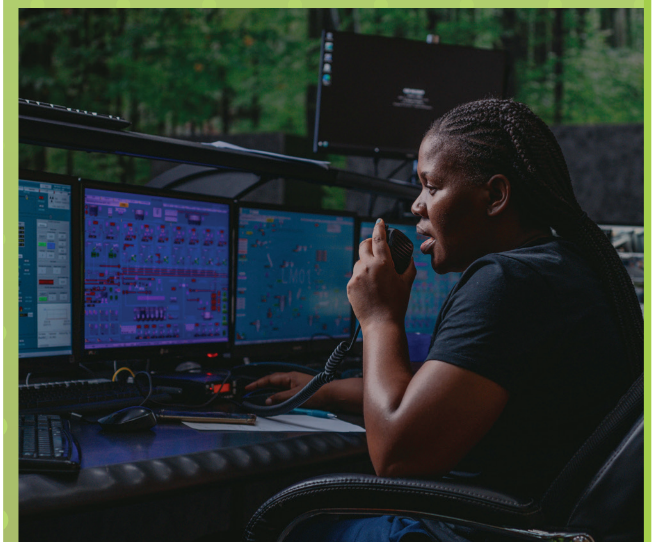
Our performance

Our values and culture are driving us towards our goals for society and the environment at large: we are empowered to grow and contribute within honest and responsible teams who are committed to excellence.





Finance director's overview

Riaan Koppeschaar
Finance director

Revenue of R46.4 billion up 41%	Adjusted equity-accounted income of R7.3 billion down 26%	Cash generated by operations at R18.9 billion up 79%
EBITDA of R19.0 billion up 78%	Headline earnings of R60.16 per share up 28%	Total ordinary dividend declared of R27.29 per share down 16%

"The strong commodity price performance together with our operational excellence efforts have contributed positively to our financial performance. Despite the logistical constraints, our managed operations were able to show strength and resilience resulting in a 78% increase in EBITDA to R19.0 billion. The contribution from our non-controlled operations showed a decrease with adjusted equity-accounted income decreasing 26% to R7.3 billion, mainly due to the performance of SIOC. This translated into basic HEPS rising to R60.16 compared to R46.83 in 2021. We are pleased to have declared a final ordinary dividend to shareholders of R11.36 per share, bringing the total dividend for the year to R27.29 per share."

Global economy and commodity prices

After a strong finish to 2021, the global economic expansion lost momentum during 2022. The growth rate in 2021 of 5.8% decreased to 2.8% in 2022. As financial market conditions deteriorated during the second half of 2022, the global economy remained at its highest vulnerability, with the risk of a global economic recession emerging.

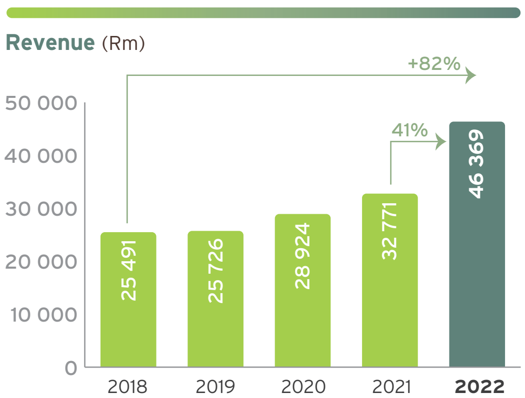
During 2022, our supply into global thermal coal markets was influenced by the Indonesian government's temporary ban on exports, inclement weather conditions, rail challenges in South Africa and labour issues in Australia. In addition, the Russia-Ukraine conflict sent global markets into turmoil as Europe's energy insecurity surfaced, which, among others, favoured South African seaborne thermal coal trade as international sanctions for Russian coal came into effect. For most of the year, the tight global gas market remained supportive to thermal coal demand and prices.

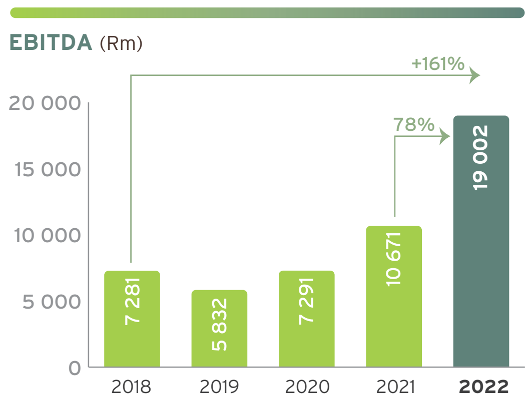
Despite the property sector weakness and widespread renewed COVID-19 lockdowns in China, the iron ore market started off the year relatively stable, supported by strong Chinese steel production. The iron ore market softened during April/May, with sentiment strengthening towards the end of the first half of 2022 from new stimulus measures and due to the easing of lockdown restrictions by the Chinese government. Weak demand sentiment in both China and Europe and global recession risks are expected to weigh on the iron ore market for the remainder of the year.

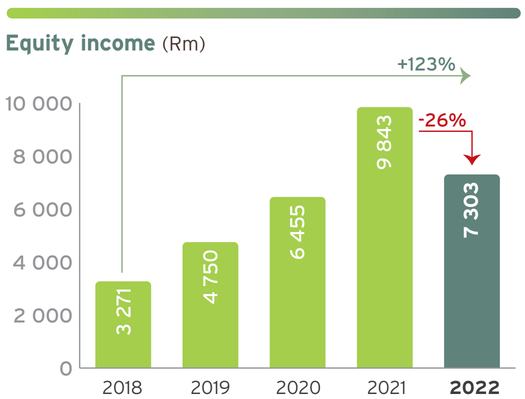
Group performance highlights

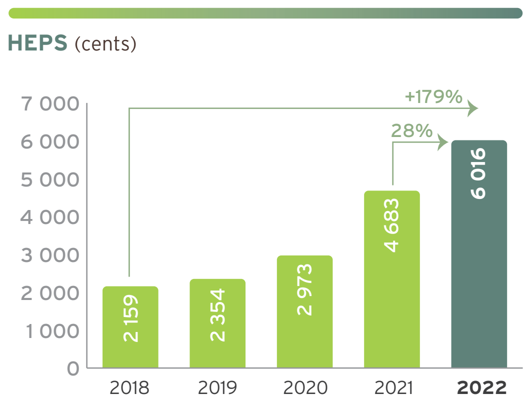
For a better understanding of the comparability of results between the two reporting periods, we have adjusted our financial results for non-recurring items (referred to as non-core adjustments) to derive our adjusted financial results. The non-core adjustments in both 2022 and 2021 are the same as the headline earnings adjustments, resulting in no differences in EBITDA and headline earnings, respectively.

Group performance* — double-digit growth challenging operating environment









Adjusted for non-core items.

Group revenue

Group revenue increased 41% to R46 369 million (2021: R32 771 million), mainly due to the exceptional performance of the coal business driven by higher export and domestic sales prices, despite the ongoing logistical challenges.

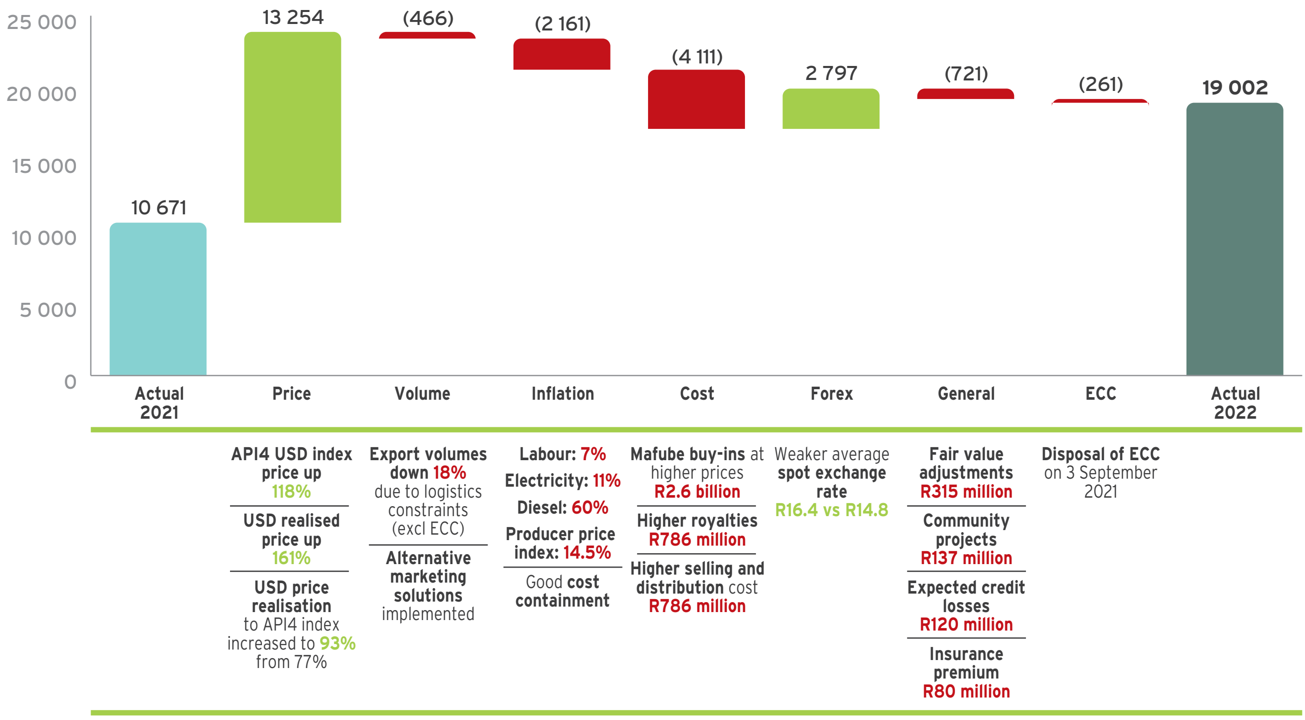
The revenue contribution from our energy business was 3% lower than 2021 due to persistent low wind conditions experienced during the past 12 months both in South Africa and across Europe.

Group EBITDA

Group EBITDA increased by 78% to R19 002 million (2021: R10 671 million), mainly attributable to a 78% increase in coal EBITDA.

The main drivers for the 78% increase in group EBITDA are provided in the graph below.

Group EBITDA – record EBITDA despite cost pressures (Rm)



We realised higher prices on our products in line with higher international coal prices. We are particularly proud of our price realisation of 93% compared to the API4 price index, which underscores the value of our early value coal strategy to render a high-quality product mix, enabling us to respond to changing market conditions.

As a result of logistical constraints, our export volumes decreased by 18% (excluding ECC) but through our concerted efforts, we were able to mitigate some of the losses through alternative logistical solutions including the use of alternative ports as well as trucking of coal.

2022 was characterised by double digit inflation growth in the mining sector but we were able to limit our cost increases to 12.7% for our coal operations as we continue to realise the benefits from our digital and operational excellence programmes.

Inflationary pressure on costs was mainly driven by diesel tariff increases that were significantly higher than the producer price index inflation rate.

Operational costs increased in line with higher production, and we bought in more coal from Mafube at higher prices.

Royalties increased in line with higher revenue as well as lower capital expenditure to offset against the revenue.

Selling and distribution costs increased due to the alternative logistical solutions we implemented.

The net positive forex variance is due to the impact of the weaker rand/US dollar exchange rate on realised and unrealised forex differences on foreign debtors and cash balances.

Included under general expenses are negative fair value adjustments on forward exchange contracts (FECs) and the environmental rehabilitation funds, higher spend on community projects, higher provision for expected credit losses as well as a higher insurance premium paid.

ECC, which was disposed of on 3 September 2021, is stripped out for comparability purposes.

Finance director's overview continued

Adjusted equity-accounted income

Adjusted equity-accounted income from associates and joint ventures decreased by 26% to R7 303 million (2021: R9 843 million).

Adjusted equity-accounted income and dividends received

	Adjusted equity-accounted income/(loss)			Dividends received		
	2022 Rm	2021 Rm	Change %	2022 Rm	2021 Rm	Change %
Coal: Mafube	1 902	375	407	750		100
Coal: Tumelo[1]		29	(100)			
Coal: RBCT	(9)	(18)	50			
Ferrous: SIOC	4 902	9 035	(46)	5 153	9 991	(48)
TiO_2: Tronox SA[2]		54	(100)			
Other: Black Mountain	578	352	64			
Other: LightApp	(70)	16	(538)			
Total	7 303	9 843	(26)	5 903	9 991	(41)

1 *Disposed on 3 September 2021 as part of ECC disposal transaction.*
2 *2021 equity-accounted income up to the date of disposal on 24 February 2021.*

The significant increase (+407%) in adjusted equity-accounted income from Mafube, our 50% joint venture with Thungela, was driven by higher export coal prices realised on higher sales volumes.

The 46% decrease in adjusted equity-accounted income from SIOC to R4 902 million (2021: R9 035 million) was primarily driven by lower market prices and volumes, as well as higher operating expenses, which were partially offset by a weaker currency.

An interim dividend of R2 498 million was received from our investment in SIOC in August 2022 (second half 2021: R6 329 million). SIOC declared a final dividend to its shareholders in February 2023. Exxaro's share of the dividend amounts to R1 419 million, which is 43% lower than the interim dividend received. The dividend will be accounted for in the first half of 2023.

The increase in the adjusted equity-accounted income of Black Mountain is mainly due to higher sales volumes at higher prices for zinc, lead, copper and silver.

Group earnings

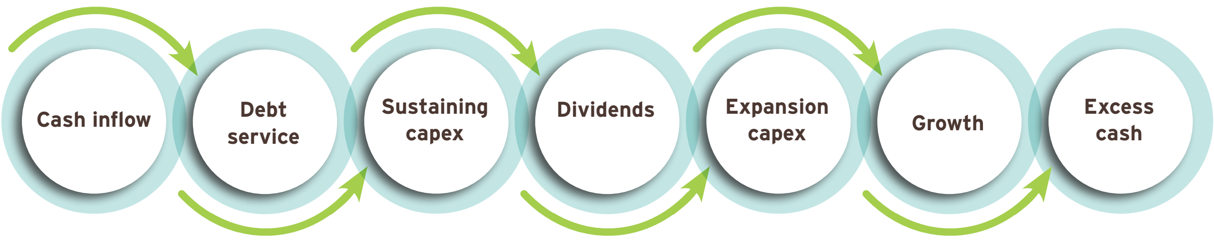
The strong contribution from our managed operations together with the contribution from our non-controlled operations resulted in a 26% increase in headline earnings to R14 558 million (2021: R11 568 million).

There was a decrease in the weighted average number of shares to 242 million (2021: 247 million) due to the shares that were bought back in 2021 as part of the share repurchase programme.

The increase in headline earnings, together with the lower weighted average number of shares translates to a record basic HEPS of 6 016 cents per share (2021: 4 683 cents per share), 28% higher than the prior year.

Capital management and shareholder returns

In terms of our capital allocation framework, free cash flow generated will be prioritised per the diagram below:



The diagram represents the order of our capital allocation framework. In applying our capital allocation framework, we aim for a gearing ratio of below 1.5 times net debt (excluding ring-fenced project financing) to EBITDA. The capital allocation framework is in line with our commitment to sustainably returning cash to shareholders through the cycle while retaining a strong financial position.

During 2022, we received cash of R20.6 billion (2021: R25 billion which included R5.8 billion proceeds from the disposal of our investment in Tronox Holdings plc in 2021), comprising R14.7 billion from our operations (net of tax paid) (2021: R9.2 billion) and dividend income received from our equity-accounted investments of R5.9 billion (2021: R10.0 billion).

In terms of our capital allocation framework, we then utilised this cash to mainly:

- Service our debt (net of interest received) of R0.3 billion (2021: R0.8 billion)
- Sustain our operations with capital expenditure of R1.4 billion (2021: R1.6 billion)
- Expand our operations with further capital expenditure of R0.3 billion (2021: R0.8 billion)
- Pay total dividends of R9.7 billion (2021: R13.7 billion)
- 2021 also included R1.5 billion for the implementation of the share repurchase programme

Given our net cash position (excluding ring-fenced project financing) at 31 December 2022 and 31 December 2021, our net debt to EBITDA cover ratio was well below our target of 1.5 times.

Exxaro remains in a strong liquidity position with a net cash balance of R5.2 billion as at 31 December 2022 (2021: net debt of R3 718 million) and undrawn borrowing facilities and maturities as set out below. If the Cennergi net debt is excluded, the net cash position at 31 December 2022 was R9.7 billion (2021: R764 million).

Capital funding structure – Exxaro excluding Cennergi

	Drawn Rm	Facilities available Undrawn/committed Rm	Facilities available Undrawn/unissued Rm
Term loan and revolving facility	3 850	3 250	
Domestic Medium-Term Note programme	643		4 000
Interest-bearing borrowings	4 493		
Interest capitalised	60		
Lease liabilities	420		
Capitalised transaction costs	(14)		
Total interest-bearing debt	4 959		
Current	544		
Non-current	4 415		
Net cash and cash equivalents	(14 612)		
Net cash	(9 653)		

Maturity profile of debt

Repayment period	4 959
Less than 6 months	301
6 – 12 months	243
1 – 2 years	1 139
2 – 3 years	508
3 – 4 years	2 564
4 – 5 years	80
> 5 years	124

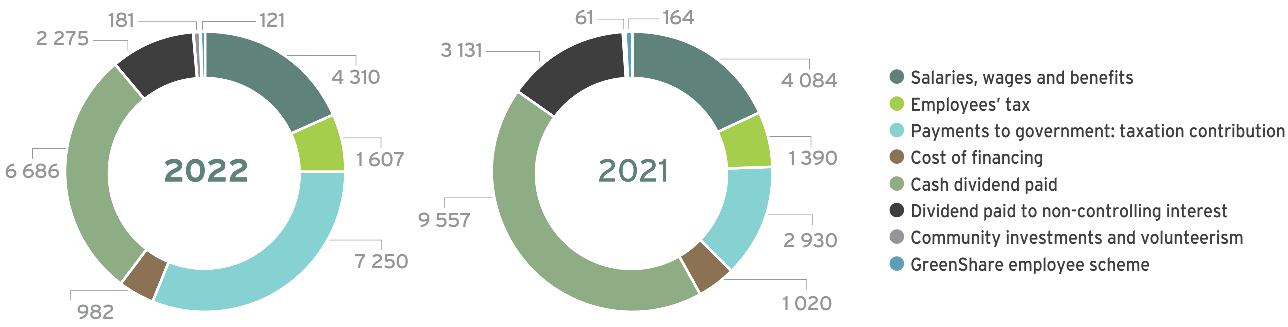
Capital funding structure – Cennergi

	Drawn Rm	Facilities available Undrawn/committed Rm
Project financing	4 551	410
Interest-bearing borrowings	4 551	
Interest capitalised	3	
Lease liabilities	58	
Total interest-bearing debt	4 612	
Net cash and cash equivalents	(200)	
Net debt	4 412	

Maturity profile of debt

Repayment period	4 612
Less than 6 months	95
6 – 12 months	116
1 – 2 years	273
2 – 3 years	349
3 – 4 years	449
4 – 5 years	555
> 5 years	2 775

Value distribution (Rm)



The value generated by Exxaro is distributed to its various stakeholders as follows:

- Employees receive salaries or wages, share-based payments as well as bonuses (where certain performance conditions are met)
- Employees' tax is deducted from employees' remuneration and paid to the South African Revenue Service
- The governments of the countries where Exxaro has operations and investments receive various taxes and royalty payments
- Cost of financing is payments to providers of finance who receive a return through interest and other loan costs
- Shareholders receive a return on their investment through dividends and capital growth in the share price
- Communities surrounding the operations of Exxaro benefit through CSI initiatives
- In terms of Exxaro's GreenShare employee scheme, employees received a further distribution of profits through dividends

All stakeholders benefit from continuous reinvestment into the group to ensure sustainability and expansion.

Finance director's overview continued

Summarised statement of financial position

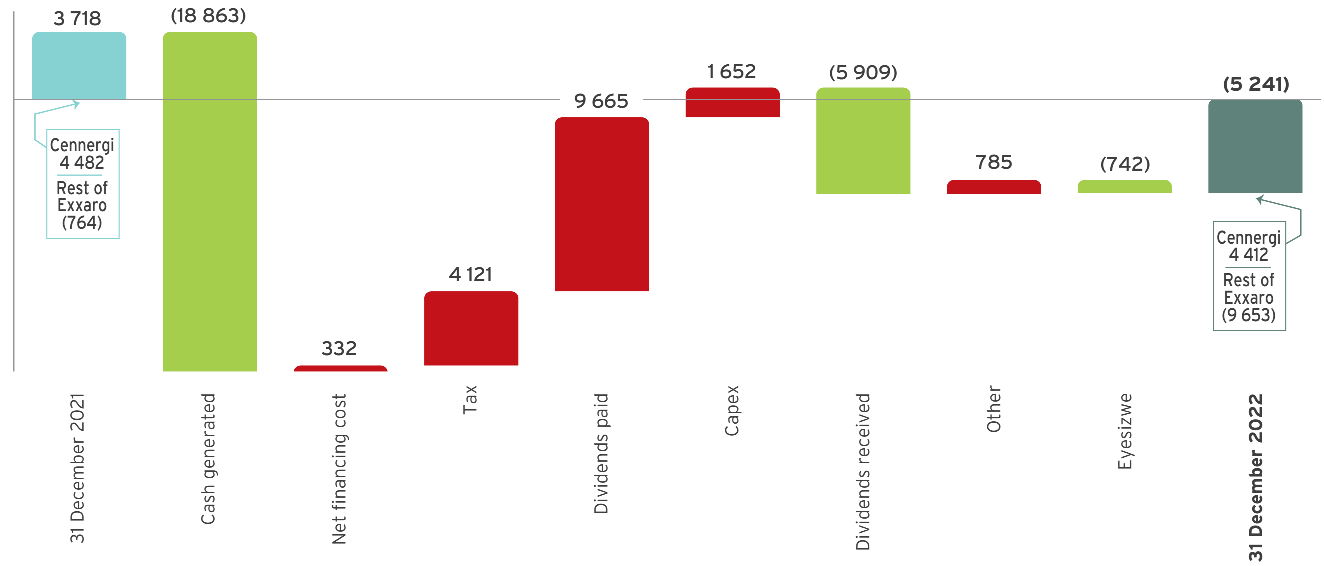
At 31 December

	2022 Rm	2021 Rm
Assets		
Non-current assets	**63 357**	63 298
Property, plant and equipment	**37 446**	38 351
Intangible assets	**2 760**	2 927
Right-of-use assets	**352**	401
Inventories	**176**	145
Equity-accounted investments	**18 060**	17 322
Financial assets	**3 539**	3 237
Deferred tax	**254**	369
Other assets	**770**	546
Current assets	**21 788**	12 419
Inventories	**1 728**	1 606
Financial assets	**376**	311
Trade and other receivables	**4 199**	2 701
Cash and cash equivalents	**14 812**	7 042
Current tax receivables	**101**	24
Other assets	**572**	735
Total assets	**85 145**	75 717
Equity and liabilities		
Capital and other components of equity		
Share capital	**983**	983
Other components of equity	**1 700**	1 560
Retained earnings	**44 136**	37 007
Equity attributable to owners of the parent	**46 819**	39 550
Non-controlling interests	**12 560**	10 548
Total equity	**59 379**	50 098
Non-current liabilities	**20 574**	20 841
Interest-bearing borrowings	**8 378**	9 255
Lease liabilities	**438**	470
Other payables	**25**	53
Provisions	**2 762**	2 201
Retirement employee obligations	**165**	159
Financial liabilities	**112**	406
Deferred tax	**8 668**	8 271
Other liabilities	**26**	26
Current liabilities	**5 192**	4 778
Interest-bearing borrowings	**715**	1 000
Lease liabilities	**40**	34
Trade and other payables	**3 340**	2 230
Provisions	**179**	101
Financial liabilities	**5**	
Overdraft		1
Current tax payables	**143**	418
Other liabilities	**770**	994
Total liabilities	**25 766**	25 619
Total equity and liabilities	**85 145**	75 717

Property, plant and equipment decreased by R905 million when compared to the corresponding period last year, which includes R1 401 million spend on sustaining capex (stay-in-business capex) and R251 million on expansion capex, offset by depreciation charges of R2 457 million. The net movement further included borrowing costs capitalised.

The graph below summarises key movements in the net debt balance for the year ended 31 December 2022.

Group results – net debt/(cash)
(Rm)



Portfolio optimisation

Exxaro initiated the Leeuwpan divestment process as part of its ongoing portfolio optimisation strategy to ensure the future resilience of our coal business. Unfortunately, progress on the divestment stalled and the process was stopped in the third quarter of 2022 to ensure stability at the mine. Exxaro will continue to review its coal assets and projects in line with its strategic goals.

Exxaro continues to evaluate its options to dispose of its 26% shareholding in Black Mountain.

Financial KPIs

The achievement of our financial KPIs is presented in the table below.

All internal KPIs are well within target, indicating a healthy balance sheet and strong cash flow generation. The impact of various coal sensitivity measures as well as the key financial risk factors can be further used to stress test our current headroom.

The group has complied with all the below mentioned bank covenants for the year ended 31 December 2022 and the previous financial year.

KPIs

	Target	2021	2022
Internal KPIs			
EBITDA interest cover*# (times)	>4	75	
Net debt/(cash): equity* (%)	<40	(2)	(17)
Net debt: EBITDA*## (times)	<1.5		
Return on total capital employed (%)	>20	36	45
Bank covenants**			
Net debt/(cash): equity (%)	<80	(1)	(16)
EBITDA interest cover# (times)	>4	35	
Net debt: EBITDA## (times)	<3		

* *Excluding Cennergi consolidated results.*
** *Including dividends received from associates and contingent liabilities, except DMRE guarantees and excluding Cennergi consolidated results.*
\# *Exxaro is in a net finance income position in 2022.*
\## *Exxaro is in a net cash position.*

Cennergi

The project financing debt under Cennergi is subject to the following financial covenants which have been achieved for both 2022 and 2021:

Tsitsikamma SPV loan facility

- Historic debt service cover ratio[1] for the calculation period ending on a calculation date is not less than 1.10:1
- Minimum annual forecast debt service cover ratio for the next calculation period is not less than 1.10:1
- Loan life cover ratio[2] is not less than 1.15:1
- Project life cover ratio[3] is not less than 1.25:1

[1] *The ratio of A to B where, A is the aggregate cash flow available for debt service (CFADS) less taxes and B is the aggregate of the finance costs, in each case for the relevant calculation period.*
[2] *The ratio of A to B where, A is the net present value of forecast CFADS from such calculation date to (and including) the final scheduled repayment date, discounted at the discount rate (as produced by the financial model) and B is the aggregate of the facility outstanding on such calculation date.*
[3] *The ratio of A to B where, A is the net present value of forecast CFADS from such calculation date to the end of the tenor of the PPA discounted at the discount rate and B is the aggregate of facility outstanding as at such calculation date.*

Amakhala SPV loan facilities

- Projected senior debt service cover ratio[1] for the immediately following measurement period is not less than 1.10:1
- Historic senior debt service cover ratio[1] for the immediately preceding measurement period is not less than 1.10:1
- Senior loan life cover ratio[2], as at each measurement date, is not less than 1.15:1
- Senior project life cover ratio[2], as at each measurement date, is not less than 1.30:1
- Projected total debt service cover ratio[3] for the immediately following measurement period is not less than 1.05:1
- Historic total debt service cover ratio[3] for the immediately preceding measurement period is not less than 1.05:1
- Total loan life cover ratio[4], as at each measurement date, is not less than 1.10:1
- Total project life cover ratio[4], as at each measurement date, is not less than 1.20:1

[1] *The ratio of CFADS to senior debt service for that period.*
[2] *The ratio of the applicable total present value amount, as at that measurement date to the sum of (i) the senior facility outstanding and (ii) all the IFC facility outstanding, as calculated and produced by the financial model, as part of the forecast for that measurement date.*
[3] *The ratio of CFADS to total senior debt service for that period.*
[4] *The ratio of the applicable total present value amount, as at that measurement date to total facility outstanding, as calculated and produced by the financial model, as part of the forecast for that measurement date.*

Coal sensitivity analysis

The following diagram indicates key sensitivities on the coal net operating profit.

Coal sensitivities – 2022

Measure	Sensitivity	Impact on net operating profit (Rm)	
Royalty cost	1%	(450)	450
Domestic sales volumes	1%	(338)	338
Environmental rehabilitation discount rate	1%	(218)	194
Production cost	1%	(196)	196
Export sales volumes	1%	(155)	155
Exchange rate	10 cents	(118)	118
Export price per tonne	US$1	(85)	85
Labour	1%	(30)	30
Railage	1%	(29)	29
Fuel	1%	(15)	15
Energy	1%	(6)	6

Key financial risk factors affecting our performance

The group's corporate treasury function predominantly provides financial risk management services to the business, coordinates access to domestic and international financial markets, and monitors and manages the financial risks relating to the operations of the group through internal risk reports that analyse exposure by degree and magnitude of risks. These risks include market risk (including foreign currency risk, interest rate risk and price risk), credit risk and liquidity.

In managing its capital, the group focuses on a sound net debt position, return on shareholders' equity (or ROCE) and the level of dividends to shareholders. The group's policy is to cover its annual net funding requirements through long-term loan facilities with maturities spread over time. Neither the company nor any of its subsidiaries are subject to externally imposed capital requirements.

Market risk management

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates, commodity prices and equity prices, will affect profit or the value of its holdings of financial instruments.

The objective of market risk management is to manage and control market risk exposure within acceptable parameters, while optimising the return on risk.

The group's activities expose it primarily to the financial risks of foreign currency exchange rates, commodity prices, interest rates and changes in the environmental rehabilitation fund and portfolio investment quoted prices.

Price risk management

The group's exposure to price risk in relation to quoted prices of the environmental rehabilitation funds and portfolio investments is not considered a significant risk as the funds are invested with reputable financial institutions in accordance with a strict mandate to ensure capital preservation and growth. The funds are held for strategic purposes rather than trading purposes.

Foreign currency risk

Certain transactions are denominated in foreign currencies, hence exposures to exchange rate fluctuations arise. The currency in which transactions are entered into is mainly denominated in US dollar, euro and Australian dollar. Exchange rate exposures are managed within approved policy parameters utilising FECs, currency options and currency swap agreements.

The group maintains a fully covered exchange rate position in respect of foreign loan balances (if any) and imported capital equipment resulting in these exposures being fully converted to rand. Trade-related import exposures are managed through the use of economic hedges arising from export revenue as well as through FECs. Trade-related export exposures are hedged using FECs and currency options with specific focus on short-term receivables.

Uncovered cash and cash equivalents amounted to US$32.89 million (2021: US$49.85 million).

Monetary items have been translated at the closing rate at the last day of the reporting period.

The FECs that are used to hedge foreign currency exposure mostly have a maturity of less than one year from the reporting date. When necessary, FECs are rolled over at maturity.

	2022			2021		
	Average spot rate	Average achieved rate	Closing spot rate	Average spot rate	Average achieved rate	Closing spot rate
US$	16.37	16.63	16.98	14.78	14.88	15.94
€	17.19		18.10	17.47		18.04
AU$	11.34		11.49	11.11		11.55

Interest rate risk

The group is exposed to interest rate risk as it borrows and deposits funds at floating interest rates on the money market and extended bank borrowings. The group's main interest rate risk arises from long-term borrowings with floating rates, which expose the group to cash flow interest rate risk. The risk is managed by undertaking controlled management of the interest structures of the investments and borrowings, maintaining an appropriate mix between fixed and floating interest rate facilities in line with the interest rate expectations. The group also uses interest rate swaps and interest rate forwards to manage the interest rate risk exposure.

When the contractual terms of the borrowings and covenants thereof require the use of hedging instruments to mitigate the risk of fluctuations of the underlying interest rate risk cash flow exposure and the impact on profit or loss of specific projects being financed, the group looks to apply hedge accounting where an effective hedge relationship is expected and to the extent that such exposure poses a real risk to the achievement of the loan covenants.

The financial institutions chosen are subject to compliance with the relevant regulatory bodies.

Finance director’s overview continued

Loan facility and bonds

The loan facility and bonds were entered into at floating interest rates.

The interest rate repricing profile for the loan facility and bonds is summarised below:

	1 to 6 months Rm	Total borrowings Rm
At 31 December 2022		
Non-current interest-bearing borrowings: loan facility and bond	(4 034)	(4 034)
Current interest-bearing borrowings: loan facility and bond	(505)	(505)
Total interest-bearing borrowings: loan facility and bond	(4 539)	(4 539)
Total borrowings (%)	100	100
At 31 December 2021		
Non-current interest-bearing borrowings: loan facility and bond	(4 704)	(4 704)
Current interest-bearing borrowings: loan facility and bond	(851)	(851)
Total interest-bearing borrowings: loan facility and bond	(5 555)	(5 555)
Total borrowings (%)	100	100

Project financing (Cennergi)

The group is exposed to the risk of variability in future interest payments on the project financing, attributable to fluctuations in the three-month Johannesburg Interbank Average Rate. The designated hedged item is the group of forecast floating interest rate cash flows arising from the project financing, up to the notional amount of each interest rate swap, over the term of the hedging relationship. The notional amounts per interest rate swap match up to the designated exposure being hedged.

Where all relevant criteria are met, hedge accounting is applied to remove the accounting mismatch between the hedging instrument and the hedged item. This will effectively result in recognising interest expense at a fixed interest rate for the hedged project financing.

The exposure profile is summarised as follows:

	Group			
	Percentage exposure			
At 31 December	2022 %	2021 %	2022 Rm	2021 Rm
Project financing nominal amount	100	100	(4 554)	(4 700)
— Linked to fixed rate	3	3	(141)	(145)
— Linked to floating rate	97	97	(4 413)	(4 555)
Project financing nominal amount linked to floating rate	97	97	(4 413)	(4 555)
Interest rate swap notional amount (swap floating rate to fixed rate)	(81)	(81)	3 691	3 808
Effective floating rate exposure on project financing[1]	16	16	(722)	(747)

[1] *Represents 40% exposure on the Tsitsikamma SPV project financing.*

Liquidity risk

Liquidity risk is the risk that the group will not be able to meet its financial obligations as they fall due. The group’s approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under normal and stressed conditions, without incurring unacceptable losses or risking damage to the group’s reputation.

The ultimate responsibility for liquidity risk management rests with the board of directors, which has built an appropriate liquidity risk management framework for the management of the group’s short, medium and long-term funding and liquidity management requirements.

The group manages liquidity risk by monitoring forecast cash flows in compliance with loan covenants and ensuring that adequate unutilised borrowing facilities are maintained.

Borrowing capacity is determined by the board of directors, from time to time.

	Group	
	2022 Rm	2021 Rm
Amount approved	58 524	49 438
Total borrowings	(9 093)	(10 255)
Unutilised borrowing capacity	49 431	39 183

The group's capital base, the borrowing powers of the company and the group were set at 125% of shareholders' funds for both the 2022 and 2021 financial years.

To avoid incurring interest on late payments, financial risk management policies and procedures are entrenched to ensure the timeous matching of orders placed with goods received notes or services acceptances and invoices.

Credit risk

Credit risk relates to potential default by counterparties on cash and cash equivalents, loans, investments, trade receivables and other receivables.

The group limits its counterparty exposure arising from money market and derivative instruments by only dealing with well-established financial institutions of high credit standing. The group's exposure and the credit ratings of its counterparties are continuously monitored, and the aggregate value of transactions concluded are spread among approved counterparties. Credit exposure is controlled by counterparty limits that are reviewed and approved by the audit committee annually.

Exxaro has concentration risk as a result of its exposure to one major customer. This is, however, not considered significant as the customer adheres to the stipulated payment terms.

Exxaro establishes an allowance for non-recoverability or impairment that represents its estimate of expected credit losses in respect of trade receivables, other receivables, loans, cash and cash equivalents and investments. The main components of these allowances are a 12-month expected credit loss component that results from possible default events within the 12 months after the reporting date and a lifetime expected credit loss component that results from all possible default events over the expected life of a financial instrument.

Expected credit loss allowances increased by 76% to R183 million (2021: R104 million). The increase mainly relates to ESD loan recipients struggling to keep up with payments. The ESD committee is renegotiating payment terms for some of these loans. ESD loans to the value of R1.6 million have been written off at 31 December 2022.

The carrying amount of financial assets represents the maximum credit exposure. None of the financial assets were held as collateral for any security provided.

Outlook

Economic context

The aggressive nature of the interest rate increases by central banks globally, on the back of stubbornly high inflation rates, has moderated the global economic outlook for 2023 to fall short of the potential growth levels. The United Kingdom and broader Europe specifically run the risk of a recession, and any new major economic shocks could tip the world economy into a global recession. However, the relaxation of China's strict COVID-19 and real estate sector policies are expected to support the Chinese and global economic activity.

South Africa's subdued economic performance in 2022 reflected the lingering effects of the unrest in July 2021, the extensive flooding in April 2022 and slowing global growth, alongside the structural constraint of inadequate electricity supply. Energy reforms are underway, with tangible commitments expressed by potential investors. Speedy and judicious implementation could raise private investment, aiding economic activity.

The rand/US dollar exchange rate is expected to remain volatile during the first half of 2023.

Commodity markets and price

The heightened European interest in South African thermal coal is expected to remain well into 2023, as Europe continues to find solutions to be independent from Russian energy sources. South African thermal coal exports into high caloric value markets, such as South Korea and Japan, present further opportunities for Exxaro. The expected global gas trade flows and market prices, post the European winter months, are expected to remain supportive of seaborne thermal coal demand and prices. Stronger demand from the Pacific is expected as South African coal continues to trade at a discount to Australian coal.

Supply tightness and higher prices in the seaborne thermal coal markets spilled over into the South African domestic market and are expected to support domestic prices into 2023. The domestic market demand for both sized and unsized product is still strong, despite declines in export pricing. Although pricing has held up compared to the export market, indications of pricing pressures are seen for products destined for export. Consequently, domestic market participants are experiencing margin squeeze when trucking coal to alternative ports, as export prices are declining.

For the iron ore market, increasing steel demand and the seasonal low iron ore supply from Australia and Brazil, due to rainy weather, will support seaborne prices in the first quarter of 2023. In the latter part of the first half of 2023, further support is expected from the positive market sentiment amid China's economic revival.

Operational performance (page 86)

Given the ongoing challenges with rail performance, the business continues to respond with our market to resource optimisation strategy, ensuring continued operations and diversified export flows by trucking coal to alternative loading stations and ports. We continue to evaluate alternative logistical options to evacuate our export product.

Riaan Koppeschaar
Finance director

14 April 2023

Operational performance

Our manufactured capital comprises the physical mining and energy assets we require to deliver our products, primarily coal and energy. Our operational performance is impacted by the quality of the assets we own and how effectively we utilise these assets.

Exxaro's manufactured capital consists of five mines, including a joint venture; two coal projects; a ferro-silicon manufacturing facility; and two windfarms. These assets are substantial in size. It is critical to invest in them to ensure their enduring value, upkeep and performance, and optimise their utilisation in delivering our products at optimal qualities.

We strive to positively impact our operational performance through:
- Appropriate stay in business capital investments
- Optimisation strategies
- Market to resource strategy
- Portfolio review

Material theme	Matter	Our strategic response	Our impact on the SDGs
Adapting to a changing context	• Geopolitical context • Macro-environment • Supporting a just transition to a low-carbon economy • Commodity price risk	• Transition at speed and scale • Make our minerals and energy businesses thrive	7 Affordable and clean energy 12 Responsible consumption and production 13 Climate action
Executing our strategy	• Coal portfolio optimisation • Diversify into minerals • Build a leading global renewable energy solutions business		

How we will achieve this

To achieve excellent operational performance, through executing our strategy in portfolio optimisation and effective utilisation of our invested capital. We do this through operational excellence and digitalisation programmes, optimisation strategies, internal cost savings and utilising data science for decision making.

Our operational performance areas comprise:
- Coal
- Energy
- Ferrous
- Portfolio optimisation
- Investments in minerals and renewable energy

Snapshot of our performance

Product volumes	Sales volumes	Export volumes
43.1Mt	42.1Mt	5.2Mt

Coal

Despite major rail constraints, our operational excellence and digitalisation programmes focus on safety, productivity improvements and cost management that deliver value. Through our integrated operations centres and market to resource optimisation strategy, we continue to enable timeous decision making, allowing our business to focus on controllable elements, thus limiting the impact of the disruptions in the value chain. We are continuing with our drive to enhance this process through our data sciences and advanced analytics, which is a large part of our digital programme going forward.

International thermal coal pricing reached record highs in 2022 with the API4 averaging US$270.87/t versus US$124.12/t in 2021. Prices were supported by increased demand from Europe with the onset of the Russia-Ukraine conflict and the embargo that was placed on Russian coal. Pricing was further supported by supply chain disruptions such as bad weather, mine incidents, labour issues and logistics constraints. Shortage of liquefied natural gas and other gas also drove European coal prices higher based on gas-to-coal switching where possible.

Cost per tonne

Production cost per tonne was impacted by increased inflation resulting in higher fuel and blasting expenses. We further experienced higher maintenance, which was offset by savings on contractor costs, resulting in a net saving in production costs.

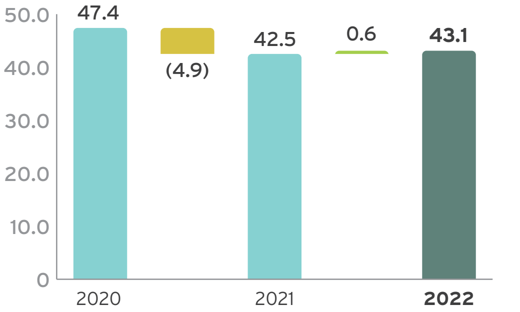
Other operational costs were impacted by increased royalties, based on increased revenue and lower capital spend, distribution cost providing for alternative logistical channels, general expenses and rehabilitation, offset by a positive impact on foreign currency movements, resulting in a net increase in operational cost.

Our net cash cost per tonne remained below mining inflation.

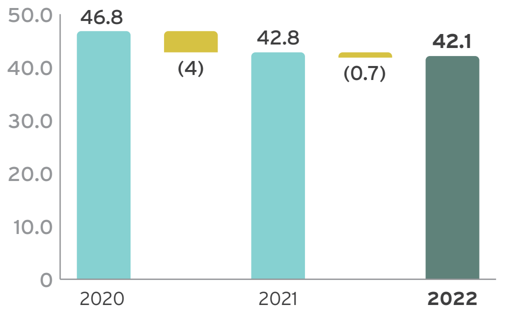
Internal cost saving initiatives were focusing on improved efficiencies remain a major focus to address the inflation challenges.

To further remain competitive across various markets, our operational excellence and digital programmes continue to focus on specific projects across the value chain, which are aimed at managing stock levels and productivity, thus reducing overall production costs.

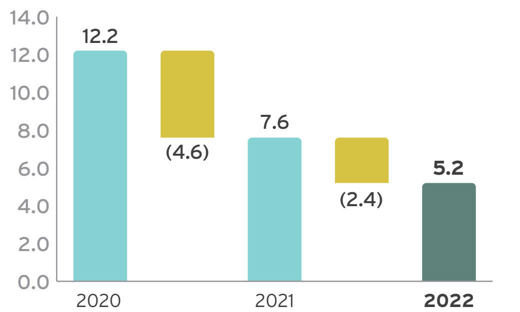
Total coal product
(Mt)



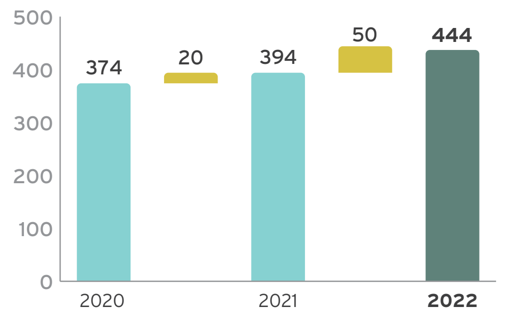
Total coal sales
(Mt)



Coal export sales
(Mt)



Cost per tonne
(R/t)



Energy

Cennergi

Cennergi's EBITDA margin was 80% (2021: 83%), showing the consistency of earnings underpinned by long-term offtake agreements.

The two windfarms' performance generated 671GWh in 2022 (2021: 724GWh). The decrease in generation resulted from persistent low wind conditions. In South Africa and regions such as Europe, windfarms have experienced below-normal wind conditions over the past 12 months. Our average equipment availability of 97.9% was better than contracted levels of 97.0%.

Ferrous

SIOC

- Adjusted equity-accounted income of R4.902 billion (2021: R9.035 billion) primarily driven by lower market prices and volumes and higher operating expenses which were partially offset by a weaker currency
- Dividends received of R5.153 billion to Exxaro in 2022 (2021: R9.991 billion)

Portfolio optimisation

Black Mountain

Exxaro continues to evaluate its options to dispose of its 26% shareholding in Black Mountain.

Leeuwpan

Exxaro initiated the Leeuwpan divestment process as part of its ongoing portfolio optimisation strategy to ensure the future resilience of our coal business. Progress on the divestment stalled and the process was stopped in the third quarter of 2022 to ensure stability at the mine. Exxaro will continue to review its coal assets and projects in line with its strategic objectives.

Business resilience

Our intellectual capital comprises the unique combination of knowledge, experience, innovation and systems that differentiate Exxaro. We leverage these elements to respond to market challenges and position our business for the future.

Technology and innovation are evolving exponentially – driving changes to patterns of production, consumption and ways of working. Exxaro is focused on both driving and leveraging those changes that can positively impact our business's value and sustainability. We apply our collective knowledge, skills and resources to ensure our business is responsive while safeguarding our people, assets and the business.

We strive to positively impact our intellectual capital through:
- Maintaining our competitive advantage through innovation and digitalisation
- Using our intellectual capital and differentiation to transition our already successful business into a company that remains sustainable, growth orientated, values driven into the future
- Becoming a leading international renewable solutions provider by 2030

Material theme	Matter	Our strategic response	Our impact on the SDGs
Adapting to a changing context	• Geopolitical context • Country risk • Supporting a just transition to a low-carbon economy	• Transition at speed and scale • Make our minerals and energy businesses thrive • Become a catalyst for economic growth and environmental stewardship • Proactive reputation management	12 Responsible consumption and production 13 Climate action 16 Peace, justice and strong institutions 17 Partnerships for the goals
Executing our strategy	• Portfolio optimisation (coal and investment) • Diversify into minerals • Build a leading global renewable energy solutions business • Implementing high-impact socio-economic development programmes		
Driving business resilience	• Capital allocation • Cyber risk • Innovation and digitalisation		

How we achieve this

Our operations must be able to overcome frequent challenges and adapt to change in global and local markets. We do this through efficient project portfolio management and capital allocation, increasing our competencies across mining and renewable energy, and investing in innovation, digitalisation and technology.

Business resilience comprises:
- Capital allocation
- Investments in renewable energy
- Driving innovation and information management
- Reputational resilience
- Stakeholder relationship management (page 36)

Snapshot of our performance

	Inputs	Outcomes
Capital allocation	• GG6 completed • Developed infrastructure projects for Matla • Engagements with Eskom about funding in progress	• GG6 small coal plant handed over to Grootegeluk operations • Matla will be able to produce 10Mtpa of thermal coal
Investments in renewable energy	• Acquired full ownership of Cennergi in 2020 • Financial close for the first solar plant for supply to the Grootegeluk mine expected in the second quarter of 2023	To be a leading international renewable energy solutions provider by 2030 to: • Fulfil own generation needs • Expand South African services and distributed generation footprint • Potential to decarbonise current business operations (scope 1 or 2 emissions)
Driving innovation and information management	• Collaborating through open innovation • Our RRODA platform/tool • Cybersecurity awareness campaigns	• Core system availability: 97.94% (2021: 99.55%) • Secure scorecard: 76.35% (2021: 63.45%)
Reputational resilience	• Stakeholder reputation surveys	• Stakeholder reputation • Stakeholder sentiment

Capital allocation

Exxaro continues to focus on the portfolio of growth and sustaining capital projects by executing our early value strategy and our capital excellence journey.

Salient features for 2022

Capital expenditure decreased by 33% from 2021 to **R1 652 million**

R1 401 million applied to sustaining and environmental capital (stay-in-business capital) (2021: R1 635 million)

R251 million invested in **new capacity** (expansion capital) (2021: R836 million)

Project	Classification (growth/ sustaining)	Product	Focus and performance	Capital expenditure	Outlook
Location: Waterberg (Limpopo)					
We commissioned the GG6 expansion project's new small coal plant, and all four modules are in production. We combined, converted, improved and expanded the capacity of the existing GG2 plant into an efficient double-stage beneficiation plant, with all modules in production. The forecast final cost at completion remains R5.3 billion.					
GG6 expansion	Growth	1.7Mtpa of semi-soft coking coal	Expanding the existing Grootegeluk 2 plant to enable production of semi-soft coking coal	R5.3 billion	First production through the small coal plant was achieved during the first quarter of 2021. Construction was concluded during the fourth quarter of 2021. The project will close by the first half of 2023.
Location: Mpumalanga					
We implemented a programme of infrastructure projects to support Matla to achieve a 10Mtpa production objective once fully ramped up. Exxaro continues to engage with Eskom to release the required funding to execute the full scope of the programme.					
Matla LoM programme	Sustaining	10Mtpa of thermal coal	Developing infrastructure to support LoM production	R3.8 billion	Construction of the box cut and silo for Matla Mine 1 has been completed. We aim to complete the tunnel development and incline conveyor in the second half of 2023. Equipment manufacturing is progressing as planned. We aim to complete Mine 2 and 3 development in the first half of 2025. We expect to complete and conclude the programme in the second half of 2025.

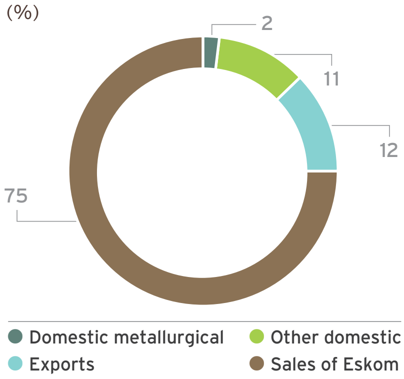
Coal

Capital expenditure in our coal business decreased 33% lower compared to 2021, driven by 72% lower spend on expansion capital as we completed the construction of the GG6 plant.

Sustaining capital decreased by 12% due to less spend at Grootegeluk and Belfast. We are starting to realise the benefit of our Capital Excellence journey which is a combination of project savings and improved timing on project execution.

	2022 actual	2022 previous guidance	2021 actual	% change previous guidance
Sustaining	1 374	1 430	1 564	(4)
Waterberg	1 117	1 158	1 285	(4)
Mpumalanga	252	256	261	(2)
Other	5	16	18	(68)
Expansion	231	257	840	(10)
Waterberg	231	257	709	(10)
Mpumalanga			131	(100)
Total	1 605	1 687	2 404	(5)

Coal sales by product tonnes
(%)



Investments in renewable energy

No investments in renewable energy were made for the year under review. However, progress was made on developing the Lephalale solar project during the year. The intent is to target financial close by the first half of 2023, thereafter followed by construction. The project will cost between R1.52 billion and R1.58 billion to develop 68MW.

Driving innovation and information management

Highlights

- Our established centres of excellence (CoEs) support our digitisation strategy
- The business applications CoE drives citizen development, which is empowering end-users to develop their own non-complex applications and workflows to improve task execution and productivity
- Data analytics is embedded in the way we do business with BUs using dashboards to enable decision making
- The intelligent automation CoE has automated 34 business processes since 2018, which has resulted in saving 90 000 hours over three years
- We use NAVEX One's conflict of interest solution and standardised policy management
- Our learning management solution embraces digital learning capabilities
- We deployed the Slope Stability Monitoring solution to monitor the movement and slopes of high walls. It also triggers evacuation in emergency situations
- We deployed a solution that designs blasting plans and monitors implementation
- Our electrical condition monitoring manages conditions of the substations
- We use Etap modelling of electrical networks for simulation of electrical networks
- We deployed an Pix4D solution for drone surveying at Belfast and Grootegeluk for survey in the professionals in training (PIT) programme

Innovation is the ultimate white label word, the definition relying on the context in which it is used. Within Exxaro's context innovation is defined as the discovery, incubation, and implementation of cutting-edge solutions with the aim of adding value by refining efficiency, increasing effectiveness, and enhancing competitive advantage.

Due to the broad nature of innovation and its reliance on the context in which it is intended to be used, innovation is further categorised into four classifications namely, sustaining, incremental, radical and disruptive. Radical and disruptive types of innovation have been difficult to identify, source and implement while keeping focus on our core business. The innovation management team identified access to the broader innovation ecosystem as the best port of call to source these radical and disruptive innovation while not being inhibited by typical search engine constraints.

Exxaro's innovation management strategy is aimed at identifying areas where innovative solutions will support Exxaro's strategy. Innovation management's approach is underpinned by gaining access to an innovation ecosystem through partnerships with industry bodies, tech disruptors and innovators, it is anticipated to have a global reach of capabilities to assist in solving business challenges.

Exxaro's innovation strategy promotes collaboration with people and organisations outside the company. It promotes the belief that knowledge and creative initiatives from outside the company can contribute to achieving strategic goals.

In 2022, the innovation management team established the foundational elements required to project Exxaro's innovation journey to enable elements of the broader Exxaro strategy. This included external and internally focused efforts, the first of which was embedding within and aligning innovation to business optimisation and supply chain management processes. This was to enable key internal processes to support and embed innovation. This further supported the successful establishment of an ecosystem, resulting in a working relationship with a range of external innovation partners. A number of challenges were published to the innovation ecosystem focused on decarbonisation and improving operational efficiencies. The result of these challenges was exposure to innovative technologies that could not have been uncovered through traditional processes, one of which translated into approval to proceed with proofs of concept to test a solution at Mafube and Grootegeluk.

The achievements and traction of 2022 bode well for the 2023 roadmap and plan. With further development and extracting value from the implemented foundational elements completed in 2022, an additional focus area for 2023 looks to develop a systematic approach to innovation that will further embed innovation into the business planning and strategy process. This will enable the necessary strategy, processes, governance, resources and measurement to further enhance Exxaro's innovation journey.

Cybersecurity

With the ever-increasing cyber threat landscape, we have intensified our efforts to secure and safeguard our information and digital assets. There is continuous commitment and focus on enhancing our internal capabilities to identify, detect, respond and recover in the event of a cyberattack.

To improve our security posture and resilience, we are strengthening our controls to align with global best practices and deployed several systems to facilitate this. These include a data loss prevention tool to address privacy risks relating to sensitive information, continuous monitoring of our control environment by performing self-assessments and independent reviews to ensure the effectiveness of our mitigation actions and remediation of weaknesses. In so doing, we improved our cybersecurity score by 12.9% since the beginning of 2022.

Driving innovation

Exxaro takes great pride in our deep-rooted culture of innovation. We firmly believe that innovation is not limited to any particular department within the organisation, but rather, it is the responsibility of all employees to contribute to this effort. Our various departments, with their unique objectives and goals, are constantly innovating in different ways. For example, the business optimisation department focuses on efficiency, while the strategy and business transformation department concentrate on management innovation. Further, the projects and technology function is responsible for equipping our BUs with cutting-edge, forward-looking technologies, to ensure we keep on thriving as technology evolve within mining.

To ensure that all our functions have the necessary resources and capabilities to search for, identify, access, and accelerate these innovations, we have equipped our people with various innovation tools. These tools allow our employees to critically evaluate the need and implications of innovation, ensuring that purpose-driven innovation is at the heart of all our initiatives, and that value is continuously added to the triple bottom line.

One of the tools we have equipped our people with is access to an ecosystem approach to search for, identify, and access innovation. We recognise that innovation is amplified when knowledge and ideas are not isolated within our organisation. Therefore, we collaborate and partner with key stakeholders, such as government, research institutions, incubators, and accelerators. By taking a systems approach to solve large and systemic problems, we are able to leverage the strengths of these organisations and benefit from their expertise.

We place particular importance on collaborating with government stakeholders since they play a crucial role in driving energy innovation and implementing the incentives and regulations needed to stimulate investment in energy innovation, its deployment and uptake.

Delivering on our strategy and future focus

We will be futureproofing Exxaro and enabling a sustainable future for our business. We aim to fast track our decarbonisation and investments to generate predictable long-term cash flows and increase portfolio diversification. As the company matures, we will build on an already successful platform, leveraging our skills and differentiation with a long-term vision to develop a sustainable, growth-orientated, value-driven company, a leading international renewable solutions provider by the end of the decade.

Our **capital allocation and project execution** remains focused on leveraging the growth investments already made, supporting our early value coal strategy and sustaining our businesses by implementing our portfolio of stay-in-business capital projects. Our early value strategy means we are strategic about our capital allocation. We embarked on a capital expenditure journey in managing our sustaining capital, ensuring we sustain a robust coal portfolio with strong cash flow generation. We continue disposing of non-core assets. We continue on our capital excellence journey in investing in our coal business to remain resilient. We are targeting average capital of between R2 billion and R2.5 billion annually in real terms. As part of the early value strategy, the GG6 expansion was completed in 2022.

For our energy business, Exxaro is targeting an additional 1.6GW (net) capacity by 2030 with total capital deployment of approximately R28 billion. We estimate that one third will be our equity contributions and two thirds project financing. This could potentially provide approximately R3 billion in EBITDA in real terms. We are aiming to achieve equity returns on a portfolio basis of 15%.

We are focusing on opportunities in South Africa to start with, while monitoring opportunities in new markets for potential entry that meet our investment criteria, building strong foundations for the future and **investing in renewable energy** assets that enable us to transition to a low-carbon world.

Case study: Protecting our business through digital transformation

In the information era, data is the "new gold". Our Digital@ Exxaro programme is therefore geared to enable us to leverage the big data generated within and around us, and create value. Our dream is to be a data-driven organisation. Leveraging our integrated operations centres and data platforms, we are deploying advanced data analytics and machine learning to solve current problems and futureproof our business. One such use case is the implementation of the machine learning model to proactively monitor and manage our haul road conditions in our pits.

The quality of the roads is one of the challenges that contribute to the overall value chain performance. If not well managed, bad road conditions lead to truck downtimes and reduced production throughput. The ability to proactively monitor the road conditions and prevent the deterioration before it impacts the hauling operation tempos, cycle times and truck reliability, is critical.

We are implementing a machine learning solution that leverages big data from our truck sensors like vibrations, truck speed, geolocation to predict the haul road conditions. This solution will enable the operations team to identify the deteriorating road conditions in real-time and repair the roads resulting in improved hauling performance. The successful implementation of this solution will not only improve throughput but will also reduce truck suspension failures.

Our people

Our human capital is central to the success of our business.

Our human capital impact comprises:

- Attracting and retaining the right employees with the skills we need now and in the future within a competitive market
- Investing in, upskilling and offering existing and potential employees (including our host communities) an attractive employee value proposition to ensure we have the right people
- Employees striving to achieve zero harm through collective responsibility, commitment and risk awareness as we are mindful of the health and safety of our employees and host communities

We strive to positively impact our human capital through:

- Our commitment to achieving zero harm
- Working with employees and contractors to avoid safety incidents
- Continuously investing in our employees' growth and development
- Respecting the human rights of our workforce and other people who may be affected by our operations (do no harm)
- Investing in community development through our SLPs and ESD programmes

Material theme	Matter	Our strategic response	Our impact on the SDGs
Helping our people thrive	• Health, safety and wellness • Workforce: culture, capability, diversity, inclusion and innovation • Labour relations	• Make our minerals and energy businesses thrive • Empower people to create impact • Become a catalyst for economic growth and environmental stewardship	3 Good health and well-being; 4 Quality education; 5 Gender equality; 8 Decent work and economic growth

People strategy

People at the heart

We **differentiate** ourselves by continuously evolving, creating impact through **new ways of work** and pursuing **new opportunities**

Develop capabilities and grow talent

We **evolve** by demonstrating **excellence**, sharpening skills, pushing limits and realising our true potential

Seamless employee experience

We **collaborate with our employees** to create compelling human-centred experiences throughout the employee lifecycle

Enable human resources through digital

We leverage internal and external partnerships to **continuously optimise** our human resources services to **better serve our people**

Lead with trust, adaptability and an outward mindset through the Exxaro Leadership Way

We **empower our employees to truly live** our values and foster a culture of **trust without fear**

Future-fit organisation

We look at current and future trends, and continuously **pivot our organisation** with speed to **remain relevant** and take our people along on the journey, considering:

- Diversity, equity and inclusion
- Culture and values
- Operational model
- Partnerships
- Performance achievement

Catalyst for the five Sustainable Growth and Impact strategic objectives

People (page 60) in our 2022 ESG report details our human capital approach and performance.

How we will achieve this

Our people and partners have the skills, capabilities, mindset and passion to achieve our purpose. Empowered to create impact, we build our resilience as a company on each other's strengths.

The SERC oversees people's health, safety, engagement and development. Our executive head: human resources, supported by various management departments, is responsible for developing and implementing employee-related strategies.

Delegation of authority framework (page 62)

Snapshot of our workforce

19 242 people employed
(2021: 18 813)

35% full-time employees
(2021: 35.84%)

64.9% contractors
(2021: 64.13%)

Cennergi: 21 full-time employees
Operation and maintenance contractors employ:
- Amakhala Emoyeni windfarm: 44
- Tsitsikamma community windfarm: 38

Cennergi Holdings: eight full-time employees, and in the process of recruiting a further 10 permanent employees.

Our future focus is on building internal capabilities and reskilling the workforce to support transitioning the organisation into new commodities. Addressing pay equity is also a continued focus. Diversity, equity and inclusion will continue to be a top focus area over the next two years, while leadership accountability and communication will be the key enablers to unlock the diversity, equity and inclusion strategy.

The five safety pillars

Safety

Our unwavering focus on zero harm has enabled us to achieve our record LTIFR performance of 0.05. We focus on identifying and managing inherent processes, external risks with a hierarchy of controls, and stakeholder involvement on our journey. We believe that we can achieve zero harm through continuous improvement and proactive measures.

Safety is crucial to achieving our strategic objectives for our business to thrive. In our aim to manage safety-related risks and prevent repeat incidents, we are guided by our safety strategy supported by the five pillars.

Incredible leadership

To demonstrate sustainable commitment to our employees' safety, our CEO leads an annual **leadership safety day** and the **sustainability summit. The 2022 sustainability summit was hosted by Belfast Coal on** 7 April 2022. The leadership safety day affords the executive committee:
- An opportunity to engage with employees on health and safety issues
- A platform to demonstrate our commitment to our zero harm vision
- Events to congratulate employees and contractors for safety excellence

Communication

We continuously communicate our safety performance which covers incidents and learnings from incidents as well as actions to be taken to address emerging risks. Messages are broadcast on virtual platforms across the group:
- Our **Khetha Ukuphepha** (isiZulu for "choose safety") campaign encourages personal responsibility for safety
- BUs host annual **safety indabas** to drive the critical importance of safety

Consequence management

- We set simple non-negotiable safety rules to promote life-saving behaviours
- Incidents are analysed in terms of zero tolerance rules
- Consequence management on safety-related contraventions is applied fairly across BUs in line with our cultural values

Training

We provide comprehensive training to address safety risks. In 2022, these included:
- The course for managers in risk management programme
- Safety management training for line supervisors
- Visible felt leadership champions training
- Safety representatives training
- On-the-job training for our employees

Risk management

The course for managers in risk management programme trains leaders and employees on a structured approach with guidelines and strategies to establish and maintain a multidimensional risk management framework. We aim to embed the course's principles in our daily risk management processes and improve our understanding of safety risk assessment processes.

Since implementation in 2009, we **review** our safety strategy annually to ensure focus areas are appropriate. We also review our safety targets every year, based on prior performance, and apply stringent **management protocols, programmes and systems**. We launched the Khetha Ukuphepha campaign in 2019 with the main objective to reinforce our zero harm vision and reiterate our philosophy that every life counts.

Safety (page 62) in our 2022 ESG report details our approach and performance.

Snapshot of our performance

Our 2022 safety targets	How we performed
Zero fatalities	• Five-year fatality-free milestone achieved in March 2022 – Grootegeluk: 10 years fatality-free milestone in October 2022 – Leeuwpan: 32 years fatality-free milestone in March 2022 • One fatality at Belfast in August 2022
Zero HPIs	Five HPIs (2021: one)
LTIFR of 0.06	Below target: 0.05 (2021: 0.08)
Zero LTIs	Seven LTIs (2021: 12)
Zero DMRE notices	• Seven section 54s (mining activity stopped) (2021: two) • No section 55s (mining in affected area stopped) (2021: two)
Zero safety-related grievances	No safety-related grievances (2021: zero)

Cennergi
- No fatalities at both windfarms for six consecutive years
- No reportable LTIs (2021: zero)
- No reportable health and safety incidents (2021: two)

More than 50% of serious incidents recorded in 2022 were repeats, which prompted a call to action from the CEO. The leading causes of incidents included:
- Poor risk awareness and assessment
- Inadequate hazard awareness and identification
- Non-adherence to procedures
- Unsatisfactory supervision, change management and task planning

In collaboration with our stakeholders, we are addressing the increase in the number of HPIs by revising our incident management process to enhance the quality of our incident investigations and enable meaningful learning from incidents and appropriate mitigation across the group. We will continue to aim for zero fatalities and the reduction of all other work-related incidents by:
- Eliminating repeat incidents
- Implementing stringent risk management processes across the group

Our people continued

Health and wellness

We improve quality of life, morale, productivity and safety of our employees and communities through a health and wellness strategy that extends beyond compliance with regulations to the sustainability of our industry.

Our integrated health and wellness strategy incorporates legislated basic conditions of employment. It is a preventive, employee-driven, holistic approach that identifies occupational and non-occupational health risks and their causes. It presents solutions to mitigate these risks and their impacts on the business within an empowering environment.

Health and wellness (page 64) in our 2022 ESG report details our approach and performance.

Integrated health and wellness strategy

Prevent
Preventive programmes (mandatory awareness campaigns and healthy lifestyle coaching) cover eight dimensions of employee health and wellness.

Diagnose
We improve medical surveillance by extending clinical tests (heart disease and risk-based cancer screening) and DNA analysis from middle management upward.

Manage
We improve healthcare management by ensuring all employees with occupational and non-occupational health risks are included in a disease management programme.

Our integrated health and wellness strategy is supported by our cultural pillars (ESG report, page 70)

Prevention initiatives

Employee wellness programme (EWP)

1. Financial
2. Emotional
3. Social
4. Thinking
5. Occupational
6. Environmental
7. Spiritual
8. Physical

Since the onset of the COVID-19 pandemic, our **EWP** has addressed the impact of financial, and other personal and professional challenges, on employees.

Bayport Financial Services provides debt restructuring, financial rehabilitation and financial management training to employees experiencing financial hardship (worsened by the impact of COVID-19).

Managed by our human resources and sustainability departments, our external counselling service has addressed psychosocial, legal, financial, emotional, family, work-related and substance abuse issues since January 2021.

Awareness:

- We advertise the EWP on LetsConnect, LCD screens at our operations, screensavers and the intranet
- Mental health masterclasses on Microsoft Teams every second Friday educate employees and present practical self-diagnosis and coping techniques
- Daily inspirational messages via SMS provide EWP contact details

#You'reNotAlone:
Voice notes and videos share employees' struggles with mental health and the relief offered by counsellors or therapists

Certificate of fitness:
The EWP is part of induction and physical fitness tests

Snapshot of our performance

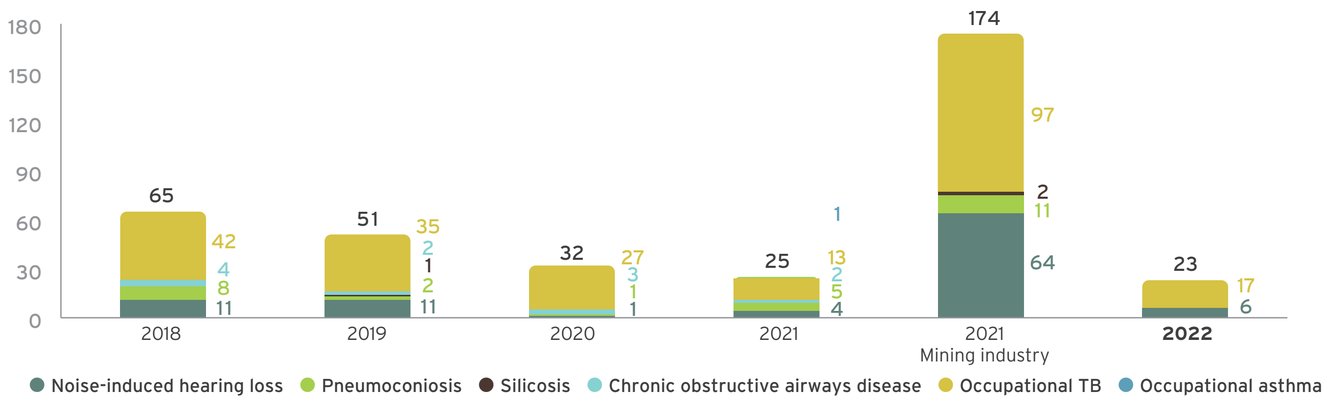
We focused on implementing our health and wellness strategy while encouraging employees to receive booster COVID-19 and flu vaccinations. We achieved a 90% COVID-19 vaccination rate against the industry target of 80%. We also progressed in addressing mental health issues brought to our attention during the pandemic.

Non-occupational diseases

- 54.9% reduction in reportable occupational health incidents (2019 to 2022)
- Occupational tuberculosis (TB) cases increased (including infected employees who worked 200 shifts a year)
- Dust fallout (ESG report, page 37)
- 7 791 COVID-19 cases (2021: 6 816)
- 23 occupational diseases (reduced by COVID-19 mitigation measures) (2021: 25)
- 24 new diabetes cases (2021: 39)
- 92 hypertensive employees and contractors (2021: 290)

Although we did not record health and wellness-related grievances (2021: zero), tuberculosis (TB) case reporting presented challenges. Our TB rate increased as infected employees who worked 200 shifts a year are considered occupational TB cases, particularly in Lephalale where government is addressing the high TB incidence rate and dust fallout exceeds the threshold. Through the Impact Catalyst we identified health facilities in communities where Exxaro operates that need support to make health services accessible and Right-to-Care was engaged to implement the programme.

Occupational diseases



In line with the outcomes of our 2022 sustainability summit, which highlighted mental health concerns, we are developing a mental health policy to be introduced in 2023. The policy will address the leading causes of mental health issues. It will also empower supervisors to facilitate resources at BUs instead of calling on external service providers.

Our hearing conservation committee, chaired by mine general managers, is also investigating customised hearing protection and engineered interventions to address identified causes of noise-induced hearing loss. This will facilitate compensation by Rand Mutual Assurance.

Utilisation: **12.68%** (2021: 15.82%)	**Life Employee Health Solutions benchmark: 10.74%** (2021: 9.47%)	**Demographics:** **Majority men (14 to 50 years old) as in 2021**
Mining industry: **9.32%** (2021: 7.67%)	**Services accessed:** **Face-to-face counselling preferred**	**Counselling mainly in English**

Mental health*

Our approach to mental health is informed by World Health Organization principles and the impacts of COVID-19 at each BU (disruptions to regular working routines, fear of loved ones contracting the virus and uncertainty about the future). Mental health was the top category presented to the EWP.

793 cases managed

1 in 3 employees has mental health-related challenges

37% are 25 to 34 years old

Stress is the leading cause of mental health issues

54% female and **46%** male

* *January 2020 to July 2022 by Life Employee Health Solutions.*

Our people continued

Employee engagement

We maintain our employee value proposition, as an employer of choice, through meaningful engagement with the people we attract and retain for the sustainability of our business.

Our established engagement structures encourage communication, and keep employees adequately informed about key organisational changes, health, wellness, safety, and operational and financial performance. We also use insights from employee engagement initiatives to enhance our processes and workplaces.

Our values and culture are a foundation for behaviours, mindset and philosophy that gives our employees a sense of belonging in the workplace. We continue to embed our values and culture through various initiatives to ensure continued alignment with our organisational purpose and strategic objectives.

Diversity, equity and inclusion are central in our approach to meaningful engagement with our employees.

Diversity, equity and inclusion strategy

The strategy, aligned with our Sustainable Growth and Impact strategy, is informed by our purpose, values, vision, culture and strategic objectives. It is a journey that began before 2019, and our approach continues to evolve to increase the speed and scale of our impact.

Employee engagement (page 68) in our 2022 ESG report details our approach and performance.

Snapshot of our performance

The board approved a revised approach to our diversity, equity and inclusion strategy (ESG report, page 68) in 2022. In delivering on this revised approach, we reviewed our policies and practices, as outlined in our 2022 ESG report. Our approach to maintaining a representative workforce, with respect for the needs of our host communities, is defined in this strategy.

Strategic priorities	• Revised diversity, equity and inclusion approach – Benchmarking performance measured against foundation (drive the strategy), internal (attract and retain people), external (listen and serve society) and bridging (align and connect) • Reviewed policies and practices – Workplace harassment policy aligned with codes of good practice – Implemented new STI scheme – Introduced parental leave policy – Approved disability policy – Employee relations strategy review based on fairness and addressing COVID-19 impacts – Wellness sessions managed mental health, COVID-19, GBV and stigmatisation (supported by employee assistance programme) – Continued skills workshops and training for employee relations managers and line managers – Broadening employee relations capacity building processes to understand recognition agreements • Aligned stakeholder communication campaigns with strategic objectives on electronic and hybrid platforms (mobile phones and LetsConnect intranet)
Trade union representation	• 5 276 employees (78.2%) (2021: 5 180) represented by affiliated trade unions recognised by Exxaro (National Union of Mineworkers, Solidarity, Association of Mineworkers and Construction Union, Food and Allied Workers Union and National Union of Metalworkers South Africa) • Three-year wage agreement signed in 2021 remained effective
Share ownership	• Each GreenShare beneficiary received a R12 400.64 cash payment
Workplace harassment	• Several harassment and sexual harassment cases reported, which were dealt with firmly by management • All sexual harassment cases reported and investigated resulted in perpetrators being found guilty and dismissed. This included senior managers who failed to act when victims reported allegations of sexual harassment • Launched a GBV campaign this year to encourage employees to report all forms of harassment to the available reporting structures
Employment equity	• Achieved employment equity targets over the past five years (aligned with Mining Charter III) • Addressing women in senior management targets with new employment equity plans for the next five years (aligned with diversity, equity and inclusion strategy) • Certified level 3 BEE contributor
Employee turnover	• Average rate of 4.4% due to abscondment, death, medical incapacity, dismissal, resignation and retirement (2021: 3.7%) • 82.37% of employees in bargaining units (2021: 81.93%) • 17.62% in management and specialist category (2021: 18.03%)
Eliminating discrimination and resolving grievances	• No alleged discrimination cases or grievances were filed (2021: zero)
Housing	• 1 384 permanent employees received mortgage repayment subsidy for first-time home buyers since 2017 • 97 employees live in converted hostels (single-quarter accommodation or family units) • Housing allowance paid to 2 272 employees with a registered bond (2021: 1 436) • Living-out allowance to 3 594 employees renting accommodation (2021: 3 329)

Cennergi
- Consistently met job creation targets
- No contract termination points or penalties from DMRE
- The Cennergi Holdings structure was approved during 2022, including its diversity and inclusion plan

We plan to complete another baseline culture and engagement survey to track the efficacy and progress of culture integration. This will also highlight areas needing improvement while we continuously improve our employment experience as we live our values with leadership support.

Managing our talent

To deliver on strategic objectives and ensure business continuity, we need to attract, develop and retain skilled people whose fulfilling careers enable them to contribute to socio-economic development.

We encourage continuous professional development so that we have the right skills, at the right time, in the right place.

Talent management is a critical sustainability indicator. We annually identify and measure KPIs as part of the strategic dashboard for talent management and human resources. The talent management and review processes, combined with succession planning, aim to identify and prepare suitable internal candidates for positions while building a leadership pipeline to address skills shortages.

Our talent management strategy

Talent management evolves with our strategy to support capability development, new ways of working, and succession planning for management and specialist roles, supported by our diversity, equity and inclusion and Social Impact strategies.

Strategic workforce planning	• Market data informs talent sourcing and development to align our evolving capability framework with our strategic direction (minerals and energy businesses) • Stakeholder engagement determines workforce requirements, and learning and development interventions to build competencies that deliver on our business strategy • Our digitalised environment enables efficient talent management
Talent planning	• Development with focus on our employment equity candidates • Proactively addresses talent and critical skills shortage and changes when employees are promoted, rotated, resign or retire • 30.8% D band (2021: 26.3%) and 35.4% E band (2021: 30.8%) clusters prepare black employees to occupy higher level positions immediately or for medium-term occupation
Leadership and capability development	• Leadership programmes were updated in 2022 to include latest capability developments in support of our strategic direction • Various leadership programmes (leading, leadership in the connection economy, essential leadership, leadership workshops and launchpad) are aligned with the Exxaro Leadership Way Capability development and preparation for the changing world of work include topics on diversity, equity and inclusion, change management, the fifth industrial revolution and sustainability • We continue expanding initiatives to facilitate continuous learning for compliance and personal development to maintain our competitive advantage • Our new capability and capacity building framework continues to be developed to reflect changes to business strategy requirements and priorities towards developing employees holistically with greater emphasis on on-the-job training and coaching • 83 employees attended various leadership programmes (2021: 121) and 181 enrolled in management programmes (2021: 201) • 21 employees enrolled in the University of Cape Town Graduate School of Business Women in Leadership programme
Create a learning culture	• Creating a culture of self-learning is important to empower our employees to prepare for future roles • E-learning and classroom-based training offer: – Leadership and management development – Soft skills training – Occupational programmes and technical training by academic institutions, service providers and our Grootegeluk and Matla training centres (accredited by the Quality Council for Trades and Occupations) • Ongoing employee development guided by internal processes such as performance achievement, career and succession planning, culture and leadership initiatives, and SLP commitments – Individual development plans ensure a healthy pipeline of core and critical skills • 592 employees registered for open-source online courses (LinkedIn, Udemy, Coursera, Open Sesame and OTT University) • There were 96 665 training interventions on the MyNexxt e-learning platform (2021: 80 303) as part of our Digital@Exxaro strategy. Courses included: – Anti-bribery and anti-corruption: 3 560 – Implicit and unconscious bias: 822 – Adapt to 4IR: 769 – Exxaro Leadership Way: 235 – Cybersecurity: 2 318 – Microsoft Office: 503 – Confidentiality courses: 707
Skills development and training	Annual submission of workplace skills plans and training reports to the Mining Qualifications Authority, Mining Charter compliance to the DMRE and B-BBEE scores to the dtic includes employee information, spend, training and development programmes
Compliance training	Ensuring safety, health and environmental compliance, 83 104 induction compliance interventions were completed through MyNexxt

Our people continued

Our talent management strategy continued	
Talent pipeline and feeder schemes	• Comply with employment equity targets and address shortages in critical skills – Address engineering (mechanical, electrical and mining) and geology skills shortages with bursaries (second and third-year full-time students in host communities) and our PIT programme • Learnerships and feeder schemes training and developing youth with formal qualifications (artisans, miners, trackless mobile machinery and plant operation, and administration) • Employment opportunities for local youth through formal programmes that ensure a feeder line of trained and skilled candidates – Internships establish a feeder scheme for C band positions (graduates receive work experience within a structured training programme that improves employability) • Adult education and training help employees reach national qualification framework level 1 (grade 9) with functional literacy for health and safety communication, further development, and access to higher level jobs • Our three-year PIT programme blends academic theory with hands-on workplace experience to prepare employees for current and future business needs (each graduate has a technical coach who supervises exposure to various operations as well as technical, leadership and management training for three years before we guide trainees who meet accreditation requirements to become professional engineers)
Talent acquisition	• Our talent acquisition team encourages sharing of job advertisements on platforms such as LinkedIn to reach a wide audience of suitable candidates • Most candidates are sourced internally, which indicates that our internal pipeline is healthy • The majority of positions are filled by black female employees to improve our employment equity profile in senior roles

Our talent management strategy includes strategic workforce planning, talent planning, leadership and capability development, compliance training and reporting, and talent pipeline development activities.

Managing our talent (page 74) in our 2022 ESG report details our approach and performance.

Snapshot of our performance

No talent management-related grievances were lodged in 2022 (2021: zero).

Developing our talent	• We spent R331 million or 6.0% of our payroll (2021: R276 million or 5.8%) on training and development, including: – **Job-related skills development (functional and technical training):** R198 million (2021: R157 million) – **Bursaries, training professionals, internships, learnerships and skills programmes:** R101 million (2021: R104 million) – **Developing targeted employees in management programmes, leadership roles, postgraduate studies and support functions:** R7.4 million (2021: R5 million) – **Community development such as portable skills training:** R10.5 million – **Support for Youth Employment Service partners training and developing youth from our host communities:** R12.6 million
Supporting historically disadvantaged people	• **Women** – Female employees represent 29% of our workforce (2021: 26%) – 50% female PIT graduates (2021: 41%) – 63% black women full-time bursars in engineering and mining disciplines* – 56% women in learnership and internship feeder schemes (2021: 51%) – 31 black women sponsored at technical and vocational education and training colleges to improve access to formal learnerships such as artisan training (2021: 23) • **Training professionals** – PIT programme graduates in our talent pipeline: 89 (89% black South Africans) (2021: 85) at a cost of R42.6 million (2021: R45.4 million) – Full-time bursars in engineering and mining disciplines*: 52 (2021: 28) – Invested in bursaries to address engineering skills shortages: R3.8 million (2021: R2.4 million) – Matriculants supported in Edumap maths and science bridging programme: 10 (2021: 10) • **People with disabilities** – Black South Africans with disabilities supported at local tertiary institutions: 20 (55% black women) (2021: 10) – Bursars and interns supported: 40 (2021: 19) • **Adult education and training** – Invested R1.57 million (2021: R1.02 million) – Four employees (2021: three) – 52 community members (2021: 89) ** South Africans at local universities.*
Developing talent bench strength	• Employees in 24-month mentoring programme: 40 (77% black people and 32% black women) (2021: 32) • Employees who attended mentee training: 35 (12 trained as mentors) • Candidates in fast-tracking programme: 52 (95% black people and 69% black women) (2021: 64)

Talent acquisition	• **Paterson D band (middle management) candidates appointed:** – External: 16 (100% black people and 69% black women) (2021: 25) – Internal: 40 (80% black people and 38% black women) (2021: 48) • **Paterson E band (senior management) candidates appointed:** – External black: One (100% black women) (2021: two) – Internal black: Three (2021: three)
Appropriate learning interventions	• Enrolled employees in formal studies to improve capabilities (traditional programmes and others supporting renewable energy, digitalisation and the new world of work) – Postgraduate[1]: Nine (six black people and four black women) – Undergraduate[1]: 17 (16 black people and five black women) – New skills short courses[2]: 44 (33 black people and 20 black women) *[1] South African universities.* *[2] South African and international universities.*

Cennergi has commenced with recruitment of key skills and will aim to further the objectives of diversity and inclusion in the renewable energy sector.

Cennergi Holdings is recruiting for skills and will look both internally and externally.

We will address our out-of-appetite B-BBEE score for spend on bursaries awarded to black people with initiatives that will reach more students who have not already received funding from the National Student Financial Aid Scheme.

In addition, we will focus on finding solutions to recruit qualified black women, particularly in our Lephalale labour-sending area where there is a shortage of suitable candidates with engineering qualifications.

Our planned interventions will develop relevant core and functional capabilities for current and future businesses.

Human rights

Human rights are basic freedoms based on dignity, fairness, equality and respect.

Exxaro strives to be a responsible steward of natural assets and social capital to uplift host communities. Acknowledging that our operations could negatively impact human rights, we have developed a policy and are committed to implementing processes that align with South African legislation and corporate governance guidelines.

Our renewed policy provides guidelines to ensure that we adhere to human rights principles. It is aligned with our purpose because we believe that all people have inherent fundamental human rights regardless of their differences. As such, we are committed to investing in and developing areas within our sphere of influence for the benefit of our stakeholders.

Human rights (page 89) in our 2022 ESG report details our approach and performance.

Snapshot of our performance

We redeveloped our human rights policy, which outlines our expectations of employees, suppliers, business partners and other parties directly linked to our operations, products and services.

No human rights-related grievances were lodged against Exxaro in 2022 (2021: zero).

Governance and ethics	• Of the 64 (2021: 54) corruption cases reported against employees, 55 resulted in further action such as disciplinary inquiries, cases registered with South African Police Service and arrests • Completed disciplinary investigations returned a guilty verdict and resulted in 41 (2021: nine) dismissal cases. None of the cases involving dismissal went to the Commission for Conciliation, Mediation and Arbitration (2021: one) Fraud and ethics hotline (ESG report, page 97)
Equal opportunities/ non-discrimination and transformation	• Aligned with South African Constitution and other legislation, National Gender Policy Framework and UN Convention on the Elimination of all Forms of Discrimination against Women Diversity, equity and inclusion strategy (ESG report, page 68)

Our people continued

Human rights in the workplace	• Never use, cause, demand or impose forced or compulsory labour on any person • No child labour (no employees under legal minimum age of 18) • Support legitimate workplace apprenticeships, internships and similar programmes complying with applicable laws and regulations • Safeguard employees' physical and mental health with reasonable working hours, leave and holidays • Fair discipline in accordance with transparent disciplinary and grievance mechanisms Employee engagement (ESG report, page 68)
Freedom of association and the right to collective bargaining	• Respect employees' rights to join or form labour unions without fear of reprisal, intimidation or harassment • Committed to establishing constructive dialogue with freely chosen representatives of legally recognised unions • Support collective bargaining principle • Engage in good faith with union representatives Employee engagement (ESG report, page 68)
Health and safety in the work environment	• Stringent management protocols, programmes and systems maintain zero harm Safety (ESG report, page 62) and health and wellness (ESG report, page 64)
Respect for all communities	• Respect cultural values of host communities (specifically self-sufficiency, sustainability, health, safety and natural environment) • Uphold communities' fundamental rights to access quality water, affordable electricity, and protection from noise, air pollution and hazardous materials • Guided by the International Finance Corporation's Performance Standard 5 and comply with DMRE's mine community resettlement guidelines (effective 30 March 2022) Communities (ESG report, page 78)
Security	• Guided by Regulation of Gatherings Act, 1993 (Act 205 of 1993), stakeholder management and human rights policies, and security strategy, aligned with Voluntary Principles on Security and Human Rights during protest action affecting operations • Ensure continuous training of employees in human rights principles
Environmental management and conservation	• Social impact framework addresses mine closure through mineral succession planning programme • Closure planning and mine rehabilitation protect environment, society and community upliftment • Committed to responsible mining, climate change mitigation and adaptation beyond compliance Climate Change Response strategy (2020 investor tab)

- Human resources policies manage and address human rights considerations
- Guided by code of conduct and grievance procedure aligned with South African human rights legislation
- Committed to the International Finance Corporation's Performance Standard 2 on labour and working conditions
  - Treat workers fairly
  - Safe and healthy working conditions
  - No child or forced labour
  - Identify related risks in primary supply chain

We will continue to embed human rights practices within our business and business conduct and further align these to our renewed policy. We acknowledge that our mining activities could cause conflict with communities and other interested and affected groups and are in the process of appointing a partner to conduct due diligence on our processes and address gaps. We also aim to train our employees in human rights.

Social licence to operate: earning our legitimacy

Our social and relationship capital refers to mutually beneficial relationships that provide our social licence to operate. To ensure we have a holistic, positive and lasting impact on our people, communities and society at large, we conduct our business activities in a way that promotes development and success for us and our stakeholders.

Our social and relationship capital impact comprises large-scale, high-quality initiatives that provide for meaningful socio-economic upliftment opportunities:

- Education and skills development
- Land use and management
- Local economic development

We strive to positively impact our social and relationship capital through:

- Our Social Impact strategy addressing challenges in our host communities
- Investment in socio-economic development
- Going beyond compliance to protect our licence to operate

Material theme	Matters	Our strategic response	Our impact on the SDGs
Building sustainable communities	• Social licence to operate • Social acceptance and community unrest • Supporting a just transition to a low-carbon economy • Job and business creation • Impacts on local communities (positive and negative) • Value sharing • Human rights	• Empower people to create impact • Be a catalyst for economic growth and environmental stewardship	7 Affordable and clean energy 8 Decent work and economic growth 9 Industry, innovation and infrastructure 11 Sustainable cities and communities 12 Responsible consumption and production 13 Climate action 15 Life on land 16 Peace, justice and strong institutions 17 Partnerships for the goals

"We know that there is a better place to be tomorrow than where we are today."
Dr Nombasa Tsengwa

Communities (page 78) in our 2022 ESG report details our social and relationship capital approach and performance.

How we achieve this

Our Social Impact strategy (ESG report, page 78), embedded in the objectives of our Sustainable Growth and Impact strategy, is a multidimensional and scaled approach to empowering our host communities. We work to empower them with skills and capabilities to find employment, and entrepreneurial opportunities to create their own economic wellbeing, social progress and dignified livelihoods. However, the potential for negative community sentiment to escalate could negatively impact our ability to succeed with our growth strategies. Our Social Impact strategy is a shift from a market-driven approach to a multidimensional approach to inputs and expected outcomes. We will continue to address compliance requirements with increased focus and on a larger scale, complemented by discretionary expenditure and collaboration.

Six funding structures serve as conduits for community donations and sponsorships, namely the Exxaro Chairman's Fund and Foundation, Matla Setshabeng NPC, Amakhala Emoyeni Community Fund Trust, Tsitsikamma Community Windfarm Trust, Tsitsikamma Development Trust and ESD programme. Our Social Impact strategy enables us to deliver impact at scale through the following key principles:

[illegible]	[illegible]	[illegible]	[illegible]

The board approved the Social Impact strategy in November 2022. The SERC, through its statutory provisions, has oversight of community engagement and development. This committee will oversee the implementation of the Social Impact strategy. The executive head: stakeholder affairs, has been delegated with the role and responsibility for integration and execution.

Social licence to operate: earning our legitimacy continued

Snapshot of our performance

Invested in social investment projects for local economic development (SLPs and CSI)
R181.31 million
(2021: R113.72 million)

Jobs created
583
(2021: 205)

Number of community members benefited
1.26 million
(2021: 53 000)

A combined total investment contributed by Exxaro and Cennergi in socio-economic and enterprise development programmes:
R205 million

SLP projects	• **Spend:** R13.38 million (2021: R56.44 million) • Our spend was impacted by delays experienced in the implementation of SLP projects • Submitted proposals for Thabametsi (2020 to 2024), Matla (2020 to 2025), Grootegeluk (2023 to 2027) and Tshikondeni (in closure) (2023 to 2027) SLPs • DMRE approved the Matla (2020 to 2025) SLP
CSI (including disaster relief)	• R167.93 million (2021: R57.28 million) (Matla Setshabeng NPC was established in 2021 and was fully operational in 2022, hence the high difference in CSI spend) • 1.17 million beneficiaries (including GBV campaigns and university chair) (2021: 300 000) • R80.9 million invested in community education to benefit 41 000 learners
ESD contribution	• **Spend:** R291.2 million (2021: R127.7 million) • **Beneficiaries:** – Qualifying small enterprises (QSEs) and exempt micro-enterprises (EMEs): 30 (2021: 15) – Youth-owned: 16 (2021: four) – Women-owned: nine (2021: seven) • **Jobs retained:** 1 037 (2021: 243) The ESD programme achieved record disbursements and played a role in the achievement of the procurement targets described below. Driven by a higher group NPAT, the programme had to spend a much higher amount within the year to ensure compliance with the dtic B-BBEE codes. Given the high coal prices, the forecast NPAT was much higher than budgeted at the beginning of the year. All efforts were invested to achieve the higher target, however, there were fundamental constraints that prevented us from achieving our ESD compliance goal. Firstly, resource constraints to spend more money and secondly, increasing the volume of ESD funding applications does not improve the number of qualifying applicants. While we reached an annual increase and record disbursement of R291 million, we expect to achieve 9.75 points (65%) out of 15 compared to the target of 13.5 (90%) once the B-BBEE verification for 2022 has been finalised.
Supply chain sustainability	• **Preferential procurement:** Fully compliant with B-BBEE codes: overall score of 26.9 (2021: 28.3) against 24.2 target • **Green procurement programme:** Spent R133 million (0.8% of total procurement budget) • **Mining Charter III scorecard:** Scored 40 (2021: 40) points against 37.2 (2021: 31.5) target • **Local procurement:** Spent R1 097 million (2021: R1.05 billion) with 246 (local black-owned SMMEs (2021: 241) • **Ethical procurement:** E-procurement software, supplier onboarding process and checks to reduce fraud risk, maintain cost efficiency and avoid conflicts of interest Our affirmative procurement initiatives at operating mines remain above target. We spent R1.1 billion, (circa 11.4%) of discretionary procurement compared to a target of 10%, on local SMMEs, thus injecting significant value into the local communities. However, the challenge remains large and we will continue to pursue higher levels of this investment through targeted expenditure and skills development to increase both the volume of expenditure and value per expenditure.

Cennergi's share of procurement sourced from B-BBEE suppliers, QSEs, EMEs and women-owned vendors is tracked against commitments and targeted percentages in the implemented agreement.

Tsitsikamma community windfarm and Amakhala Emoyeni are committed to 60% total procurement from B-BBEE suppliers, 10% from QSEs and EMEs, and 5% and 2.5% respectively from women-owned vendors.

While the Social Impact strategy will fit into the "S" element of ESG, the implementation approach will incorporate elements from "E" and "G" to ensure sustainability, especially in relation to just transition considerations. We were deliberate in selecting to focus on education (ECD and adopting local schools), land use and management (mineral succession planning, ie finding alternative economic uses of the land beyond mining) and continuation of local economic development through local procurement and ESD initiatives. When viewed through the lens of the SDGs, this approach will have a sustaining positive impact on communities and reduce poverty by combining multidimensional approaches (education, economic wellbeing, school health and education infrastructure) and influence other areas of wellbeing without additional investment (the multiplier effect). We are planning to have approval of (partial, while researching other) execution plans by mid-year 2023.

Our environment: stewardship and compliance

Our natural capital is the resources we draw from our natural environment to run our business and create the products and services we deliver to our stakeholders.

We understand that mining can result in long-lasting environmental impacts if unmanaged. Our strategy continues to guide our approach in managing our environmental impact; protecting the natural resources on which we rely.

Our environmentally and socially responsible response to climate change supports South Africa's just transition programmes, and reflects our commitment to sustainability and our goal to be carbon neutral by 2050. We balance this with our role as a critical supplier to South Africa's coal-based electricity sector.

Our natural capital impact encompasses air quality, climate change resilience, energy, water security, waste management, biodiversity, and environmental liabilities, land management and rehabilitation.

We manage our impact by:
- Incorporating environmental performance principles in our ESG management systems, environmental policies and practices
- Complying with local legislation, management standards, and current and future-based best practice
- Going beyond compliance as demonstrated by our participation in voluntary benchmarks such as the global CDP climate and water disclosure projects

Material theme	Matter	Our strategic response	Our impact on the SDGs
Adapting to a changing context	• Supporting a just transition to a low-carbon economy	• Make our minerals and energy businesses thrive • Be carbon neutral by 2050 • Become a catalyst for economic growth and environmental stewardship	7, 9, 11, 12, 13, 15, 17
Responsible environmental stewardship	• Water stewardship • Impact of climate change • Managing our pollution • Closure planning and rehabilitation management • Carbon emissions reduction • Waste management • Biodiversity management		
Principled governance	• Embedding ESG in response to increased regulation and for sustainability		

Exxaro's livestock grazing

Our environment: stewardship and compliance continued

How we achieve this

Our environmental management programmes comply with applicable legislation, ensuring that all activities requiring licences are fully licensed, and our Sustainable Growth and Impact strategy guides the evolution of our environmental policy as we transition to a climate change-resilient portfolio. Management standards for air quality, water, energy, mine closure and rehabilitation as well as environmental incident management and reporting support our BUs in this transition, and embed climate change mitigation and adaptation. These standards are integrated into our environmental management activities, which are also ISO 14001-certified. Our STI scheme, aligned with our decarbonisation plan and Sustainable Growth and Impact strategy, motivates employees to uphold these standards.

The RBR committee oversees our environmental management and impact on behalf of the board. The executive head: sustainability is responsible for implementing environmental strategies for the group, assisted by sustainability and BU managers. The SERC ensures we align with just transition principles while the ESG steering committee's role is to support Exxaro's ongoing commitment to environmental, health and safety, corporate social responsibility, corporate governance, sustainability, and other relevant public policy matters.

Wheel of excellence

Our environmental commitments fall under the following areas, each supported by specific strategies and policies:

Environmental liabilities and rehabilitation (page 111)

Our mine plans consider land management, closure and concurrent rehabilitation with financial provision to ensure we honour our commitments.

- Approved environmental management programme with closure objectives
- Mine closure and concurrent rehabilitation procedures
- Integrated concurrent and closure plan
- Environmental risk amendments
- Rehabilitation monitoring and KPI reporting
- Closure project management

Air quality (page 105)

We manage and mitigate the negative impacts of air pollution, including dust and particulate matter, emanating from our mining activities.

- Approved air quality authorisation (atmospheric emission licence)
- Management procedure and plans
- Assessment, monitoring and reporting
- Emissions inventories

Biodiversity (page 110)

Our low-impact, high-value approach supports ecosystem health to protect indigenous flora and fauna at our operations.

- Approved environmental impact assessment authorisations
- Management procedure
- Impact assessments
- Management plans
- Ecological offset impact procedure (includes terrestrial and aquatic/wetland ecosystems)
- Monitoring and reporting
- Ecology efficiency reports
- Land management strategy
- Land management procedure
- Operational land management plan
- Land disposal strategy

Climate change resilience (page 105)

We are building our climate resilience by enhancing the adaptive capacity of Exxaro and communities and capitalising on strategic opportunities presented by the transition to a lower-carbon economy.

- Carbon measurements, data and reporting
- Carbon emissions reduction projects
- Becoming carbon neutral by 2050
- Climate change adaptation and mitigation
- Green supply chain
- Climate considerations for capital projects

Energy management (page 107)

Our energy and carbon management programme drives efficiencies that support a just transition to a low-carbon economy.

- Measurement, data and reporting
- Energy intensity improvement projects
- Becoming carbon neutral by 2050
- Climate change adaptation and mitigation
- Green supply chain
- Energy and carbon management guidelines for capital projects

Waste management (page 109)

Our cradle-to-cradle approach minimises waste production through recycling and reuse within a circular economy.

- Approved waste management licence
- Waste stream assessment
- Prevention, reuse, recycling and energy recovery
- Management procedure (including classification)
- Handling, transportation and disposal procedure
- Monitoring and reporting

Water security management (page 108)

Our water security plan is based on efficient water consumption, reuse and recycling to protect natural resources.

- WUL
- Management standards and procedures
- Risk assessment
- Water-saving targets and performance reporting
- Monitoring and reporting
- Technological water treatment options
- Integrated water management plans
- Audits

The environment chapter (page 33) in our 2022 ESG report details our natural capital approach and performance.

Air quality

Air quality management is a top priority for operational sustainability, community safety and regulatory compliance.

Pollutants such as dust and particulate matter (PM), including PM_{10} and $PM_{2.5}$, emanate from opencast mining activities such as drilling, blasting, crushing, screening, transportation, materials handling, windswept storage piles and exposed areas.

These activities unavoidably generate dust, and therefore pose health and safety risks. We are responsible to our employees and host communities to minimise and avoid this impact on air quality and the environment.

Exxaro's air quality management approach aims to reduce our impact through:
- Proactive risk-based planning and risk management
- Monitoring, measuring and reporting
- Implementing mitigation measures such as dust suppression
- Adhering to all applicable legislative requirements

Snapshot of our performance

- Dust suppression measures intensified to address fugitive emissions, particularly in winter, due to the high wind speeds which result in an increase in fugitive dust emissions
- Substantial resources allocated to manage waste dumps at Grootegeluk to reduce air pollution
- Dust monitoring networks reviewed to ensure effective air quality management and compliance to the allowable number of exceedances for the residential and non-residential limits per year (two non-sequential exceedances)
- Dust emissions tracked from sources other than our operations (such as agriculture, other mines, power generation and open areas)
- Additional ambient air quality monitors installed at our operations
- Reviewed Leeuwpan's air quality management system to avoid source monitoring and ensure a comprehensive and representative monitoring network
- Invested in an advanced digital solution for real-time emissions monitoring

We consistently enhance our mitigation measures to reduce the significant impacts on the environment and our host communities. These measures include:
- Chemical and wet dust suppression on unpaved roads (with additives that improve effectiveness)
- Limited drop heights during offloading activities
- Vehicle speed control with proximity detection systems and speed limiters
- Vegetation on topsoil stockpiles and overburden material
- Blast design optimisation (considering wind conditions)

To further mitigate dust fallout, in addition to traditional dust suppression methods, we plant trees as windbreaks at Belfast.

None of our BUs exceeded the number of allowable exceedances (two per year and non-sequential) for residential and non-residential dust limits. This is an indication that our fugitive dust mitigation measures are effective. We will continue monitoring and prioritising the mitigation of dust emissions.

We aim to intensify mitigation efforts through chemical suppression of dust on primary haul roads to increase dust suppression efficiencies in the third quarter of 2023. This is critical given that unpaved haul roads are significant contributors to fugitive dust in our operations.

Climate change resilience

Climate adaptation, resilience and transition refer to our capacity to adjust to current and anticipated climate change-related risks, and capitalise on strategic opportunities presented by a low-carbon and resource-constrained economy.

Two of Exxaro's strategic objectives – to transition at speed and scale and to be carbon neutral by 2050 – outline our goals and commitment to fundamentally change our business to positively respond to the climate change agenda.

Our Climate Change Response strategy, TCFD recommendations, decarbonisation plan (under development for the medium and long-term targets) and linked STI scheme across the business support the achievement of these objectives. The principles and mechanisms to respond to climate change are integrated throughout our business and are central to our thinking and actions.

We mitigate climate change and its impacts through:
- Reducing our carbon footprint, guided by our Climate Change Response strategy and decarbonisation plan. In the short term, our operational energy efficiency projects, renewable energy self-generation and potential divestment, will result in emissions reduction of 40% by 2026 for scope 1 and 2. We are developing the medium and long-term elements of our decarbonisation plan, including the capital alignment implications
- Measuring, monitoring and reporting data and performance
- Incentivising performance through the STI scheme
- Prioritising adaptation and resilience of our operations and host communities
- Creating awareness during regular stakeholder engagements
- Supporting research and development

Read more about our response to climate change

Climate Change Response strategy (2020 investor tab)
Climate change position statement (sustainability tab)
Transitioning into a low-carbon business (ESG report, page 11)
TCFD Index (refer to the databook)
Decarbonisation plan (ESG report, page 13)
CDP (www.cdp.net)

Responding to TCFD reporting requirements (page 112)

Our environment: stewardship and compliance continued

Snapshot of our performance

Carbon intensity increased by 0.5% to
$5.54tCO_2e/kTTM$
(2021: $5.51tCO_2e/kTTM$)

Scope 3 emissions increased by 5% to
$74\ 488ktCO_2e$
(2021: $70\ 931ktCO_2e$)

CDP score: B
(higher than the coal mining sector C average)

Scope 1 and scope 2 emissions decreased by 2.5% to **$971ktCO_2e$**
(2021: $995ktCO_2e$)

R8.9 million invested in **research and development**
(2021: R9.5 million)

Carbon intensity increased due to the ramp-up of operations at GG6, discussed in our operational performance (page 86). We expect an intensity reduction as we implement initiatives to support our STI scheme and our goal to be carbon neutral by 2050. Additionally, the grid emission factor increased from 1.06 to 1.08 affecting scope 2 and 3 emissions.

Exxaro has several operational efficiency programmes that aim to reduce scope 1 and 2 (direct) emissions by $62ktCO_2e$ by the end of 2026. These programmes focus on reducing diesel and electricity consumption. The solar PV project at Grootegeluk is designed to reduce emissions by $175ktCO_2e$ upon commissioning and is envisaged to be implemented within the next two years. We also partner and collaborate with our value chain partners on reducing emissions associated with their operational activities and the value chain, share information on the impact and importance of climate change resilience for business and host communities. This is because scope 3 emissions are the main contributors to our profile. However, the impact of these initiatives cannot be quantified as savings in tCO_2e.

As our decarbonisation journey moved into implementation, we included climate change metrics in scorecards across the business and finalised our capital allocation model (page 45), supported by analytics tools that informed strategic decision-making. These tools enabled incremental steps towards emissions reductions against significant logistics constraints for our vehicle fleet at Grootegeluk. We addressed these constraints by implementing optimisation solutions that rectified higher carbon intensity per tonne of product mined due to sub-optimal equipment use.

Our 2021 to 2025 pollution prevention plan, as required by the National Pollution Prevention Plan Regulations, includes GHG emissions reduction projects that aim to reduce diesel and electricity consumption and carbon emissions at our operations.

We are investing extensively in developing knowledge of climate change, renewable energy and sustainability. We prioritise innovation, research and development, and collaboration on sustainability issues with value chain stakeholders.

We remain cognisant of the changing regulatory landscape and continue to monitor related developments that may impact our business. We will continue contributing to Exxaro's goals to build a climate-resilient organisation – by reducing emissions, increasing the adaptive capacity of our operations and host communities and extending our influence throughout our value chain. We will progress our efforts to raise awareness, internally and externally, about climate change and the just energy transition to support South Africa's low-carbon transition.

Our primary focus areas in 2023 include climate adaptation (at our operations and host communities), using climate-related data to predict the impacts of extreme weather events on our operations, communities and social impact programmes. In addition, we will intensify energy efficiency and mitigation efforts at BUs. We are evaluating various opportunities to reduce emissions, including biofuels, compressed natural gas, electric vehicles, carbon and methane capture and storage, solar farms, green hydrogen and emissions offsets.

Energy management

We realise that efficient energy use is critical, particularly in South Africa where coal-based electricity supply is constrained and cost outpaces inflation. As such, we are committed to energy management that reduces GHG emissions to achieve our decarbonisation goals. We consider our value chain and support suppliers on our inclusive, sustainable and productive decarbonisation journey.	To be carbon neutral, innovative and efficient energy management is crucial. As we prepare our business for the low-carbon economy, we must ensure that decarbonisation thinking is integrated into our operations with dedication to reducing direct (scope 1 and 2) GHG emissions across our BUs and value chain. To support these goals, we implement the ISO 50001 energy management system.

Snapshot of our performance

Total energy consumed decreased by 5.25% to
5 211 418GJ
(2021: 5 500 339GJ)

Electrical energy intensity increased by 3.9% to
3.37MWh/kt
(2021: 3.24MWh/kt)

Diesel energy intensity decreased by 7.0% to
4.88MWh/kt

Electricity consumption increased by 1.4% to
590 078MWh
(2021: 582 066MWh)

Diesel consumption decreased by 10.3% to
83 226kL
(2021: 91 838kL)

Our primary energy sources were 40.7% electricity (2021: 40%) and 59% diesel (2021: 59%). Electricity and diesel intensity in total decreased in 2022. We submitted a 12L tax claim for one of the completed diesel energy intensity reduction projects executed at Grootegeluk.

Based on the decrease of 2.4% in RoM tonnages, electrical energy intensity increased by 3.9% and diesel energy intensity decreased by 7.0%.

Each BU has energy intensity targets linked to the STI scheme. The targets were based on the outcomes of current state and opportunity scoping reviews, which began at Grootegeluk in 2021. By year end, targets were in place at all operations.

The outcomes of the reviews also informed interventions that will reduce energy consumption and GHG emissions to improve intensity (GJ per total tonnes handled) at each site. Intensity performance is tracked monthly relative to the calculated energy intensity baseline. This baseline was calculated using the energy consumption and production data from the most recent preceding year that represented each mine's steady-state operation.

Energy-saving behaviour impacts the business and our wider operating environment. As such, our human resources, business improvement and information management teams drive behaviour change among employees by nurturing a culture of emissions reduction and accountability through communication, awareness training and engagement. Employees support efforts to establish energy management systems with engineering teams championing initiatives. Energy management champions motivate behaviour transformation and we discuss performance in monthly forums at each BU.

From 2023, we will focus on adopting proven technologies to reduce electrical energy intensity. To this end, we will implement impactful initiatives in our Grootegeluk and Mpumalanga process plant areas.

We will also begin decarbonising our mobile equipment fleet by working with original equipment manufacturers to align on their technology road maps, and trial and implement their technologies at pace and economical scale over the next five years.

Our environment: stewardship and compliance continued

Water security management

Water security is our capacity to safeguard sustainable access to sufficient, acceptable quality water. By proactively identifying risks and planning solutions, we sustain communities, protect the environment from water-related pollution and disasters, and stabilise crucial ecosystems.

Water security management is a critical component of our overall operational and environmental management as we are sensitive to South Africa's water scarcity and the effects of climate change, particularly increased temperatures and rainfall variability.

We manage water-related risks, minimise impacts and operate efficiently by:
- Reducing, reusing and recycling water in line with water conservation plans that support the National Water Resource Strategy
- Providing suitable barriers to our dirty water facilities that prevent groundwater contamination
- Committing to protecting and improving water quality by discharging treated water at our operations through reverse osmosis and/or sewage treatment plants

Snapshot of our performance

47% **water recycled**
(2021: 46%)

10 419ML total **water consumption**
(2021: 10 281ML)

11 486ML total **water withdrawal**
(2021: 10 890ML)

150L/t RoM
water intensity
(2021: 149L/t RoM)
(target 2025: 180L/t RoM)

We exceeded our overall water recycling target of 38% (defined as the total water recycled divided by total water used including recycled water).

Total water consumption (water withdrawals less water discharged) increased by 0.6% (normalised) and water intensity increased by 0.5% due to increased consumption at our Matla operation with the new box cut construction.

Our water intensity targets align with industry norms and site-specific conditions. The 180L/t RoM target is well below the coal industry average of 380L/t RoM.

Belfast's WUL was submitted to the Department of Water and Sanitation (DWS) for review and was granted in the fourth quarter of 2022. The renewal application for Matla's WUL was declined by DWS. However, an appeal was lodged with the Water Tribunal ensuring that the WUL is valid until a decision has been made. In the interim, Exxaro is engaging with DWS to find an acceptable resolution.

Our water management efficiency, mitigation, maintenance and conservation measures included:
- Financial approval of Grootegeluk's Oliphantskop dam refurbishment project to be implemented in 2023/2024 (enhancing water recycling at the beneficiation plants to prevent process water losses to the pit, and reducing electricity consumption due to pumping and water quality deterioration in the pit)
- Recalibrating Belfast water balance while investigating a potential water treatment plant to reduce hydraulic load caused by heavy rains over the past three years
- Completion of the new Matla Mine 1 pollution control dam linked to the Matla reverse osmosis plant
- Improved operation and maintenance of sewage treatment plants at Matla shafts 2 and 3
- Improving dirty and clean water separation, and preventing groundwater contamination with improved waste management at operations

High rainfall had a negative impact on mining conditions although this mitigated the short-term risk of water shortages.

While we continue our efforts to improve water efficiency through various infrastructure projects and enhancements, we will set an internal water price in 2023 to fully understand the actual cost of water versus the current cost to adequately address scarcity and quality concerns.

Waste management

Mining activities create various waste streams. We are transforming our business into a circular mining economy so that the waste we produce is recycled and reused with sustainable benefits for host communities that depend on Exxaro for their livelihoods.

By recycling and reusing the waste we produce, we uphold our licence to operate with a cradle-to-cradle approach that minimises waste production. Cradle-to-cradle waste management is a closed cycle: waste from one process is used in other processes to encourage elimination or minimisation of waste.

Exxaro's evolving environment policy and management standard for hazardous and non-hazardous waste govern our approach. We ensure prevention, minimisation, reuse, recycling, energy recovery and safe waste disposal in compliance with the National Environmental Management: Waste Act, 2008 (Act 59 of 2008) and supporting legislation.

Our management procedures include waste classification and efficiency reporting, as required by waste management licences, informed by sustainability KPIs aligned with ESG indices to drive continuous improvement.

Snapshot of our performance

2 768t general **waste recycled**
(2021: 3 018t)

1 624t hazardous waste sent to landfill – a 68% improvement on the previous year (2021: 520t)

Head office	Renewed contracts for recycling and general waste disposal at head office	
Grootegeluk	Completed the fire protection system installation in the temporary waste tyre storage area and stacked tyres as per the approved layout at Grootegeluk	• Renewed our hazardous waste handling contracts at Grootegeluk and Matla • Placed medical waste, including waste generated from COVID-19 preventive measures (masks, gloves and screening) at the Matla and Grootegeluk clinics, in specific containers
Matla	Began appointing a new service provider (currently TL Ideas, an ESD beneficiary) to manage our waste recycling station at Matla	
Leeuwpan	Took ownership of the optimised sewage treatment plant at Leeuwpan	
Belfast	Appointed Phambili Services, an ESD beneficiary, to manage general and hazardous waste	

General waste recycled decreased by 9% due to less ferrous and non-ferrous scrap produced at Grootegeluk.

The total weight of hazardous waste generated at our managed coal operations and sent to landfills in 2022 increased by 68% due to clean-up operations in May, June and August at Grootegeluk. This resulted in a 30% increase in the amount of hazardous waste taken away and disposed of in a registered landfill.

In its grievance register, Exxaro did not report any waste grievances, fines or penalties and did not receive any environmental fines and penalties related to non-compliance on waste management during the financial year.

Cennergi's operation and maintenance contractors are responsible for waste management at both wind energy facilities. Cennergi implements waste separation at source to increase recycling, where possible, and minimise waste sent to landfill. Cennergi did not report any waste grievance, fines and penalties during the year.

We will optimise our 2023 reporting to set targets that will enable us to divert 80% to 85% of recyclable waste from landfill sites by 2025. We plan to use alternative waste reduction or avoidance technologies and opportunities to procure equipment that supports our commitment to the circular economy concept.

At Grootegeluk, we will continue the successful waste tyre reclamation project with a new service provider, establish partnerships with other NGOs and seek access to additional project funding.

As advised by FTSE Russell, we will include additional KPIs in our reporting.

Our new waste management policy will be approved and published in 2023. The policy outlines waste reporting, management and mitigation. Detailed procedures and KPIs will ensure we honour our commitments. The dashboard that tracks waste volumes generated, recycled and sent to registered landfills will include KPIs such as total costs of environmental fines and penalties, as recommended by FTSE Russell. This will enable us to improve our disclosure.

Assessments across our operations determined the scope of work needed to achieve these targets. Data collected on recyclable materials from the waste stream assessments will optimise our 2023 reporting.

Our environment: stewardship and compliance continued

Biodiversity

Conservation is a priority for Exxaro to avoid biodiversity loss for the sake of wildlife, economic activities and people who depend on the natural resources impacted by our mining activities. We therefore assess our potential impacts before we mine, and conduct biomonitoring and environmental incident reporting. Communities benefit from employment created by contractors who will eventually hand over invasive plant control contracts to local community members.

We strive to be a low-impact, bio-regenerative organisation for current and future generations.

Our holistic approach to biodiversity management combines:
- Cost-effective solutions
- Environmental responsibility
- Conservation of biodiversity-rich areas within mining rights
- Management of International Union for Conservation of Nature Red List species
- Control of invasive plants (categories 1a, 2 and 3)
- Integration of biodiversity into social impact studies
- Collaboration with key stakeholders to achieve our biodiversity goals (Mpumalanga Tourism and Parks Agency, DFFE, Limpopo Economic Development, Environment and Tourism, DWS, Eastern Cape Parks and Tourism Agency, and Mpumalanga Department of Agriculture, Rural Development, Land and Environmental Affairs)

Snapshot of our performance

We experienced minor challenges such as restricted access to privately owned land within our mining right area for the removal of invasive alien plants and delays in permit approval by authorities for species relocation from the mining area into conservation land at Belfast. We therefore cleared 58% less invasive alien vegetation compared to the previous year.

Relocation and conservation programmes

Waterberg (Limpopo)

Grootegeluk and Belfast: Baboon spider and succulent relocation

Our team works closely with authorities in relocating baboon spiders and protected succulent species as our mining footprint expands.

Grootegeluk: Conservation in Manketti Game Reserve

The 22 000ha Manketti Game Reserve continues to optimise land use and the sustainability of Grootegeluk.

Mpumalanga

Matla and Belfast: African grass owl and bat protection

Exxaro has partnered with the Endangered Wildlife Trust to develop a monitoring programme that could enhance our existing processes. Within the Belfast conservation area, we also assist the Birds of Prey NGO with the safe and controlled release of grass owls and bats.

Eastern Cape

Cennergi: Bird and bat fatality curtailment

Cennergi employs local carcass search companies to monitor bird and bat fatalities in accordance with the South African bird and wind energy facilities guidelines. At Amakhala Emoyeni, a bat fatality curtailment programme will be implemented between October 2022 and May 2023 to reduce fatalities. The avifauna specialists prepare the semi-annual bird and bat monitoring reports submitted to lenders, BirdLife Africa, Endangered Wildlife Trust, the DFFE and other relevant authorities.

No red data mortalities were recorded at Tsitsikamma in 2022. Unfortunately, one secretary bird fatality was recorded at Amakhala Emoyeni.

Amakhala Emoyeni: Cape vulture management

Cennergi supports the Endangered Wildlife Trust's Eastern Cape vulture safe zone research. This programme aims to reduce Cape vulture fatalities at operating and proposed wind energy facilities. It also stabilises the local population by addressing threats in the safe zone. It is the first habitat safe for vultures within wind energy facilities and the surrounding landscape.

Alien plant eradication

236ha land cleared of invader plants

Across our sites, we progressed in avoiding:
- Biodiversity decline
- Indigenous animals being prevented from feeding or nesting in the area due to fauna changes
- Extinction of indigenous species due to genetic pool loss (pine, wattle and hakea trees prevent fynbos species growth)
- Greater risk of catastrophic events (fire and flooding) due to ecological imbalance
- Lower productivity of rangeland due to selective grazing
- Soil erosion and dam and river siltation due to invasive alien species consuming more water than indigenous flora
- Sandy and nitrogen-poor natural soil

Invasive alien plant control continues at BUs and will start at Grootegeluk in 2023. The tender process to appoint a service provider began in the third quarter of 2022.

Since 2016, full-time local SMMEs have successfully managed Cennergi's alien plant control programme.

Pan research

Following an assessment of pans at Belfast by the Council for Scientific and Industrial Research in 2019, and subsequent monitoring by Exxaro since 2020 to avoid deprivation, an external reviewer conducts monthly and quarterly evaluations. We are evaluating recommendations from our completed pan research project to determine the next steps.

Wetland rehabilitation

- We completed rehabilitation of the wetland system adjacent to Belfast in 2020
- The proof-of-concept study in the LoM footprint area at Grootegeluk was completed in 2021. Six seasonal pans were created using donor material from pans that will be lost to mining. The five-year programme to monitor the project's success started in January 2022

We did not record any biodiversity-related grievances in 2022.

Exxaro intends to introduce detailed regional biodiversity management plans, based on our impact assessments in 2022. Plans will ensure compliance, and inform targets and KPIs being developed for each BU.

Environmental liabilities and rehabilitation

Understanding that responsible mining practices continuously evolve, we have a holistic and integrated approach to mine closure, taking into account environmental protection, social wellbeing and financial performance.

Mine rehabilitation is the restoration of the post-mined landscape to the intended post-mining land use. We see environmental rehabilitation as an opportunity to uplift our employees and communities with sustainable alternative land use.

We manage our environmental liabilities and rehabilitation in compliance with legislation and evolving responsible mining practices. Our licence to operate depends on a holistic and integrated approach to land management, mine closure and concurrent rehabilitation.

Our approach therefore considers impacts on employees, communities, the environment, government and infrastructure. Further, our proactive management of environmental impacts minimises residual liabilities (water quality and quantity, and topsoil health), that could affect Exxaro's financial performance by completing concurrent rehabilitation timeously and to prevent water ingress into rehabilitated areas.

Snapshot of our performance

2 000ha land rehabilitated
(2021: 1 933ha)

9 624ha land disturbed
(2021: 9 280ha)

R8 428 million
total **closure costs**
(2021: R7 581 million)

Operations in active closure in 2022: Tshikondeni, Durnacol, Hlobane and Strathrae (2021: four)

Available land for emerging farmers and communities
- **Mpumalanga**
  - Strathrae: 5 447ha (seven farmers on 4 495ha of land used for crop and cattle farming)
  - Sheepmore: 740ha (two farmers on 740ha of land used for cattle farming)
- **KwaZulu-Natal**
  - Durnacol: 190ha (110ha leased to one female farmer for cultivation)
- **Limpopo**
  - Lephalale: 296ha (112ha leased to three entities for intensive vegetable farming)

We are working towards transferring **90% of post-mining land to emerging farmers in local communities by 2026.**

We will align our mine closure and rehabilitation approach with the Sustainable Growth and Impact strategy in 2023.

Our strategic objectives include:
- Embedding concurrent rehabilitation and mine closure in the management of operations at BUs
- Aligning with rehabilitation standards that ensure sustainable alternative post-mining land use (including vegetation that can be used for carbon sequestration)
- Clear and measurable concurrent and ongoing rehabilitation targets
- Building accountability into operational management KPIs
- Reducing financial environmental liability

Responding to TCFD reporting requirements

This is Exxaro's third year of reporting in line with the TCFD recommendations. This reflects Exxaro's internalised and proactive approach to climate change and our ESG commitments.

The table below provides an overview of our responses and links to relevant coverage in this report, our ESG report and other supporting documents available online. We published a separate Climate Change Response strategy and our climate change position statement in 2020. These provide additional detail on some areas of our response to climate change.

Requirement	Progress	Further reading
1 Describe the board's oversight of climate-related risks and opportunities.	Climate change is an integral consideration and as such is embedded in our governance processes. The board takes ultimate responsibility and is supported by its subcommittees. The CEO and chairperson oversee climate-related risks and opportunities.	Governance (ESG report, page 92) Governance for value creation (page 51)
2 Describe management's role in assessing and managing climate-related risks and opportunities.	Ultimate responsibility from a management perspective rests with the CEO. She is supported by the executive committee. Climate change is a key consideration and our response to it is embedded in our Sustainable Growth and Impact strategy.	Transitioning into a low-carbon business (ESG report, page 11) Our strategy (page 44)
3 Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long term.	Climate-related risks and opportunities are embedded in our risk management processes.	Transitioning into a low-carbon business (ESG report, page 11) Business risks and opportunities (page 26)
4 Describe the impact of climate-related risks and opportunities on the organisation's, strategy, and financial planning.	Climate change risks and opportunities are embedded into all strategic, operational and financial matters. Our strategy details how climate change is driving our journey to resilience.	Transitioning into a low-carbon business (ESG report, page 11) Our strategy (page 44)
5 Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	We undertook scenario analysis to understand our business resilience from a physical and transition risk perspective. Our strategy is designed to ensure our resilience to different climate scenarios, including 2°C or lower. Our strategy details how we are responding to risks and opportunities associated with the low carbon transition. Furthermore, our Climate Change Response strategy report and climate change position statement include information on this analysis.	Climate Change Response strategy report (2020 investor tab) and climate change position statement (sustainability tab) Our strategy (page 44)
6 Describe the organisation's processes for identifying and assessing climate-related risks.	We take a proactive approach to identifying climate-related risks.	Transitioning into a low-carbon business (ESG report, page 11), Climate Change Response strategy report (2020 investor tab) and climate change position statement (sustainability tab) Our strategy (page 44)
7 Describe the organisation's process for managing climate-related risks.	Climate-related risks are managed within our ERM framework.	Transitioning into a low-carbon business (ESG report, page 11) Business risks and opportunities (page 26)
8 Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	Climate-related risks are integrated into overall risk management and factor as one of the top 20 risks facing the business.	Business risks and opportunities (page 26)
9 Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management.	Climate risk metrics are disclosed in the ESG report for emissions, energy, water, land use and waste. The remuneration report discloses how climate-related issues are incorporated into our remuneration practices.	Environment (ESG report, page 33) and remuneration report (ESG report, page 145)
10 Disclose scope 1, scope 2, and, if appropriate, scope 3 GHG emissions, and the related risks.	We report extensively on our scope 1, 2 and 3 emissions in our ESG and CDP reports.	GHG emissions (ESG report, page 41) and CDP report (www.cdp.net)
11 Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	We have committed to being carbon neutral for our scope 1 and 2 emissions by 2050.	Transitioning into a low-carbon business (ESG report, page 11) Our strategy (page 44)