Operational reviews continued

ARM Ferrous

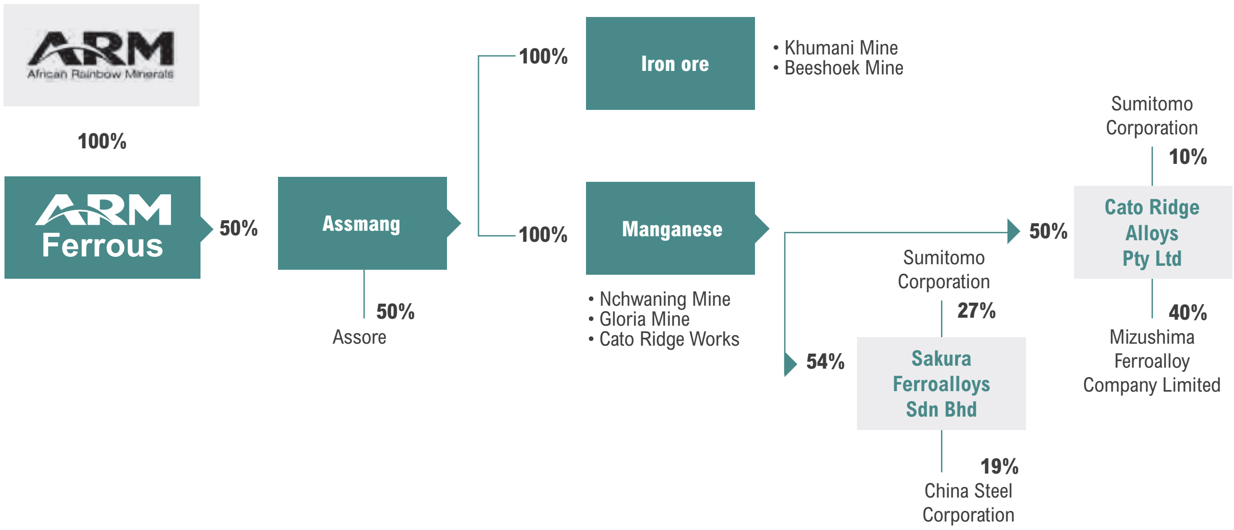
Key features for F2024
World-class safety performance
Robust free cash flow generation
Iron ore contributed **80%** to the group segmental **EBITDA**
Total iron ore production and sales volumes were **up 2%** and **4%** respectively
Average realised **export iron ore** price **up 4%**
Total manganese ore production was **down 15%**
Average high-grade and low-grade **manganese ore prices declined by 5%** and **1%** respectively

André Joubert
Chief executive – ARM Ferrous

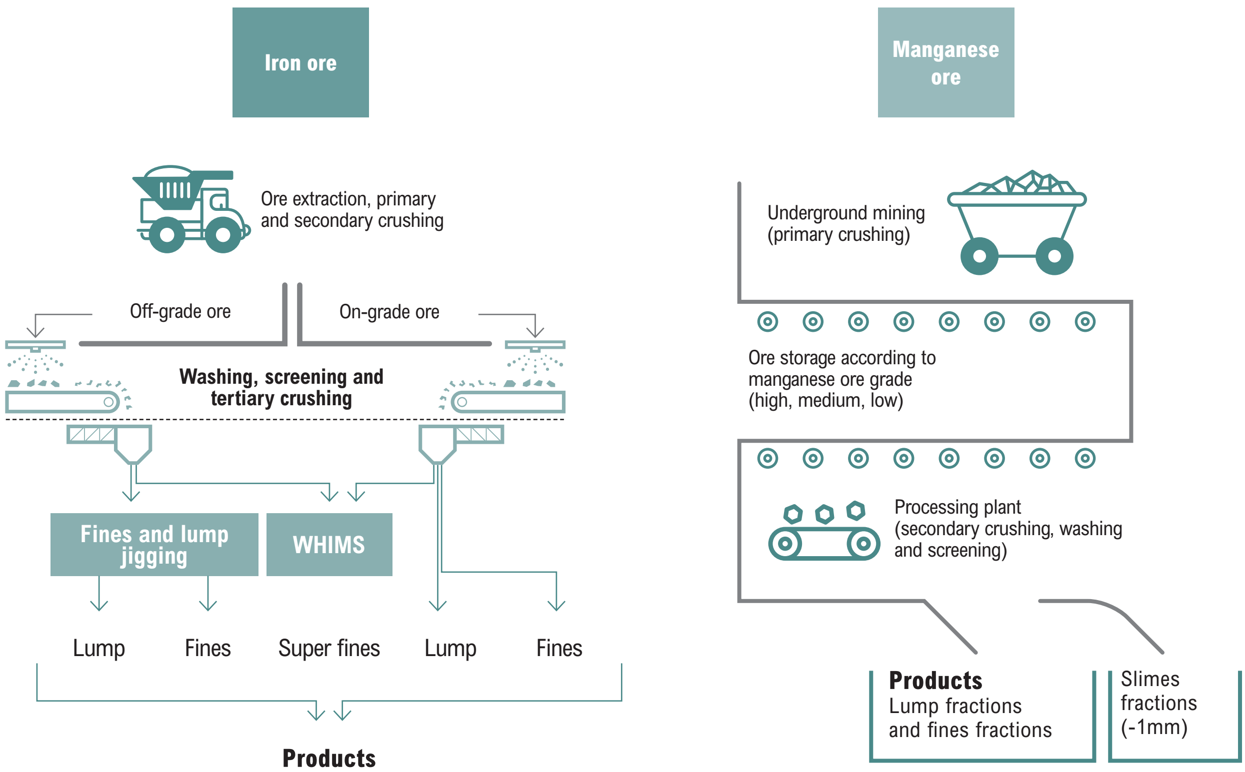
Significant points

- Increase in production and sales volumes of iron ore
- Continuing water-supply challenges to Khumani Mine
- Above-inflation increases in costs.

Structure



Production process



ARM Ferrous continued

Scorecard

Khumani Mine Iron ore

F2024 OBJECTIVES	ACHIEVED/NOT ACHIEVED	F2025 OBJECTIVES
• Ensure LTIFR below tolerance level of 0.15 per 200 000 man-hours.	**Not achieved** • LTIFR was 0.24 per 200 000 man-hours.	• Ensure LTIFR below tolerance level of 0.20 per 200 000 man-hours.
• Production planned at 12.7 million tonnes to accommodate Transnet's deteriorating performance.	**Not achieved** • 11.5 million tonnes achieved mainly due to water-supply shortages, worsened by section 54 blasting stoppage in May 2024 and untimely primary crusher breakdown in June 2024.	• Production planned at 12.5 million tonnes to accommodate deteriorating performance of Transnet.
• Lump production ratio of 56%.	**Achieved** • Lump ratio of 57%.	• Lump production ratio of 56%.
• King pit mining ratio maintained at 65%.	**Achieved** • Total ex-pit mining from King pit was 65.6%.	• King pit mining ratio maintained at 65%.
• Sales volumes planned lower at 13 million tonnes to accommodate risk of Transnet performance in F2024.	**Not achieved** • Sales volumes were 12.3 million tonnes.	• Sales volumes planned lower at 12.3 million tonnes to accommodate risk of Transnet performance in F2025.
• Target unit cash cost (pre-charge out cash cost on mine) increases below inflation to maintain competitiveness at R475/tonne for F2024.	**Not achieved** • R485/tonne mainly due to impact of below-plan production volumes and higher mining maintenance expenses on consumable spares and R/$ exchange rate, partially offset by below-plan diesel cost, blasting cost and savings on plant cost with lower water and electricity consumption.	• Target unit cash cost (pre-charge out cash cost on-mine) increases below inflation to maintain competitiveness at R510/tonne for F2025.

Beeshoek Mine Iron ore

F2024 OBJECTIVES	ACHIEVED/NOT ACHIEVED	F2025 OBJECTIVES
• Ensure LTIFR below tolerance level of 0.20 per 200 000 man-hours.	**Achieved**	• Ensure LTIFR below tolerance level of 0.15 per 200 000 man-hours.
• Achieve production of 2.8 million tonnes per annum.	**Not achieved**	• Achieve production of 2.2 million tonnes per annum.
• Achieve sales of 2.8 million tonnes per annum • No export sales.	**Not achieved**	• Achieve sales of 2.2 million tonnes per annum • No export sales.
• Target unit cash costs of R700 per tonne.	**Achieved**	• Targeting unit cash costs increases of 6%.

Black Rock Mine Manganese ore

F2024 OBJECTIVES	ACHIEVED/NOT ACHIEVED	F2025 OBJECTIVES
• Ensure LTIFR below 0.25 per 200 000 man-hours.	**Achieved**	• Ensure LTIFR below 0.25 per 200 000 man-hours.
• Target production volumes of 4 million tonnes.	**Not achieved**	• Target saleable production volumes of 4 050 000 tonnes.
• Deliver export sales volume of 3.7 million tonnes to accommodate risk of Transnet performance in F2024.	**Not achieved** • Not achieved by 16 000 tonnes	• Deliver export sales volume of 3.6 million tonnes F2025.
• Targeting unit production cost increases of 9%, negatively impacted by logistics constraints.	**Not achieved**	• Targeting unit production cost increases of 8%.

Cato Ridge Works Manganese alloy

F2024 OBJECTIVES	ACHIEVED/NOT ACHIEVED	F2025 OBJECTIVES
• Maintain zero lost-time injuries.	**Not achieved** • Three lost-time injuries for F2024.	• Ensure LTIFR below tolerance level of 0.17 per 200 000 man-hours.
• Maintain ferromanganese alloy grade of 76% and 80% for high-carbon ferromanganese and medium-carbon ferromanganese respectively.	**Achieved**	• Ensure over 80% of medium-carbon ferromanganese alloy produced is at a grade of 80% and above.
• Ramp up on-site BRIX sinter production and optimise grade.	**Achieved**	• Secure alternate supply of carbonaceous fines to ensure good quality sinter.
• Continue using and optimising biomass reductants.	**Achieved**	• Ensure zero valid customer complaints for both high-carbon and medium-carbon ferromanganese.

Sakura Ferroalloys Manganese alloy

F2024 OBJECTIVES	ACHIEVED/NOT ACHIEVED	F2025 OBJECTIVES
• Improve safety performance, ensuring LTIFR below tolerance level of 0.18 per 200 000 man-hours.	**Achieved** • Zero LTIs recorded for the year • New record of 1.7 million safe man-hours recorded at 30 June 2024.	• Maintain safety performance, ensuring LTIFR below tolerance level of 0.18 per 200 000 man-hours.
• Target production volumes of 238 000 tonnes.	**Not achieved** • Total production of 230 381 tonnes.	• Target production volumes of 245 000 tonnes.
• Target sales volumes of 248 000 tonnes.	**Not achieved** • Sales volumes 9% below target mainly on lower offtake from USA, EU and Japan.	• Target sales volumes of 246 000 tonnes.
• Maintain furnace efficiencies and improve unit costs through cost-saving initiatives.	**Achieved** • Ore efficiencies only decreased by 0.5% and reductant efficiencies by 0.6%.	• Maintain furnace efficiencies and improve unit costs by implementing cost-saving initiatives.
• Complete construction and commissioning of sinter plant by end-August 2024.	**Not achieved** • Construction completion date moved to October 2024 while expected commissioning date moved out to December 2024.	• Complete construction and commissioning of sinter plant by end-December 2024.

Operational reviews continued

ARM Ferrous continued

Commodity prices

Average realised US dollar export iron ore prices were 4% higher on a free-on-board (FOB) equivalent basis at US$109 per tonne (F2023: US$105 per tonne).

In F2024, index prices for high-grade ore changed from a 44% index to a 43.5% index while the low-grade index changed from 37% to 36.5%. Together with the increase in prices in May 2024, driven by typhoon damage at Groote Eylandt Mining Company (GEMCO), the year-on-year average US$ price for high-grade manganese (43.5%) ore decreased by 5% while low-grade manganese (36.5%) ore decreased by 1%.

Financial performance

ARM Ferrous headline earnings were 9% lower at R5.0 billion (F2023: R5.5 billion), driven by a 90% headline earnings decrease in the manganese division and a 19% increase in the iron ore division.

Operational performance

Iron ore division

Total iron ore sales volumes increased by 4% to 14.7 million tonnes (F2023: 14.2 million tonnes). Export sales volumes were 2% higher at 12.2 million tonnes (F2023: 12.0 million tonnes).

Local sales volumes increased 11% to 2.5 million tonnes (F2023: 2.2 million tonnes), driven by higher offtake from a local customer.

The lump-to-fines ratio increased from 56:44 in F2023 to 57:43 in F2024.

Total iron ore production volumes increased by 2% to 14.1 million tonnes (F2023: 13.9 million tonnes). F2023 production volumes were lower due to logistical challenges and full stockpiles as previously reported.

Water supply to the Northern Cape mines remains a risk. The supplemental supply of water from a neighbouring mine's stormwater was depleted in May 2023. This, together with the inability to get sufficient water from the Vaal Central Water Board (VCWB), impacted Khumani Mine. Management supplemented Khumani's water requirement from on-mine boreholes and made more sustainable arrangements with the neighbouring mine. Since January 2024, Khumani has had no production losses due to water shortages. This arrangement is working well but is not sustainable. The long-term solution is the urgent start of phase 2 of refurbishing the Vaal Gamagara pipeline, which is being addressed as a key priority between the Department of Water and Sanitation and the Northern Cape mines.

On-mine production unit costs for the iron ore division increased by 10% to R400 per tonne (F2023: R364 per tonne). This was mainly due to inflation-related cost escalations and a higher increase in cash costs combined with more waste-stripping tonnes expensed and less waste-stripping tonnes capitalised.

Unit cash costs per tonne for the division rose 5% to R507 per tonne (F2023: R482 per tonne) due to inflation, higher mining expenses due to higher stripping ratio and higher plant expenses. This was partially offset by higher production volumes and lower diesel and explosive prices.

On-mine unit production costs at Khumani Mine increased 11% to R383 per tonne (F2023: R344 per tonne) while on-mine unit cash costs (which exclude run-of-mine ore stock movements and include capitalised waste-stripping costs and certain non-cash adjustments) were 6% higher at R485 per tonne (F2023: R455 per tonne). The increase was mainly due to inflation-related cost escalations, higher stripping ratio and lower capital waste tonnes, partially offset by higher production volumes and lower diesel and explosive prices.

On-mine unit production costs at Beeshoek Mine increased by 5% mainly due to inflation, lower mining cash cost and a lower work-in-progress adjustment due to lower dumps level.

Beeshoek Mine's unit cash costs were in line with the prior year. Inflationary increases on cost were offset by a 3% increase in production volumes and lower diesel and explosives prices.

Unit cost of sales for the iron ore division, which includes marketing and distribution costs, were 7% higher, mainly due to higher on-mine production costs (discussed above) and increased railage costs. Sales and marketing costs, which are determined based on free-on-board revenue, were higher owing to higher US dollar iron ore prices in F2024.

Manganese ore

Manganese ore sales volumes in F2024 increased 2% to 4.4 million tonnes (F2023: 4.3 million tonnes). Export sales volumes rose 3% to 3.7 million tonnes (F2023: 3.6 million tonnes), due to the rollover of shipments from F2023 and local sales volumes that were higher at 0.75 million tonnes (F2023: 0.73 million tonnes).

Production volumes at Black Rock Mine decreased 15% to 3.6 million tonnes (F2023: 4.3 million tonnes) due to operational challenges at Nchwaning 3, exacerbated by a decision to stop producing unprofitable ore, in turn affecting the development and opening of new, more profitable mining areas. The recovery plan was successfully executed but resulted in production delays until the end of March 2024. Ramp up to the required full production run-rate was only achieved in June 2024.

On-mine unit production costs at Black Rock Mine rose to R857 per tonne from R732 in F2023. On-mine unit cash costs increased to R879 per tonne in F2024 due to inflation and lower production volumes, with an adverse effect on fixed-cost dilution and increase in power costs.

Unit costs of sales (which include marketing and distribution costs) increased 6% due to higher production costs (as discussed above) and the increase in inland logistics costs, offset by lower marketing expenses driven by lower manganese ore prices and lower freight rates.

Manganese alloys

High-carbon ferromanganese production at Sakura (100% basis) decreased to 230 000 tonnes (F2023: 253 000 tonnes). High-carbon ferromanganese sales (100% basis) declined 5% to 226 000 tonnes (F2023: 237 000 tonnes). Lower production and sales volumes in F2024 reflect decreased demand.

High-carbon ferromanganese production at Cato Ridge Works decreased by 13% to 101 000 tonnes (F2023: 116 000 tonnes), mainly due to holding back production because of soft market demand in F2024.

For the same reason, medium-carbon ferromanganese production at Cato Ridge Alloys (100% basis) declined 10% to 51 000 tonnes (F2023: 56 000 tonnes).

High-carbon ferromanganese sales at Cato Ridge Works decreased 28% to 31 000 tonnes (F2023: 43 000 tonnes), impacted by lower production and a decrease in demand. Medium-carbon ferromanganese sales at Cato Ridge Alloys (100% basis) decreased by 8% to 50 000 tonnes (F2023: 54 000 tonnes), impacted by lower market demand in F2024.

Unit cash costs at Sakura decreased 12% in F2024. The significant drop is mainly due to a 23% decrease in ore prices and 25% decrease in reductant prices, offset by lower production volumes and inflationary increases in other conversion costs.

Unit cash costs at Cato Ridge Works rose 11% in F2024. The significant increase is mainly due to a 13% reduction in production volumes, above-inflation increases in power costs and the cost of ore from Black Rock, plus inflationary increases in other raw material prices.

Medium-carbon ferromanganese unit cash costs at Cato Ridge Alloys decreased 1% in F2024.

Operational reviews continued

ARM Ferrous continued

Investing in the current business

Capital expenditure (100% basis) for the iron ore division was R3 215 million (F2023: R3 414 million), which includes capitalised waste-stripping costs of R1 335 million (F2023: R1 361 million). Khumani Mine's capital expenditure (100% basis) decreased 5% to R2 573 million (F2023: R2 711 million), mainly because of lower stay-in-business capital and less waste-stripping tonnes capitalised. Beeshoek Mine's capital expenditure (100% basis) decreased 9% to R642 million (F2023: R703 million), mainly due to lower capitalised waste-stripping costs of R393 million (F2023: R410 million) and lower stay-in-business capital.

Total capital expenditure for manganese ore operations was R1 368 million on a 100% basis (F2023: R1 618 million). Capital expenditure is lower due to projects that were postponed given market conditions and low pricing for the first nine months of F2024.

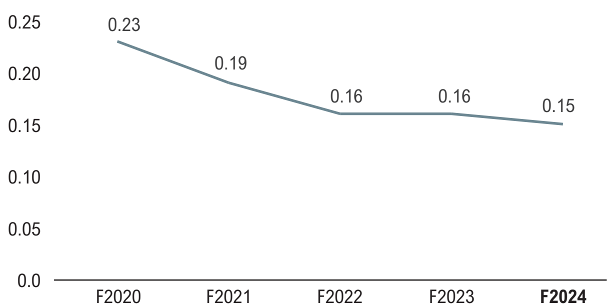
Ensuring a safe, healthy and appropriately skilled workforce

Total employees at ARM Ferrous decreased 5% to 9 327 at 30 June 2024 (30 June 2023: 9 843), with 61% full-time employees and 39% contractors. ARM Ferrous invested R267 million in training in F2024 (F2023: R238 million).

Safety and health

There have been no fatalities at ARM Ferrous since 2015. The divisional LTIFR improved to 0.15 per 200 000 man-hours in F2024. Black Rock Mine achieved 12 million fatality-free shifts and 15 consecutive years fatality free, Khumani Mine completed five million fatality-free shifts over nine years and Cato Ridge Works achieved three million fatality-free shifts over 16 years. Beeshoek Mine achieved 16 months without a lost-time injury, a full year with no reportable injuries and completed more than five million fatality-free shifts over 21 years.

LTIFR (per 200 000 man-hours)



Operation	Total fatality-free shifts worked*	Last fatality	Fatality free
Beeshoek Mine	5 789 339	Mar 2003	21 years
Black Rock Mine	12 102 367	Apr 2009	15 years
Khumani Mine	5 740 201	Apr 2015	9 years
Cato Ridge Works	3 135 011	Feb 2008	16 years

* *As at 30 June 2024.*

Specific health risks in each workplace and occupation are identified and addressed by risk-based occupational medical surveillance programmes, with an emphasis on TB, HIV and Aids and NIHL. In F2024, medical surveillance included:

- 16 049 audiometric tests
- 35 914 TB screening tests
- 13 499 HIV counselling sessions.

Chronic conditions are monitored by specific occupational exposure profiles for high-risk roles. Employees can access psychological support through a toll-free helpline in the employee assistance programme and the on-site psychological support programme.

Environmental performance

Carbon emissions and energy use

Estimated scope 1 and 2 carbon emissions decreased by 13% due mainly to reduced production at the Cato Ridge smelter, which contributed 45% to ARM Ferrous' total scope 1 and 2 emissions. Scope 1 and 2 carbon emissions per tonne of iron ore produced decreased to $0.027tCO_2e$ (F2023: $0.028tCO_2e$) and emissions per tonne of manganese ore produced increased to $0.046tCO_2e$ from $0.042tCO_2e$ in F2024. Scope 1 and 2 carbon emissions per tonne of manganese alloy produced decreased to $3.1tCO_2e$ (F2023: $3.3tCO_2e$).

Electricity consumed accounted for 68% of ARM Ferrous' scope 1 and 2 emissions and decreased 10% year on year. ARM Ferrous is a member of the Energy Intensive Users Association and has a charter to map its development and implementation of energy-efficient practices.

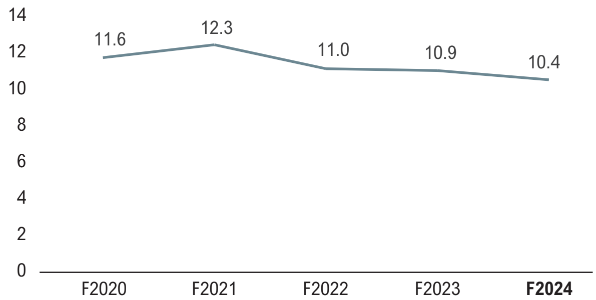
At the ARM Ferrous Northern Cape mining operations, performance challenges and the resultant termination of a consultant's services delayed the definitive feasibility study (DFS) to explore the correct energy mix for the mines that will cater to baseload demand. A new service provider has been appointed to conduct the DFS, which will also explore the best options between outright ownership and buying power from independent power producers. This will be completed by December 2024.

Water management

ARM Ferrous' mines based in the water-scarce Northern Cape, and the cost and continuity of water supply is a risk for all mines as well as communities in the region. The 2024 climate change and water report provides more information on mitigating measures.

We continue to make good progress in deepening our understanding of water-related impacts, risks and opportunities, and are aligning water accounting with the ICMM's updated water reporting good practice guide. Total operational water withdrawn decreased 4% to 10.4 million m^3 (F2023: 10.9 million m^3). Beeshoek Mine accounted for 45% of ARM Ferrous' operational water withdrawn, Khumani Mine 37% and Black Rock Mine 16%.

Operational water withdrawn (million m^3)



Tailings storage facilities (TSFs)

The ARM TSF management policy and standard, which align with the ICMM's GISTM, are being implemented at all three ARM Ferrous mines. Conformance to the GISTM was self-assessed at Black Rock and Khumani mines in F2023. GISTM conformance verification third-party validation was conducted in July 2023 at Khumani Mine and updated in June 2024 as per the self-assessment checklist. The TSF at Beeshoek Mine has been classified as low hazard, and conformance is consequently due by August 2025. ARM's report on conformance to GISTM is available on our website.

Supporting host communities

ARM Ferrous participates in the shared-value working committee with other Northern Cape manganese producers and the Minerals Council in creating innovative projects with a meaningful benefit for communities.

Enterprise and supplier development initiatives promote economic development and job creation in local communities. Projects under local economic development and social and labour plans, as well as corporate social investment initiatives, contribute to community infrastructure and socio-economic development. In F2024, these included improving water-supply and sanitation infrastructure, stormwater drains on roads, waste infrastructure and services, support for learners and the vulnerable, classrooms and school ablution facilities as well as health facilities. Black Rock Mine completed a three-year health-screening and education programme at 29 local schools.

[1] *Water entering our system that is actively managed without intent to supply operational water demand.*

Operational reviews continued

ARM Ferrous continued

ARM Ferrous ESG indicators

	Unit	F2024	F2023	F2022	F2021	F2020
Employee indicators						
Average number[1]		**10 192**	11 166	12 034	12 097	10 430
– Permanent employees		**5 350**	5 432	5 498	5 501	5 222
– Contractors		**4 842**	5 734	6 536	6 595	5 207
LTIFR per 200 000 man-hours		**0.15**	0.16	0.16	0.19	0.23
Environmental indicators (100% basis)						
Scope 1 and 2 carbon emissions	tCO_2e	**1 022 597**	1 177 878	1 260 064	1 194 037	1 145 463
Total operational water withdrawn	million m^3	**10.4**	10.9	11.0	12.3	11.6
Energy usage						
– Electricity	MWh	**697 215**	774 220	824 098	805 557	767 952
– Diesel	000 litres	**64 537**	62 629	61 232	59 267	57 155
Community investment indicators						
Total corporate social responsibility (CSR)	R million	**123**	93	91	106	109
– Corporate social investment (CSI)	R million	**38**	26	30	42	33
– Local economic development (LED)	R million	**85**	67	61	64	75

[1] *Permanent employees and contractors reported as average for the year, consistent with calculating safety statistics.*

Black Rock Mine

Summary operational and financial indicators – 100% basis

Iron ore division

Operations
Khumani and Beeshoek mines – 100% basis unless otherwise stated.

Ownership
ARM and Assore each own 50% of Assmang.

Management
ARM provides management services while Assore performs the sales and marketing function.

	Unit	F2024	F2023	F2022	F2021	F2020
Operational						
Production volumes	000t	**14 146**	13 886	16 201	15 929	16 092
Khumani Mine	000t	**11 547**	11 351	13 074	12 675	13 100
Beeshoek Mine	000t	**2 599**	2 535	3 127	3 254	2 993
Sales volumes	000t	**14 723**	14 210	16 064	16 417	15 568
Export iron ore	000t	**12 241**	11 966	13 176	13 269	13 129
Local iron ore	000t	**2 482**	2 244	2 888	3 148	2 439
Unit cost changes						
Unit cash costs[1]	%	**5**	28	12	13	10
Unit cost of sales	%	**7**	9	8	16	10
Financial						
Sales revenue	R million	**29 068**	25 069	27 856	37 621	20 638
Total costs	R million	**16 480**	14 734	15 769	16 927	11 065
Operating profit	R million	**12 625**	10 654	12 192	20 694	9 573
EBITDA	R million	**14 461**	12 435	13 758	22 255	10 992
Headline earnings	R million	**9 867**	8 316	9 307	15 046	7 376
Capital expenditure	R million	**3 215**	3 414	2 890	2 397	2 223

[1] *On-mine unit production costs from F2020 until F2022.*

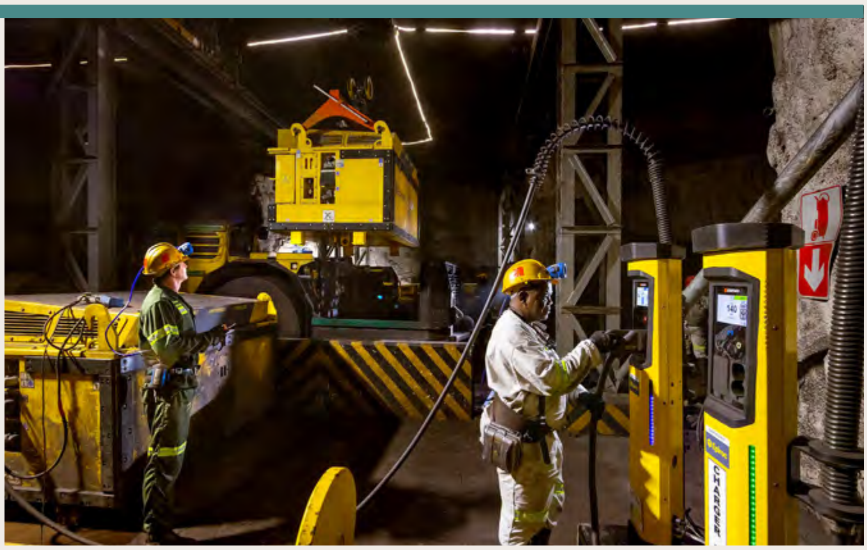
Summary operational and financial indicators – 100% basis

Manganese division

Operations
Nchwaning and Gloria mines (collectively Black Rock Mine), Cato Ridge Works, Cato Ridge Alloys and Sakura Ferroalloys.

Ownership
ARM and Assore each own 50% of Assmang.

Management
ARM provides management services while Assore performs the sales and marketing function.



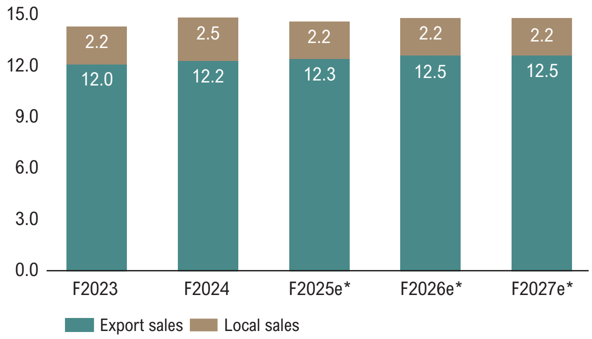
	Unit	F2024	F2023	F2022	F2021	F2020
Operational						
Production volumes						
Manganese ore	000t	**3 622**	4 272	4 147	4 041	3 619
Ferromanganese	000t	**382**	425	385	362	409
Sales volumes						
Manganese ore[1]	000t	**4 432**	4 325	3 957	3 966	3 227
Ferromanganese	000t	**307**	334	291	353	323
Unit cost changes – manganese ore						
Unit cash costs[2]	%	**20**	5	(1)	18	(2)
Unit cost of sales	%	**6**	(4)	15	8	–
Financial						
Manganese ore						
Sales revenue	R million	**11 748**	12 973	12 009	10 236	9 005
Total costs	R million	**11 019**	10 809	9 841	9 034	6 410
Operating profit	R million	**744**	2 724	2 726	1 202	2 595
EBITDA	R million	**1 848**	3 697	3 626	1 918	3 183
Headline earnings	R million	**492**	2 130	2 101	823	1 846
Capital expenditure	R million	**1 368**	1 618	2 133	2 060	2 228
Ferromanganese						
Sales revenue	R million	**1 724**	2 316	2 718	1 956	1 791
Total costs	R million	**2 140**	2 130	2 074	1 794	1 651
Operating profit	R million	**(376)**	399	784	162	140
EBITDA	R million	**(376)**	409	795	220	189
Headline earnings	R million	**(206)**	614	2 035	74	(174)
Capital expenditure	R million	**26**	65	87	188	86

1 *External sales only and includes sales to Sakura Ferroalloys.*
2 *On-mine unit production costs from F2020 until F2022.*

Outlook sales volumes – 100% basis

Iron ore

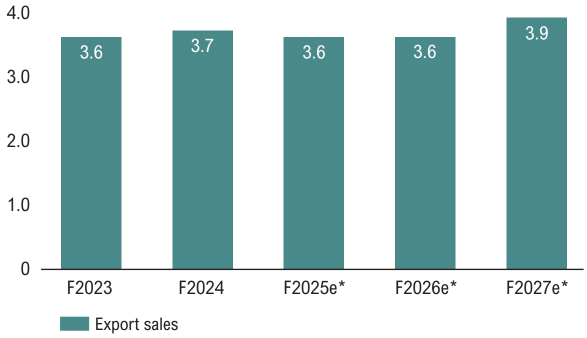
Sales volumes (million tonnes)



* *F2025, F2026, F2027 are estimated volumes.*

Manganese ore

Sales volumes (million tonnes)



* *F2025, F2026, F2027 are estimated volumes.*

Black Rock Mine