SUSTAINABILITY REPORT

>>>>>>>>>
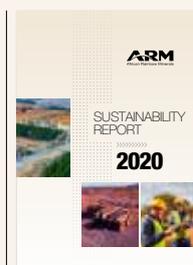
2020

Contents

OUR 2020 SUITE OF REPORTS

2020 INTEGRATED ANNUAL REPORT
A holistic assessment of ARM's ability to create sustainable value, with relevant extracts from the annual financial statements and supplementary reports, particularly the sustainability report covering non-financial aspects with a material impact on our performance and our business.

2020 ANNUAL FINANCIAL STATEMENTS
The audited annual financial statements have been prepared according to International Financial Reporting Standards (IFRS).

2020 SUSTAINABILITY REPORT
Detailed information on our performance on key environmental and social matters.

The supplementary report on climate change and water, as well as additional sustainability data tables are available on our website at **www.arm.co.za**

2020 MINERAL RESOURCES AND MINERAL RESERVES REPORT
In line with JSE Listings Requirements, ARM prepares mineral resources and mineral reserves statements for all its assets as per SAMREC Code guidelines and definitions (2016).

2020 CORPORATE GOVERNANCE REPORT
The corporate governance report includes detailed disclosure on the framework, processes and intended outcomes of ARM's governance structures and detailed disclosure on ARM's application of the principles of King IV™.

™ *Copyright and trademarks are owned by the Institute of Directors in Southern Africa NPC and all its rights are reserved.*

2020 KING IV™ APPLICATION REGISTER

2020 NOTICE OF AGM

REFERENCES

IAR	AFS	SR	RR	CGR	CW	www.arm.co.za
2020 Integrated annual report	2020 Annual financial statements	2020 Sustainability report	2020 Mineral resources and mineral reserves report	2020 Corporate governance report	2020 Supplementary report on climate change and water	

All monetary values in this report are in South African rand unless otherwise stated. Rounding may result in computational discrepancies on management and operational review tabulations.

About this report

The African Rainbow Minerals Limited (ARM or the company) 2020 sustainability report provides additional information for the company's stakeholders regarding environmental, social and governance (ESG) practices, and sustainable development performance for the year to 30 June 2020 (F2020). The ARM 2020 integrated annual report (available on our website **www.arm.co.za**) is the company's primary report and provides information on financial and operational performance to meet the information needs of shareholders, potential investors and other providers of capital.

Throughout the report, cross references are provided to the other reports in the suite (contents page) where additional information is available on relevant issues. The ARM supplementary report on climate change and water provides additional environmental information and sustainability data tables provide more detail on various sustainability indicators. Both are available on the ARM website at **www.arm.co.za**.

REPORTING GUIDELINES

The integrated reporting process responds to the relevant statutory frameworks, which include the Companies Act 71 of 2008 (as amended), the King Report on Corporate Governance for South Africa 2016 (King IV™), the JSE Listings Requirements, as well as all legislation, regulations and codes of practice applicable to the South African mining sector.

Disclosures in this sustainability report are primarily focused around our most material matters, guided by the member requirements of the International Council on Mining and Metals (ICMM), the GRI Standards (Core option) and the GRI Mining and Metals Sector Disclosures. The legislation, industry initiatives, frameworks and guidelines that shape our reporting and approach to sustainable development are shown in the graphic on pages 2 and 3.

BOUNDARY AND BASIS FOR INCLUSION

This report includes sustainability information from those operations over which ARM has direct or joint management control, namely the operations that form part of the ARM Ferrous and ARM Platinum divisions. Consistent with reporting in prior years, the report excludes those operations, joint ventures and investments that we do not manage directly (ARM Coal, the Sakura Ferroalloys Smelter and Harmony Gold), as well as projects that are in exploration, development or feasibility phases.

COMBINED ASSURANCE

The combined assurance model draws from the ARM enterprise risk management (ERM) processes, internal and external audit processes and various management assurance interventions by specialists/subject matter experts to further reinforce comprehensive management assurance processes and reporting. This ensures a coordinated and integrated approach that identifies potential gaps and duplication in assurance and provides input to strengthen the control environment.

Independent assurance was provided over select information in the sustainability report by IBIS ESG Consulting Africa (Pty) Ltd through an engagement performed in accordance with AccountAbility's AA1000AS (2008) with 2018 Addendum Type II moderate assurance requirements. This includes a review of the reporting process and an assessment of the report against the AccountAbility Principles of inclusivity, materiality, responsiveness and impact. Due to the travel restrictions imposed to address Covid-19, and to minimise risk to the operations, sustainability data was remotely assured this year, covering Khumani, Black Rock and Two Rivers mines.

The process combined content-based and indicator-based assurance. Content-based assurance tests assertions in the report for plausibility (the likelihood of being true) and/or supportability (whether there is evidence to support them) to assess the report's completeness in terms of GRI reporting requirements. Indicator-based assurance reviews data reported for selected sustainability indicators for accuracy, completeness, consistency and reliability. The Independent Assurance Statement is presented on pages 102 to 105 of this report.

CONSISTENCY OF DISCLOSURE

The sustainability information disclosed in this report covers ARM's activities for the year to 30 June 2020 on a 100% basis (as if ARM owned 100% of all the operations) and is consistent throughout, apart from:

- Certain information that is disclosed for the calendar year ending 31 December 2019 to align with the legislation regulating these disclosures, namely information regarding pulmonary tuberculosis (PTB) infection and cure rates, as well as the information sourced from the Mining Charter Scorecard reports.
- Carbon emissions are disclosed on an attributable basis (in the proportion of ARM's shareholding in the operations) to align with carbon emission reporting requirements.
- The total workforce figure used for occupational health and safety statistics is the average of 18 783 employees and contractors eligible for induction and/or medical surveillance, and contributing to the safety statistics over the year. The total labour figure reported in the human resources management section and the integrated annual report of 20 998 is the headcount recorded as at 30 June 2020.

STAKEHOLDER FEEDBACK

We welcome feedback on our sustainability reporting practices and ESG performance. Contact details and a stakeholder feedback form are included at the back of this report.

DIRECTORS' RESPONSIBILITY

The ARM board is ultimately responsible for this sustainability report and has mandated the social and ethics committee to oversee the reporting process. The board has reviewed the content of this report and believes that, read together with the 2020 integrated annual report, it provides an accurate and balanced reflection of the group's activities for the year and appropriately addresses the most material issues.

Dr R V Simelane
Chairman of the social and ethics committee

Mike Schmidt
Chief executive officer

8 October 2020

Our approach to sustainable value creation

We consider sustainable value creation in the context of:

In F2020, ARM was ranked fourth in the FTSE/JSE Responsible Investment Top 30 Index

RELEVANT LEGISLATION

As highlighted at the start of each section.

OUR MOST MATERIAL MATTERS

IAR Pages 34 to 35.

INDUSTRY INITIATIVES AND GOOD PRACTICE

The Minerals Council South Africa (MCSA)

MINERALS COUNCIL
SOUTH AFRICA

The International Council on Mining and Metals (ICMM)

ICMM International Council on Mining & Metals | **SUSTAINABLE DEVELOPMENT FRAMEWORK**

PRINCIPLES	POSITION STATEMENT

PERFORMANCE EXPECTATIONS

CORPORATE SD REPORTING AND ASSURANCE, PE VALIDATION AND DISCLOSURE

GUIDELINES AND FRAMEWORKS

- The King IV Code™*
- The Extractive Industries Transparency Index (EITI)
- The FTSE/Russell Responsible Investment Index
- The Global Reporting Index (GRI) Standards
- The Task Force on Climate Related Financial Disclosures (TCFD)
- The CDP Climate Change and CDP Water Responses
- The South African National Strategic Plan 2017 – 2022 (NSP)
- South Africa's National Development Plan (NDP)
- The United Nations Global Compact (UNGC)
- The United Nations Sustainable Development Goals (UN SDGs)
- The ICMM Sustainable Development Framework
- The International Integrated Reporting Council (IIRC) Integrated Reporting <IR> Framework

* Copyright and trade marks are owned by the Institute of Directors in Southern Africa NPC and all of its rights are reserved

ICMM International Council on Mining & Metals | **MINING WITH PRINCIPLES**   **top EMPLOYER** SOUTH AFRICA 2020   **FTSE Russell**   **SUSTAINABLE DEVELOPMENT GOALS**   **EITI** Extractive Industries Transparency Initiative   **IIRC**

DELIVERING FINANCIAL RETURNS TO SHAREHOLDERS AND OTHER PROVIDERS OF CAPITAL

IAR Pages 26 to 39.

UN SDGs

1 NO POVERTY

8 DECENT WORK AND ECONOMIC GROWTH

ICMM Mining Principles

1 ETHICAL BUSINESS

2 DECISION-MAKING

4 RISK MANAGEMENT

10 STAKEHOLDER ENGAGEMENT

CONTINUOUSLY IMPROVING OPERATIONAL PERFORMANCE

IAR Pages 54 to 89.

UN SDGs

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

ICMM Mining Principles

1 ETHICAL BUSINESS

2 DECISION-MAKING

4 RISK MANAGEMENT

5 HEALTH AND SAFETY

6 ENVIRONMENTAL PERFORMANCE

10 STAKEHOLDER ENGAGEMENT

ENSURING A SAFE, HEALTHY AND APPROPRIATELY SKILLED WORKFORCE

SR Pages 48 to 77.

UN SDGs

1 NO POVERTY

2 ZERO HUNGER

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

10 REDUCED INEQUALITIES

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

17 PARTNERSHIPS FOR THE GOALS

ICMM Mining Principles

4 RISK MANAGEMENT

5 HEALTH AND SAFETY

MAINTAINING OUR SOCIAL LICENCE TO OPERATE

SR Pages 36 to 47.

UN SDGs

3 GOOD HEALTH AND WELL-BEING

4 QUALITY EDUCATION

5 GENDER EQUALITY

8 DECENT WORK AND ECONOMIC GROWTH

ICMM Mining Principles

1 ETHICAL BUSINESS

2 DECISION-MAKING

4 RISK MANAGEMENT

10 STAKEHOLDER ENGAGEMENT

ENSURING RESPONSIBLE STEWARDSHIP OF NATURAL RESOURCES

IAR Pages 78 to 101.

UN SDGs

2 ZERO HUNGER

6 CLEAN WATER AND SANITATION

7 AFFORDABLE AND CLEAN ENERGY

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

14 LIFE BELOW WATER

15 LIFE ON LAND

ICM Mining Principles

6 ENVIRONMENTAL PERFORMANCE

7 CONSERVATION OF BIODIVERSITY

8 RESPONSIBLE PRODUCTION

Salient features

Headline earnings increased by 6% to R5 534 million. Headline earnings per share increased by 8% to R28.50 compared to R27.18 in F2019.

The financial year ended 30 June 2020 was challenging, particularly in the second half of the year with the onset of the Covid-19 pandemic. Our diversified portfolio of commodities again stood us in good stead as higher PGM and iron ore prices more than offset the negative impact of lower manganese ore, manganese alloys and thermal coal prices. The weaker Rand against the US Dollar also contributed positively to headline earnings.

Production at ARM operations (in South Africa) except the ARM Coal operations were placed on temporary care and maintenance for the duration of the 21-day national lockdown that started on 27 March 2020. The ARM Coal operations were considered by government to be an essential service and were permitted to continue producing during the lockdown. As lockdown restrictions eased, all South African mining operations were allowed to ramp up and ARM's operations ramped up at different rates during this period.

During the Covid-19 pandemic we further supported our host communities, suppliers and other stakeholders. The ARM Ferrous and ARM Platinum operations contributed approximately R58 million (on a 100% basis) towards various Covid-19 response initiatives in host communities and Covid-19 relief funding for small, micro and medium enterprises (SMMEs) affected by Covid-19. Initiatives to support host communities included the purchase of Personal Protective Equipment (PPE) and medical equipment and the supply of water and food parcels to host communities as well as radio and media awareness campaigns.

In addition, the executive chairman of ARM, Dr Patrice Motsepe, announced on 28 March 2020 that his family, in partnership with companies and organisations that they are associated with (including ARM), pledged R1 billion to assist with South Africa's and Africa's response to the challenges presented by the Covid-19 pandemic. As part of the pledge, ARM has contributed R50 million towards the purchase of PPE for health care workers.
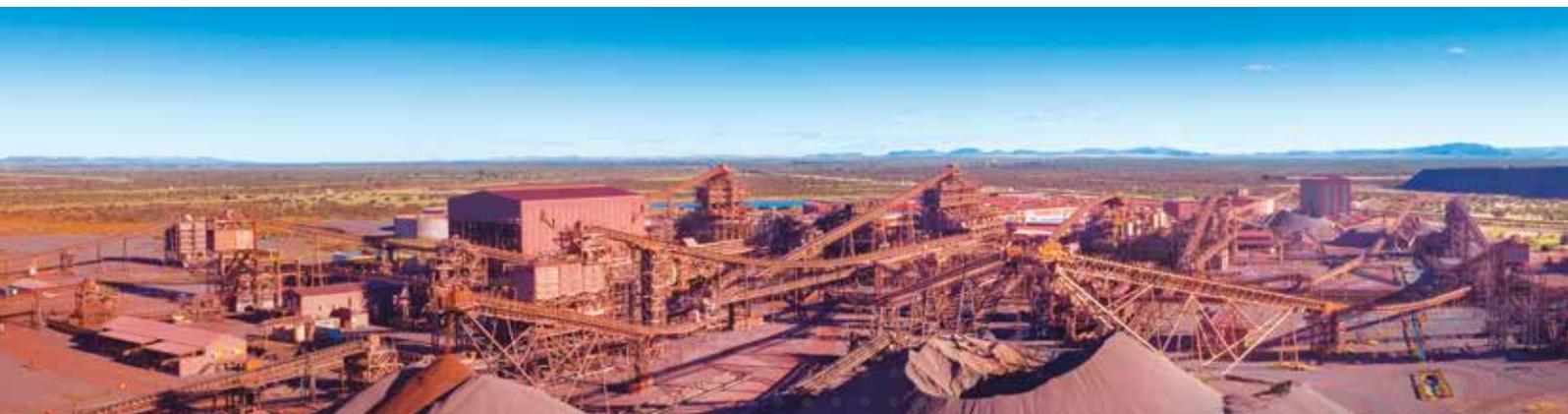
The board approved a share buy-back which commenced on 19 March 2020. R57 million was spent acquiring approximately 623 000 ARM shares at an average price of R90.86 per share. The share buy-back was terminated on 24 March 2020 to conserve cash owing to uncertainty created by the Covid-19 pandemic.

We were pleased to declare a final dividend of R7.00 per share during these difficult times while maintaining a robust flexible financial position. Combined with the interim dividend of R5.00 per share, the total dividend for F2020 is R12.00 per share (F2019: R13.00).

Diversity on the board enhances integrated thinking, as does the range and depth of expertise among our directors. During the review period, we exceeded our 50% target for black representation on the board and achieved our 25% target for female directors.

Scaling down of the Nkomati Mine in preparation for care and maintenance is progressing well with the mine now expected to cease production in February 2021 (previously September 2020).

We remain committed to creating and maintaining a safe and healthy work environment for all employees. As reported in the first half of the financial year, tragically three colleagues were fatally injured in separate accidents at the Two Rivers, Nkomati and Tweefontein mines. No fatalities were reported in the second half of F2020.

CARBON FOOTPRINT
Scope 1 and 2 emissions
(million tCO_2e)

1.2
1.0 — **1.10**
0.8 — **1.02**
0.6
0.4
0.2

F2019   F2020

Carbon footprint
decreased by **8%** to
1.02 million $tCO_2(e)$

ELECTRICITY CONSUMPTION
(GWh)

2 000
1 500 — **1 659**   **1 563**
1 000
500

F2019   F2020

Electricity consumption
decreased by **6%** to
1 563 GWh

WATER WITHDRAWAL
(million m^3)

25
20 — **21.8**   **20.3**
15
10
5

F2019   F2020

Improved measuring
and accounting for
water through
implementation of the
ICMM Water
Accounting Framework.
Water withdrawal
decreased by **7%** to
20.3 million m^3. Water
re-use efficiency
increased to **72%**

EXPENDITURE ON SKILLS TRAINING
(R million)

250
200 — **239**   **225**
150
100
50

F2019   F2020

Skills training
expenditure decreased
by **6%** to R225 million

CORPORATE SOCIAL RESPONSIBILITY (CSR)
(R million)

200
175
150
130
100
50

F2019   F2020

Expenditure on CSR
through Social Labour
Plans, Local Economic
Development, and
Corporate Social
Investment decreased
by **26%**

Sustainability performance year-on-year

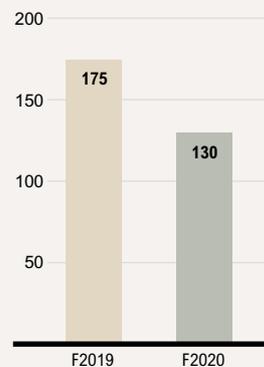| Performance indicator	F2020	F2019	F2018	F2017	F2016
Economic and related core baseline indicators					
Sales (Rm)	**27 370**	26 641	21 916	21 298	19 072
Taxes (Rm)	**2 805**	2 135	2 023	858	478
Headline earnings (Rm)	**5 534**	5 226	4 814	3 196	1 051
EBITDA (Rm)	**11 009**	9 336	8 024	6 372	3 964
Number of environmental administrative penalties/fines	**–**	–	–	–	–
Employee indicators – on a 100% basis					
as at 30 June 2020*					
Total number of ARM employees and contractors	**20 998**	21 417	21 862	24 106	23 128
– Employees (permanent)	**12 678**	12 771	12 420	13 218	13 793
– Contractors (mainly used in capital projects)	**8 320**	8 646	9 442	10 871	9 319
– Expatriates	**–**	–	–	17	16
Employee turnover (excluding contractors) (%)	**6.3**	5.7	6.9	1.1	15
Investment in employee training and development					
– Total expenditure (Rm)	**225**	239	239	180	184
– % of payroll	**6.8**	7.7	8.8	6.0	6.9
Employment equity (% representation of previously disadvantaged groups among permanent employees)					
– Executive management	**61**	56	56	42	38
– Senior management	**52**	51	50	49	49
– Professionally qualified	**68**	66	64	60	57
– Technically qualified	**79**	77	75	71	68
Lost time injury frequency rate (LTIFR)/200 000 man-hours•	**0.45**	0.42	0.38	0.28	0.32
Reportable/serious accidents	**63**	76	68	47	60
Number of lost man days due to industrial action	**–**	8	5 904	–	3 024
Injury environmental indicators – on a 100% basis					
Total water withdrawn (m^3) (municipal, surface and groundwater)	**20 267 668**	21 773 440	18 296 551	14 295 993	19 066 300
Energy usage					
– Electricity (MWh)	**1 563 311**	1 658 629	1 656 263	1 784 491	1 820 802
– Diesel (000 litres)	**82 572**	96 055	94 234	87 494	91 974
Emissions (Attributable^)#					
Carbon emissions (equivalent tonnes CO_2)					
– Scope 1 and 2	**1 016 652**	1 102 614	1 026 249	1 047 418	1 077 746
– Scope 1	**194 189**	235 956	235 354	226 744	226 972
– Scope 2	**822 463**	866 659	790 895	820 674	850 774
Direct emissions#					
– NOx (tonnes)	**398**	434	461	437	405
– SOx (tonnes)	**274**	298	312	346	316
– Particulate matter (tonnes)	**267**	274	202	242	216
Corporate Social Responsibility (CSR) – on a 100% basis					
Total community upliftment and CSR (Rm)	**130.3**	175.3	167.0	122.8	105.9
– CSI (Rm)	**44.7**	27.4	20.5	22.1	18
– LED (Rm)	**85.6**	147.9	135.3	92.5	80.5
ARM BBEE Trust (Rm) (Projects)	**14.5**	16.4	11.2	8.2	7.4

Non-financial data is stated on a 100% basis, unless otherwise indicated.
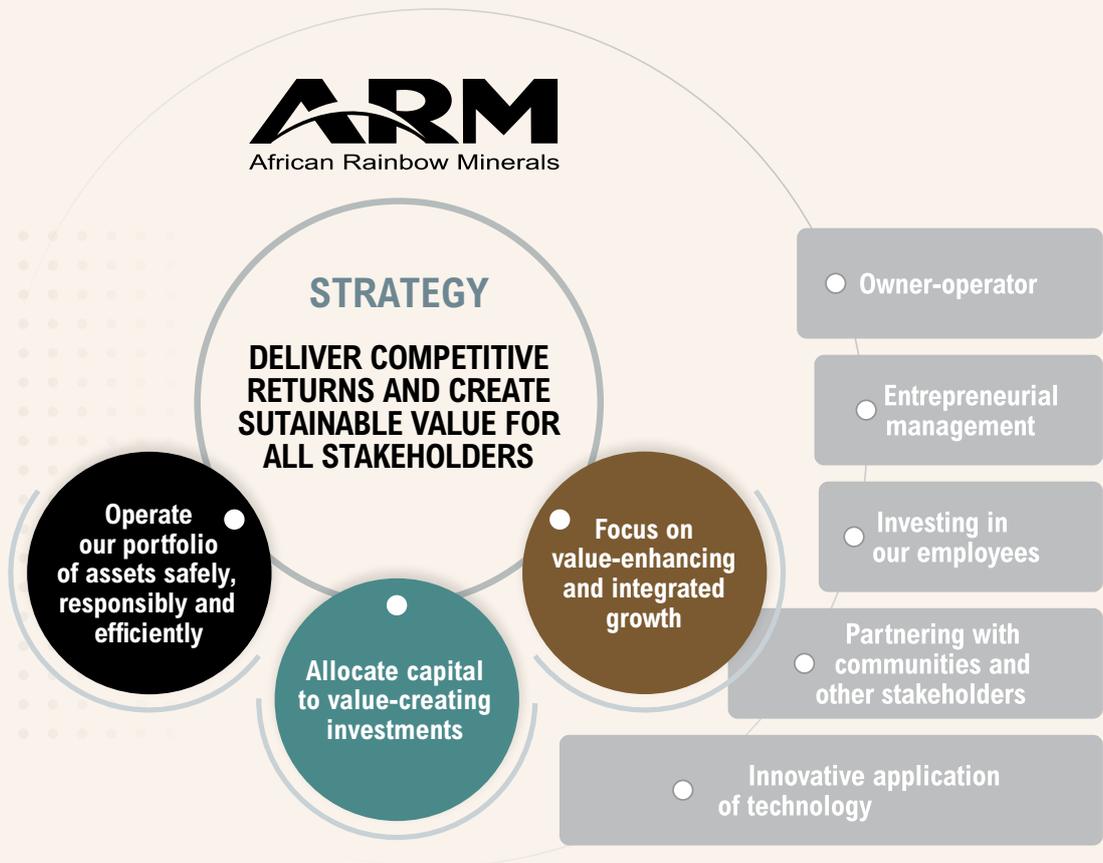* *Total number of ARM employees and contractors as at 30 June 2020.*
• *LTIFR: injury rates are measured per 200 000 man-hours and include both ARM employees and contractor incidents.*
^ *Values attributable to shareholding percentages.*
# *Direct emissions as a result of smelting operations only at Cato Ridge Works from F2018 to F2020. No smelting operations were conducted at Machadodorp Works after F2017.*

Strategy

ARM
African Rainbow Minerals

STRATEGY

DELIVER COMPETITIVE RETURNS AND CREATE SUTAINABLE VALUE FOR ALL STAKEHOLDERS

Operate our portfolio of assets safely, responsibly and efficiently

Allocate capital to value-creating investments

Focus on value-enhancing and integrated growth

- Owner-operator
- Entrepreneurial management
- Investing in our employees
- Partnering with communities and other stakeholders
- Innovative application of technology

Values

Our management style is supported by our values,
which in turn guide the way we conduct our business.

Aim for **operational excellence**	Provide a **safe and healthy work environment** for all our employees	Maintain a **non-discriminatory workplace**
Improve the **lives of those in the communities where we operate**	Work responsibly to **achieve balance between the economic, social and environmental** aspects of our business	Maintain the **highest standards of corporate governance**

We do it better

Where we operate

IAR 📖 🌐 | Please see detailed operational reviews from page 54 of the ARM integrated annual report at **www.arm.co.za.**

SOUTH AFRICA

Participative Coal Business (PCB)

Goedgevonden

LIMPOPO

Modikwa

Two Rivers

Machadodorp

Nkomati

NORTH WEST

MPUMALANGA

Nchwaning and Gloria

Khumani

Beeshoek

KWAZULU-NATAL

Cato Ridge

NORTHERN CAPE

MALAYSIA

SABAH

Brunei

South China Sea

Sakura

SARAWAK

⬤ ARM Platinum

⬤ ARM Ferrous

⬤ ARM Coal

KHUMANI

IRON ORE

○	Open-pit mechanised mine
△	**13.1Mt iron ore**
LOM	20 years
EMPL	**3 885**
LTIFR	0.13
□	50th percentile (60th)

See page 68 of the integrated annual report for the ARM Ferrous operational review.

BEESHOEK

IRON ORE

○	Open-pit mechanised mine
△	**3.0Mt iron ore**
LOM	6 years
EMPL	**1 057**
LTIFR	0.13
□	50th percentile (60th)

See page 68 of the integrated annual report for the ARM Ferrous operational review.

NCHWANING AND GLORIA
(collectively Black Rock)

MANGANESE ORE

○	Underground mechanised mine
△	**3.6Mt manganese ore**
LOM	>30 years
EMPL	**5 619**
LTIFR	0.27
□	40th percentile (40th)

See page 68 of the integrated annual report for the ARM Ferrous operational review.

CATO RIDGE WORKS

FERROMANGANESE

○	Smelter
△	**177 000t ferromanganese**
EMPL	**553**
LTIFR	0.36

See page 68 of the integrated annual report for the ARM Ferrous operational review.

SAKURA FERROALLOYS

FERROMANGANESE

○	Smelter
△	**232 000t ferromanganese**
LOM	>30 years
EMPL	**Not reported by ARM**
LTIFR	Not reported by ARM

See page 68 of the integrated annual report for the ARM Ferrous operational review.

TWO RIVERS

6E PGM METALS

○	Underground mechanised mine
△	**261 000 6E PGM oz**
LOM	>30 years
EMPL	**3 329**
LTIFR	0.41
□	45th percentile (40th)

See page 54 of the integrated annual report for the ARM Platinum operational review.

MODIKWA

6E PGM METALS

○	Underground mine
△	**259 000 6E PGM oz**
LOM	>30 years
EMPL	**4 686**
LTIFR	0.85
□	50th percentile (55th)

See page 54 of the integrated annual report for the ARM Platinum operational review.

NKOMATI

NICKEL (BY-PRODUCTS INCLUDING PGM, CHROME, COPPER AND COBALT)

○	Open-pit mechanised mine
△	**10 600t nickel, 80 700 oz PGM, 222 000t chrome**
LOM	<1 year
EMPL	**1 505**
LTIFR	0.29
□	80th percentile (75th)

See page 54 of the integrated annual report for the ARM Platinum operational review.

GOEDGEVONDEN (GGV)

THERMAL COAL

○	Open-pit mechanised mine
△	**6.8Mt saleable thermal coal**
LOM	20 years
EMPL	**Not reported by ARM**
LTIFR	Not reported by ARM
□	40th percentile (35th)

See page 82 of the integrated annual report for the ARM Coal operational review.

PARTICIPATIVE COAL BUSINESS (PCB)

THERMAL COAL

○	Open-pit and underground mechanised mine
△	**13.3Mt saleable thermal coal**
LOM	19 years
EMPL	**Not reported by ARM**
LTIFR	Not reported by ARM
□	35th percentile (30th)

See page 82 of the integrated annual report for the ARM Coal operational review.

Mt Million tonnes   **PGM** platinum group metals   ○ Mine/operation type   △ F2020 production volumes 100% basis

LOM Approximate life-of-mine   **EMPL** Number of employees at 30 June 2020 (full-time employees and contractors)

LTIFR F2020 lost-time injury-frequency rate (LTIFR) per 200 000 man-hours   □ F2020 position on global commodity unit cost curve (F2019 in brackets)

How we create value for our stakeholders
(Business model)

INPUTS – Our capitals

Financial
Our assets, cash flow from operations and funding from shareholders and other providers of capital.

IAR

Refer to the financial review on pages 26 to 39 of the integrated annual report.

People
Our people are key to creating value for all stakeholders. We aim to maintain a safe, healthy and non-discriminatory work environment for all employees and ensure our operations are adequately resourced with a skilled, engaged and motivated workforce.

SR

Refer to the section on ensuring a safe, healthy and appropriately skilled workforce on pages 48 to 77 of this report.

Relationships
Sound relationships with all stakeholders are key to the sustainability of our business. In particular, relationships with our employees, trade unions, host communities, regional and national governments and regulators support our social licence to operate.

SR

Refer to the section on maintaining our social licence to operate on pages 36 to 47 of this report.

Natural
The mineral resources and mineral reserves in our portfolio are the largest part of our natural capital. The natural resources we use to extract and process the minerals we mine include energy, water and land. Our goal is sustainable use of all natural resources.

SR

Refer to the section on ensuring responsible stewardship of natural resources on pages 78 to 101 of this report as well as the supplementary report on climate change and water available at **www.arm.co.za**

Innovation
Access to and investment in innovation and technology allows ARM to continuously improve production processes. The knowledge, experience and expertise that we have amongst our subject matter experts differentiates ARM. Our innovation also includes information technology systems, risk management processes and research and development.

CGR

Refer to the information technology report in the 2020 corporate governance report available on **www.arm.co.za**

Manufactured assets
Our operations rely on above and below-ground infrastructure and specialised equipment to extract and process minerals. Efficient use of this infrastructure and equipment is crucial to cost-effective extraction and processing of our minerals.

BUSINESS PROCESS

OPERATING ENVIRONMENT

Extract

Explore

GOVERNANCE

ARM Platinum

ARM Ferrous

ARM Coal

OUTCOMES – Our capitals

Financial
Headline earnings:
R5 534 million
(F2019: R5 226 million)
Segmental EBITDA:
R11 009 million
(F2019: R9 336 million)
Share buy-back:
R57 million (F2019: nil)

Net cash to equity ratio:
11% (F2019: 9%)
Dividends paid to ARM shareholders:
R2 717 million
(F2019: R2 206 million)
Return on capital employed:
22% (F2019: 18%)

People
Three fatalities at the operations (F2019: 1)
LTIFR of 0.45 per 200 000 man-hours
(F2019: 0.42 per 200 000 man-hours)

Relationships
R130 million invested in host communities through corporate social responsibility initiatives (F2019: R175 million)

R58 million of this was to support communities and SMMEs with their response to Covid-19

597 jobs created through local economic development and enterprise supplier development investments

Natural
8% decrease in scope 1 and 2 carbon emissions

Responsible waste disposal

Implementation of a **detailed water accounting framework** completed

7% decrease in water withdrawn with a **72%** re-use efficiency

External review and dam beach analysis completed at our tailings storage facilities

Innovation
Progress made on alternative smelting technology

Manufactured assets
R3 506 million in capital expenditure (segmental basis)
(F2019: R3 242 million)

OUTPUTS

Production

| 601 068 6E PGM ounces |
| 16.1Mt iron ore |
| 3.6Mt manganese ore |
| 409 000t manganese alloys |
| 20.1Mt thermal coal |
| 394 000t chrome concentrate |
| 10 638t nickel |
| 5 169t copper |
| 616t cobalt |

STAKEHOLDERS

Process

Sell

STRATEGY

Trade offs

Financial capital is prudently allocated to maintain the appropriate balance between sustainability and stakeholder benefit. Disciplined capital allocation ensures our continued growth and supports our ability to add value to all our other capitals.

Health, safety and skills development underpin productivity, so while our key priority is to keep our people safe, healthy and reaching their full potential, ARM benefits from higher productivity.

Our **communities** grant our social licence to operate. We invest significantly to address community needs and contribute to improving the lives of those living in our host communities.

Innovation and efficiency underpin the profitability/ financial viability of modern mining operations and attract investment that, in turn, ensures sustainability.

Financial capital is invested in **natural capital** which is essential to the sustainability of our business and protection of resources for future generations.

Value contribution

ARM operations produce commodities which are an integral part of our society and play a key role in many aspects of modern life. Our commodities are also an important ingredient in the solutions emerging to support a lower-carbon future and contributing to the developmental aspirations set in the United Nations Sustainable Development Goals (SDGs).

UN SDGs:

CONTRIBUTION TO SOCIETY

We produce iron ore, manganese ore, manganese alloys and nickel which are used to make steel and alloys, the backbones of the infrastructure and industry that sustain and support development in cities and communities. This value contribution includes hospitals and schools improving health and education outcomes.

Steel is not only essential as a manufacturing input to produce cars, white goods, wind turbines and many other products, but also for the machinery and equipment used in industries, which drive job creation and economic growth. It also plays a critical part in water and energy distribution systems, agricultural irrigation, transport infrastructure, alternative energy systems and information and communication technology. As stainless steel, it has many industrial and medical applications.

Iron is used in solar photovoltaic (PV) panels and nickel and manganese are used in lithium-ion energy storage technologies, which play a role in the growth in renewable energy and electromobility. Corrosion-resistant alloys made with nickel are used in desalination plants to convert sea water into potable water.

The platinum group metals (PGMs) we produce are used in catalytic converters to reduce harmful greenhouse gas emissions from motor vehicles and hydrogen fuel cells are a promising source of clean energy that use platinum.
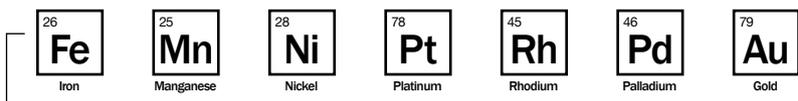
IMPROVING EFFICIENCIES

Demand for higher quality ore, which produces fewer emissions when processed, is increasing due to China's focus on addressing its pollution challenges through improved efficiencies in heavy industries. The iron and manganese ore produced by ARM enable customers to optimise production and reduce emissions by offering greater blending options. For example, using lumpy iron ore in the steel making process eliminates the need for sintering of fine ore, reducing greenhouse gas emissions.

Metals support the growth of the circular economy as they can be recycled almost indefinitely without losing their essential properties and performance. Recycling metal is more efficient, saves water and energy and produces less waste and fewer greenhouse gas emissions than mining new ore.

MINING INDUSTRY CONTRIBUTION TO SOCIETY

The South African mining industry is a significant employer and contributor to the country's GDP. Metals and minerals make up a meaningful proportion of exports, bringing significant foreign exchange into the country. The industry is also a significant employer and makes a significant contribution to the fiscus through royalties and taxes paid to government.

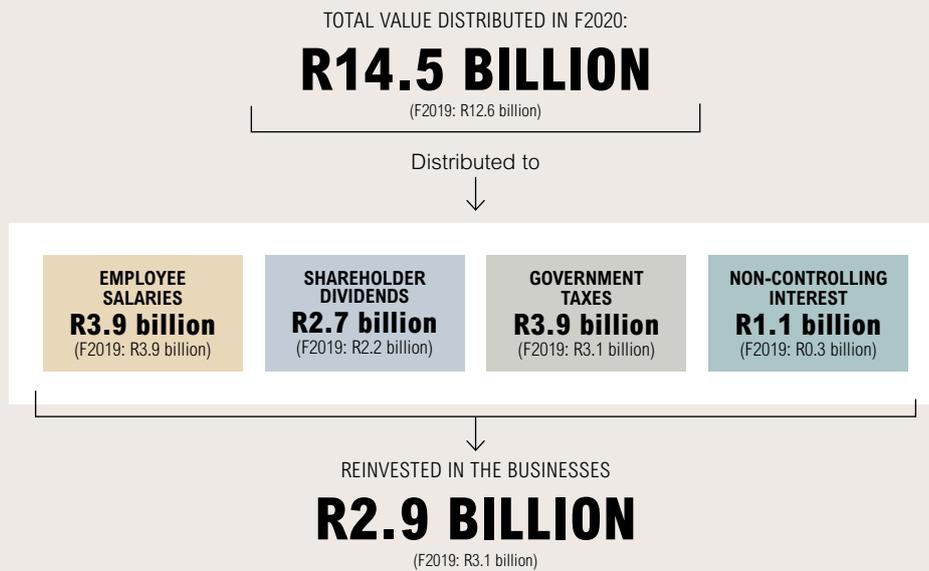| 26 **Fe** Iron | 25 **Mn** Manganese | 28 **Ni** Nickel | 78 **Pt** Platinum | 45 **Rh** Rhodium | 46 **Pd** Palladium | 79 **Au** Gold |

SOCIAL IMPACTS

The value created by our activities is distributed to a range of stakeholders. In F2020, ARM created R14.5 billion in financial value (F2019: R12.6 billion) and the diagram below summarises how this was distributed to our stakeholders.

The operations are located in some of the poorest and most remote parts of the country, and support local communities by providing employment opportunities, skills development and educational assistance. Community resilience, sustainability and socio-economic development are strengthened through infrastructure investments and support for social projects.

Preferential procurement and enterprise development programmes increase economic activity in the areas around our operations by supporting entrepreneurship and economic growth among historically disadvantaged South Africans (HDSAs) and in local communities, creating jobs and improving market access for South African capital goods and services.

TOTAL VALUE DISTRIBUTED IN F2020:

R14.5 BILLION

(F2019: R12.6 billion)

Distributed to

EMPLOYEE SALARIES	SHAREHOLDER DIVIDENDS	GOVERNMENT TAXES	NON-CONTROLLING INTEREST
R3.9 billion	**R2.7 billion**	**R3.9 billion**	**R1.1 billion**
(F2019: R3.9 billion)	(F2019: R2.2 billion)	(F2019: R3.1 billion)	(F2019: R0.3 billion)

REINVESTED IN THE BUSINESSES

R2.9 BILLION

(F2019: R3.1 billion)

Contributions from ARM operations over the last five years (on a 100% basis) included:

R12.2 billion paid as taxes and royalties.

R675 million invested in community development.

858 bursaries provided.

Paid **R18.8 billion** to employees as salaries, wages and benefits.

Invested **R1.1 billion** in training initiatives to improve the skills of employees.

Provided employment for **20 998 employees and contractors** (as at 30 June 2020).

Improved HDSA representation in management from **53% in F2016 to 65% in F2020.**

R55 billion paid in procurement. Preferential procurement plans at the mines aim to increase procurement of mining goods and services from HDSA, women and youth owned companies.

Provided adult education and training (AET) to **623** employees and **1 637** community members at ARM facilities since F2016, increasing their confidence and employability.
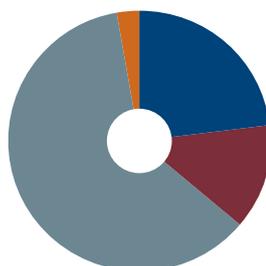
COVID-19 RESPONSE

In F2020, the ARM Ferrous and ARM Platinum operations contributed R58 million (on a 100% basis) to support communities and small, medium and micro enterprises (SMMEs) in response to Covid-19.

In addition, the Motsepe family in partnership with companies and organisations that they are associated with (including ARM), have pledged R1 billion[1] to assist with the Covid-19 pandemic and its related challenges confronting South Africa, Africa and the world.

1 ARM committed R50 million as part of the R1 billion pledge.

R58.0 MILLION

contributed by ARM Ferrous and ARM Platinum operations

R million

Community support	**13.4**
PPE, medical equipment and other health related support	**7.7**
SMME support and relief	**35.3**
Community awareness campaigns	**1.6**

How we govern and manage sustainable value creation

ARM takes a responsible, sustainable approach to mining and beneficiation. Our values explicitly include the broader concept of sustainability as well as our commitment to zero tolerance for harm to employees, host communities and the environment.

The board is the foundation of the corporate governance system and is accountable and responsible for the performance of the company, which includes sustainable development. The board aims to implement ARM's long-term strategy and vision in a sustainable manner and ensure that business is conducted ethically and sustainably. ARM supports the governance outcomes, principles and practices in the King IV Code on Corporate Governance as set out in the King IV Report on Corporate Governance™ for South Africa, 2016 (King IV™) and its outcomes of ethical culture, good performance, effective control and legitimacy.

The ARM social and ethics committee monitors and reports on the manner and extent to which the company protects, enhances and invests in the well-being of the economic, social and environmental contexts in which we operate to ensure that our business practices are sustainable. It is chaired by Dr R V Simelane and comprises five non-executive board members.

The management risk and compliance committee (a sub-committee of the audit and risk committee) coordinates and monitors the company's ERM process, which includes sustainability risks. Sustainable development matters and performance are included in the committee's formal agenda.

The terms of reference for the board and its committees, as well as those of divisional and operational committees, are regularly reviewed and updated to ensure that they continue to appropriately address industry and regulatory developments.

IMPLEMENTATION AND MONITORING

The chief executive officer is responsible for implementing ARM's sustainable development policies and procedures, and delegates this responsibility to the chief executives of each division. The group's strategic approach to sustainable development and relevant policies and standards are set at corporate level. Management at the operations implement this approach and adapt it to the specific sustainability matters that are most material to their circumstances.

Relevant indicators and benchmarks are regularly monitored at operational, divisional, executive and board level, together with the information received from engagements with our key stakeholders, to assess the effectiveness of our approach to sustainable development. These assessments are supported by the group's combined assurance model, which is based on six lines of assurance and provides a sound basis from which to evaluate the appropriateness and reliability of ARM's sustainability processes, controls and information.

Certification in terms of internationally and nationally recognised management systems

To ensure that our key sustainability issues are managed effectively and appropriately, the management systems implemented at operations align with international and national management standards. At most operations, as shown in the graphic below, alignment with the standards is independently certified on an annual basis.

Certification and alignment with international and national management standards

	ISO 9001	ISO 14001	SANS 16001	ISO 45001	OHSAS 18001
Black Rock, Beeshoek and Khumani mines	◉	◉	◉	◉	
Two Rivers Mine	◉	◉		◉	
Cato Ridge Works	◉	◉		◉	
Nkomati Mine	◉	◉			◉
Modikwa Mine	◉	■			■
Machadodorp Works	◉	■			■

◉ certified　　■ aligned

ISO 9001	the international standard on quality management
ISO 14001	the international standard on environmental management
SANS 16001	the South African national standard on disease and wellness management
ISO 45001	the current international standard on occupational health and safety management
OHSAS 18001	the previous international standard on occupational health and safety management

ICMM Sustainable Development Framework

In February 2020, the ICMM launched enhanced membership requirements that build on the original ten Sustainable Development Principles and Position Statements. The ICMM Mining Principles strengthen members' social and environmental requirements and are underpinned by the 38 Performance Expectations (PEs). Assurance and validation on the PEs are to be implemented from 2021.

ICMM International Council on Mining & Metals | **SUSTAINABLE DEVELOPMENT FRAMEWORK**

| PRINCIPLES | POSITION STATEMENTS |

| PERFORMANCE EXPECTATIONS |

| CORPORATE SD REPORTING AND ASSURANCE, PE VALIDATION AND DISCLOSURE |

ARM piloted the PEs at two assets in F2019 and in F2020 engaged IBIS ESG Consulting Africa (Pty) Ltd to conduct third-party validation around ARM's implementation of the PEs at Khumani, Two Rivers and Black Rock mines, as well as at ARM corporate as part of the external assurance of sustainability data. More information on the PEs is available in the sustainability data tables on the ARM website at **www.arm.co.za**.

Sustainability compliance and verification – six lines of assurance

1. Management oversight

- Management review of and responsibility for sustainability risks and controls, including policies, procedures, systems and processes.
- Regular inspections and reviews, e.g. by SHEQ[1] officers at the operations to monitor compliance with safety, occupational health and wellness, and environmental internal standards and regulatory requirements.
- Includes monitoring of sustainability indicators at operational, divisional and group levels.

2. Internal assurance and compliance functions

- Internal assurance – risk and compliance functions.
- ARM corporate office functions/subject matter experts, systems and processes.

3. Internal auditors

- Internal audit, internal fraud and forensic investigators, specialist expert and process assessors.

4. External auditors

- External financial audits.
- Annual external audits of operating procedures and practices.
- Annual external legal compliance audits assess compliance with legislation and company policies, e.g. safety, health and environmental audits.
- Annual external audit of operating occupational health procedures and practices by an independent occupational medical practitioner.

5. External assurance providers

- External safety, health and environmental (SHE) compliance audits facilitated every second year by the corporate office.
- External certification audits in terms of management standards (ISO 9001, OHSAS 18001/45001, SANS 16001 and ISO 14001).
- Annual external assurance of sustainability data.[2]

6. Regulator inspections

- Inspections by regulators and authorities, including the Department of Mineral Resources and Energy, Department of Environment, Forestry and Fisheries, the Department of Water and Sanitation, the Department of Employment and Labour and the Department of Health.

1 Safety, health, environmental and quality.
2 IBIS ESG Consulting Africa (Pty) Ltd provided independent assurance over select subject matter included in the 2020 Sustainability Report. The assurance statement is included on pages 102 to 105 and includes comment on data collection in ARM.

CGR ARM's 2020 corporate governance report (available at: **www.arm.co.za**) provides more information on the structure, roles and responsibilities of the board committees and management committees. ARM's combined assurance model is discussed in the risk section of the report.

The executive: sustainable development operates with oversight from the social and ethics committee, and reviews sustainability policies, standards, strategies and targets, and ensures these align with the board's commitment to zero tolerance for harm. This role provides input into the management risk and compliance committee on matters related to sustainable development as a standard agenda item.
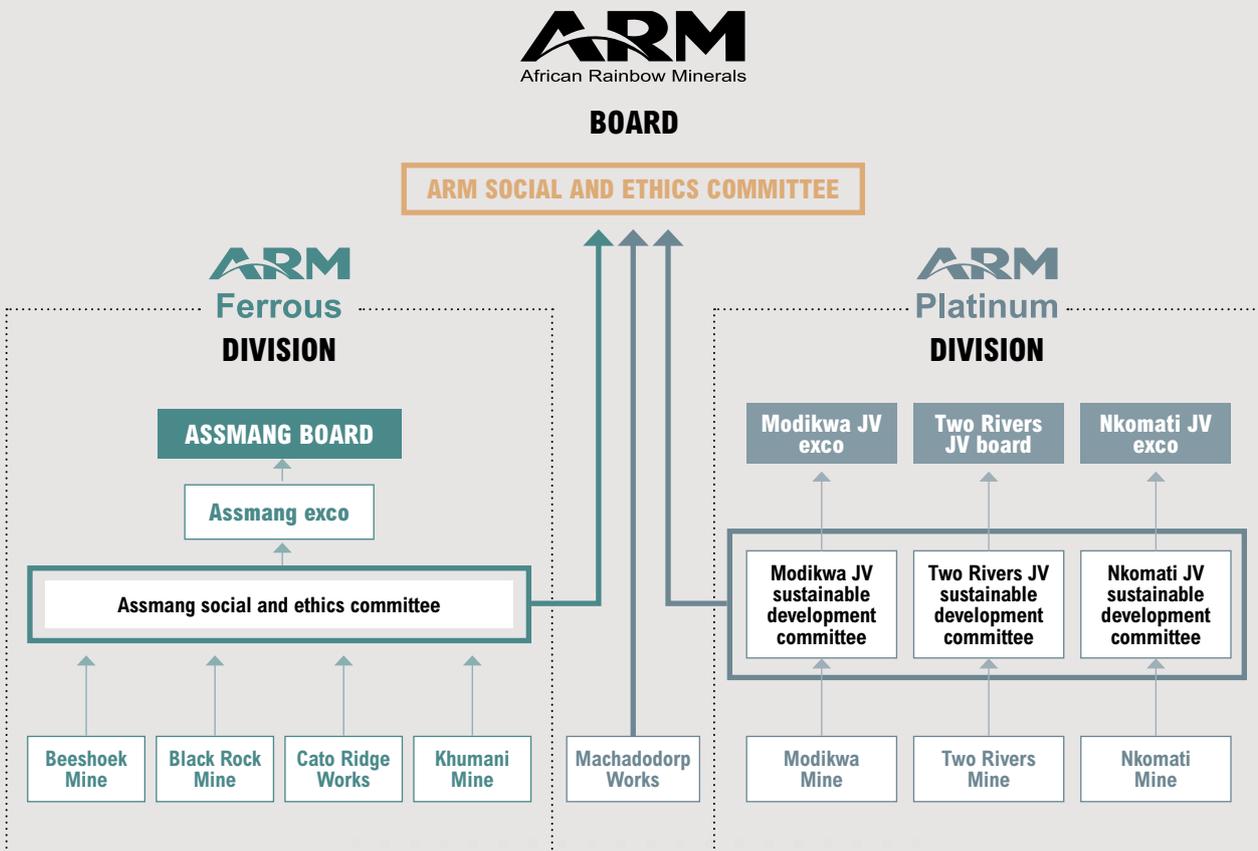
The chief risk officer and executive: sustainable development participate in social and ethics committee meetings and are members of the management risk and compliance committee and the ARM steering committee. They also attend board meetings to respond to any risk and sustainability-related matters raised by the board.

DIVISIONAL AND OPERATIONAL GOVERNANCE FRAMEWORKS

The operations in the ARM Platinum division each have a sustainable development committee chaired by the ARM executive: sustainable development. These committees report to the exco or board of the respective joint ventures, as appropriate.
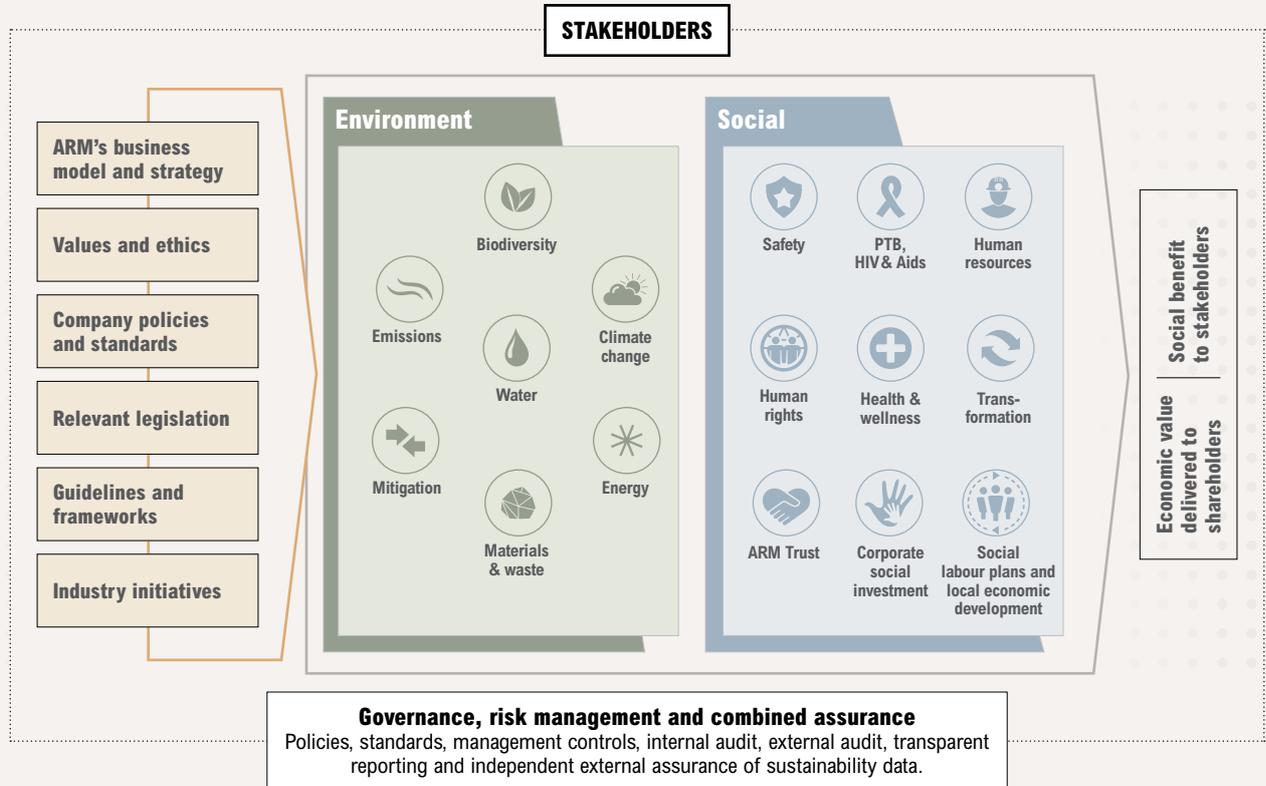
The sustainability performance of the ARM Ferrous operations is overseen by the Assmang social and ethics committee, which is chaired by the executive director: investor relations and new business development. Quarterly compliance meetings at these operations ensure comprehensive reporting at operational level.

The Assmang social and ethics committee and the sustainable development committees in the ARM Platinum division report on operational performance and compliance to the ARM social and ethics committee at quarterly meetings.

ARM'S SUSTAINABLE DEVELOPMENT MODEL

Our sustainable development model represents ARM's approach to sustainable development and shows the inputs that shape our approach and the environmental, social and governance (ESG) aspects we consider in the creation of value.

STAKEHOLDERS

ARM's business model and strategy

Values and ethics

Company policies and standards

Relevant legislation

Guidelines and frameworks

Industry initiatives

Environment
Biodiversity
Emissions
Water
Climate change
Mitigation
Energy
Materials & waste

Social
Safety
PTB, HIV & Aids
Human resources
Human rights
Health & wellness
Trans-formation
ARM Trust
Corporate social investment
Social labour plans and local economic development

Economic value delivered to shareholders | Social benefit to stakeholders

Governance, risk management and combined assurance
Policies, standards, management controls, internal audit, external audit, transparent reporting and independent external assurance of sustainability data.

These inputs include:

- Our values and ethics, which drive our commitment to sustainable development and underpin our business model and strategy.
- Relevant group policies and standards that formalise our approach to sustainability.
- ARM regards regulatory compliance as the minimum requirement for sustainable development, rather than the end goal. Developments in relevant current and proposed legislation and regulations are consequently key inputs in our approach to sustainable development.
- Ongoing review of and participation in industry good practice, reporting requirements and guidelines that apply to sustainable development at our operations. These include King IV™ and the GRI Standards.
- International and national industry initiatives that support continuous improvement. ARM is a member and active participant in the International Council on Mining and Metals (ICMM) and the Minerals Council South Africa.

Our approach to sustainable development and the way we conduct our business is shaped by the insights gained through ongoing engagements with our key stakeholders, our governance and risk management frameworks, as well as the combined assurance model.

ETHICS

ARM is committed to a culture of ethical behaviour and integrity, and we aim to lead ethically and effectively in the conduct of our business. Embracing and embodying the foundation stones of

King IV – ethical leadership, stakeholder inclusivity and corporate citizenship – is critical to the sustainability of the business.

The code of conduct (the code) details ARM's ethical principles of integrity, competence, responsibility, accountability, fairness and transparency. Our approach to governing ethics aims to create and sustain an ethical culture in the organisation and entrench respect for human rights.

The code applies at corporate and operational level, and to directors, management, employees, contractors, suppliers and joint ventures. All employees receive training on the code at induction and through a compulsory online training programme.

The management risk and compliance committee monitors and reports on the governance of ethics and the ethics performance to the social and ethics committee, which reports on these matters to the board.

The code was reviewed and amended during the year in respect of ethics, conflicts of interest, employment equity, communications, anti-bribery and anti-corruption and confidentiality of information. The expansion of the sections on anti-bribery and anti-corruption incorporate the anti-bribery and anti-corruption policy into the code and the policy has accordingly been terminated as a standalone document. The provisions in the code regarding conflicts of interest are being expanded, which removes the need for a separate conflict of interest policy.

The code is available in the corporate governance section of our website at **www.arm.co.za**

The code and ethics policies provide guidance regarding ARM's ethical standards and culture, and cover a range of issues, including:

Unethical and improper conduct

ARM recognises that corruption is a major concern for South Africa and that promoting an ethical, anti-corruption culture is key to combatting instances of bribery and corruption in the workplace. Accordingly, ARM has a zero-tolerance approach to unethical and improper conduct, including bribery, corruption and money laundering. The chief executive officer introduces the code of conduct (the code) training programme and emphasises top management's commitment to ARM's stance against bribery and corruption. ARM's codes and policies explicitly prohibit bribery and corruption, including the policies and procedures relating to giving and receiving of gifts, sponsorship, entertainment, hospitality and favours. The audit and risk committee oversees ARM's anti-fraud, bribery and corruption (ABC) prevention strategy.

SR Please refer to page 19 for more information on the anonymous whistleblower facility.

The ARM competition law compliance policy was revised and updated for recent amendments to the Competition Act and the competition compliance training programme and competition law compliance handbook were updated in line with the amended policy. The new training programme is being rolled out in F2021. ARM employees receive training in competition law compliance as part of their induction process and regular refresher training.

Health and safety

The code reiterates our commitment to health, safety and environmental responsibility, and what this requires from employees.

Dignity and respect

Employees are required to treat each other in a way that upholds each person's self-worth and that respects and does not interfere with cultural, political, religious and other beliefs.

Share dealing

The dealings in securities and insider trading policy precludes directors, officers and designated persons from dealing in the company's securities during closed periods, in compliance with the relevant legislation. Directors and employees are provided with the relevant extracts from applicable legislation and the company's related procedures, and are reminded of their obligations in terms of insider trading and the penalties for contravening the law and regulations.

Conflicts of interest

The code prohibits conflicts of interest, whether real or perceived, and where these arise, they must be disclosed and dealt with in terms of the applicable laws. Acceptance of gifts must be approved by a member of the executive and gift registers are in place to ensure that gifts, hospitality and favours are declared and authorised within limits.

Political activities

ARM makes donations to political parties to support South Africa's democratic processes, in line with a formal policy. The donations budget is approved by the board.

Stakeholder engagement

The code encourages complete, accurate and timely communication with the public. The chief executive officer, the financial director, the executive director: investor relations and new business development and the company secretary oversee compliance with disclosure requirements, including those in the JSE Listings Requirements.

HUMAN RIGHTS

Our approach to promoting and protecting human rights aligns with South Africa's human rights legislation, including the Constitution and the Bill of Rights, which safeguard basic human rights. ARM is committed to the ten principles of the United Nations Global Compact (UNGC).

ARM's business policies and management systems incorporate human rights principles to ensure that human rights are appropriately managed and addressed. The fundamental concepts underlying these rights inform the code as well as ARM's grievance procedure, protected disclosure and sexual harassment policies.

The code, the employment equity policy and ARM's human resources management policies promote equality and the elimination of unfair discrimination on the basis of race, ethnicity, colour, gender, sexual orientation, nationality, place of origin, citizenship, creed, political persuasion, age, marital or family status or disability.

ARM is committed to fair, responsible and competitive remuneration and we do not use forced, compulsory or child labour. All non-management employees are afforded freedom of association.

The community relations strategies at operations uphold and promote human rights and respect cultural considerations and heritage.

Employees who feel that their human rights have been violated can report their grievances to their supervisors or managers, to the human resources department, or anonymously through the whistleblower facility.

The code applies to ARM's suppliers and contractors, requiring that they behave ethically and with respect for human rights.

WHISTLEBLOWER FACILITY

Our whistleblower policy emphasises our zero tolerance approach to retaliation or occupational detriment to whistleblowers.

Our anonymous whistleblowers' facility is operated by an independent service provider, Whistle Blowers (Pty) Ltd, and is certified by the Ethics Institute. The facility includes multiple options for contact such as a dedicated toll-free number (0800-006-792), electronically through www.whistleblowing.co.za, by facsimile (086-5222-816), through an SMS call back system by sending a "please call me" to 0826-777-531, or through the SMS service at 33490. All calls made to Whistle Blowers are dealt with by trained multi-lingual call operators. Whistleblowers will inform ARM's chief risk officer of the complaint. Details about the hotline are included in the code and are posted at the company's offices and operations. The facility is available to employees, contractors, suppliers, communities, and other stakeholders to report unethical behaviour.

All complaints reported through the facility are investigated and progress on actions taken are reported at the quarterly social and ethics committee meetings. Feedback is also provided to the whistleblowers' facility, who engage with the whistleblower to update them regarding the investigation.

Further to the whistleblower awareness campaign that was implemented across the group in June 2019, ARM corporate conducted sessions to inform employees on the whistleblowing process and provide information in terms of fraud awareness.

In F2020, 58 reports were received through the facility (F2019: 62). 22 reported incidents are currently under investigation, 1 was substantiated, 6 were partially substantiated, 27 were unsubstantiated and 2 were referred back to Whistle Blowers due to insufficient information.

Comment from the Sustainability Assurance Provider:

"As part of the scope of work to provide independent third party assurance over ARM's sustainability reporting, IBIS ESG Consulting Africa (Pty) Ltd conducted an assessment of ARM's ethics policies and procedures, in line with King IV™ recommendations. Based on our review, including observations and interviews during visits to selected sites, ARM employs a comprehensive set of policies (e.g. the code of conduct), procedures, systems and controls to meet reasonable expectations for the monitoring and management of ethical compliance throughout its operations."

SR The comprehensive Assurance Statement by IBIS ESG Consulting Africa (Pty) Ltd is available on pages 102 to 105 of this report.

ENTERPRISE RISK MANAGEMENT

ARM's enterprise risk management (ERM) policy aligns with the risk management requirements of King IV™ and assesses the uncertainties emanating from the triple context in which the company operates as well as the capitals that we use and affect. The policy recognises the importance of protecting and improving the health, safety and wellbeing of everyone affected by our operations, as well as the need for responsible environmental management.

Our ERM policy statement clearly demonstrates the intent and commitment to practising effective risk management in all aspects of our business. This implicitly includes all operational, investment and project considerations, in line with the definition of risk in ISO 31000.

Risk is the effect of uncertainty on objectives

- An effect is a deviation from the expected. It can be positive, negative or both, and can address, create or result in opportunities and threats
- Objectives can have different aspects and categories, and can be applied at different levels
- Risk is usually expressed in terms of risk sources, potential events, their consequences and their likelihood.

It follows that the context, identification and management of risk can only be derived from a sufficient understanding of what is to be achieved and by following a standard process of risk assessment to identify and evaluate risks facing the company. This process establishes mandatory steps to context setting, risk identification, risk analysis, risk evaluation, risk treatment, communication and consultation, monitoring and review processes throughout ARM.

Risk appetite and tolerance

Taking risks is an integral part of daily business activities. By carefully balancing our strategic and operational objectives against the risks we are prepared to take, we strive to conduct business in a socially responsible and sustainable manner. This approach helps ARM attain its strategic objectives.

Accordingly, we have introduced a risk appetite and tolerance (RA&T) standard for defining and managing group-wide risks. The standard clarifies the types and levels of risk ARM is willing to take on (risk appetite) or prepared to tolerate (risk tolerance) to achieve its objectives.

The RA&T standard is a key component of our risk management strategy. It is an effective tool for sharing information among management on risks facing ARM and for facilitating appropriate risk-taking. In the context of business strategy and planning, risk appetite facilitates discussions about where and how we should deploy its capital and other resources under a risk/return view, while risk tolerance sets clear boundaries to risk-taking.
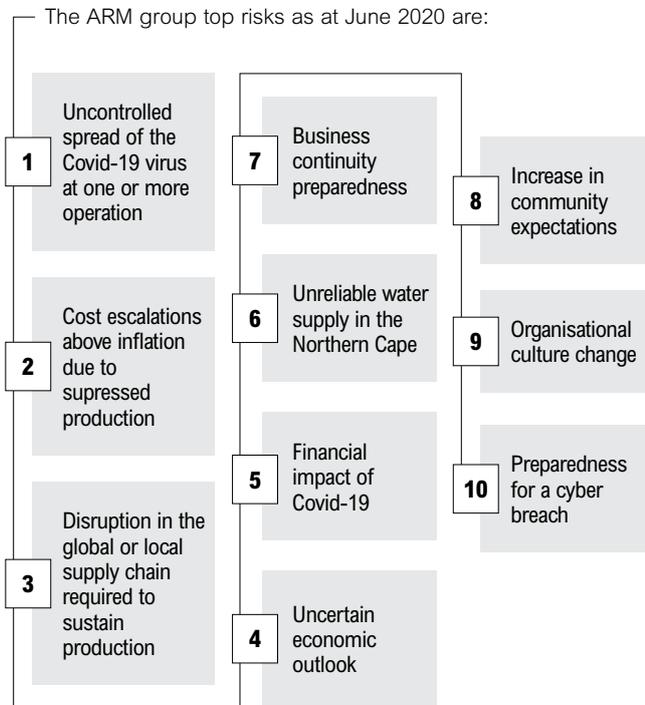
The board assesses and approves the RA&T standard annually and monitors risk exposures, which are also regularly reviewed.

The standard enables the board to set boundaries for taking risk, while enabling management to make risk-informed decisions within the risk appetite of the board.

The risk rating methodology links the ARM strategic intent factors to the approved impact factors as follows:

STRATEGIC INTENT FACTORS

Focus on the efficient allocation of capital

1 3 4

Aim for value-enhancing integrated growth

1 5 7 8 10

Sustaining and improving our financial position

1 3 10

Maintaining a safe and healthy working environment

2 5 10

Improving operational efficiencies and containing unit cost increases by using technological advances

1 4 5 6 10

Partnering with and investing in the personal and professional wellbeing of our employees

7 8

Improving relationships with our key stakeholders

6 7 8

Remain responsible stewards of our environmental resources

1 4 5 7 8 9

IMPACT FACTORS

1	Financial	6	Employee relations
2	Safety and health	7	Stakeholders (internal and external)
3	Project management	8	Corporate image and reputation
4	Operations	9	Environment
5	Legal and compliance	10	Information technology (IT)

ARM's top ten risks identified through the ERM process include environmental and social risks in recognition of the impact of sustainability concerns on the company's ability to create value.

The ARM group top risks as at June 2020 are:

1	Uncontrolled spread of the Covid-19 virus at one or more operation
2	Cost escalations above inflation due to supressed production
3	Disruption in the global or local supply chain required to sustain production

7	Business continuity preparedness
6	Unreliable water supply in the Northern Cape
5	Financial impact of Covid-19
4	Uncertain economic outlook

8	Increase in community expectations
9	Organisational culture change
10	Preparedness for a cyber breach

CGR More detail on the composition and activities of the management risk and compliance committee and ARM's risk report is available in the 2020 corporate governance report at **www.arm.co.za**

BUSINESS CONTINUITY MANAGEMENT (BCM)

ARM's emergency and crisis management and BCM functions should not be seen as mutually exclusive, but as a continuum and complementary management response to different types of events.

Emergency and crisis management recovery is primarily focused on being able to contain and manage an emergency or crisis to ensure the safety of people and assets, to halt the situation at its source and to manage the range of impacts that pre-determined events could have. In contrast, business continuity is for managing business interruption events and getting the business back on track, once the crisis or emergency has been resolved.

The ARM BCM methodology is aligned to the UK Business Continuity Institute good practice guidelines (2013) and ISO 22301:2012 (societal security – business continuity management systems – requirements).
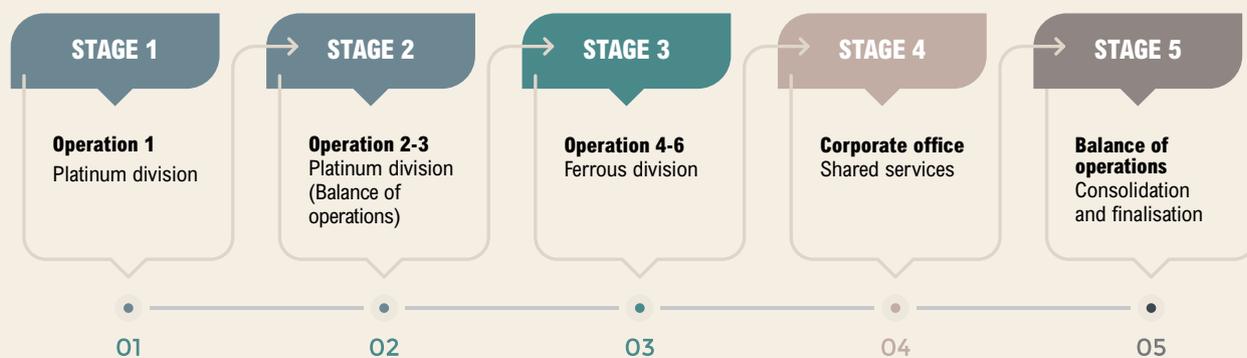
COMBINED ASSURANCE

Combined assurance is a coordinated approach that ensures all assurance activities provided by management, internal and external assurance providers offer adequate assurance on the controls that mitigate material risks facing the company.

Our focused approach to the integration of risk and assurance and our ERM activities ensure that a comprehensive integrated combined assurance base is established. The combined assurance model is aligned to King IV™ and approved by the board. It defines what constitutes management assurance as per the six lines of assurance and provides a coordinated and integrated approach to obviate duplication and gaps in assurance to enable comprehensive management assurance activities.

ARM's overriding policy and philosophy is that the management of risk is the responsibility of management at every level in ARM.

CGR ARM's combined assurance model is discussed in the risk report of the 2020 corporate governance report available at: **www.arm.co.za**

ROLL-OUT OF BUSINESS CONTINUITY MANAGEMENT PROGRAMME

STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5
Operation 1 Platinum division	**Operation 2-3** Platinum division (Balance of operations)	**Operation 4-6** Ferrous division	**Corporate office** Shared services	**Balance of operations** Consolidation and finalisation
01	02	03	04	05

The roll-out of each stage above will be undertaken using the design, implementation, validation and embedding steps of the BCM. Lifecycle, policy and programme management will not be repeated as work done at stage 1 will cover the entirety of ARM as BCM coordination will be controlled.

Moderate independent third party assurance over selected non-financial disclosures in this report was provided by IBIS ESG Consulting Africa (Pty) Ltd. The independent assurance statement by IBIS is included on pages 102 to 105 of this report and includes comments on data collection.

Over the last five years, independent assurance has been provided over the indicators at the operations sampled shown in the table below. Due to the travel restrictions imposed to address Covid-19, and to minimise risk to the operations, sustainability data was remotely assured this year.

In addition to the indicators shown below, the ICMM Performance Expectations (PEs) were piloted at two assets to familiarise and educate the operations as part of the F2019 assurance process. This year, self-assessment against the PEs was conducted under guidance of the external assurance team and external validation performed at Khumani, Two Rivers and Black Rock mines as well as at ARM corporate. More information on the self-assessment in terms of the PEs is available in the sustainability data tables on the ARM website at **www.arm.co.za.**

		F2020	F2019	F2018	F2017	F2016
OPERATIONS ASSURED						
	Beeshoek Mine		◉		◉	
	Khumani Mine	◉		◉		◉
	Black Rock Mine	◉	◉		◉	
	Cato Ridge Works					◉
	Machadodorp Works					
	Nkomati Mine			◉		◉
	Two Rivers Mine	◉		◉		
	Modikwa Mine		◉		◉	
INDICATORS ASSURED						
Occupational health and safety indicators	Fatality frequency rate (FFR)	◉	◉	◉	◉	◉
	Lost time injury frequency rate (LTIFR)	◉	◉	◉	◉	◉
	Total recordable injury frequency rate (TRIFR)	◉	◉	◉	◉	◉
	New PTB* cases detected	◉	◉	◉	◉	
	Occupational diseases identified and submitted for compensation	◉	◉	◉	◉	
	Employees and contractors on ART**	◉	◉	◉	◉	
Social licence indicators	Corporate social responsibility (CSR) spend	◉	◉	◉	◉	◉
Environmental indicators	Electricity consumption	◉	◉	◉	◉	◉
	Fuel consumption	◉	◉	◉	◉	◉
	Water withdrawal	◉	◉	◉	◉	◉
	Water discharge	◉	◉	◉	◉	◉
	Scope 1 and 2 GHG# emissions	◉	◉	◉	◉	◉

*   PTB: Pulmonary Tuberculosis   ** Antiretroviral Therapy   #   GHG: Greenhouse Gas

REWARDING VALUE CREATION

The executive remuneration philosophy aims to attract and retain high-calibre executives and to motivate and reward them for developing and implementing the company's strategy of delivering consistent and sustainable shareholder value. In addition, ARM promotes positive outcomes, an ethical culture and corporate citizenship in decisions on pay.

The remuneration committee ensures the alignment of remuneration practices with the strategic direction and that the leadership team is rewarded in a manner linked to performance outcomes. The committee's mandate includes monitoring of incentives to ensure that these do not encourage behaviour contrary to the company's risk management policy and strategy, which include sustainability factors.

25% of the senior executive long-term incentive calculation comprises sustainability performance conditions to ensure that non-financial sustainability issues are appropriately prioritised. Climate change performance targets are included in the environmental compliance conditions to incentivise reductions in Scope 1 and 2 greenhouse gas emissions over three years.

Short-term incentives linked to leading and lagging safety indicators are in place at operational, divisional and corporate level. Energy targets and KPIs linked to climate change emissions reduction initiatives are in place for employees in the relevant functions at operations, such as engineers and production teams.
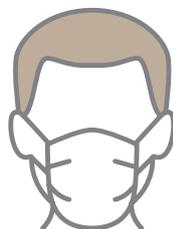
Impact of Covid-19

All South African operations apart from the ARM Coal operations were placed on temporary care and maintenance during the national lockdown announced by the President of the Republic of South Africa that started on 27 March 2020.

The ARM Coal operations were considered by government to be an essential service and were permitted to continue producing during the lockdown. As lockdown restrictions eased, all South African mining operations were allowed to ramp up to 100% capacity and ARM's operations ramped up at different rates during this period, following a strict risk-based phased in approach.

ARM implemented a range of measures in a collaborative approach that encompassed employee support, economic recovery and occupational health measures. These are summarised below, along with the impact of Covid-19 on activities and performance during the year.

Support and collaboration with local host communities and SMMEs with ARM operations contributing R58 million to the purchase of PPE and medical equipment, supply of water and food parcels, radio and media awareness campaigns and Covid-19 relief to SMMEs.

Rigorous screening and testing of returning employees, which is integrated with the national health system. Strict measures and protocols to prevent the spread of Covid-19 and protect employees and contractors have been implemented and are ongoing across all operations.

Ensuring safe transport arrangements within host communities for employees.

A collaborative approach with national and local health authorities, the DMRE and the Minerals Council South Africa (MCSA) among others.

Production volumes, sales volumes and unit costs were impacted by the Covid-19 national lockdown and restrictions. Delivery of skills development, social labour plan (SLP) and corporate social investment (CSI) related projects as well as environmental authorisation processes were delayed.
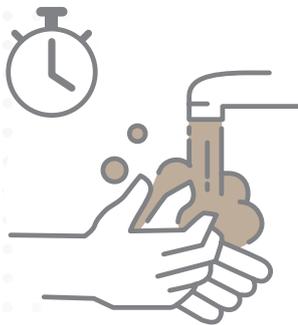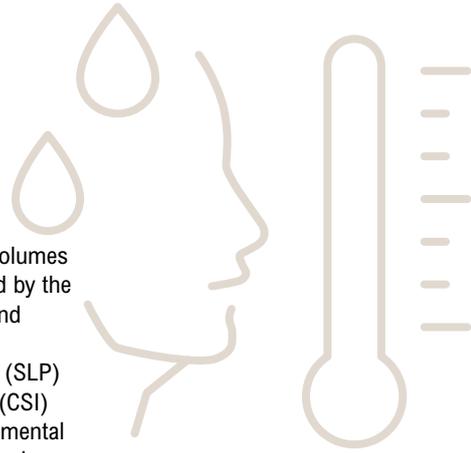
Contact tracing and provision of quarantine facilities where employees test positive for Covid-19, together with support programs for all employees. Ongoing provision of medical support to employees as required.

Assistance with and application of various economic/social benefits including UIF applications and payments.

Risk identification and assessment, including the establishment of mandatory codes of practice (COPs) and standard operating procedures (SOPs) at all operations and the corporate offices. Ongoing stakeholder engagement and development of effective organisational capacity to address the rapidly changing situation.

All mine clinics implemented the protocols of the National Institute of Communicable Diseases (NICD) of the Department of Health (DoH). Healthcare personnel have been trained by the DoH in terms of Covid-19 testing. Clinics have been inspected regularly by both the DMRE and DoH in terms of compliance with the protocols since re-opening of the operations and have been found to be compliant.

At 25 September 2020, 54 000 employee screenings had been completed for Covid-19 and 3 431 employees tested. 934 of our colleagues tested positive for Covid-19. Regrettably six colleagues succumbed to Covid-19. We extend our deepest condolences to the families, friends and colleagues of the employees who lost their lives to Covid-19.

Stakeholder engagement

ARM's success and our ability to create value is inextricably linked to the value we create for others. The sustainability of our operations depends on our ability to appropriately balance the needs, interests and expectations of our stakeholders with those of the group.

We define our stakeholders as individuals or groups that have a material interest in, or are affected by our operations. The board has mandated the social and ethics committee to monitor stakeholder relationships while retaining responsibility for identifying stakeholders and developing appropriate strategies.

The information we receive from regular interactions with our stakeholders helps to create a broader context and provide us with new ideas. These engagements also inform our most material matters, risks and opportunities and provide input into the strategy and long-term direction.

ARM's stakeholder communication policy is contained in the code of conduct and includes measurable outcomes for all engagements. Formal and informal engagements occur at the corporate, divisional and operational level as appropriate to the stakeholder and operational engagement reports record the content of engagements to ensure that learnings are documented and shared effectively. Stakeholder and community engagement are agenda items at operational, divisional and board meetings.

Senior executives responsible for stakeholder engagement include:

- **Executive chairman**
- **Chief executive officer**
- **Finance director**
- **Executive director: investor relations and new business development**
- **Divisional chief executives**
- **Executive: compliance and stakeholder relations**
- **Executive: sustainable development**
- **Executives responsible for stakeholder engagement in each division**
- **Senior management.**

KEY STAKEHOLDERS AND THEIR MATERIAL CONCERNS

Our key stakeholders and their most material concerns are shown in the table below. More information regarding our stakeholders, our primary engagement channels, stakeholder concerns and how we address these is available in the table on pages 106 to 109.

STAKEHOLDER GROUPS	MATERIAL CONCERN	AREAS OF INTEREST	MATERIAL MATTERS	INITIATIVES IN RESPONSE
Government **Customers** **Labour and unions** **Employees**	**Being a responsible employer**	Health and safety of our workforce		• Comprehensive wellness programme; • Policies and management systems align with ISO 9001 (quality); OHSAS 18001, ISO 45001 (safety and occupational health) and SANS 16001 (wellness and disease management) systems • Return to work procedures implemented after lockdown and ongoing in line with the protocols from the MCSA and guidelines from the DMRE and DoH • Regular internal and external assurance.
Labour and unions **Communities and NGOs** **Employees**		Skills development		• ARM's human resources (HR) strategy prioritises capacity building • Investment in skills development • Benchmarking against industry good practice.
Government **Customers** **Communities and NGOs** **Industry Associations**	**Corporate citizenship**	Environmental responsibility		• Alignment with the ICMM Sustainable Development Framework • ISO 14001-aligned operational environmental management systems • Regular internal and external assurance • Engagements with civil society organisations as required to understand their concerns and provide additional information regarding ARM's approach to environmental stewardship.
Government **Communities and NGOs** **Industry Associations**		Social responsibility		• Significant investments in building capacity in local communities through corporate social investment and local economic development initiatives • Coordinated industry-level and direct community support during Covid-19.
Government **Suppliers** **Labour and unions**		Transformation		• Transformation is embedded into all business processes and particularly HR, procurement and corporate social responsibility • Performance is assessed against the Mining Charter and dti Codes • Assistance provided to support the sustainability of SMME suppliers during Covid-19.
Joint venture partners **Shareholders and other providers of capital** **Industry associations** **Labour and unions**	**Financial sustainability**	Financial performance		• Enterprise risk management incorporating elements of ISO 31000 and King IV™ • Strong internal controls, compliance, governance and combined assurance framework • Various interventions to improve operational efficiencies and contain unit cost increases • Regular feedback on the financial impact of Covid-19 and response initiatives • Robust combined assurance program effecting regular internal and external assurance.
Labour and unions **Communities and NGOs** **Shareholders and other providers of capital** **Suppliers**		Fair exchange of value		• Equitable remuneration practices • Significant investment in communities • Returns for shareholders and consistent dividend payer • Fair payment terms • Support provided to communities, SMMEs and suppliers during Covid-19.

Significant engagements with stakeholders during F2020 include:

ARM Ferrous participates in the Northern Cape Shared Value Project, a collaboration across various Northern Cape mines led by the Minerals Council South Africa to provide scale, improve delivery success and increase the impact of community investment programmes. The collaboration pledged R33.9 million to provide emergency relief to local communities identified through engagement with the Department of Health, Department of Social Development and the district municipality.

SR 📖 These initiatives as well as the direct support provided by ARM operations are discussed in more detail on pages 39 and 61.

The executive chairman of ARM, Dr Patrice Motsepe, announced on 28 March 2020 that his family, in partnership with companies and organisations that they are associated with including ARM, have pledged R1 billion to assist with South Africa's and Africa's response to the challenges presented by the Covid-19 pandemic. As part of the pledge, ARM has contributed towards the purchase of personal protective equipment (PPE) for health care workers.

The Raith Foundation (a social justice non-profit organisation (NPO) and ARM shareholder) and Just Share (a shareholder activist NPO) engaged ARM on climate change. As part of the request to disclose GHG emissions related to the ARM/Glencore joint venture operations, ARM committed to engage Glencore as the managing partner and to provide emissions data related to those operations in the F2020 sustainability report.

As part of our commitment to water stewardship, our operations engage with a broad range of water-related stakeholders in the respective catchment management areas to support sustainable water supply and to find solutions appropriate to all water users' needs. These include the Department of Water and Sanitation, local communities, authorities at the local, provincial and national levels, water forums, irrigation boards, catchment management agencies, farmers and other industry users. The engagements aim to ensure the sustainability of water resources, understand and mitigate the water-related concerns of communities, identify how operations can contribute to community water security and increase transparency regarding our operations.

Local economic development projects supported by operations, particularly those in the water-scarce Northern Cape, include upgrades to essential water and sewerage infrastructure. The operations' response to Covid-19 included a focus on providing water to local communities for sanitation and as drinking water through the supply of water tanks and water infrastructure as well as supply by mine water trucks.

Modikwa Mine engaged the Makgoshi and other community leaders in their host communities to explain the impact and mitigating interventions the mine had taken regarding the Rustenburg ACP (force majeure). Crucial information on Covid-19 was shared as well as the precautions the mine was taking to protect employees and communities along with tips of what community members could do to limit the spread of the virus.

Beeshoek, Black Rock and Khumani mines continue to partner with the Northern Cape Department of Health to strengthen the implementation of the provincial tuberculosis (TB), HIV & Aids, STIs and chronic diseases strategies. The partnerships build capacity of local clinic staff and engage communities and other stakeholders to decrease the morbidity and mortality associated with these diseases. Modikwa Mine has an equivalent agreement with the Department of Health in Limpopo and Two Rivers Mine is finalising a similar agreement.

The ARM Ferrous and ARM Platinum operations contributed R58 million towards various Covid-19 response in host communities including the purchase of PPE and medical equipment and the supply of water of food parcels in host communities as well as radio and print awareness campaigns. The operations also provided support and relief to small, micro and medium enterprises (SMMEs) affected by Covid-19.

SR

Nkomati Mine is engaging with a range of stakeholders in preparation for the closure of the mine. This includes consultations with communities and municipalities to determine the socio-economic status of each community and the potential impact of the mine closure to identify focus areas to address community needs.

Employee engagement has been a significant focus at the mine and employees are being supported with counselling, financial planning advice, outplacement services and reskilling as well as skills development. Focused monitoring and lifestyle coaching, financial coaching sessions and counselling sessions through the employee assistance programme are being provided to address increased stress related to the imminent closure of the mine.

Stakeholder engagement Focus areas for F2021

Continue to ensure effective stakeholder engagement.

Conclude stakeholder engagements required for the closure of Nkomati Mine.

Social and ethics committee chairman's review

Responsible social and environmental practices are integral to ARM's strategic priorities to operate safely, responsibly and efficiently, and to partner with communities and other stakeholders. The company values, governance structures and ethical leadership guide employees and management to behave with integrity and act appropriately in the context of our natural environment and the country's socio-economic realities.

The board delegates responsibility for monitoring the effective management of sustainable development to the social and ethics committee while retaining ultimate responsibility for this area. The committee is supported by executive management and relevant executive committees and governance structures, including the employment equity and skills development committee. The social and ethics committee oversees the management of sustainability risks in accordance with its terms of reference which is revised regularly. Sustainability risks are identified by internal and external stakeholders and governance processes, including the enterprise risk management programme. ARM's values are formalised through our code of conduct and commit us to the highest moral, ethical and legal compliance standards in dealing with our stakeholders.

The increasing focus on environmental and social responsibility by investors, funders, customers and civil society, among others, represents a maturing of the sustainability discourse and is a positive development. We acknowledge our responsibility to manage and mitigate the potential negative impacts of our business activities, which create the value that allows us to support growth and development in the societies in which we operate. We believe that our approach to sustainable value creation is effective in discharging this responsibility and were extremely pleased when ARM's environmental, social and governance (ESG) practices were ranked fourth in the FTSE/JSE Responsible Investment Top 30 Index.

We believe in sharing learnings across our diverse operations, learning from others and implementing industry good practice. As a member of the International Council on Mining and Metals (ICMM), ARM shares its commitment to 'Mining with Principles' and has implemented the Sustainability Framework of the ICMM. In recent years, the ICMM developed a set of 38 performance expectations (PEs) with input from NGOs, international organisations and academia, which set a benchmark for responsible mining principles. As part of the initial testing of the PEs, we completed self-assessment against the PEs at two operations during F2019 and during the year under review, self-assessment was conducted by three operations as well as the corporate office. In addition, validation of these self-

assessments was included in the scope of the external assurance over sustainability data, performed by IBIS ESG Consulting Africa (Pty) Ltd. The gaps identified are being addressed as part of our preparation to report on this in more detail in 2021 in terms of our commitment to "Mining with Principles" as a member of the ICMM.

We strive to build on our good relationships with our stakeholders and engage them in open dialogue as we do not operate in isolation from those around us. The Covid-19 pandemic had a significant impact on our key stakeholders, including our joint venture partners, employees, contractors, suppliers, government and local communities. At the corporate and operational level, we engaged both directly with communities and those in need, as well as through the Minerals Council South Africa with various government departments to coordinate and expedite support for local communities to limit the impact and spread of Covid-19.

SAFETY, HEALTH AND WELLNESS

The safety, health and wellness of our employees and contractors is a priority in line with our commitment to zero harm. The implementation of the Critical Control Management (CCM) process across the mining operations is at an advanced stage and good practice is being shared within the group. The CCM process is globally recognised as a process that could significantly help to prevent disabling or fatal accidents. Completion of implementation has been delayed due to Covid-19 interventions. Focused safety initiatives were launched at both Modikwa and Black Rock mines to improve safety performance and both operations showed an improvement during the year under review.

In September 2019, Mr Mpedi Ishmael Malatji, a load haul dump operator at Two Rivers Mine was fatally injured in an accident involving trackless moving machinery. At Nkomati Mine, Mr Makoti Marks Tshwale, a water truck operator employed by a contractor, was fatally injured in October 2019 when he lost control of the truck he was driving, causing it to overturn. Mr Simon Sandamela was fatally injured in a blasting incident on 10 November 2019 at Tweefontein Coal Mine. We are deeply saddened by these accidents and have interrogated

the causes and mitigatory actions to prevent recurrence with management. Any loss of life is unacceptable and we extend our heartfelt condolences to the families of Mr Malatji, Mr Tshwale and Mr Sandamela, and to their colleagues and friends.

ARM's integrated wellness management programme aims to prevent occupational health hazards from impacting on the health of employees and contractors, and to actively identify and manage health risks and chronic conditions that could affect their wellness and quality of life. These programmes have an emphasis on managing hearing conservation, pulmonary tuberculosis (PTB), HIV & Aids, occupational lung diseases and chronic conditions.

Before restarting after the national lockdown, the operations completed 'return to work' risk assessment and operating procedures in line with guidelines from the Minerals Council South Africa and relevant guidelines from the regulators. The mines developed and submitted the mandatory Codes of Practice on Covid-19 management and engaged the Department of Minerals and Energy (DMRE) in terms of return to work arrangements as required.

The operations follow a risk-based approach in allowing employees to return to work, excluding employees who are vulnerable or have co-morbidity risks that are not well controlled, for their own wellbeing. Our site clinics implemented the protocols of the National Institute of Communicable Diseases (NICD) of the Department of Health (DoH) and healthcare personnel were trained by the DoH in terms of Covid-19 testing.

ARM's mining operations are participating in the collaborative initiative facilitated by the Minerals Council South Africa to ensure effective Covid-19 testing strategy and capacity, engagement with government and mining communities.

At 25 September 2020, 53 961 employees had been screened for Covid-19 and 3 431 employees tested. 934 of our colleagues tested positive for Covid-19. As at 25 September, the recovery rate across the group was 95.7%. Regrettably, six colleagues succumbed to Covid-19. We extend our deepest condolences to the colleagues, family and friends of the employees who lost their lives to Covid-19.

The DoH's Test and Treat Policy for HIV & Aids has been implemented at all operations and we are pleased that more employees elected to undergo HIV testing than in the previous year, supported by HIV campaigns at Modikwa, Black Rock and Two Rivers mines.

We are committed to the national agenda in making a significant contribution to addressing PTB and HIV & Aids and have successfully implemented public-private partnerships as powerful tools to bring healthcare to communities. Community PTB and HIV & Aids initiatives include awareness and outreach initiatives. The three mines in the Ferrous division and Modikwa Mine have memorandums of understanding (MOUs) with the DoH at provincial level to strengthen the implementation of provincial PTB, HIV & Aids, STIs and chronic disease

management strategies, and extend primary healthcare services to contractors and communities. Two Rivers Mine is in the process of establishing similar partnerships with the Limpopo DoH, finalisation of which was delayed due to the national lockdown.

Operations continue to progress implementation of the DoH's 90-90-90 principle relating to PTB, HIV & Aids. Increased focus will be applied to initiatives to achieve the HIV & Aids goals, as performance in this area decreased slightly in F2020. There was a significant decrease in the number of new PTB cases across the operations as a result of ongoing awareness programmes, health monitoring and Isoniazid Preventative Therapy (IPT).

Lifestyle diseases including hypertension and Type 2 diabetes are increasing in the South African population and, while these diseases are well below national rates at ARM's operations, the increased incidence of hypertension in the workforce is a concern. Operations monitor and manage those affected, and are implementing specific initiatives to assist employees in managing their health and mitigating the risks associated with chronic health conditions. These include a focus on increasing physical activity and creating awareness around diet and lifestyle. The clinics also continue to engage other stakeholders such as the Department of Health and community NGOs in conducting wellness campaigns both in the workplace and the community.

DEVELOPING OUR HUMAN CAPITAL AND DRIVING TRANSFORMATION

Implementation of the group diversity management policy across the company is overseen by the employment equity and skills development committee, which includes an internal gender unit. Representation of historically disadvantaged persons (HDPs) improved across all management levels and women in mining improved at executive and senior management. We continue to implement initiatives to improve representation of women across the group, including through establishing women in mining committees at operations, developing a female leader profile, conducting gender mainstreaming refresher courses and through our Women Development and Women in Leadership Development training programmes.

These initiatives form part of ARM's broader focus on transformation, which includes ensuring HDP ownership, human resources development, preferential procurement, enterprise and supplier development, and mine community development. The mining operations submitted reports to the DMRE in June 2020 regarding their performance for the 12 months to December 2019 in terms of the reporting requirements set in the 2018 Mining Charter.

Covid-19 delayed delivery on various HR initiatives but also acted as an opportunity to embrace the many opportunities presented by distance learning, remote assessments and virtual development. Line managers were provided with

ongoing awareness sessions regarding effective communication for individuals and teams, leading in times of crisis and refresher courses on internal grievance procedure and disciplinary processes. Employees were reminded of the psychological counselling available through the employee assistance programme to support them in managing the psychological impact of the lockdown and changed ways of working.

We invested R225 million in skills development in F2020, through programmes that emphasise the development of women and previously disadvantaged individuals in support of the group's transformation strategy.

Nkomati Mine will cease production in February 2021 (previously reported as September 2020) and we continue our engagement with affected stakeholders to ensure that the process is managed in a responsible manner. Counselling and support are provided to employees during this challenging period. A dedicated project team, with input from external specialists in holistic mine closure, is mapping and executing the closure plan to ensure that both social and environmental responsibilities are addressed in line with relevant statutory requirements as well as good practice guidance from the ICMM on responsible mine closure.

COMMUNITY RELATIONS

Partnering with local communities provides us with an opportunity to contribute to the socio-economic development of the people living there, which include employees. Our investments in these communities help to address some of their challenges and supports their resilience and sustainability.

In response to the Covid-19 pandemic, ARM operations supported host communities through the purchase and supply of PPE, medical equipment, water and food parcels, as well as radio and media awareness campaigns. In total, ARM operations contributed R58 million in support to the end of June 2020.

Infrastructure development is a core focus of community development initiatives through projects such as upgrades to essential water and sewerage infrastructure, as well as construction of roads. 48% of our total of R130 million Corporate Social Responsibility investment in F2020 related to infrastructure development through local economic development commitments identified in partnership with local government and community representative structures.

Educational support includes direct support for community schools, bursaries for promising students from these communities and adult education and training (AET) opportunities. Youth opportunities include learnerships and a graduate development programme.

Enterprise and supplier development programmes driven by the operations promote local job creation and economic development by accelerating the development of local black-owned and black women-owned companies by providing business development support, mentoring and coaching, and financial support in certain instances. The operations also provided support and relief to small, micro and medium enterprises (SMMEs) affected by Covid-19.

RESPONSIBLE STEWARDSHIP OF NATURAL RESOURCES

Responsible tailings management is a priority for ARM, the mining industry and investors. External review and dam breach analysis were completed at our TSFs to ensure a comprehensive understanding of the potential impact on stakeholders including communities, the environment and infrastructure, and to inform enhanced emergency response planning. These studies and reports have just been completed and action plans are being formulated in response to the outcomes.

Water quality and availability are recognised in the group's top ten risks. ARM's reporting of water aligns with the ICMM's Position Statement on Water, which is based on the Water Accounting Framework for the Minerals Industry of the Minerals Council of Australia. The implementation of the framework over the past 24 months has resulted in significantly improved measuring of water impacts, water reporting and understanding of water re-use efficiency, which is above 72% and a key indicator in monitoring and managing consumption and losses. Total water withdrawal decreased by 7% to 20.3 million m^3 and we achieved our F2020 water target to reduce withdrawals of potable water by 10% against the F2011 baseline. We have published our second focused supplementary report on climate change and water which is available on our website and provides increased transparency and comparability in water and climate change reporting to meet the requirements of a broad range of stakeholders.

ARM's F2020 estimated carbon footprint (Scope 1 and 2 attributable emissions) decreased by 8% to 1.0 million tonnes of carbon dioxide equivalent (tCO_2e) and electricity consumption decreased 6% to 1 563 GWh. We did not achieve our F2020 greenhouse gas (GHG) emissions target to reduce absolute Scope 1 and 2 emissions by 5% against the F2014 baseline through emission reduction initiatives. Some of these initiatives, for example the procurement and implementation of electric vehicles at Black Rock Mine, involve material capital expenditure and, while the investment was made during F2020, the benefit will only be realised as these are deployed into production.

We regard legal compliance as the minimum requirement while we implement targeted continuous improvement initiatives, including reduction in water consumption and reducing carbon emissions. Regular engagements with regulators are conducted to ensure that the required licences and permit applications are approved and in place, and that we continue to comply with the conditions of these authorisations. Amendments to licences and permits is an ongoing process as operations expand and projects evolve, underpinned by internal and external compliance monitoring processes. No major environmental incidents were reported at our operations in F2020.

I would like to thank my fellow social and ethics committee members and colleagues on the board for their counsel and support during the year. Acting with integrity while maintaining environmental and social priorities in delivering on our business goals, requires that employees and management are aligned to these goals. We recognise their diligence and commitment during a uniquely challenging year and thank them for their efforts.

We are constantly reminded that our ability to create value depends on the value realised for others. We thank our stakeholders for their support during the year and are committed to working towards further strengthening these relationships in the year ahead.

Dr R V Simelane
Chairman of the social and ethics committee

Focus for F2021

Our primary priorities remain the safety of our workforce and achieving zero harm. We monitor the effectiveness of the systems and controls currently in place to manage our most material sustainability matters and investigate new opportunities to continuously improve these processes. Specific areas of focus for the year ahead include:

Ensuring effective stakeholder engagement, including concluding engagements required for the closure of Nkomati Mine;

Continued engagement with stakeholders to understand concerns around environmental stewardship;

Completing the implementation of the critical control management (CCM) process to enhance current risk controls across operations followed by verification of effective implementation;

Continued learning regarding safety initiatives and leading practices, internally among operations and from engagement with peers and industry associations;

Continuing our progress in achieving the DoH 90-90-90 goals for PTB, HIV & Aids , with a focus of improving performance in the HIV & Aids indicators;

Achieving the 2014 occupational health and safety milestones as agreed by the Tripartite partners during the 2014 Occupational Health and Safety Summit, which include elimination of occupational lung diseases, noise-induced hearing loss, PTB and HIV & Aids;

Supporting community health and wellness initiatives in partnership with the DoH;

Continued risk-based monitoring and treatment of chronic conditions, particularly hypertension, supported by lifestyle coaching and awareness programmes;

Screening, testing and prevention of further spread of Covid-19;

Implementing the short-term initiatives that support the human resources medium-term focus areas;

Continuing to deliver on our community development commitments in terms of our Social and Labour Plans;

Driving community enterprise and supplier development programmes;

Continued improvement in understanding and reporting on performance in terms of climate change and water, and further refinement in terms of implementation of the Water Accounting Framework;

Setting long-term water and carbon targets;

Continued reduction in carbon emissions and mitigating the risks presented by climate change both to operations and surrounding communities; and

Responsible tailings management and implementation of the Global Industry Standard on Tailings Management (GISTM).

Material matters

In F2020, material matters were reviewed against board and executive committee deliberations, feedback from formal and informal engagements with stakeholders during the year, a review of media reports and peer analysis. While the impact of the Covid-19 pandemic clearly dominated the short-term view, other material matters previously reported remained broadly relevant for the current period although some components and descriptions have changed.

	COMPONENTS	F2020 RESPONSES
Delivering financial returns to shareholders and other providers of capital	• Negative economic outlook • Financial impact of Covid-19 • Business continuity and cybersecurity preparedness • Addressing loss-making and cash-negative operations • Efficient capital allocation	• ARM's strong cash position enabled us to navigate a challenging environment while continuing to invest in our business and pay dividends. It also gives us flexibility to pursue value-enhancing growth opportunities aligned to our strategy • Business continuity plans were implemented seamlessly, including cybersecurity • All operations were headline earnings positive except Nkomati Mine which is being scaled down and ARM Coal
Continuously improving operational performance	• Above inflation cost escalations due to lower volumes • Disruption in global or local supply chains required to sustain production • Consistency and security of water supply at the Northern Cape operations • Progressing the Black Rock Mine and Gloria modernisation projects on schedule and in budget	• Unit costs were affected by lower production volumes. Managing costs remains a management focus • Northern Cape operations continued to work with the Sedibeng Water Board to progress refurbishment of the water pipeline. A capital user charge was implemented which impacted unit costs • The Black Rock and Gloria modernisation projects are progressing well but were delayed due to Covid-19
Ensuring a safe, healthy and appropriately skilled workforce	• Managing spread of Covid-19 at the operations • Continuous improvement in the safety performance at all operations • Attracting and retaining key skills, particularly at Nkomati Mine	• Strict protocols to prevent spread of Covid-19 were implemented at all operations • 934 employees have tested positive for Covid-19 of which 96% have recovered • Black Rock Mine achieved 8 million fatality-free shifts • Deteriorating safety performance is being addressed through focused programmes and skills training • Global safety specialist deployed at Modikwa to assist in improving the safety culture
Maintaining our social licence to operate	• Increase in community expectations • Community unrest	• Each operation contributed to mitigating the impact of Covid-19, while continuing to invest through social and labour plans, local economic development and corporate social investment spanning infrastructure, education, health, skills development and job creation in our host communities • ARM works with community forums, municipalities and government on community investment
Ensuring responsible stewardship of natural resources	• Unreliable water supply in Northern Cape • Climate change and reducing carbon emissions • Efficient energy use • Responsible water use • Safe and responsible management of tailings	• Further refinement of reporting in terms of the water accounting framework. • Additional comprehensive reporting introduced for climate change and water management in the supplementary report on climate change and water • External review and dam breach analysis of tailings storage facilities completed

OUR PERFORMANCE

Maintaining our social licence to operate

Communities

Transformation

Our value chain

"Maintaining good relationships with host communities strengthens ARM's social licence to operate and our investments in infrastructure and social projects can create significant positive impact for the people who live there. We unequivocally support transformation in the South African mining industry to redress historical inequality and facilitate broader social development. We recognise our responsibility to consider the broader impacts of our activities upstream and downstream from the operations"

COMMUNITIES

ARM's strategy is to partner with communities and other stakeholders, investing significantly to promote socio-economic development and improve community resilience and sustainability.

HOW WE MANAGE COMMUNITY RELATIONSHIPS

Stakeholder and community engagement are agenda items at operational, divisional and board meetings. Community concerns or disputes are reported in quarterly sustainability reports, which are discussed at operational, divisional and board-level social and ethics or sustainable development committees.

Community stakeholder groups are identified through stakeholder mapping exercises and when stakeholders contact the operations. These groups are recorded in stakeholder registers that are updated on an ongoing basis. Community stakeholders include traditional leaders, representatives elected or approved by the communities as well as groups comprising community members that represent a particular interest, such as business, youth or women forums.

Community engagements are guided by formal stakeholder engagement strategies and policies, and implemented according to stakeholder engagement plans that are revised regularly. Stakeholder engagement at operational level is overseen by the executive: compliance and stakeholder relations and divisional senior management. Engagements are both formal and informal in nature, and formal engagements are generally minuted.

We monitor delivery on projects implemented and impact in the communities through metrics relevant to the nature of the project and stakeholders. Indicators include the number of jobs created, households benefitted, beneficiaries supported, spending against commitments of approved Social Labour Plans (SLPs), socio-economic benefit created, stakeholder buy-in, meaningful partnerships with local government and the percentage of the project value that directly benefits black people, black youth and black women.

Communities can raise grievances through formal stakeholder structures and concerns are often addressed to municipalities and communicated to the operations by local mayors. Stakeholder groups also approach the operations directly, call or email the operation, or use the ARM whistleblower hotline.

Globally, pressure and expectations by local communities for employment, procurement and other benefits are increasing, and resulting community unrest has affected some mining operations. This trend has become increasingly evident in South Africa over the last few years as poor and marginalised South Africans become frustrated with countrywide unemployment, poverty and inequality. Covid-19 has further highlighted issues of inequality, poverty and health challenges. The ARM group risk register recognises increasing community expectations as a top ten risk.

Maintaining good relationships with host communities strengthens ARM's social licence to operate and we are committed to continuing to work with community forums, municipalities, the Department of Mineral Resources and Energy and other local and national stakeholders to find solutions for the challenges facing these communities. Our investments in local communities aim to improve the living conditions and standards of living of the people in these communities.

Investments in infrastructure and social projects can create significant positive impact, strengthening relationships with local communities as well as benefitting employees who live there. Regular engagements improve our understanding of community needs and expectations, and promote community ownership of projects by including beneficiaries from the planning phase. Covid-19 created a need to further support communities in managing the impact of the virus.

FORMAL AND INFORMAL COMMUNITY-RELATED ENGAGEMENT STRUCTURES

Future forums
Municipalities, unions, community structures

Identify and discuss progress on local economic development (LED), employment opportunities and community upliftment.

LED updates
Municipalities, communities, DMRE

Structured feedback on progress with LED projects, at least quarterly with municipalities and at least annually with communities and traditional leaders.

Community forums
Community representatives, business forums, traditional leaders, youth representatives

Meet regularly to address issues raised by communities, including employment opportunities, procurement opportunities and skills development opportunities.

Community open days
Communities

Interactive engagements to support information sharing and relationship building.

Integrated Development Plan (IDP) meetings
Local municipalities, traditional leaders, community representatives

Facilitated by local municipalities to update communities on progress on IDPs, including LED projects.

Ad hoc engagements
Municipalities, communities, DMRE

Approaches from various community groups to represent their interests. These include business forums, non-government organisations, women's forums, youth forums, traditional leaders, community trusts, community property association, local councils and home-based care-givers.

Future forums
Community representatives, business forums, foresters, farmers

Meetings to discuss concerns, issues or conflicts arising from possible socio-economic and environmental impacts from new projects and changes/expansions to operations. These meetings form part of the Environmental Impact Assessment (EIA) process and include communications regarding mitigating actions to address concerns raised. Common concerns include access to water, dust mitigation, blasting and employment opportunities.

To improve coordination and increase social impact, wherever possible operations collaborate with peers and other industry bodies. The Northern Cape shared-value working committee enables ARM Ferrous and other manganese producers to work with the Minerals Council South Africa (MCSA) to coordinate and deliver sustainable corporate social responsibility projects in the region. The general managers of Modikwa and Two Rivers mines participate in a working group with other CEOs of local mining companies and the MCSA to identify solutions to the various socio-economic challenges in the area.

Effective implementation of community projects is not always easy. Challenges include managing increasing community expectations, particularly at marginal operations, and ensuring that initia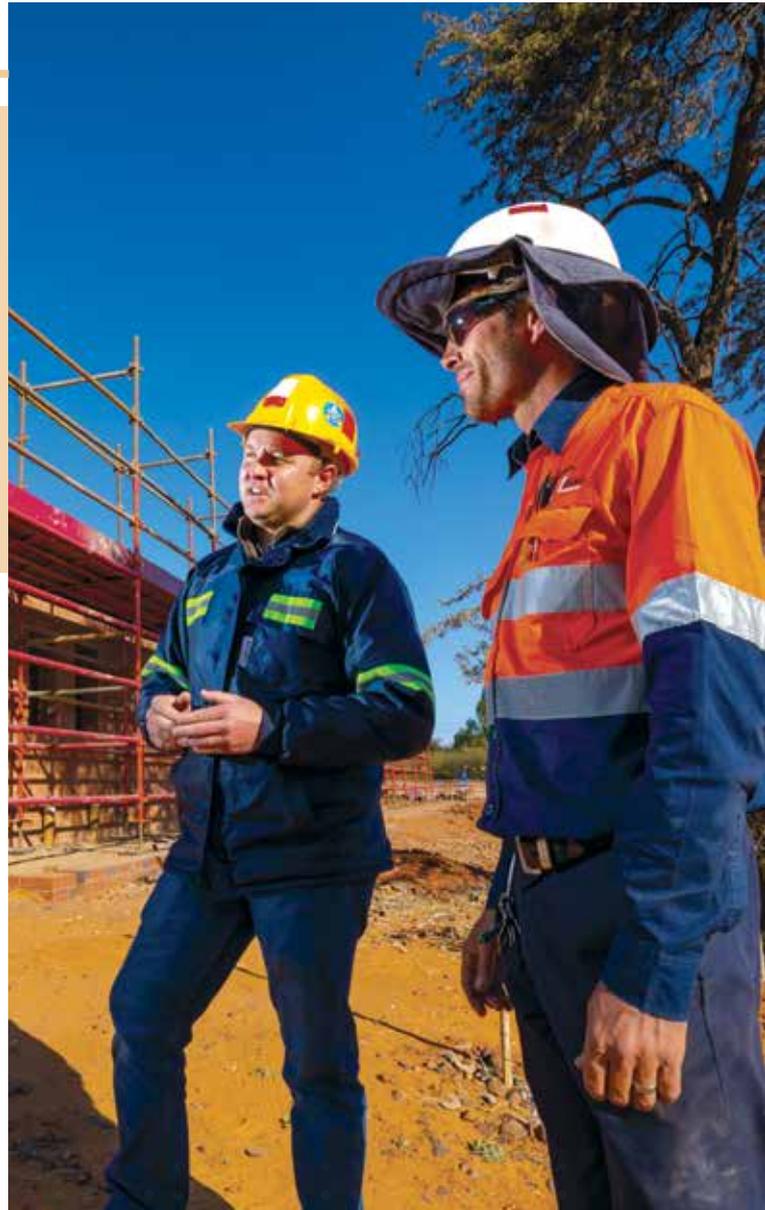tives meet the range of expectations across stakeholder groups affected by each project. Ongoing monitoring is necessary to ensure that funding provided is spent effectively and on the agreed projects, and identifying whether beneficiaries (local businesses, NGOs etc.) are already receiving funding or support from other sources is important to ensure that funding is effectively deployed. Sustainability of projects and timing of exit are key concerns, particularly in enterprise and supplier development programmes. Continuity in stakeholder representatives can be a challenge and elected structures may be undermined by self-appointed community groups. The number of ad-hoc forums (business, youth, women) with different demands continues to increase. Ensuring that municipalities accept handover of completed projects timeously and continue to maintain infrastructure, remain areas of focus.

Covid-19 relief

The Covid-19 pandemic had a significant impact on communities and the people and businesses that operate in those areas. Although lockdown affected delivery on planned CSR projects, the operations implemented a range of additional initiatives to support host communities.

The ARM Ferrous division committed R10 million to Covid-19 relief, R5 million through the collaborative Northern Cape Mines initiatives and R5 million through direct sponsorship and committed contributions towards the relief of vulnerable local communities, local government and the Department of Health. Through the direct initiatives, ARM Ferrous:

- Supported Covid-19 related campaigns on radio and print media to create awareness and drive prevention to suppress the regional rate of infection.
- Supplied over R1 million in medical equipment, PPE, supplies and bed linen to John Taolo Gaetsewe (JTG) District hospital, Kuruman District Hospital, Tshwaragano Hospital and 14 clinics in the area.
- Donated PPE (9 540 masks and gloves) and hand sanitisers to local communities, municipalities, SASSA and SAPS for employees that worked during the lock-down period.
- Supported vulnerable families and old age homes during lockdown by providing more than 300 food parcels, two trailers to transport the food parcels and food vouchers.
- Provided laptops, projectors and PPE to the local Department of Education to support virtual training.
- Procured 20 water tanks in Gasegonyana and a water bowser for JTG district.
- Provided 100 contact tracers, 450 PCR tests, 4 nurses and a doctor for JTG municipalities. Donated cellphones for contact tracers.
- Delivered Covid-19 training to 53 business owners in the Kuruman SMME Village, at faith-based leader workshops and to taxi drivers transporting mine employees.
- Beeshoek Mine provided Covid-19 PPE to the 11 schools in Postmasburg for 8 517 learners and 336 educators.
- In total, ARM Ferrous mines spent R18.2 million on community PPE and medical supplies to the end of June 2020.
- The mines also provided support and relief funding of R35.3 million for local SMMEs through the operations' Enterprise and Supplier Development programmes.

The collaboration between mines in the Northern Cape aimed to execute on requests received from local stakeholders as well as provide support to the regional response with other stakeholders. These initiatives included support for awareness campaigns on radio and print media as well as:

- Procuring 50 water tanks and installing 8 tap stations in Mapoteng to supply water to the community.
- Donating 5 000 masks to the municipality for employees that worked during lockdown.
- Providing R2.5 million funding to the Solidarity Fund to assist with demand supply planning.
- Providing food parcels to support vulnerable families during lockdown.

As discussed in more detail below, the mines in the ARM Platinum division contributed R1 million in water supply, PPE and sanitisers as well as R3.5 million in local SMME relief funding to the end of F2020.

Nkomati Mine implemented three water supply community initiatives, including the supply of water tanks, sanitisers and face masks to communities around its operations.

Modikwa Mine's Covid-19 community initiatives included:

- Extending the free flu vaccinations offered to employees and contractors to community leaders to strengthen their immune systems.
- Copying around 30 000 Covid-19 screening questionnaires for the DoH to be used in the communities.
- Sanitising/disinfecting the classrooms, toilets, kitchens, offices and administration blocks of eight primary schools and seven high schools before schools reopened. The two tribal offices at Sehlaku and Mamphahlane villages were also sanitised.
- Engaging with community leaders to share information on Covid-19 and how to control the spread, as well as supplying them with sanitisers.
- Supplying potable water to the communities of Balotjaneng using mine water tankers during the first three days of lockdown. Thereafter, a water tap was installed adjacent to one of our shafts from which the community is able to access potable water in order to mitigate the spread of Coronavirus.
- Providing face masks to Lebalelo Water officials and community members who were assisting with the installation of 70 water tanks in the community to fight the spread of the virus.

- Donating food parcels to vulnerable and indigent families and individuals from our host communities, together with representatives of organised labour, community leaders and the local municipality ward councillor.
- Fast-tracking the start of water borehole and reticulation projects in three communities.
- Providing peer educator training on Covid-19, the importance of observing lockdown regulations and other important prevention measures such as social distancing, hand washing and the use of sanitisers and cloth face masks.

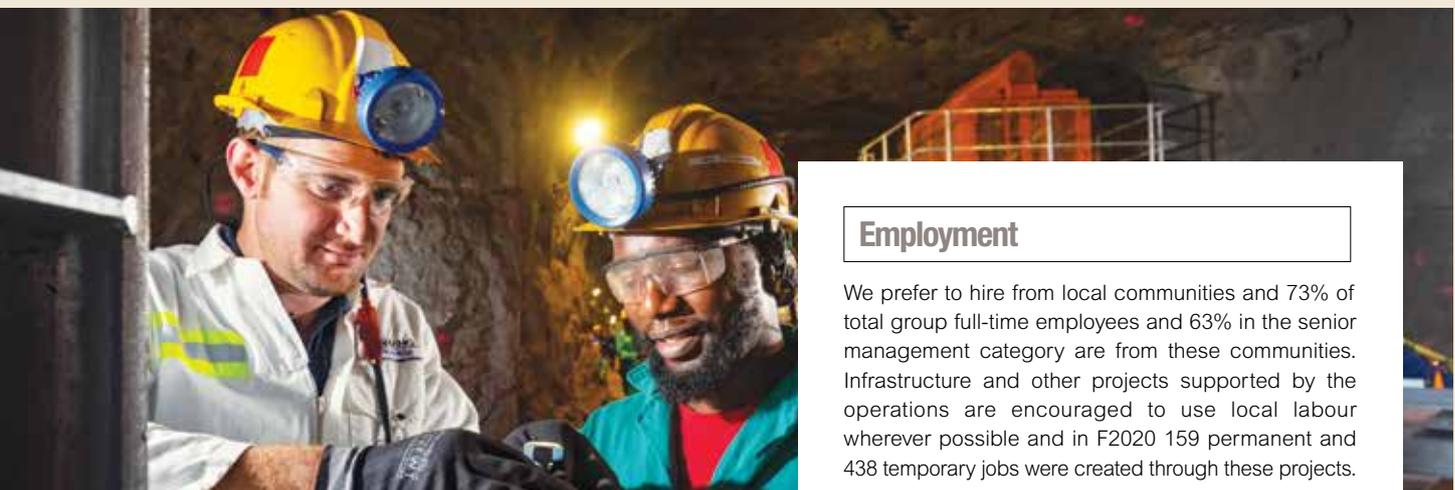Two Rivers Mine community engagement and assistance included:

- Issuing face masks to the community.
- Continuing with the schools feeding project in the community.
- Sanitising community schools that reopened.
- Engaging with the MCSA and the Department of Education to better understand requirements and to align with the department's programs to support schools, including through e-learning materials.
- Providing a borehole to provide drinking water for the Kalkfontein community.

Operations also supported suppliers and SMMEs in their enterprise development programmes by offering repayment holidays on the SMMEs' interest free loans for 3 months and supporting them with on-boarding medical screening to declare them fit for travel to the mines. They also provided assistance in the process of obtaining funding support from the various Covid-19 Funds and covered salary expenses to ensure SMMEs can continue to pay their employees and to remain in business.

In total, the group's mines contributed R58 million towards Covid-19 relief.

ARM'S CONTRIBUTION TO COMMUNITIES

Ongoing CSR initiatives support a range of programmes in host communities that promote socio-economic upliftment, improve living conditions and strengthen our relationships with stakeholders. These programmes include education, skills development, entrepreneurship, social projects and infrastructure programmes.

Employment

We prefer to hire from local communities and 73% of total group full-time employees and 63% in the senior management category are from these communities. Infrastructure and other projects supported by the operations are encouraged to use local labour wherever possible and in F2020 159 permanent and 438 temporary jobs were created through these projects.

Healthcare initiatives

Operations support government and industry health priorities by working closely with regional Departments of Health (DoH). Memorandums of Understanding (MoUs) are in place with the DoH at the three mines in the Ferrous division, at Modikwa Mine and being implemented at Two Rivers Mine through which the mines support the implementation of provincial PTB, HIV & Aids, STIs and chronic conditions management strategies, and extend primary healthcare services to contractors and communities. Black Rock Mine also partners with the Northern Cape DoH to provide primary healthcare services to the Black Rock community.

All operations support awareness, testing campaigns and outreach initiatives to address PTB, HIV & Aids among employees and in communities.

Operations directly support community health initiatives, including wellness centres and home-based care groups. They also engage with local Aids councils where possible to ensure community projects address the most pressing wellness and health needs. In F2020, ARM operations provided R10.8 million to support community health and HIV & Aids projects, and Covid-19 support, through the corporate social investment (CSI) programme (F2019: R1.95 million).

Education

ARM participates in a number of initiatives that support youth development, increase employability in local communities and develop future industry skills. Bursaries are available for qualifying students from local communities in relevant fields of study. Other programmes include sponsoring a web-based programme for local school leavers, learners and the broader community to improve performance in maths and science and increase opportunities to obtain learnerships, bursaries and further career development.

During F2020, ARM provided R15.9 million towards educational initiatives through the CSI programme (F2019: R7.5 million).

Skills development

ARM aims to make a meaningful contribution to increasing the pool of skills in our host communities, especially among members of historically disadvantaged communities. These initiatives include programmes supporting youth and women development in communities near our operations.

Nationally-aligned Adult Education and Training (AET) is offered to employees and community members through training centres at operations to support the development of basic skills to improve career prospects and future employability.

Learnerships allow eligible candidates from outside the academic streams to develop skills across various disciplines applicable to mining.

The Graduate Development Programme provides unemployed youth who have completed degrees or diplomas in the scarce skills disciplines identified in the MQA and MERSETA Sector Skills Plan with work exposure across different operations in the group.

Preferential procurement and enterprise and supplier development

ARM's preferential procurement and enterprise and supplier development programmes support the development of local small, medium and micro enterprises (SMMEs). These initiatives promote entrepreneurship, create jobs, increase economic activity in mining communities, empower historically disadvantaged South Africans (HDSAs) and improve market access for South African capital goods and services.

ARM's operations support black-owned and black women-owned businesses, and, where appropriate, ring-fence opportunities for such suppliers. Initiatives include a Young Entrepreneurs Incubation Programme and a Business Skills Development Programme. Support is provided through training, mentoring and coaching, early payment terms to assist with cash flow management, provision of equipment and financial support to qualifying SMMEs. The goal of the enterprise and supplier development programme is to graduate sustainable businesses into the mining supply chain.
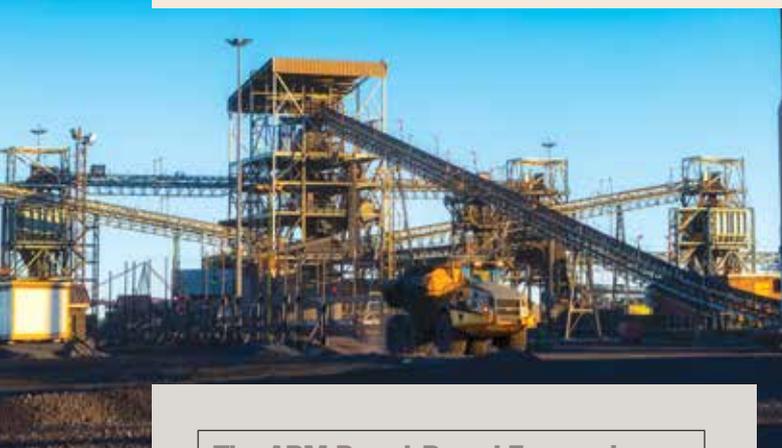
Infrastructure development

The five-year Social and Labour Plans (SLPs) the mines commit to in terms of the MPRDA include Local Economic Development (LED) programmes that deliver community infrastructure development projects. SLP projects align with the needs identified in regional IDPs and are agreed and regularly revised in close consultation with communities, the DMRE, Department of Health, Department of Education and local government.

SLP projects are continually monitored and progress is reported internally at least quarterly at social and ethics committee and sustainable development committee meetings at corporate, operational and divisional levels. Regular updates are provided to municipalities, communities, the DMRE and other government departments.

During F2020, R62.5 million was invested in LED infrastructure projects (F2019: R122.5 million), which comprises 48% of the group's total corporate social responsibility (CSR) spend.

Focus on community water infrastructure

Access to water is a challenge in the Northern Cape and the ARM Ferrous mines have supported a number of projects over the last few years that improve access to water and water resiliency for local communities. This year Khumani and Black Rock mines contributed to the installation of pipes from the Kuruman bulk water reservoir to provide access to water for communities situated in the Ga-Segonyana area. Black Rock Mine is supporting a project to provide a bulk water system and internal reticulation to the estimated 120 households in Magobing village within Joe Morolong local municipality.

The ARM Broad-Based Economic Empowerment Trust (ARM Trust)

The ARM Trust works with kings, traditional leaders, religious and faith-based organisations, representatives from government, business, trade unions, women, youth, NGOs and other rural and urban communities to contribute to uplifting the living conditions and standards of living of poor and marginalised South Africans living in rural and urban communities.

Rural Upliftment Trusts (RUTs) in every province except for Gauteng and Western Cape, implement welfare, community development and anti-poverty initiatives with an emphasis on education. ARM provides resources to build administrative and project management capacity to the Trust to manage the development initiatives. The RUTs and individual unit holders are funded by the dividends accruing to their combined equity interest in ARM. During F2020, R14.5 million was provided to the projects facilitated by the Trust (F2019: R16.4 million).

Corporate social investment (CSI)

Requests for community assistance that fall outside the SLPs are funded through the operational CSI budgets. At ARM corporate level, CSI initiatives include the ARM Chairman's Fund and the Educational Trust.

CSI spending increased to R44.7 million (F2019: R27.4 million), with 35% invested in supporting educational initiatives and 24% in health (mostly Covid-19 related spending).

Sporting events included sponsorships of local soccer and netball events by Khumani Mine, table tennis, netball and cricket by Black Rock Mine, soccer by Cato Ridge Works and soccer and netball events by Two Rivers Mine.

Employee volunteering is encouraged through initiatives such as Mandela Day.

F2020 TOTAL CSR SPEND R130.3 million
(%)

- LED – Enterprise development (9%)
- LED – Community (4%)
- Other (CSI & LED) (15%)
- CSI – Health (8%)
- CSI – Education (12%)
- CSI – Capacity building (1%)
- CSI – Sporting events (3%)
- LED – Infrastructure (48%)

TRANSFORMATION

"We are committed to working with government, labour, our host communities and other stakeholders to ensure that the South African mining industry advances the interests of all stakeholders."

Reporting context

REPORTING FRAMEWORKS

ICMM

UN SDGs:

1 NO POVERTY

4 QUALITY EDUCATION

5 GENDER EQUALITY

UNGC 6

8 DECENT WORK AND ECONOMIC GROWTH

10 REDUCED INEQUALITIES

11 SUSTAINABLE CITIES AND COMMUNITIES

PRINCIPAL LEGISLATION

- The Mineral and Petroleum Resources Development Act (MPRDA)
- The Mining Charter
- The Department of Trade and Industry Revised Codes of Good Practice (dti CoGP)
- The Employment Equity Act

We regard transformation as an effective means to redress historical inequality and facilitate broader social development, and we unequivocally support transformation in the South African mining industry to achieve these goals and give all South Africans a stake in the country's mineral wealth. Mining licences depend on transformation performance and compliance with the relevant legislation is a key focus. We are committed to working with government, labour, our host communities and other stakeholders to ensure that the South African mining industry advances the interests of all stakeholders.

HOW WE MANAGE TRANSFORMATION

The social and ethics committee oversees transformation. Transformation principles are integrated into business processes with specific focus in those areas most directly involved in promoting transformation such as the human resources, procurement and corporate social responsibility functions.

Progress in terms of the requirements of the Mining Charter and the dti CoGP is monitored on an ongoing basis and reported to the social and ethics committee every quarter.

MINING CHARTER 2018

The Broad-Based Socio-Economic Empowerment Charter for the South African Mining Industry (the Mining Charter) aims to achieve the transformation goals of the Mineral and Petroleum Resources Development Act (MPRDA). The objectives of the Mining Charter are to:

- Promote equitable access to the nation's mineral resources to all the people of South Africa;
- Substantially and meaningfully expand opportunities for Historically Disadvantaged Persons (HDPs) to enter the mining and minerals industry and to benefit from the exploration of the nation's mineral resources;

- Utilise and expand the existing skills base for the empowerment of HDPs and to serve the community;
- Promote employment and advance the social and economic welfare of the mine communities and major labour sending areas;
- Promote beneficiation of South Africa's mineral commodities; and
- Promote sustainable development and growth of the mining industry.

The six South African mines submitted reports to the DMRE in June 2020 regarding their performance for the 12 months to December 2019 in terms of the reporting requirements set in the 2018 Mining Charter. The Mining Charter requires the mining industry to implement and report on:

Ownership

All mines exceed the 26% HDP ownership set in the Mining Charter.

Mineral beneficiation

The Minerals Council South Africa is engaging with the DMRE on behalf of its members to better understand the reporting requirements in light of the Mineral Beneficiation Strategy.

Housing and living conditions

Our housing strategy and policy aims to ensure that every employee has decent accommodation in line with the Mining Charter, the Housing and Living Conditions Standards for the Minerals Industry and the relevant municipal and spatial planning legislation. Housing initiatives are discussed on page 76.

Mine community development

Our socio-economic development initiatives aim to make a meaningful contribution to mine community development. Community projects are identified through consultation with community leaders, communities and local municipalities, and include skills transfer and capacity building initiatives. There was a delay in 2019 projects at Modikwa Mine as the mine is prioritising the execution of the outstanding 2018 projects in line with the official completion of the 2014-2018 SLP. A catch-up plan is in place to fast track the execution of 2019 and 2020 projects. Nkomati Mine is in consultation with all local economic development beneficiaries to ensure that legacy projects are completed before the mine closure. ARM's corporate social responsibility initiatives are discussed on pages 40 to 42.

Human resources development

The mines invested in excess of 5% of annual salaries in human resources development, as required by the Mining Charter. This includes mining and engineering learnerships to employees and local communities, scholarships, bursaries, study assistance grants, opportunities to graduates for vocational training and adult education and training (AET). Skills development is discussed on page 71.

Employment equity, Procurement and Supplier and enterprise development

are discussed in more detail below:

Employment equity

Mining licence holders are required to submit five-year employment equity (EE) plans to the Department of Employment and Labour (DOEL) for approval.

Transformation in the workforce, skills attraction, development and retention are guided and monitored by the employment equity and skills development committee, which reports to the ARM exco. It reviews recruitment processes, follows up on deviations in EE performance and monitors the technical skills required to meet our transformation goals.

The group executive: compliance and stakeholder relations and the group executive: human resources conduct quarterly workshops at the operations to monitor and evaluate progress in terms of Section 43 of the Employment Equity Act, 55 of 1998, as amended.

The Mining Charter sets targets for HDP and female representation in the workforce, as well as for persons with disabilities (PWDs) and core and critical skills. ARM group EE performance improved in all occupational levels and exceeded the Mining Charter targets at most levels, with areas requiring further attention being HDP representation at senior management, female representation at senior and junior management and PWD representation. Talent management, succession plans, promotion, recruitment and selection efforts are targeted to address areas below target.

Initiatives to nurture and prepare African females for management levels include talent pool identification and management programmes, career path programmes, individual development plans for key employees to fast track targeted employees, recruitment of PWDs and increasing female learnerships, bursaries and graduates. The ARM women development, women in leadership development and future leadership development programmes also play important roles in developing leadership capabilities in women in the workforce.

Preferential procurement and enterprise and supplier development

Preferential procurement and enterprise and supplier development promote entrepreneurship and economic growth among historically disadvantaged persons (HDPs), create jobs, improve market access for South African capital goods and services, and increase economic activity in the areas around our operations. The corporate procurement department assists divisional chief executives to drive the process of improving preferential procurement. Suppliers and service providers are required to supply B-BBEE improvement plans when proposals are submitted and to supply valid and current B-BBEE certificates at the start of the contract. Suppliers and service providers are encouraged to continuously improve their B-BBEE ratings and to communicate any changes in their status.

Recognition of performance depends on valid B-BBEE accreditation of suppliers by SANAS-accredited agencies or through sworn affidavits for exempt micro enterprises (EMEs) and qualifying small enterprises (QSEs). Operations track and flag expiry of suppliers' B-BBEE certificates to ensure that they remain valid.

We offer awareness workshops to educate suppliers on B-BBEE requirements and ARM operations' preferential procurement policies, with a particular focus on non-compliant companies, and encourage 26% black-owned businesses to partner to increase black ownership.

Mining Charter Element	Compliance target %	Measure	Year 1 Target
Total procurement spend on goods and services	Mining Goods – procure a minimum of 70% locally manufactured with 60% local content.	HDP-owned companies	3%
		Women/youth-owned companies	0.7%
		BEE compliant companies	6%
	Services – procure a minimum of 80% from local sources.	HDP-owned companies	44%
		Women-owned companies	13%
		Youth-owned companies	4%
		BEE-compliant companies	9%
	Research and development	SA-based	70%
	Sample analysis	SA-based	100%

All mines achieved the year 1 targets for mining goods, as well as services procured from BEE-compliant companies. Black Rock, Beeshoek and Khumani mines achieved the remaining services procurement targets. Two Rivers, Modikwa and Nkomati mines did not achieve the procurement targets for women- and youth-owned companies, and procurement procedures have been amended to improve performance in these areas.

Nkomati Mine did not achieve the sample analysis and research and development targets, while Two Rivers Mine has initiated a process to identify areas for research and development to achieve the Mining Charter target in that area.

The enterprise and supplier development programme aligns with the goals of the preferential procurement programme by supporting black-owned and black women-owned SMMEs to help sustainable businesses graduate into the mining supply chain. Support includes training, mentoring and coaching, early payment terms to assist with cash flow management, provision of equipment and financial support. Where appropriate, opportunities are ring-fenced for such suppliers.

Operations supported SMME's in their enterprise and supplier development programmes during the Covid-19 pandemic by providing repayment holidays on their interest free loans for three months and providing on-boarding medical screening declaring them fit for travel to the mines.

Our value chain

We recognise our responsibility to consider the broader impacts of our activities upstream (i.e. supply chain impacts) and downstream (customer impacts) from the operations.

Upstream and downstream activities are considered in our carbon footprint when we assess and mitigate greenhouse gas- and water-related risks in our value chain. Assessments of climate change risks and opportunities are being expanded across the value chain and to meet the increasing expectations of investors through initiatives such as the Task Force on Climate Related Financial Disclosures (TCFD) and the Transitions Pathways Initiative (TPI). An initial assessment of supply chain risk has been undertaken of operations' top five suppliers by spend.

SUPPLIERS

We are committed to moral, ethical and legal standards, and contract with suppliers and contractors that take a responsible approach to business. The code sets the appropriate standards for legal compliance, health and safety, and environmental practices, and applies to suppliers and contractors.

Preferential procurement programmes at operations prioritise local businesses and suppliers, with a focus on black-owned and black women-owned businesses. These programmes support the development of local small, medium and micro enterprises (SMMEs), foster entrepreneurship, create jobs and build sustainable businesses in mining communities.

Key upstream concerns:
- Respect for human rights and fair labour practices;
- Product quality;
- Health and safety;
- Ethical business practices;
- Socio-economic transformation through; preferential procurement; and
- Upstream climate change risks including carbon emissions and water consumption.

Mining operations

Extraction/mining of ore

Crushing and milling

Processing and beneficiation

CUSTOMERS

ARM's joint venture partners sell and market the metals and minerals produced at the operations and the company is not directly involved in these activities. Our customers are industrial companies that we engage on a contractual basis.

ARM is a member of the ICMM's Product Stewardship Programme Committee and, together with its joint venture partners, participates in a number of relevant industry forums to monitor developments regarding the properties of metals and minerals and their lifecycle effects on human health and the environment.

Where required, material safety data sheets have been developed to provide information regarding the potential health, safety and environmental impacts of our products and operations. We encourage responsible use, re-use, recycling and disposal of our products. Most operations have ISO 9001 certified quality management systems to support product quality, while customer complaints are addressed comprehensively at operational level.

Ore and Metal, the marketing company for Assore with whom ARM partners in the ARM Ferrous division, monitors changes in national and international legislation that could influence the mining, beneficiation, sale or transportation of its products and proactively responds as necessary. Ore and Metal also facilitates customer ESG audits of operations as required.

More stringent management and monitoring is required during shipment for the products of the Ferrous division as a result of the progressive modification of the International Maritime Organisation's Codes. "REACH" initiatives being developed and implemented in key markets such as China, Japan, South Korea, India and Brazil may also require registration of these products. The data sheets for these products align with the requirements of the Globally Harmonised System (GHS) of hazard classification and include information from ongoing research sponsored by both the group and industry associations.

Key downstream concerns:
- Product quality
- Health and safety during transportation and further processing and beneficiation
- Safe transportation to prevent spillage into the natural environment
- Downstream climate change risks
- Downstream carbon emissions

Metals and mineral-related industry forums in which ARM or its joint venture partners participate
- The Minerals Council South Africa (MCSA)
- The International Council on Mining and Metals (ICMM)
- The International Manganese Institute (IMnI)
- The International Chrome Development Association (ICDA)
- The Ferro Alloy Producers' Association (FAPA)
- The Association of Mine Managers South Africa (AMMSA)

Ensuring a safe, healthy and appropriately skilled workforce

Safety

Occupational health and wellness

Human resources management

"We remain committed to maintaining a safe and healthy work environment for all employees. Safety and health are critical components of operational performance and directly affect productivity, efficiency, financial capital and our relationships with our stakeholders. ARM's integrated wellness management programme aims to prevent occupational health hazards from impacting on employee health and actively identify and manage health risks and chronic conditions."

SAFETY

"The commitment by management and each individual to safe work is the core of our zero harm philosophy. Identifying hazards in the workplace and prevention of harm are at the heart of working safely."

Reporting context

REPORTING FRAMEWORKS

ICMM

UN SDGs:

3 GOOD HEALTH AND WELL-BEING

8 DECENT WORK AND ECONOMIC GROWTH

FTSE/ Russel SHS

PRINCIPAL LEGISLATION

- The Mine Health and Safety Act (MHSA)
- The Occupational Health and Safety Act (OHSA)
- The Mining Charter
- The Mineral and Petroleum Resources Development Act (MPRDA)
- The Disaster Management Act

Safety is a value and therefore a priority at all ARM operations and we remain committed to maintaining a safe and healthy work environment for all employees. Safety is a critical component of operational performance and directly affects productivity, efficiency, financial capital and our relationships with our stakeholders.

Mining, crushing and milling, and the processing and beneficiation of minerals and metals present challenging working conditions. Hazard identification and risk assessment is critical to ensuring appropriate controls for mitigation of harm.

The most significant safety concerns at our operations include falls of ground, trackless mobile machinery, working at heights and fatigue.

HOW WE MANAGE SAFETY

Our holistic approach to employee wellness considers occupational hygiene, health and safety. Group safety policies inform operational safety policies and strategies that are adapted to meet the specific safety challenges at each operation. ARM-managed operations collaborate and share safety learnings across the group.

Each operation performs and continuously reviews risk assessments to identify and assess their specific safety and health risks. These assessments include input from regulators, specialists, equipment manufacturers, our employees and labour representatives. Identifying hazards in the workplace and prevention of harm are at the heart of working safely. Risk assessments are conducted daily, before commencing any new tasks, expansions or changes to current operations as well as in planning and execution of projects.

Operational safety and health policies and management systems align with OHSAS 18001, the international standard on health and safety management systems, and ISO 45001, the revised international standard which replaces OHSAS 18001. Modikwa and Nkomati mines did not undergo OHSAS 18001

re-certification during F2020 as Modikwa Mine is preparing for certification in terms of ISO 45001 while Nkomati Mine is preparing for closure. Machadodorp Works was OHSAS 18001 certified and while it is not formally re-certified at this time due to a significant reduction in activities, remains aligned with the standard.

Safety training is provided to employees and contractors at induction, through-on-the job training and competency training, and on an ongoing basis to entrench a culture of safe working practices. Risk assessment informs Standard Operating Procedures, which are used for on-the-job training. Employees then undergo regular planned task observations by their supervisors to confirm that the correct procedures are followed and to coach and improve on safe task execution. Contractors are treated as employees, receiving the same training and are included in our safety reporting, as required by legislation and industry standards.

Performance incentives for operational, divisional and corporate staff include a weighting for safety performance that reflects leading and lagging safety indicators.

We assess and monitor our safety processes and performance through:

External safety, health and environmental (SHE) audits facilitated every second year by the ARM corporate office (performed in F2019).

Leading and lagging indicators are reported and reviewed at quarterly operational, divisional and corporate SHEQ and related meetings as well as the quarterly meetings of the ARM social and ethics committee.

Benchmarking against industry peers.

Annual ISO 45001 certification audits.

Inclusion of safety data in annual external assurance of sustainability data.

Internal safety competitions to raise awareness and create constructive internal benchmarking between operations.

Safety and health awareness campaigns

Supervisors conduct planned task observations to ensure understanding and compliance with safety procedures

Ongoing training entrenches a culture of safe working practices

Safety training at induction

Ongoing training to entrench safe working procedures and practices

Detailed and specific safety training during on-the-job training and competency training

F2020 FOCUS

Zero fatalities, zero harm to our employees.

In September 2019, Mr Mpedi Ishmael Malatji, a load haul dump operator at Two Rivers Mine was fatally injured in an accident involving trackless moving machinery. At Nkomati Mine Mr Makoti Marks Tshwale, a water truck operator employed by a contractor, was fatally injured in October 2019 when he lost control of the truck he was driving causing it to overturn. Mr Simon Sandamela was fatally injured in a blasting incident on 10 November 2019 at Tweefontein Coal Mine[1]. Any loss of life is unacceptable and we conducted in-depth investigations into these accidents. Learnings and opportunities for improvement were presented to the members of the ARM social and ethics committee, who further contributed to insights around improving our safety systems.

We extend our deepest condolences to the families of Mr Malatji, Mr Tshwale and Mr Sandamela, and to their colleagues and friends.

ARM operations recorded 86 Lost Time Injuries[2] (LTIs) in F2020 (F2019: 90), 63 Reportable Injuries (F2019: 76) and 178 Recordable Injuries (F2019: 205). While injuries recorded at ARM operations decreased, total man-hours worked for the year reduced 11% in F2020. The ARM group Lost Time Injury Frequency Rate (LTIFR) consequently increased to 0.45 per 200 000 man hours (F2019: 0.42) while the Total Recordable Injury Frequency Rate (TRIFR) decreased to 0.92 (F2019: 0.96).

The LTIFR increased in both the Platinum and Ferrous divisions. Modikwa Mine is the only conventional stope/mining operation in the group and inherent risk is higher than at the other mines and 49 of the total LTIs were recorded at Modikwa Mine. The Black Rock Mine expansion project involves a large number of contractors on site, a significant increase in non-routine activities, the redeployment of employees to new work areas and the introduction of new tasks. Focused safety initiatives were launched at both Modikwa and Black Rock mines to improve safety performance and both operations showed an improvement in LTIFR.

1   Safety statistics for non-managed operations are not recorded in ARM safety statistics.
2   Safety definitions and additional safety statistics are available in the sustainability data tables available at www.arm.co.za

F2020 FOCUS | Zero fatalities, zero harm to our employees *continued*

Injuries, the results of incident investigations and action plans to prevent recurrences are discussed in detail in operational safety meetings, operational management meetings and quarterly joint venture sustainable development committees. They are also included in reports to the quarterly ARM social and ethics committee meeting.
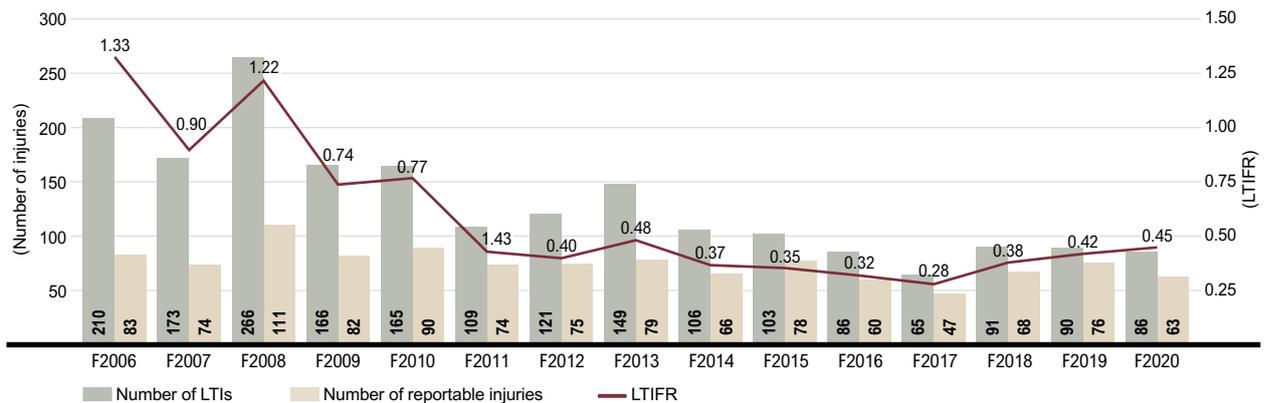
A strong focus in terms of safety relating to transport and trackless machinery remains on collision awareness and avoidance systems, which are also referred to as Proximity Detection Systems or PDS. Collision awareness systems (vehicle-to-vehicle as well as vehicle-to-person detection systems) have been installed in trackless machinery at ARM mines and collision avoidance systems are in the process of being installed. The operations are working jointly with vehicle manufacturers to develop solutions for current trackless mobile machinery. In addition, following the tragic fatal accident at Nkomati Mine, an audit of mobile machinery and maintenance systems was undertaken across the operations.

The focused safety intervention at Modikwa Mine saw the establishment of a sub-committee comprising representatives from both JV partners, ARM and Anglo American Platinum, to consider and review safety performance. Subsequently, three external safety specialist consulting firms were engaged to conduct surveys, audits and investigations of legal and technical compliance as well as of the safety culture at all levels of the organisation. The outcome of this process is an integrated safety improvement plan, which is being implemented.

During June 2020 a project manager was appointed to drive the implementation of the safety turnaround project.

Modikwa Mine's LTIFR improved from 0.90 in F2019 to 0.85.

SAFETY PERFORMANCE: LAGGING INDICATORS (LTI AND REPORTABLE INJURIES)

Safety achievements during the year included:

- Beeshoek Mine achieved 18 000 fatality-free production shifts on 16 August 2019, an accomplishment that took 16 years and 5 months to achieve. The mine also achieved 365 successive days without a lost time injury on 9 September 2019.
- Beeshoek Mine received the first prize for best safety performance, as well as the second prize for the most improved safety performance in the base metals category at the 10th annual South African Mining Industry SHE Awards day.
- Beeshoek Mine also received the runner-up award in the Northern Cape Mine Managers Association competition for the best safety performance.
- Khumani Mine achieved 3 million fatality free shifts on 29 November 2019.
- Black Rock Mine achieved 8 million fatality free shifts on 11 March 2020. This is a significant milestone that took 11 years and two months to reach and has only been achieved by a select few mines in South Africa, including Modikwa Mine. The mine also improved its LTIFR by 21% year-on-year.
- Modikwa Mine achieved 1 million fatality free shifts on 6 January 2020.

After year end, Beeshoek Mine achieved 19 000 fatality-free production shifts on 20 July 2020, an accomplishment that took 17 years and 4 months to achieve.

Operation	Total fatality-free shifts worked*	Last fatality*
Beeshoek Mine	**4 505 705**	March 2003
Black Rock Mine	**8 187 522**	April 2009
Khumani Mine	**3 303 299**	April 2015
Cato Ridge Works	**2 568 626**	February 2008
Machadodorp Works	**1 138 917**	February 2011
Modikwa Mine	**1 461 950**	March 2019
Two Rivers Mine	**484 448**	September 2019
Nkomati Mine	**276 835**	October 2019

* *As at 30 June 2020.*

F2020 FOCUS
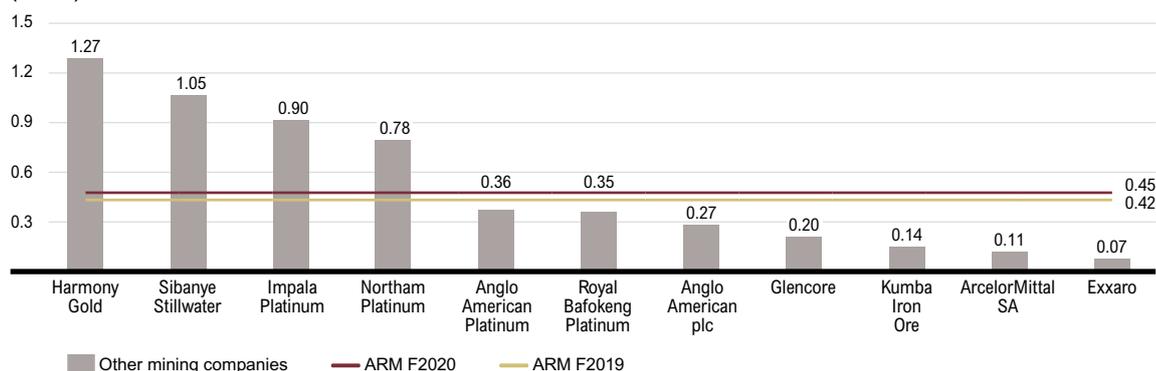
Zero fatalities, zero harm to our employees *continued*

Safety performance indicators of different mining companies are not necessarily directly comparable due to the risks inherent in different mining and extraction processes, equipment and levels of complexity. We nevertheless benchmark our LTIFR against industry peers to provide context against which we can monitor our safety performance. The graph below compares ARM's LTIFR relative to the LTIFRs sourced from the latest published reports of peer mining companies.

LTIFR INDUSTRY BENCHMARK
(LTIFR)

	Harmony Gold	Sibanye Stillwater	Impala Platinum	Northam Platinum	Anglo American Platinum	Royal Bafokeng Platinum	Anglo American plc	Glencore	Kumba Iron Ore	ArcelorMittal SA	Exxaro
Value	1.27	1.05	0.90	0.78	0.36	0.35	0.27	0.20	0.14	0.11	0.07

ARM F2020: 0.45 — ARM F2019: 0.42

Other mining companies   ARM F2020   ARM F2019

Divisional and overall performance across the main lagging safety performance indicators we use to monitor our safety performance is shown in the table below.

	F2020			F2019		
	ARM Ferrous	**ARM Platinum**	**ARM total**	ARM Ferrous	ARM Platinum	ARM total
Lost Time Injuries	**19**	**67**	**86**	17	73	90
LTIFR[1]	**0.23**	**0.63**	**0.45**	0.19	0.60	0.42
Reportable Injuries	**17**	**46**	**63**	15	61	76
RIFR[2]	**0.20**	**0.43**	**0.33**	0.16	0.50	0.35
Total Recordable Injuries	**40**	**138**	**178**	60	145	205
TRIFR[3]	**0.47**	**1.28**	**0.92**	0.66	1.19	0.96
Fatalities	**–**	**2**	**2***	–	1	1
FFR[4]	**–**	**0.019**	**0.010**	–	0.008	0.005

1   LTIFR: Lost Time Injury Frequency Rate
2   RIFR: Reportable Injury Frequency Rate
3   TRIFR: Total Recordable Injury Frequency Rate
4   FFR: Fatality Frequency Rate

*   Mr Simon Sandamela was fatally injured in a blasting incident on 10 November 2019 at Tweefontein Coal Mine. Safety statistics from ARM Coal are not included in the reporting boundary for this sustainability report as these operations are managed by our Joint Venture partner.

F2020
F O C U S

Improving compliance to regulatory and internal standards, thereby reducing stoppages due to Section 54 and Section 55 Notices.

In F2020, 28 Section 54 Notices were issued by the DMRE at ARM operations (F2019: 19) and 112 shifts (or part of shifts)[1] were affected by these stoppages (F2019: 64). 26 of these notices were issued in the ARM Platinum division – 13 at Modikwa Mine and 9 at Two Rivers Mine. One Section 55 Notice was issued at Black Rock Mine and four at Modikwa Mine, not affecting any shifts.

A significant number of shifts were lost as a result of stopping operations after the fatalities at Two Rivers and Nkomati mines, which were followed by extensive investigation and engagement with the DMRE to ensure that all measures for improvement and recurrence were implemented.

The smelters in the group were not issued with any Compliance or Prohibition Notices in terms of the Occupational Health and Safety Act during F2020 (F2019: 0).

1 Note that stoppages may be applied to a particular activity within an area or to a specific area only, while production continues in the rest of the operation. Therefore quantification and comparison of shifts lost in each case is specific and unique.

More detailed safety statistics, including Section 54 and Section 55 Notices by operation, are available in the sustainability data tables on the ARM website www.arm.co.za

	F2020			F2019		
	ARM Ferrous	**ARM Platinum**	**ARM total**	ARM Ferrous	ARM Platinum	ARM total
Section 54 Notices	**2**	**26**	**28**	1	18	19
Shifts (or part thereof) affected by Section 54 Notices	**–**	**112**	**112**	–	64	64
Section 55 Notices*	**1**	**4**	**5**	1	1	2

* No shifts or part thereof affected by Section 55 Notices.

F2020 FOCUS

Continued focus on monitoring and implementation of existing leading practices. Active participation in new initiatives and leading practices.

ARM participates in industry forums and initiatives relating to health and safety where good practice is shared and adopted by members to help to improve health and safety performance. These initiatives include:

The Mining Industry Occupational Safety and Health (MOSH) initiatives

The MOSH Learning Hub was established by the Minerals Council South Africa (MCSA) to encourage mining companies to learn and adopt leading practices from areas of excellence across the industry. The MOSH Initiatives aim to help the mining industry to meet the Tripartite occupational health and safety Targets and Milestones. ARM's executive: sustainable development and the group occupational health and wellness superintendent participate in the MOSH Task Force of the MCSA and the Occupational Health and Safety Policy Committee of the MCSA.

The International Council on Mining And Metals (ICMM)

Membership of the ICMM provides access to a network for learning from peers and implementing industry good practice.

The Culture Transformation Framework (CTF)

The CTF aims to eliminate discrimination and create a safe, healthy and productive mining industry in South Africa, with risks controlled at source. ARM's culture, systems and programmes align with the goals of the CTF. The Framework arose from a tripartite process between government, labour and industry with the goal of fostering collaboration between these stakeholders.

F2020 FOCUS

Implementation of the Critical Control Management process to enhance current risk controls.

Implementation of the Critical Control Management (CCM) process across the mining operations is at an advanced stage. The CCM process is globally recognised as a process that could significantly help to prevent disabling or fatal accidents by identifying critical controls to prevent major unwanted events. Good practice is being shared within the group. Completion of implementation has been delayed due to the Covid-19 preparations. Upon completion of implementation at all operations and pending the lifting of travel restrictions, an external audit of the process will be commissioned.

F2020 FOCUS

Continued alignment with the occupational health and safety Milestones and targets set for 2024 during the 2014 Tripartite Summit of the Mine Health and Safety Council.

ARM monitors and reports internally in terms of the Milestones at quarterly operational sustainable development committee/compliance review meetings. Progress towards achieving the targets is reported to the DMRE in the annual Mining Charter reports, and is also reported to the MCSA.

Focus for F2021

Zero fatalities and zero harm to employees.

Reduction in injuries and severity of injuries.

Completion of the implementation of the CCM process as well as verification of effective implementation.

Continued learning, internally among operations and from engagement with peers and industry associations.

OCCUPATIONAL HEALTH AND WELLNESS

"Safe and sustainable mining requires a healthy workforce. ARM's integrated wellness management programme aims to prevent occupational health hazards from impacting on employee health and to actively identify and manage health risks and chronic conditions that may impact the wellness and quality of life of individuals. Health is also integral to the safety and productivity of the workforce."

Reporting context

REPORTING FRAMEWORKS

ICMM

UN SDGs:

PRINCIPAL LEGISLATION

- The Mine Health and Safety Act (MHSA)
- The Occupational Health and Safety Act (OHSA)
- The Mining Charter
- The Occupational Diseases in Mines and Works Act
- The Compensation for Occupational Injuries and Diseases Act
- The Disaster Management Act

ARM takes a precautionary approach to occupational health and wellness that aims as far as possible to limit at-source workplace exposure to hazards. The integrated wellness management programme also covers primary and chronic health challenges that affect the workforce, including pulmonary tuberculosis (PTB), HIV and sexually transmitted infections (STIs). The programme aligns with and supports government initiatives described in the National Strategic Plan (NSP) to reduce and prevent these and other primary health challenges, and includes community awareness and outreach initiatives.

Our approach to occupational health and wellness aligns with the requirements of the Department of Health (DoH), Department of Employment and Labour (DOEL), Department of Mineral Resources and Energy (DMRE) and the Mine Health and Safety Council (MHSC).

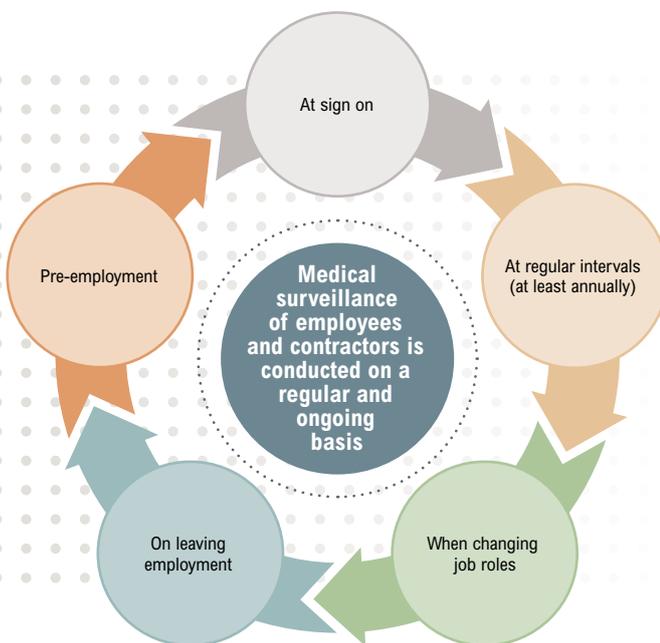## HOW WE MANAGE OCCUPATIONAL HEALTH AND WELLNESS

The occupational health management programme combines occupational hygiene surveillance that provides important leading indicators regarding exposure to hazards in the workplace with comprehensive risk-based occupational medical surveillance programmes that identify and monitor for the health risks relevant to each workplace and occupation. These programmes align with SANS 16001 (the South African national standard on disease and wellness management) and

the three mines in the ARM Ferrous division are SANS 16001 certified. Two Rivers Mine and Cato Ridge Works are certified in terms of ISO 45001 (the international standard on occupational health and safety management) and Nkomati Mine is certified in terms of OHSAS 18001 (the previous international standard on occupational health and safety management). Modikwa Mine is implementing an integrated ISO 14001 and ISO 45001 management system in preparation for certification in terms of these standards. While Modikwa Mine and Machadodorp Works are not currently formally certified in terms of OHSAS 18001, they remain aligned with the standard.

Site clinics are operated and managed by reputable external occupational healthcare service providers which we contract and partner with to provide occupational health and wellness services to employees and contractors.

The occupational healthcare system is linked to access controls to ensure that employees know their health status and that only employees who are fit to perform work enter potentially hazardous workplaces. Health screening and medical examinations appropriate to each employee's risk profile are conducted at least annually. Supervisors are notified of due dates for employees' scheduled medical examinations to ensure that priority is given to medical examinations, certificates of fitness are valid and chronic conditions are well controlled.

At sign on

Pre-employment

Medical surveillance of employees and contractors is conducted on a regular and ongoing basis

At regular intervals (at least annually)

On leaving employment

When changing job roles

practice and SANS 16001. The operational clinics are audited annually by a certified external auditor against legal requirements and the ARM standard to identify areas for improvement, measure year-on-year progress and benchmark performance between operations. The average score across the operations was 86.5% in F2019, above the target of 81% at the time. In order to ensure continuous improvement, we revised the target to 85% in F2020. The audits are usually conducted towards the end of the financial year and the focus on Covid-19 related initiatives and the national lockdown resulted in the audits not being performed in person this year. Instead, the occupational medical practitioner who conducted the audits in F2019 held virtual meetings and conducted online reviews to revisit the findings from the previous audits to ensure that the requisite improvements have been implemented and that the standard remained consistent across the group.

A comprehensive audit of each operation will be conducted during the third quarter of F2021.

Other assessments that provide assurance around the integrated wellness management programme include:

- Quarterly reviews by an external occupational health expert.
- Annual internal audits of operating procedures and practices by an independent occupational health nurse and doctor to monitor compliance and identify areas for improvement.
- External safety, health and environmental (SHE) audits facilitated every second year by the ARM corporate office (performed in F2019).
- Annual external audits related to certification in terms of OHSAS 18001 and ISO 45001.
- SANS 16001 certification audits at the mines in the ARM Ferrous division.
- Annual external assurance of a number of health indicators as part of the assurance of sustainability data.

Contractors are treated as employees and are screened at the start of, during and at completion of contracts. Occupational health and hygiene training is provided at induction, and Wellness Officers and Peer Educators provide ongoing training and awareness.

Operational wellness committees at the operations meet regularly to discuss issues relating to occupational health, hygiene and wellness. Engagement between representatives of the employer, employees and organised labour promotes a partnership approach to managing wellness.

The superintendent: occupational health and wellness co-ordinates the implementation of group health and wellness policies and oversight across the group. The ARM health and wellness standard informs occupational hygiene, health and wellness practices and processes to ensure consistency across operations. The standard is based on the requirements of relevant legislation, reporting frameworks, industry good

OCCUPATIONAL HEALTH AND WELLNESS

Material health risks in the mining industry include noise-induced hearing loss (NIHL), occupational respiratory diseases arising from exposure to particulate matter, fumes and hazardous substances. The ten-year goals set by the Mine Health and Safety Council (MHSC) in 2014, referred to as the Occupational Health and Safety Milestones, include the elimination of occupational lung diseases and NIHL.

A comprehensive hearing conservation programme at the operations addresses NIHL and regular occupational medical surveillance programmes monitor for occupational respiratory disease. While cases of occupational respiratory disease have been reported at our operations, baseline indicators from pre-employment medical surveillance indicate that, to date, these cases relate to exposure that arose before commencing employment with ARM. Our clinics facilitate compensation submissions in these cases regardless of the origin of conditions.

We aim to limit at-source workplace exposure to hazards as far as possible, through a combination of:

- identification of potential hazards and risk assessment;
- control at source;
- personal protective equipment;
- employee education and training on job-related risks and related controls;
- awareness campaigns;
- occupational hygiene and personal monitoring; and
- formalised safe operating procedures to limit exposure.

All employees and contractors undergo medical surveillance prior to starting to work in risk areas in order to measure and record individual baseline information for relevant indicators, such as hearing and lung capacity. These indicators are regularly monitored as part of the mandatory medical surveillance programmes to assess and follow up on shifts from the baselines. Deterioration in the indicators is addressed through counselling and training and, where appropriate, the use of personal protective equipment. For example, when the hearing capacity of an employee shifts from the initially recorded baseline above a defined threshold, the case is reported to the DMRE and, if occupational exposure is suspected, the employee is referred for specialist examination to confirm this.

The Covid-19 lockdown, the staggered restart and focus on limiting the spread of Covid-19 at operations created a backlog in scheduled periodical medical surveillance, including audiometric tests and lung function tests. Each operation engaged with the regional office of the DMRE to appraise them of the backlog and the plans for managing the overdue medicals. As a result, there has been a decrease in the number of audiometric and HIV counselling and voluntary testing sessions but PTB screening continued as part of Covid-19 related health screening practices.

F2020 FOCUS

Continued focus on reaching the 2014 Occupational Health and Safety Milestones, which include elimination of occupational lung diseases and noise-induced hearing loss.

ARM's progress against the ten year goals set by the MHSC:

Eliminate occupational lung disease (no new cases of silicosis)	**Eliminate noise-induced hearing loss (no hearing shifts >25 db from hearing baseline)**	**Prevention of HIV & AIDS and PTB (PTB incidence to be below national level, currently reported as 567[1]/100 000)**
No new silicosis infections have been diagnosed arising from exposure at ARM-managed mining operations since 2009. Three silicosis cases that were diagnosed, investigated and established as originating from exposure prior to employment at ARM operations, were submitted for compensation during F2020 but not included in the Milestone statistics.	Regular audiometric testing includes early warning programmes to effectively manage NIHL. In cases where early warning indicators or even minor shifts from the hearing baseline are detected, counselling and coaching about hearing protection is provided.	The incidence of PTB per 100 000 employees at ARM mines is 245. This is significantly below the national rate of 567 and the industry rate of 298 (for 2019).

1   Source: WHO Global TB Report 2018, based on 2017 data. This is the latest available WHO data as reported in the Masoyise Health Programme 2019 Annual Report

Hearing conservation and NIHL[1]

The hearing conservation programme aligns with the Mining Industry Occupational Safety and Health (MOSH) leading practice on noise, an initiative in adoption of leading practice facilitated by the MCSA. Regular audiometric testing is done to monitor deviation from individual hearing baseline in the form of Standard Threshold Shifts and includes specialist early warning programmes that detect deformity in the sensory hair before actual hearing loss occurs.

Percentage loss of hearing (PLH) measures deviation from the individual's hearing baseline established before they start working or when they are transferred between work environments. Where deterioration in hearing is identified, appropriate measures are implemented as shown in the column on the right. PLH shifts of 5% or more are reported to the DMRE and investigated in terms of Section 11.5 of the Mine Health and Safety Act (MHSA).

Where the hearing loss may be due to exposure to noise, individuals with PLH shifts greater than 10% are referred for specialist examination. This includes diagnostic audiograms conducted by an Audiologist and Ear, Nose and Throat Specialist to establish the cause of the hearing loss. If the audiograms confirm NIHL due to workplace exposure, a claim for compensation is submitted on behalf of the employee[2].

How we manage hearing conservation

Audiometric testing
- Baseline medical surveillance testing performed prior to employment and when transferring between work environments to establish baselines.
- Regular periodic hearing tests include early warning programmes and identify PLH shifts from the hearing baseline.

Workplace hearing conservation initiatives
- Reducing equipment noise emissions to below the DMRE threshold (107 dB(A)).
- A buy-quiet policy for new equipment.
- Hearing safety awareness campaigns in high noise areas.
- Training in the use of hearing protection devices (HPDs), which include personalised HPDs at all operations for employees who work in areas where they might be exposed to noise above 85db.

If hearing deteriorates
- Counselling and coaching is provided to the affected person.
- Clinic personnel provide training.
- Appropriateness and effectiveness of hearing protection devices is re-confirmed.
- Exposure to noise both at and outside the workplace is monitored.
- The employee is redeployed to work in areas with low noise levels where possible.

Hearing conservation in F2020

⬇ **31 284**
Audiometric tests conducted decreased 14% to 31 284 due to Covid-19 impact
(F2019: 36 572)

⬇ **1.1%**
The number of employees who recorded PLH shifts >10% decreased to 1.1% as a result of our ongoing focus on hearing conservation
(F2019: 1.4%)

⬇ **2.1%**
The number of employees who experienced PLH shifts or deterioration in hearing between 5% and 10% from baselines as recorded at employment decreased to 2.1% due to effective early warning programmes for hearing loss
(F2019: 2.7%)

---

1 More information on current and historic NIHL at an operational level can be found in ARM's sustainability data tables, available on our website at www.arm.co.za.

2 Claims for NIHL are submitted for compensation to either Rand Mutual Assurance (mine employees) or the Medical Bureau for Occupational Diseases (employees at our two smelters) in terms of the Occupational Diseases in Mines and Works Act.

Dust and hazardous substances

Hazardous substances include:

Dust particulates

Long-term exposure to high levels of dust can result in respiratory complications including pneumoconiosis and increased pulmonary tuberculosis (PTB) infection rates. The occupational hygiene monitoring programmes at ARM operations routinely monitor the silica content in the orebodies of our base metals and platinum mines. Silica levels recorded are consistently below analytical detection limits and there is therefore minimal risk of exposure to silica at our operations.

While three cases of silicosis were reported during F2020 (F2019: 6), the baseline indicators for these workers recorded at pre-employment occupational medical surveillance indicate that these arose from exposure to silica before commencing work at ARM operations. The clinic personnel at the relevant operations facilitated the process of submitting compensation claims for affected individuals.

Dust suppression is a core occupational hygiene focus and airborne dust levels are controlled using water sprays and surfactants. Extractor fans minimise exposure to dust in the workplace where relevant and where dust cannot be eliminated at source, employees are supplied with dust masks.

Asbestos

Asbestos fibres have been detected in the ore body at Nkomati Mine but are not present at the other mines in the group. Nkomati Mine has extensive dust suppression and exposure mitigation measures in place and a comprehensive surveillance and control programme was implemented in consultation with leading experts from the Institute of Medicine (IOM) in Scotland.

Two cases of asbestosis were diagnosed at Black Rock Mine and reported to the Medical Bureau for Occupational Diseases (MBOD) in F2020 (F2019: 3). Investigation into these cases by the local Asbestos Relief Trust confirmed that they relate to community exposure. The cases were reported to the DMRE and the site clinic facilitated compensation claims.

Manganese

A medical surveillance and biological monitoring protocol for manganese developed by leading occupational health specialists has been implemented at Cato Ridge Works, which processes manganese ore, at Black Rock Mine, where the ore is mined, and for employees who handle the ore at the Saldanha and Port Elizabeth port terminals.

Other
- Chromium
- Coal, tar, pitch and volatiles (CTPV) at Cato Ridge Works

PRIMARY HEALTH

ARM's integrated wellness management approach includes comprehensive programmes to manage the primary healthcare challenges in the workforce.

Primary healthcare (PHC) services including treatment and counselling are provided through wellness centres at all of the mines, except for Nkomati Mine, where the full time PHC nurse provides daily PHC services at the mine clinic. Trained occupational health and wellness coordinators oversee the wellness programmes at the operations.
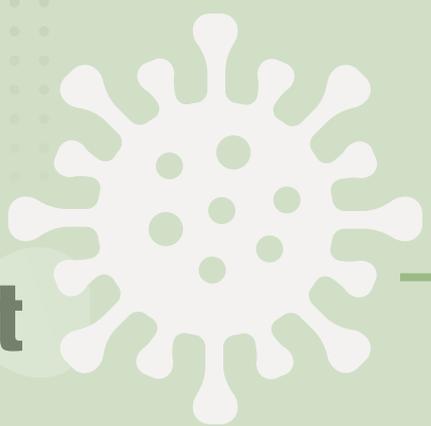
Healthcare programmes at the operations align with and support national health priorities, including those addressing pulmonary tuberculosis (PTB), HIV & Aids and sexually transmitted infections (STIs) laid out in the National Strategic Plan 2017 – 2022 of the DoH, the DMRE Guidelines for PTB, HIV & Aids Management and the requirements of the Mining Charter.

The wellness coordinators at Two Rivers, Modikwa, Khumani, Beeshoek and Black Rock mines have completed training on the implementation of SANS 16001, which addresses disease and wellness management, including HIV & Aids. Beeshoek, Black Rock and Khumani mines have Memorandums of Understanding (MOUs) with the Northern Cape DoH to strengthen the implementation of provincial PTB, HIV & Aids, STIs and chronic diseases strategies, and extend primary healthcare services to contractors and communities. These partnerships build capacity of local clinic staff and engage communities and other stakeholders to decrease the morbidity and mortality associated with these diseases. The wellness centre at Beeshoek Mine is approved to dispense HIV & Aids, STI and PTB treatment.

A similar MOU was finalised at Modikwa Mine with the Limpopo DoH during the year and is being implemented. Implementation of an MOU at Two Rivers Mine is progressing, however mandatory training of clinic personnel by the DoH was delayed due to the national lockdown.

Contractors presenting with chronic diseases are treated in terms of memorandums of understanding with the DoH and, where appropriate, referred to public hospitals and clinics.

Covid-19 management

All South African operations stopped production from 27 March to
17 April 2020 in line with the national lockdown announced by the President
on 23 March. Operations communicated with employees during lockdown,
sending sms messages to motivate compliance with the lockdown rules and
re-emphasise measures to protect employees and their families.

Before restarting, the operations completed 'return to work' procedures in line with Standard Operating Procedures developed according to the guidelines from the Minerals Council South Africa and relevant guidelines including those of the Department of Mineral Resources and Energy (DMRE) and Department of Health (DoH). The mines submitted the mandatory Codes of Practice on Covid-19 management and engaged the DMRE in terms of return to work arrangements as required. Trade unions were involved with the development of the Return to Work plans and provided support to management with the restart of operations.

The operations continue to follow a risk-based approach in allowing employees to return to work. Employees who are vulnerable or have co-morbidity risks (e.g. HIV, TB, excessive body mass index, cholesterol or blood pressure as well as other chronic health conditions) that are not well controlled, have been excluded for their own wellbeing. Employees undergo compulsory occupational health screening to determine fitness to work initially upon return after the lockdown, in addition to daily Covid-19 related screening, referral or testing as appropriate.

Special training sessions were held to educate the workforce on the risks and all other matters relating to the Covid-19 epidemic.

Quarantine facilities have been secured for employees who test positive for Covid-19 and employees support programs are in place, including ongoing provision of medical support to employees who need it. Controls were extended to transport providers to implement effective sanitisation and distancing measures.

The mining and smelter operations continue to revise risk assessments and update Standard Operating Procedures and Codes of Practice as new guidelines and regulations are issued.

Site clinics have implemented the protocols of the National Institute of Communicable Diseases (NICD) of the DoH. Healthcare personnel have been trained by the DoH in terms of Covid-19 testing. Clinics have been inspected regularly by both the DMRE and DoH in terms of compliance with the protocols since re-opening of the operations and have been found compliant.

For confirmed Covid-19 cases, contact tracing and screening as well as case management in terms of quarantine and isolation, is conducted in alignment with the Guidelines issued by the DoH. Results of screening and testing are reported to the DMRE, the DoH and the MCSA as appropriate.

At the ARM corporate office, a comprehensive risk assessment was conducted and mitigation measures implemented prior to re-opening of the offices. A detailed Standard Operating Procedure was developed and implemented (and has subsequently been reviewed and updated) to manage the prevention of spreading of the Covid-19 virus in accordance with national and international guidelines. The ARM corporate health and safety committee and appointed Covid-19 compliance officer, continuously monitor compliance and implement improvement measures.

In order to manage Covid-19 positive cases and conduct appropriate contact tracing and screening at the ARM corporate office, the specialist services of an occupational nursing practitioner and occupational medical practitioner were contracted. This approach has served to contain outbreaks of Covid-19, protecting the health and safety of ARM corporate employees.

ARM operations also participated in various initiatives to support local communities during the pandemic.

Mining industry Covid-19 collaboration

Mining operations are participating in the collaborative initiative facilitated by the Minerals Council South Africa to ensure:

An effective Covid-19 testing strategy;

Increased testing capacity for the industry by facilitating access to laboratory facilities;

Engagement with the Department of Health, including the National Health Laboratory Services; and

Regional cooperation to secure quarantine and isolation facilities.

ARM participates in Regional Working Groups that were established in the mining communities around the mines.

TESTING STRATEGY

The testing strategy prescribed by the National Institute for Communicable Diseases (NICD) was adopted throughout the operations and resulted in focus on:

- Testing employees based on health questionnaires, temperature screening, display of symptoms and direct contact with confirmed Covid-19 positive cases;
- Stratifying vulnerable and high-risk employees with co-morbidities;
- Quarantining of employees who travelled to and from areas declared as hot spots;
- Re-testing of employees post quarantine and isolation; and
- Regular testing of front line workers.

At the start of June 2020, the testing strategy was reviewed due to the high demand within the national system when testing facilities were no longer coping with the volumes received. The testing strategy was revised accordingly to:

- Only test symptomatic cases;
- Prioritise frontline workers; and
- Eliminate testing for employees post quarantine and Isolation subject to medical advice.

TESTING CAPACITY

ARM operations formed collaborations within their regions to secure testing facilities as follows:

- Modikwa Mine signed an agreement with Anglo American to use the laboratory at Mototolo Mine;
- Khumani, Beeshoek and Black Rock mines signed a Memorandum of Understanding (MOU) with Anglo American to use testing machines based at Kolomela mine in Postmasburg and Kumba in Sishen, over and above the MOU agreements in place with the DoH in the Northern Cape.

QUARANTINE AND ISOLATION FACILITIES

All ARM mining operations made arrangements for quarantine and isolation facilities within existing mine properties and arrangements with private lodges/hotels, as follows:

- Khumani and Beeshoek mines secured beds at a shared lodge in Kuruman;
- Black Rock Mine secured beds at a lodge at Black Rock Village and at the mine single quarters;
- Modikwa Mine set up an arrangement for capacity in a local residence, with half of the beds used for isolation purposes;
- Two Rivers Mine secured capacity at a hotel in Polokwane for employees from Mozambique and additional capacity at a local farm house; and
- Nkomati Mine secured capacity at a lodge in Machadodorp.

PTB, HIV & Aids

ARM's occupational health and wellness program integrates management of PTB, HIV & Aids and STIs, and prioritises their early identification. Awareness and education about these conditions is provided during induction training and at wellness days, including World Aids Day on 1 December. The mining operations report monthly to the DMRE regarding screening, diagnosis and treatment, as well as compliance with the DMRE Guidelines for PTB, HIV & Aids Management.

F2020 FOCUS

Continue passive PTB screening and offering HIV counselling and voluntary testing to all employees visiting our clinics.

Alignment with and implementation of the National Strategic Plan (NSP 2017 – 2022) to ensure reduction and prevention of PTB, HIV & Aids infections and STIs; offer all employees counselling and voluntary testing (CVT); and link all eligible employees to an anti-retroviral (ART) treatment programme.

The Masoyise Health Programme

The Masoyise Health Programme is a multi-stakeholder initiative led by the Minerals Council South Africa focused on leading the fight against PTB, HIV, occupational lung diseases and non-communicable diseases in the mining industry. The programme includes targets to offer HIV testing to 100% of employees annually and link those who test positive to an anti-retroviral therapy (ART) programme, and to reduce TB incidence in the mining sector to below the national TB rate by 2024. ARM participates in the programme and the mining operations submit quarterly Masoyise reports to the MCSA.

HIV & Aids

Employees are encouraged to know their HIV status and to take responsibility for managing their wellness, and the ARM group HIV & Aids policy emphasises the right of all employees to confidentiality and non-discrimination on the basis of HIV status. Trained peer educators provide ongoing awareness and training, and provide formal feedback on their activities.

HIV & Aids management in F2020

↓ **27 397**
CVT counselling sessions decreased 20% to 27 397 due to Covid-19 impact
(F2019: 34 246)

↑ **18 464**
employees tested (+45%)
(F2019: 12 765)

↓ **3 168**
employees on ART (-16%)
(F2019: 4 767)

HIV counselling and voluntary testing (CVT) is offered (but not obligatory) at every visit to the PHC facilities, including at induction and during regular follow-up visits for chronic disease management. Permanent employees belong to medical aid schemes that provide disease management programme (DMP) benefits, including HIV & Aids treatment.

Indicative HIV prevalence rates from the operational clinics indicate that estimated prevalence rates at our operations are below the district and provincial prevalence. The average estimated HIV prevalence for the operations is 6.2% (F2019: 7.8%).

It is encouraging that more employees elected to undergo HIV testing than in the previous year. The number of employees tested for HIV increased by 45% year on year due to HIV campaigns at Modikwa, Black Rock and Two Rivers mines in December 2019. However, counselling sessions decreased 20% due to the lockdown in the last quarter, the restart during which operations operated at low capacity and the scaling down of activities at Nkomati Mine.

Anti-retroviral therapy (ART) is provided through various medical aid schemes, local wellness centres and through Government clinics with MOUs. The test and treat policy of the DoH has been implemented across all operations and all patients receiving ART are enrolled on DMPs. Employees and contractors receiving ART decreased by 16% as contractors returned to their home areas during Covid-19 and were transferred from ARM DMPs to DMPs in their home areas.

Employees and contractors	F2020			F2019		
	ARM Ferrous	**ARM Platinum**	**ARM total**	ARM Ferrous	ARM Platinum	ARM total
Counselled*	**12 355**	**15 042**	**27 397**	18 078	16 168	34 246
Tested	**5 856**	**12 608**	**18 464**	5 802	6 963	12 765
Enrolled in disease management programmes	**1 597**	**1 571**	**3 168**	1 715	2 049	3 764
Receiving anti-retroviral therapy (ART)	**1 597**	**1 571**	**3 168**	1 715	3 052	4 767

* Since CVT is offered to employees and contractors at every visit to the PHC facilities, the number of counselling sessions can be greater than the number of employees and contractors at year end.

Pulmonary tuberculosis (PTB)

Mandatory passive PTB screening tests are conducted on all employees and contractors using the cough questionnaire of the DoH each time they visit the clinics. Contact tracing is conducted at the workplace for all new PTB cases to manage infection control. Site clinics notify the community clinic in the area where the employee resides to arrange for contact tracing at home. New PTB cases are reported to the DMRE and submitted to the Medical Bureau for Occupational Disease (MBOD) for possible compensation.

Note: The Department of Health monitors PTB statistics on a calendar-year basis. The PTB statistics in this section align with this approach and report statistics for the 12 months ending 31 December 2019 (C2019).

Employees with PTB are treated by the local DoH clinic and monitored according to the national PTB management protocol. In alignment with the MOUs with the DoH, all mines provide Isoniazid Preventative Therapy (IPT), which is provided for a period of six months, particularly to support patients with HIV or other lung diseases such as pneumoconiosis.

PTB management in the calendar year to 31 December 2019

▲ **55 265**
Passive screening tests (+10%)
(C2018: 50 358)

▼ **46**
New PTB cases (-30%)
(C2018: 66)

▼ **87%**
cure rate
(C2018: 87.9%)

There has been a significant decrease (30% year on year) in the number of new PTB cases across the operations. This can be attributed to awareness programmes, health monitoring and IPT. PTB incidence is below national rates at all ARM mines and below industry rates at all mines except Two Rivers Mine. The mine has negotiated an MOU with the Limpopo DoH that will enable the implementation of IPT to reduce PTB rates. However, the mandatory training and accreditation of clinic personnel by the DoH could not be completed before year end due to the national lockdown. PTB incidence at Two Rivers Mine improved by 25% from C2018 to C2019 and we expect further improvement with the implementation of IPT. From January to June 2020, Two Rivers Mine recorded five new PTB cases compared to four new cases for the corresponding period in the previous year.

National PTB incidence	567/100 000 workers
Industry PTB incidence	435/100 000 workers
ARM Mines Incidence	245/100 000 workers
Total PTB cases at ARM Mines C2018	66
Total PTB cases at ARM Mines C2019	43*

* Excludes 3 PTB cases recorded at the ARM smelter operation.

A total of 55 265 PTB screening tests were conducted on employees and contractors in the 12 months to 31 December 2019 and 46 new cases were detected. The cure rate remained at 87.0% (C2018: 87.9%), slightly below the DoH's 2014/2015 target of 90%. Three cases of multi-drug resistant (MDR) PTB were detected at our operations during the year (C2018: five). The patients were admitted to special MDR hospitals for further management as required by the DoH. Each case was investigated in terms of Section 11(5) of the Mine Health and Safety Act with the results being submitted to the DMRE and the progress of each patient being monitored by clinic personnel during treatment.

F2020 FOCUS

Continued focus on reaching the 2014 Occupational Health and Safety Milestones, which include elimination of occupational lung diseases and noise-induced hearing loss.

ARM supports community initiatives that address PTB, HIV & Aids, including providing support for community wellness centres and home-based care groups, as well as facilitating community

awareness and testing campaigns. Where possible, ARM operations engage with local Aids councils to ensure community projects address the most pressing wellness and health needs.

Employees and contractors:	January to December 2019			January to December 2018		
	ARM Ferrous	**ARM Platinum**	**ARM total**	ARM Ferrous	ARM Platinum	ARM total
Screened*	**37 002**	**18 263**	**55 265**	33 587	16 771	50 358
New cases	**22**	**24**	**46**	13	53	66
Cured	**16**	**24**	**40**	8	50	58
MDR/XDR**	**1**	**2**	**3**	1	4	5

* Since passive TB screening is conducted at all visits to the PHC facilities, the number of counselling sessions is greater than the number of employees and contractors at year end.
** Multi-drug resistant/Extremely drug resistant TB.

The DoH's 90-90-90 principle relates to PTB, HIV & Aids counselling and testing, and refers to Goal Three of the NSP. This requires that operations achieve 90% compliance with the following elements by 2022:

HIV & Aids

90% of employees living with HIV must know their status	**90%** of employees who are HIV positive must be on ART	**90%** of employees on ART must achieve viral suppression

PTB

90% of employees must be screened for PTB	**90%** of those diagnosed with PTB must be on treatment	**90%** of those on PTB treatment must be cured successfully

ARM has achieved 100% for the three PTB-related goals, but the HIV & Aids indicators declined below the target in F2020. This is primarily due to a decrease in employees and contractors registered in DMPs and receiving ART as a result of operations operating at reduced capacity from March to June 2020 and the movement of contractor employees off ARM DMPs when transferred to different treatment programmes near their homes.

Chronic conditions

F2020 FOCUS Continued risk-based monitoring and treatment of chronic conditions, particularly hypertension.

The integrated health risk and wellness management programmes at the operations monitor chronic diseases including hypertension, Type 1 and Type 2 diabetes, and epilepsy. Individuals diagnosed with chronic conditions are recorded in chronic disease registers and monitored by specific occupational risk exposure profiles with specific reference to high risk occupations.

Lifestyle diseases including hypertension and Type 2 diabetes are increasing in the South African population. Hypertension remains a concern as it is a key risk factor for stroke and heart disease. The number of hypertension cases reported at operations increased by 20% in F2020 from 2 363 to 2 839 cases, with the highest prevalence rates evident at Beeshoek, Nkomati and Two Rivers mines. A high incidence has been recorded among employees working in core functions such as mining and engineering.

All operations have implemented programmes to address chronic conditions such as hypertension and diabetes by focusing on increasing physical activity and creating awareness around diet and lifestyle. Education on lifestyle diseases forms part of the compulsory occupational health surveillance programme.

The clinics monitor employees with hypertension and manage compliance with prescribed treatment regimes. Workplace blood pressure screening and surveillance have increased, body mass index is included in the medical surveillance programmes and occupational medical practitioners monitor and report blood pressure statistics every quarter.

The clinic teams in the Northern Cape mines include dieticians and the ARM Platinum operations use contracted dieticians as part of the employee assistance programmes. Education regarding lifestyle diseases is included in the compulsory occupational health surveillance programme for employees in addition to the wellness awareness aspect of the induction program. Clinics also engage other stakeholders such as the Department of Health and community NGOs in conducting wellness campaigns both in the workplace and the community.

Nkomati Mine identified a significant increase in new hypertension cases for the last quarter. According to the wellness and clinic team, stress related to the Covid-19 pandemic and imminent closure of the mine, played a material role. In addition to focused monitoring and lifestyle coaching, the mine has implemented financial coaching sessions and counselling sessions as part of the employee wellness programme.

Upper respiratory tract infections (URTIs) are diagnosed based on a medical screening questionnaire rather than on a full diagnostic process and are more frequent during the cold winter months. 8 694 cases of URTI were diagnosed and treated during F2020, which includes repeat cases (F2019: 12 194).

Chronic conditions in F2020
(number of cases as a % of the workforce)

Hypertension
⬆ **15.1%**
(F2019: 11.5%)

Diabetes Type 1
⬆ **0.4%**
(F2019: 0.2%)

Diabetes Type 2
⬆ **2.9%**
(F2019: 2.3%)

Epilepsy
➡ **0.1%**
(F2019: 0.1%)

Focus for F2021

Continued focus on reaching the 2024 occupational health and safety Milestones, which include elimination of occupational lung diseases and noise-induced hearing loss.

Continued risk-based monitoring and treatment of chronic conditions, particularly hypertension, supported by lifestyle coaching and awareness programmes

Continue alignment with the National Strategic Plan (NSP 2017 – 2022) to ensure reduction and prevention of PTB, HIV & Aids infections and STIs; offer all employees counselling and voluntary testing (CVT); and link all eligible employees to an anti-retroviral (ART) treatment programme.

Continue passive PTB screening and offering HIV counselling and voluntary testing to all employees visiting our clinics.

Reinforce PTB-related community outreach projects to focus on early detection and treatment of PTB for communities around the operations.

Continue progress towards achieving the DoH Strategic Plan in terms of the 90-90-90 goals for PTB, HIV & Aids, with a focus of improving performance in the HIV & Aids indicators.

Screening, testing and prevention of the further spread of Covid-19.

HUMAN RESOURCES MANAGEMENT

ARM's human capital strategy comprises strategic workforce planning, talent management, learning and development and performance enhancement, with technology as an overarching enabler. It supports value creation by sourcing, attracting and retaining people with the necessary experience and skills, fostering an entrepreneurial and innovative culture, and providing appropriate development opportunities.

REPORTING FRAMEWORKS

ICMM | UN SDGs:

4 RISK MANAGEMENT

1 NO POVERTY

4 QUALITY EDUCATION

5 GENDER EQUALITY

10 REDUCED INEQUALITIES

PRINCIPAL LEGISLATION

- The Skills Development Act
- The Employment Equity Act
- The Mineral Petroleum Resources Development Act (MPRDA)
- The Basic Conditions of Employment Act
- The Labour Relations Act
- The Disaster Management Act

ARM is committed to creating and maintaining a work environment that is non-discriminatory, based on equality, fair labour practices and freedom of association, in which employees can contribute to the best of their ability and are empowered to develop rewarding careers. We respect the rights of our employees and ensure open and effective dialogue with employees, organised labour and all stakeholders.

By sourcing, attracting and retaining people with the necessary experience and skills, fostering an entrepreneurial and innovative culture, and providing appropriate development opportunities, the human capital strategy supports value creation. Labour productivity is a key aspect of achieving our production targets, in line with our strategy of low-cost production.

HOW WE MANAGE HUMAN CAPITAL

The human capital strategy comprises the 5 pillars shown below, with technology as an overarching pillar that permeates the other four pillars.

5 Technology

ARM's talent management

framework is informed by gap analyses of current core and critical skills against the needs identified in the workforce plan and forecast attrition rates. Required positions are filled through recruitment and succession planning by developing suitable internal candidates for these roles. The talent management system integrates with our talent portal and employment equity system to ensure talent, succession, career development and transformational goals are aligned. This enables monitoring and tracking of talent across the company to support delivery on our employment equity and gender transformation plans. Key performance indicators and individual development plans are in place across all occupational levels in the group. We view talent management as critical to supporting the group's recovery after the crisis.

Strategic workforce planning

systematically identifies and analyses workforce needs to produce a three- to five-year workforce plan to ensure that the right people are in the right place at the right time to achieve strategic and operational objectives. ARM has mapped talent over 16 years to enable long-term workforce planning and the group recruitment strategy towards attracting young talent is showing good progress to reduce the average age of the workforce.

Performance enhancement

aims to direct, develop, support, align and improve individual and team performance. ARM's remuneration strategy includes short- and long-term incentives that aim to promote a culture that supports enterprise and innovation, and are fair and achievable. Performance and development reviews are conducted for all employees at least twice a year and feedback from these reviews guides training initiatives and skills focus, including performance improvement. A new performance enhancement online platform was launched during the year.

The learning and development

pillar provides occupationally-directed and other learning interventions that enable and enhance the knowledge, practical skills and workplace experience and behaviour of individuals and teams. These interventions aim to develop the current and future workforce skills required for optimal organisational performance and sustainability.

CGR More details about ARM's remuneration policy are available in the remuneration report in the 2020 corporate governance report available on our website at www.arm.co.za.

TECHNOLOGY

Technology was introduced as an overarching strategic pillar to recognise the impact of the 4th Industrial Revolution on human resources management. The HR strategic pillars have been automated using human resources information systems and data analytics tools, and systems have been developed to improve reporting, data management and process enhancement integration. All HR processes have been automated for reporting purposes and HR data analytics systems have been completed to support talent, workforce planning, talent mapping and succession planning. An online performance enhancement platform is being rolled out and will improve compliance, reporting, communication and assessment of performance management. Technology was also a critical enabler to allow remote working during Covid-19 and assisted with contact tracing.

Our human capital policies, procedures and practices align with South African labour laws and the South African Board for People Practices (SABPP) National Standards to ensure that our human capital practices meet the stipulated legal and ethical requirements, which include conditions of employment, pay, and leave regulations, and limit excessive working hours. These policies and procedures are regularly reviewed and updated. Remuneration practices are regularly benchmarked to ensure that these align to national industry standards and legislative requirements, including with regard to minimum wages.

We recognise the importance of taking steps to address the wage gap between the remuneration of executives and employees at the lower end of the pay scale and the remuneration committee monitors developments in this regard.

Management of human resources, human resources development and employee relations meet every quarter to drive the implementation of the HR strategy. Human capital performance indicators are monitored and reported on at quarterly operational, divisional, executive committee, steering committee, management risk committee and social and ethics committee meetings
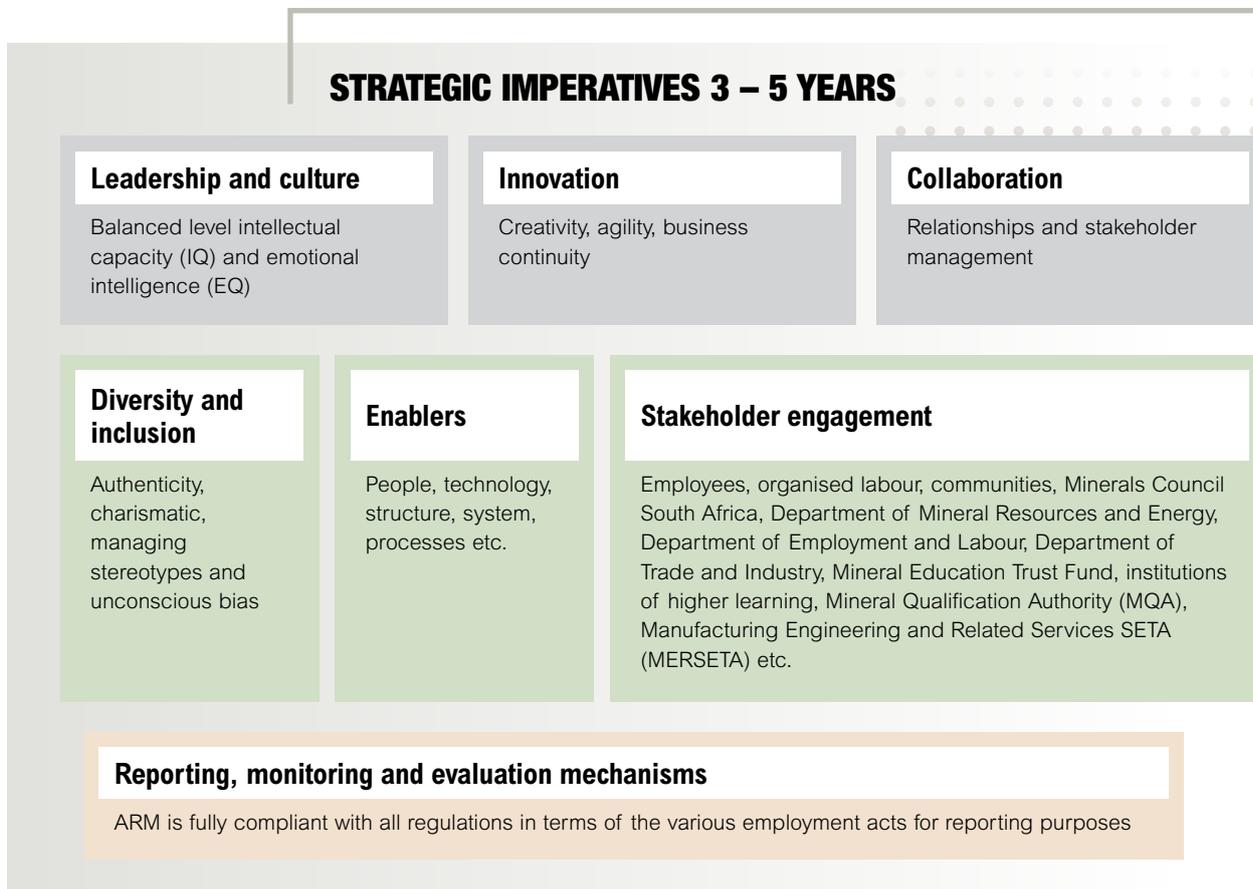
The group executive: human resources and the group executive: compliance and stakeholder relations lead quarterly compliance roadshows at the operations to monitor and evaluate compliance, performance and implementation. ARM benchmarks our HR practices against international best practices through participation and contribution to professional bodies, including the SABPP and the Global Top Employer Certification Programme.

The group executive: human resources is the senior executive responsible for the implementation of the five human resources strategic pillars and is the executive accountable for HR's legal compliance. The compliance matrix below outlines the various reporting timelines.

REGULATING BODY	RELEVANT ACT/AUTHORITY	REPORT/SUBMISSION	FREQUENCY	REPORTING PERIOD	SUBMISSION DATE
Mining Qualifications Authority	Skills Development Act 97 of 1998	Operation accreditation certification	3 years	From date of SETA Certification/ ETQA Approval	As per 3-year expiry date
	Skills Development Act 97 of 1998	MQA Workplace Skills Plan	Annually	01 Jan – 31 Dec	30 April
	Skills Development Act 97 of 1999	Annual Training Report	Annually	01 Jan – 31 Dec	30 April
Sector Education and Training Authority	Skills Development Act 97 of 2000	Operational ROI - Grants and Rebates	Annually	1 April – 31 March	30 May
Department of Employment and Labour	Employment Equity Act 55 of 1998	EE Report	Annually	12 months	15 January (Electronic), 1 Oct (Manual)
	Employment Equity Act 55 of 1998	EE Plan	5 years	01 Jan – 31 Dec	15 January (Electronic), 1 Oct (Manual)
	Basic Conditions of Employment Act	Ministerial determination in terms of the BCEA to work continuous operations	Annually	September to September	30 June
Department of Mineral Resources and Energy	Mineral and Petroleum Resources Development Act No 28 of 2002	Mining Charter Report	Annually	01 Jan – 31 Dec	31 March
	Mineral and Petroleum Resources Development Act No 28 of 2002	Employment Equity Plan	5 years	01 Jan – 31 Dec	5 years
	Mineral and Petroleum Resources Development Act No 28 of 2002	Housing and Living Conditions Plans	3 years	01 Jan – 31 Dec	5 years
	Mineral and Petroleum Resources Development Act No 28 of 2002	Social Labour Plan Quarterly Report	Quarterly	5 years	5 years
	Mineral and Petroleum Resources Development Act No 28 of 2002	Social Labour Plan Annual Report	Annually	As per 5 year expiry date	As per 5 year expiry date
	Mineral and Petroleum Resources Development Act No 28 of 2002	Social Labour Plan	Every 5 years	5 years	As per 5 year expiry date

REGULATING BODY	RELEVANT ACT/AUTHORITY	REPORT/SUBMISSION	FREQUENCY	REPORTING PERIOD	SUBMISSION DATE
Department of Home Affairs	South African Consulate General	Corporate Work Permit	Every 5 years	1 July – 30 June	01 July
Department of Trade and Industry/B-BBEE	Department of Trade and Industry	dti Scorecard	Annually	1 July – 30 June	01 August
Commission for Gender Authority	Commission for Gender Equality	On request	On request	On request	On request

In support of our legal requirements, the following drivers are key to facilitate the implementation of HR Legal Compliance.

STRATEGIC IMPERATIVES 3 – 5 YEARS

Leadership and culture

Balanced level intellectual capacity (IQ) and emotional intelligence (EQ)

Innovation

Creativity, agility, business continuity

Collaboration

Relationships and stakeholder management

Diversity and inclusion

Authenticity, charismatic, managing stereotypes and unconscious bias

Enablers

People, technology, structure, system, processes etc.

Stakeholder engagement

Employees, organised labour, communities, Minerals Council South Africa, Department of Mineral Resources and Energy, Department of Employment and Labour, Department of Trade and Industry, Mineral Education Trust Fund, institutions of higher learning, Mineral Qualification Authority (MQA), Manufacturing Engineering and Related Services SETA (MERSETA) etc.

Reporting, monitoring and evaluation mechanisms

ARM is fully compliant with all regulations in terms of the various employment acts for reporting purposes

At 30 June 2020, ARM had 20 998 workers across the Group, 40% of whom were contractors (F2019: 21 417 and 40% contractors).
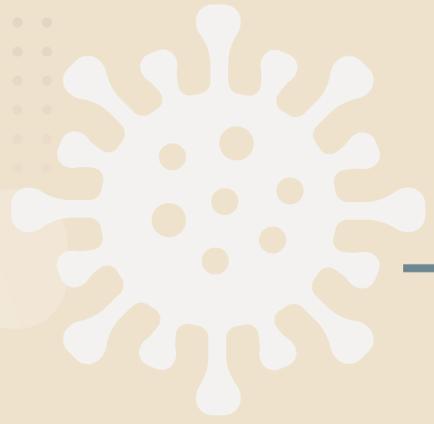
ARM offers a compelling employee value proposition (EVP) as part of our culture that aims to create an innovative environment and encourage an entrepreneurial culture, and includes competitive remuneration and benefits, study assistance, performance management and career development opportunities. Remuneration is benchmarked annually against market practices of other comparable South African mining companies. The benchmarking conducted in F2019 indicated that the ARM Gini coefficient[1] of 0.36 remains below the industry (0.42) and South African National (0.43) levels. An employee share scheme is currently in the process of being rolled out across operations.

ARM participates in the Global Top Employer Certification Programme, which assesses an organisation's HR practices against 400 HR best practices over 20 topics. ARM achieved certification under the programme for the eighth consecutive year in F2020. 98% of job offers made during the year were accepted (F2019: 97%) and employee turnover[2] increased to 6.3% (F2019: 5.7%) due to the increased number of retirements as compared to last year.

1   The Gini coefficient is a measure of income inequality, with 0 representing perfect equality and 1 representing complete inequality.
2   Employee turnover is calculated as the number of permanent employees who leave our organisation during the year, including resignations, dismissals, retirements and those that left voluntarily. It excludes contractors.

Impact of Covid-19

Covid-19 affected ARM's HR initiatives in a number of ways. Recruitment and on-boarding processes were delayed and in-person workshops, conferences and seminars for learning and development had to be cancelled. Some employees struggled to access the online performance enhancement platform remotely and the shift of employee engagement initiatives to telephonic/virtual channels creates a reduced experience compared to face-to-face interactions. Lockdown also resulted in some delays to filing of employee records.

At the same time, the changed ways of working provided an opportunity to embrace the many opportunities presented by distance learning, remote assessments, and virtual development. Many of the challenges faced could be addressed through online virtual platforms to conduct interviews and on-boarding, as well as the use of online internal training and awareness programmes and webinars. Line managers also received ongoing awareness sessions regarding effective communication for individuals and teams, leading in times of crisis and refresher courses on ARM's internal grievance procedure and disciplinary processes. Executive coaching is being conducted via video conferencing and we anticipate that remote performance assessments will increase rater accuracy and assessment report quality.

Employees had to make the mind shift to working remotely and manage their time efficiently to ensure that work deliverables and deadlines were met while juggling family needs and maintaining an appropriate balance between work and personal time.

Managing the psychological impact of the lockdown and changed ways of working was an important focus and employees were reminded of the support available through the employee assistance programme, which includes psychological counselling.

Covid-19 was a catalyst for digital adoption that provides companies with a chance to reshape their operating models. Enforced remote working and increased location flexibility create a number of opportunities and challenges that have changed the way both companies and employees think about the 'new normal' of work.

LEARNING AND DEVELOPMENT

Our learning and development programmes are designed to ensure that our workforce has the necessary skills to meet current and future needs. Training and development to develop core and critical skills for the business in support of the Skills Development Act is planned and budgeted for at an operational level. Training is delivered through training centres at each operation that have full SETA accreditation with either the MQA or the MERSETA.

A number of other development programmes are offered to empower candidates with the skills and attitudes to achieve their full potential. The leadership development framework aims to ensure all employees acquire leadership and managerial competencies. Development programmes include:

| | | DELEGATES | |
PROGRAMME	DEVELOPMENT OPPORTUNITY	F2020	F2019
The Rising Star and GradStar programmes	Celebrates the academic and leadership achievements of young talented people, connects them with other young professionals and supports them to develop their leadership skills. Recognises the top students across the country based on leadership qualities and readiness for the workplace. ARM nominates high potential candidates to the programmes from its pool of bursars. One of ARM's bursars was recognised as among the Top 100 rising stars in South Africa in 2019.	8	19
The Junior Development Programme	Empowers participants to acquire the knowledge, skills, attitudes and values required to operate confidently in their current and future roles. The F2019 intake is still in the process of completing the programme.	16	16
The Women Development Programme	An externally facilitated programme to develop leadership and managerial competencies, and create talent pools to accelerate development and improve promotional opportunities for A to C band female employees.	22	17
Women in Leadership Development Programme	Targets women from middle management and above to develop leadership skills and competencies. Delivered in association with Henley Business School. * This programme is run when sufficient candidates are available. Candidates are currently being identified for inclusion in the next cohort.	*	41
The Future Leaders Development Programme	Delivered in partnership with Wits Business School, the programme targets talent pool and potential successors to enhance management competencies through a combination of theoretical and experiential workplace learning. Since its inception, 155 employees have completed the programme, 94% of whom are HDPs and 43% are women.	30	32

Investing in the skills of the future talent pool

ARM actively invests in developing the talent pool for both our own future needs as well as those of the mining and metals industry. These initiatives include:

	DELEGATES	
DEVELOPMENT OPPORTUNITY	**F2020**	**F2019**
Bursaries provided to students studying industry-relevant fields to develop the future talent pipeline and ensure the sustainability and growth of the business.	110	115
The ARM graduate development programme provides work exposure for unemployed youth and develops ARM's future leaders and technical experts. This programme is also open to graduates from the Motsepe Foundation bursary scheme who achieve mining-related qualifications.	64	55
Learnerships for eligible candidates from outside academic streams. Where applicants to learnerships do not meet the minimum qualifying criteria for the programmes, they are channelled to other programmes such as AET and on-the-job training to facilitate the process for Recognition of Prior Learning so that they may be placed on the programme at a later stage.	239	299
Adult Education and Training (AET) at ARM training centres:		
• Employees	137	142
• Community members	117	439

ARM has partnerships with a number of institutions to keep abreast of current national and global trends in the mining industry. These include participation in the Minerals Education Trust Fund and the Education Advisory Committee of the Minerals Council South Africa. ARM also participates in the DMRE's annual Learner Focus week to promote mining through career guidance for learners in Grades 9 to 12, as well as the DMRE Girl Learner Bursary Programme, through which ARM adopted two female learners studying mining engineering degrees.

ARM partners with a number of institutions of higher learning across the country to support industry-relevant departments including mining engineering, metallurgy, chemical engineering, engineering and geology. The group also engages with heads of department at South Africa's top universities to design collaboration frameworks and placement plans for top students.

ARM participates in the Department of Trade and Industry's Youth Employment Service (YES) initiative, a business-led collaboration with government and labour to create work opportunities for youth.
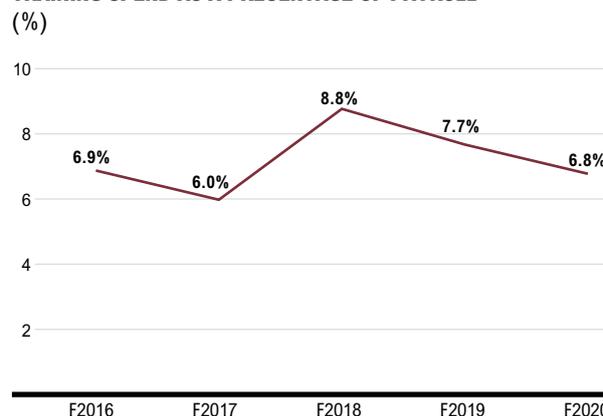
The ARM bursar ambassador programme helps bursars gear up for the world of work, build relationships with fellow bursars, meet and network with the management teams and get to know the business. The programme forms part of our strategy to attract and retain young talent, and helps to create ambassadors at institutes of higher learning across South Africa. In December 2019 we held a three-day workshop for ARM ambassadors with the theme of Entrepreneurship and Social Responsibility. During Covid-19 lockdown, ARM supported its bursars by providing access to the group employee assistance programme, providing a data allowance for online learning and continued to pay their monthly stipends.

Career development panels are held for alumni from the graduate development programme as a tool to ensure retention and continuous engagement with these employees. 18 employees attended the panels in F2020, which are facilitated by representatives from business and human resources. These panels highlighted the need for continuous mentoring in their roles to ensure development and retention.

ARM participates in the Educational Advisory Committee of the Minerals Council South Africa, at which representatives from mining companies engage to address training of employees and future skills.

The lockdown affected delivery on our learning and development initiatives in the last quarter and the total investment in skills development in F2020 decreased to R225 million (F2019: R239 million), which equates to 7% of payroll (F2019: 8%), remaining above the Mining Charter target of 5%. Total training spend was R10 822 per worker (including contractors) compared to R11 159 in F2019 and represented 4.5 training days per employee (F2019: 6.8 days).

TRAINING SPEND AS A PRECENTAGE OF PAYROLL
(%)

DIVERSITY AND INCLUSION

ARM's commitment to diversity and inclusion is driven by our belief that an inclusive and representative workforce greatly benefits and enriches our company and our country. The code of conduct emphasises our strong stance against unfair discrimination and promotes equality. We are committed to creating opportunities and employment for all people regardless of race, religion, gender, age, sexual orientation, nationality or disability.

The employment equity and skills development committee reports to the ARM social and ethics committee and oversees the implementation of the group diversity management policy. It is responsible for managing and monitoring progress on transformation in the workforce, skills attraction, development and retention. The committee reviews recruitment processes, follows up on deviations in employment equity (EE) performance and monitors the technical skills required to meet our transformation goals.

The group executive: human resources and the group executive: compliance and stakeholder relations, with the support of top leadership, oversee and monitor transformation in the workforce. The group executive: human resources is the legally appointed employment equity senior manager for the group in terms of the Employment Equity Act (No. 55 of 1998) Section 24.

The group executive: human resources reports EE performance and progress in the following structures:

- The ARM executive committee;
- The ARM steering committee;
- The ARM management risk and compliance committee;
- The ARM social and ethics committee; and
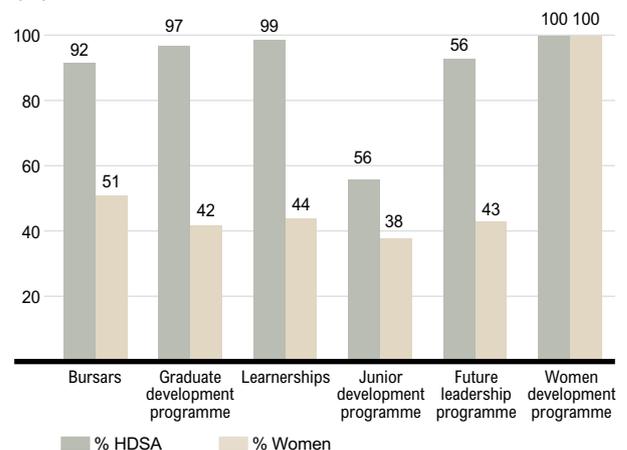- The ARM remuneration committee.

EE performance is measured in terms of the requirements of the Mining Charter, the Department of Employment and Labour, the Commission for Gender Equality and the Department of Trade and Industry (dti) Codes of Good Practice (CoGP).

These scorecards require EE performance to be measured against the economically active population (EAP) and against Mining Charter targets and demographics. The EAP is considered in training, recruitment and developmental interventions and ARM's legislative compliance monitoring tools aim to ensure that all transformation plans are aligned.

All ARM operations under the former Department of Labour Director General Review, now the Department of Employment and Labour, have submitted their 5 year EE plans. Scorecard transformation targets, including progress in terms of Section 43 of the Employment Equity Act, 55 of 1998, as amended, are assessed during the quarterly HR roadshows.

Transformation targets are built into pillars of the human capital strategy to improve reporting, monitoring and evaluation, and our skills development initiatives place significant emphasis on, and play a key role in, driving EE in the workplace.

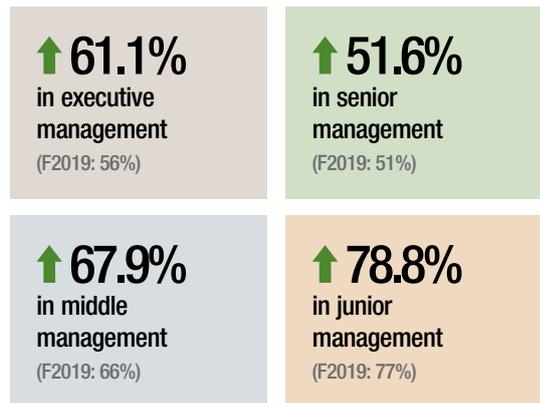## DIVERSITY IN SKILLS DEVELOPMENT PROGRAMMES FOR F2020 (%)

Our talent management strategy includes talent pool identification and management, which supports transformation by driving career path programmes that enable the rapid development of historically disadvantaged people (HDPs) to senior levels in the workforce.

During F2019, ARM operations and ARM corporate completed an equal pay for work of equal value analysis as required by section 6(4) of the EE Act and adjustments were made to address income differential gaps. The benchmarking exercise conducted in F2020 did not indicate any areas requiring adjustment in terms of equality.

ARM HDP in management

↑ 61.1%	↑ 51.6%
in executive management (F2019: 56%)	in senior management (F2019: 51%)
↑ 67.9%	↑ 78.8%
in middle management (F2019: 66%)	in junior management (F2019: 77%)

ARM corporate's diversity and inclusion programme facilitates continuous deep-seated and sustainable change on an individual level, as well as enabling an ARM cultural shift towards inclusivity on a team and organisational level. The programme aims to ensure sustainable change and to entrench conversations regarding diversity and inclusion in the organisational culture change journey.
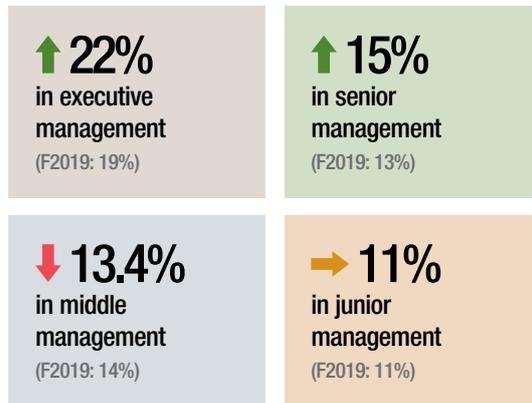
Our diversity programme includes a focus on raising awareness regarding people with disability (PWD) and increasing the representation of PWDs in the workforce wherever practical. A disability policy is in place at the Northern Cape operations to

achieve these goals. There were 142 PWDs working at ARM in F2020 (F2019: 139), 52 of whom are women (F2019: 53). There were 141 PWDs on learnerships at ARM's operations in F2020 (F2019: 22). These programmes include Adult Education Training, a range of relevant short courses and a Certificate in Business Administration course. Most of these programmes were put on hold due to Covid-19, although the learners continued to receive stipends.

Gender mainstreaming

Gender mainstreaming is overseen by the corporate gender unit, a substructure to the employment equity forum. ARM's gender mainstreaming policy and action plan (2018 – 2020) was compiled in consultation with the Commission for Gender Equality (CGE) and performance against the action plan is reported to the social and ethics committee.

Women in mining

↑ 22%	↑ 15%
in executive management (F2019: 19%)	in senior management (F2019: 13%)
↓ 13.4%	→ 11%
in middle management (F2019: 14%)	in junior management (F2019: 11%)

A dedicated internal gender unit was established as a substructure of the employment equity and skills development committee and is committed to advancing women's interests in the company. The unit is the support structure that acts as a platform for women to share their experiences, grievances and desires.

During F2020 the focus was on establishing women in mining committees in ARM Platinum and aligning existing committees with the national body, Women in Mining South Africa. These committees are integral tools to advance gender mainstreaming and diversity. In F2021, women in mining committees will be established in ARM Ferrous operations.

The group also embarked on a process to develop a female leader profile to promote gender diversity in leadership as well as ensuring attraction and retention of female talent. The project assessed attrition and retention of women in the ARM group and reviewed exit interviews, psychometric assessments completed by women in the business and the action learning projects completed by delegates in the women in leadership development programme. The profile will be specific to ARM female leaders and will be used for development and recruitment purposes. The leadership profile provides a context for the challenges a female leader is most likely to experience and the key competencies required to be successful in their roles to

improve our understanding of a candidate's suitability for a particular role. The profile will also inform the leadership development programmes to ensure the programmes are aligned, address any gaps identified and that graduates from these programmes are adequately prepared for their roles.

Gender mainstreaming refresher courses were conducted across all operations and appointment of gender focal persons at operations and ARM corporate is in progress. Awareness sessions were conducted on gender-based violence and sexual harassment during F2020. The gender audit planned for the second half of F2020 was postponed due to Covid-19, meetings of the women in mining committees were suspended

and we are exploring ways to progress gender mainstream initiatives virtually.

A men's forum was launched at Beeshoek Mine during the year to work with men to advance gender equality, gender justice, human rights and social justice to create an enabling environment for a developmental workforce that is more supportive and positively focused on promoting and advancing healthy lifestyle, positive masculinity, social tolerance and respect for sexual identity and orientation. Similar forums will be progressively rolled out throughout the group.

A number of other initiatives are in place to monitor and improve representation of women in mining. These include:
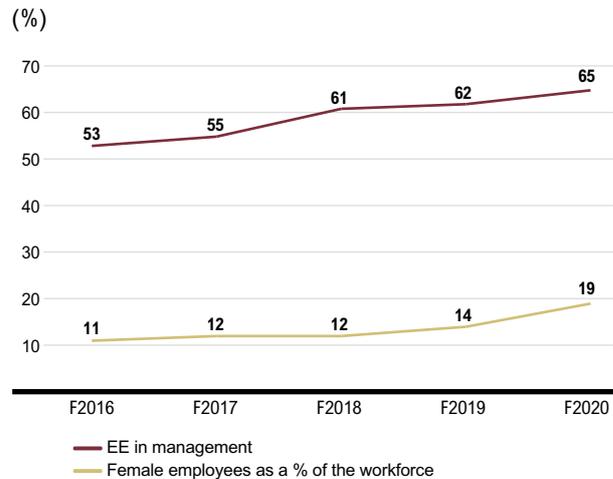
ARM's women in mining forum.	Engagements on women in mining hosted by the MCSA.	Women representatives included in the employment equity committees.	ARM participation in provincial DMRE Women in Mining structures.
Gender-based access control at change houses at operations.	Personal Protective Equipment (PPE) designed for women is available.	Awareness campaigns focussing on sexual harassment and on women and child abuse.	ARM's Girl Child initiative provides support in maths, science and life skills to female learners in Grades 10 to 12 to expand the pool of potential women candidates for the mining industry. We also participate in the DMRE's Girl Learner Bursary Programme through which ARM adopted two female learners studying towards Mining Engineering degrees at Wits University.

Employment equity performance

HDSA representation in management increased to 64.9% (F2019: 62%) and women in mining increased to 19% (F2019: 14%). 90% of ARM's workforce represents core and critical skills (F2019: 90%) compared to the Mining Charter target of 60%. Board diversity improved to 56% by the end of F2020, above our target of 50%. Female representation on the board was 25%.

EE is monitored and reported in line with the requirements of the new Mining Charter, which measures performance against demographics as indicated by Statistics South Africa. The table on the next page shows performance against national demographics as it covers all ARM operations across the country. The individual operations track and monitor their performance against the provincial demographics relevant to their respective areas. ARM group EE performance improved in all occupational levels in F2020, with areas requiring attention being senior management (HDP and female representation), female representation at junior management level and people with disabilities. Talent management, succession plans, promotion, recruitment and selection efforts are targeted to address these areas.

REPRESENTATION
(%)

	F2016	F2017	F2018	F2019	F2020
EE in management	53	55	61	62	65
Female employees as a % of the workforce	11	12	12	14	19

EE performance in terms of the new Mining Charter	HDP Representation			Female Representation		
	ARM Actual	Mining Charter Target	Demographics	ARM Actual	Mining Charter Target	Demographics
Board	56%	50%	96%	25%	20%	51%
Executive management	61%	50%	96%	22%	20%	51%
Senior management	52%	60%	96%	18%	25%	51%
Middle management	68%	60%	96%	25%	25%	51%
Junior management	79%	70%	96%	18%	30%	51%
People with disabilities	1%	1.5%	N/A			
Core and critical skills	90%	60%	96%			

LABOUR RELATIONS

ARM respect the rights of employees to bargain collectively to ensure engagement on labour-related matters and we recognise organised labour as a key stakeholder of the group. We are committed to engaging in a mature and constructive way.
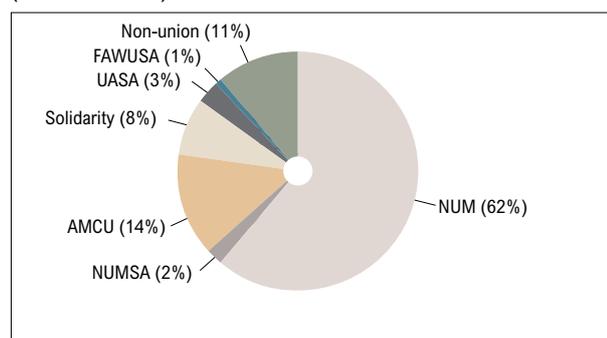
Operational HR managers are primarily responsible for union negotiations and employee relations consultative matters. Employee relations are guided by policies and guidelines set at corporate level. Wages and conditions of employment are negotiated according to the collective agreements in place at each operation. Unions are engaged through consultative forums and other structures as required.

Recognition agreements are in place with five unions across our operations and 89% of the workforce is unionised. No man days were lost due to strikes in F2020 (F2018: 8).

Nkomati Mine will cease production in February 2021 (previously September 2020). A Section 189 process in terms of the Labour Relations Act has been initiated, but the final facilitation session had to be rescheduled due to the national lockdown. Employees of the mine have been provided with counselling, financial planning advice, outplacement services and reskilling as well as skills development.

TRADE UNION REPRESENTATION
(% of workforce)

Non-union (11%)
FAWUSA (1%)
UASA (3%)
Solidarity (8%)
AMCU (14%)
NUMSA (2%)
NUM (62%)

EMPLOYEE HOUSING

The housing strategy promotes ownership of affordable housing to employees at our operations so that every employee has access to decent accommodation. The strategy aligns with the requirements of the Mining Charter, the Housing and Living Conditions (HLC) Standards for the Minerals Industry and other municipal and spatial planning legislation. The HLC Standards come into effect in December 2020 and require the submission, within a year, of a housing plan after having consulted unions and other stakeholders. The plan should outline the housing requirements and provide employees with various housing options.

The Khumani Housing Development Company facilitates home ownership to qualifying employees of the Northern Cape mines in the Ferrous division and also offers houses for rent. The Northern Cape mines are engaging with labour through a high-level working committee to provide input for the development of a revised housing policy. These engagements aim to identify long-term sustainable solutions that will address stipulations of the DMRE as well as the needs indicated by employees, which include overcoming the challenges around facilitating home ownership in tribal areas.

Most of the employees working at Modikwa, Two Rivers and Nkomati mines live in local communities and these mines offer assistance through a home ownership allowance for qualifying employees.

Social and Labour Plans (SLPs) and Local Economic Development (LED) projects (refer to page 42) include infrastructure development programmes in local communities that aim to improve living conditions and socio-economic development in these communities. These projects also benefit the majority of our employees who live in communities surrounding our operations.

HR FOCUS 5 TO 10 YEARS

FOCUS AREA	PROGRESS IN F2020	FOCUS FOR F2021 AND BEYOND
Strategic workforce planning **Business planning and budgeting** • Ensure human capital resource planning to support operational business plans within approved budgets. • Align transformational targets to business requirements.	Well managed turnover rate in line with business plan, natural attrition of workforce planning model. Achieved within budget.	• Continuous monitoring of workforce planning goals in line with business strategy.
Talent management **Integration of young professionals** • Drive talent acquisition strategy. • Use technology/HR Analytics and diagnostics tools to mitigate risks associated with potential talent retention for business continuity. • Manage the dynamics of generational gap, i.e. skills transfer, among others.	HR data analytics systems have been implemented to support talent, workforce planning, talent mapping and succession planning. The group recruitment strategy to attract young talent is showing good progress to reduce the average age of the workforce.	• Focus on young talent attraction and retention. • Manage career discussion panels to open a dialogue. • Incorporate young talent views into organisational culture to promote retention.
Learning and development **Changing world of work** • Evaluate the impact of Industrial Revolution 4.0 to our business. • Identify skills gaps and re-skill the workforce for "skills of the future".	Covid-19 was a catalyst for digital adoption and the changing ways of working.	• Drive human capital interventions such as new world of work and employees' mental health. • Ongoing engagement to capacitate the workforce for the future.
Performance enhancement **Enhance ARM employee value proposition** • Maintain Employer of Choice Certification position. ARM has been certified for seven consecutive years. • Promote talent retention, through skills development, rewards and performance enhancement. • Improve employees' levels of: • Engagement • Motivation • Morale	Maintained Employer of Choice certification for the eighth consecutive year.	• Optimise the use of technology to keep the workforce engaged, motivated and ensure that reward is commensurate to performance. • Build level of staff motivation and engagement. • Provide constructive feedback by live supervision/management.
Human capital 4.0 **Integration of technology** • Use artificial intelligence to drive the HR strategy. • Use technology/HR analytics and diagnostic tools to mitigate risks and improve processes. • Implement an in-house performance enhancement system. • Use technology/app to enhance staff engagement.	The HR strategic pillars have been automated using human resources information systems and data analytics tools. An online performance enhancement platform is being rolled out.	• Automate HR processes to allow workers to engage irrespective of location. • Expand footprint through digitisation by interacting at global level and incorporate global best practice through technology.

Ensuring responsible stewardship of natural resources

Compliance

Water

Climate change

Carbon emissions

Energy

Land use management

Waste management

Rehabilitation and closure

Responsible tailings management

"Our actions are guided by our values, governance structures, and ethical leadership, which guide employees and management to behave with integrity and act appropriately in the context of our natural environment and the country's socioeconomic realities. We acknowledge our responsibility to manage and mitigate the potential negative impacts of our business activities and assert that it is the value created by these activities that gives us the opportunity to support growth and development in the societies in which we operate."

We are committed to responsible environmental stewardship, in line with our values and our aspiration to zero harm.

HOW WE MANAGE NATURAL RESOURCES

ARM takes a precautionary approach to environmental stewardship across business processes.

Environmental management systems (EMSs) at each operation align with the "plan-do-check-act" principle to identify potential environmental impacts and measure and monitor our performance. Where possible and through a precautionary approach, we aim to eliminate or reduce and where unavoidable, to mitigate environmental impact.

ARM's enterprise risk management process includes an assessment of environmental and related risks where relevant. Operational and corporate risk registers are reviewed and updated at quarterly risk workshops, and material environmental matters and risks are consolidated at group level. Risks are reported and resulting strategies are discussed and planned at the ARM management risk and compliance committee, the ARM social and ethics committee and the ARM audit and risk committee.

Environmental impact assessments (EIAs), including social impact assessments, are conducted when planning new projects or making changes to existing operations, and environmental management programmes (EMPs) are established as required by the National Environmental Management Act (NEMA) and its Regulations.

The EMSs align with ISO 14001, the international standard on environmental management. Black Rock, Beeshoek, Khumani, Two Rivers and Nkomati mines and Cato Ridge Works are certified in terms of this standard. Modikwa Mine and Machadodorp Works were ISO 14001 certified and, while not formally re-certified, remain aligned with the standard.

Environmental management is facilitated by environmental specialists in each operation's SHEQ department, but every employee and contractor is responsible for compliance to the standards and policies which are specific to each operation. Training on relevant environmental policies, standards and procedures is delivered during induction and in regular refresher courses and job-specific training while environmental conditions form part of contracts.

Reporting context
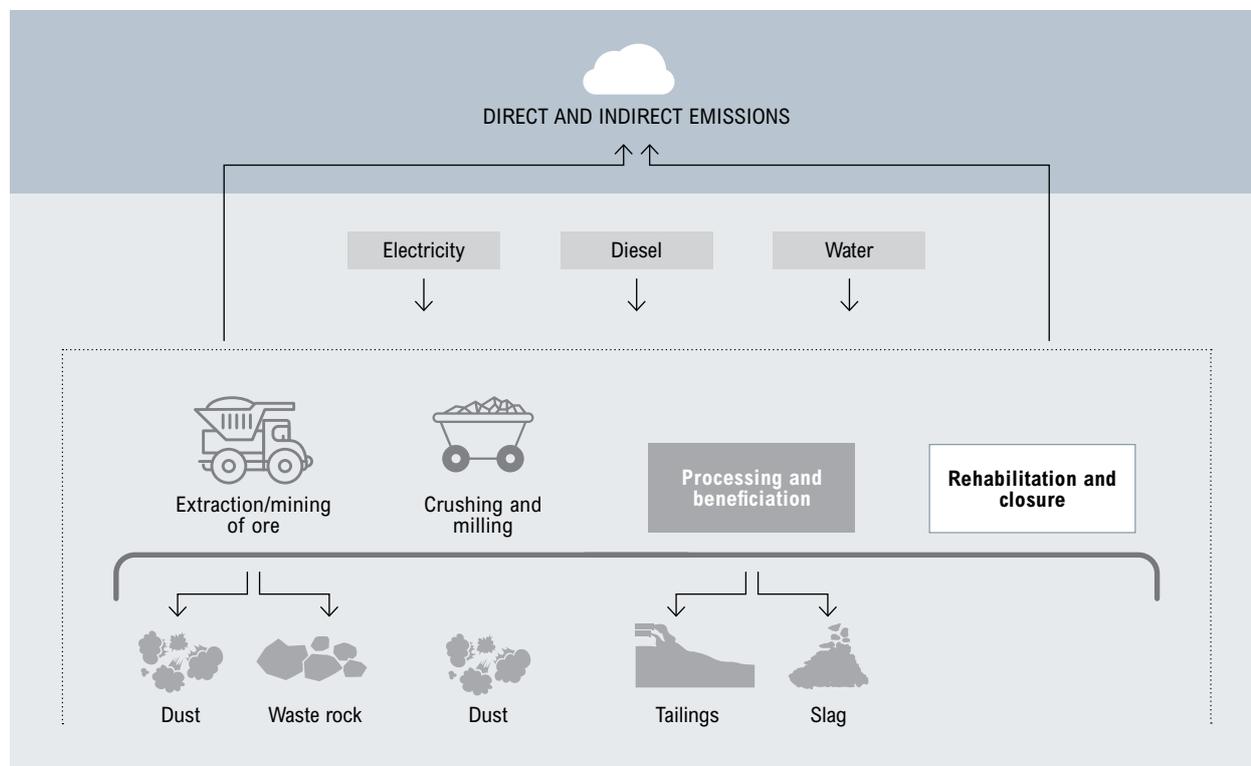
REPORTING FRAMEWORKS

ICMM   UN SDGs:

PRINCIPAL LEGISLATION

- The National Environmental Management Act (NEMA) and Regulations
- The National Environmental Management: Air Quality Act
- The National Environmental Management: Biodiversity Act
- The National Environmental Management: Waste Act
- The National Water Act
- The Environmental Conservation Act
- The National Heritage Resources Act
- The National Climate Change Response Policy
- The National Greenhouse Gas Reporting Regulations
- The National Climate Change Act
- The Mineral and Petroleum Resources Development Act (MPRDA)

Our most material environmental matters are:

- Water;
- Air quality;
- Climate change;
- Resource management, particularly energy use and water availability (with a specific focus on recycling and minimising withdrawal of clean water);
- Managing and minimising our waste streams;
- Land management, including conservation of heritage sites and biodiversity, rehabilitation and closure planning;
- Responsible tailings management; and
- Stewardship of environmental resources in the context of neighbouring communities and the other stakeholders with whom we share these resources.

Principal environmental impacts

As part of the climate and water compliance and reporting programme, ARM conducts annual climate change and water workshops at each operation. Representation at these includes senior management, engineers and environmental managers on-site, together with the executive: sustainable development and the divisional SHEQ managers; and facilitated by an external specialist consultant. These workshops explore evolving climate change and water risks and opportunities and include an explicit assessment of upstream (supply-chain) risks that have the potential to impact operations directly (e.g. through production stoppages or increased costs) and our stakeholders (e.g. particularly around the availability of water for communities). The workshops have also served to build awareness, gather data and inform the approach to complying with and responding to these requirements and expectations.

F2020 FOCUS

Raising awareness and further educating the workforce on responsible environmental stewardship, especially focusing on climate change and water.

This year the workshops focused on:

- Meeting climate change GHG requirements and expectations (existing target and share plan, carbon budgets and mitigation plan, setting a new target);
- Improving ARM's GHG management and reporting systems;
- Undertaking climate scenario analysis;
- Engaging with ARM's value chain (reporting Glencore GHG emissions, engaging Raith Foundation/Just Share, engaging our supply chain);
- Improving ICMM Water Reporting;
- Integrating climate change and water risks formally into ARM's enterprise risk management (ERM) framework;

- Meeting and updating ARM's water target; and
- Feeding into ARM's annual reporting processes (including updating this supplementary report).

The group's environmental reporting database covers managed and jointly managed operations, and provides a consolidated view of divisional and group environmental performance. Key environmental indicators are monitored and benchmarked, and regularly reviewed at the operational and corporate level. Environmental performance is an important focus at the quarterly operational, divisional sustainable development/social and ethics committee meetings and the ARM social and ethics committee meetings.

Assuring environmental performance and compliance

Internal operational environmental inspections and audits	Biennial external environmental compliance audits facilitated by the corporate office
External assurance of sustainability data for reporting in the integrated annual report and sustainability report	ISO 14001 certification audits
External legal compliance audits	Compliance audits on authorisations, e.g. commitments in EIAs, EMPs and water use licences

Business and industry environmental initiatives

ARM participates in a number of business and industry initiatives that enable collective engagement with regulators and stakeholders, and promote benchmarking and sharing of good environmental practice. These include the MCSA (including the Environmental Policy Committee), Business Unity South Africa (BUSA), The Ferro Alloy Producers' Association and the ICMM.

Our joint venture partnership with Assore Ltd in the ARM Ferrous division provides access to important industry initiatives such as the Life Cycle Assessment and Life Cycle Inventory studies, waste management initiatives and energy efficiency initiatives of the International Manganese Institute and the International Chrome Development Institute.

Engagements with stakeholders to understand and further improve environmental reporting

F2020 FOCUS

Continued engagement with stakeholders to understand and further improve environmental reporting.

Pressure is increasing, particularly from investors, to proactively manage climate change risks and opportunities which are material to shareholder value. For example, in 2019 the Raith Foundation and Just Share engaged ARM about a number of questions and concerns related to climate change seeking clarity regarding ARM's position on this issue. Key concerns raised included the exclusion of GHG emissions from ARM's investment in ARM Coal (managed by Glencore) from the group's GHG emission reporting, alleged non-compliance with water use licence conditions at Tweefontein and Goedgevonden mines (ARM Coal) and the concerted campaign by Business Unity South Africa (BUSA) to persuade the government to defer the implementation of the carbon tax.

ARM, as a member of the ICMM, was actively involved in the Global Tailings Review (GTR) process that convened an independent review of global tailings management practices, convened by the ICMM, UNEP (United Nations Environmental Programme) and PRI (Principles for Responsible Investment).

COMPLIANCE

Our values commit us to responsible environmental stewardship, which includes ensuring ongoing regulatory compliance. The legal compliance policy guides compliance and is regularly updated. Environmental compliance and performance are tracked continuously at various levels in the company as a high priority, including through regular internal and external legal compliance and operational audits. Any areas of non-compliance with regulatory requirements identified are promptly rectified.

Operational and divisional compliance certificates are reported to the ARM management risk and compliance committee, the ARM social and ethics committee and the ARM audit and risk committee on a quarterly basis.

No environmental fines or penalties were received during F2020 and no Compliance Notices in terms of Section 31L of NEMA were issued at any operation in F2020.

WATER

Water is a precious shared resource with high social, cultural, environmental and economic value. ARM recognises that access to water is a right; integral to wellbeing and livelihoods and the spiritual and cultural practices of communities. Water is also essential to the healthy functioning of ecosystems and their services. Pressure on water resources is increasing from industrialisation, urbanisation, climate change and the needs of a growing global population.

Water is also a vital input for all mining and metals operations. It is used for milling, beneficiation, cooling and for dust suppression during blasting, on haul roads and at ore transfer points. We are committed to providing our employees with access to sufficient potable water for drinking and water for sanitation and hygiene (WASH) services. Water is critical for various users in our wider catchments, is a critical supply chain commodity and is needed in the production of other critical supply chain commodities such as electricity, chemicals and explosives.

The earth's water systems are under significant threat from rising water consumption, greater pollution, weak governance and climate change. Shifting weather patterns are altering

water supplies and intensifying extreme weather events such as floods and droughts. ARM is exposed to increased water-related risks that could affect production, increase costs, constrain growth, disrupt our supply chains and place our communities under significant strain. Water is consequently a material operational and strategic concern, and water stewardship is fundamental to achieving our strategic objectives.

ARM supports the ICMM position statement on water stewardship and has implemented the Water Accounting Framework (WAF) as part of the commitment.

Continuing improvement in water reporting

F2020 FOCUS   **Publication of an online supplementary report on climate change and water.**

In F2017, we embarked on a focused project to ensure that our water management and reporting methodology aligns fully with the commitments of the ICMM outlined in the ICMM Position Statement on Water Stewardship and "Practical guide to consistent water reporting". This comprehensive guideline is based on the WAF for the Minerals Industry of the Minerals Council of Australia, which underpins the Water Accounting Principles referred to in the ICMM Position Statement.

One of the key commitments is for members to report consistently and transparently on water management and accounting. The project aligned the detailed water balances and classification of sources of water withdrawal at each operation to the expanded definitions included in the Guidance from the ICMM. While each operation has an approved water balance which is used to report to the Department of Water and Sanitation, the Guidance includes additional sources such as

storm water, harvested rainfall and runoff from mining operations that led to the identification of water withdrawal sources not previously included in the operational water balances.

The second part of the project focused mainly on the qualitative aspects of reporting, while further refining the water balances and ensuring consistent application of the methodology. In F2019, we reported our water performance according to the WAF and ICMM requirements for the first time.

In addition, to meet increasing and evolving stakeholder expectations and regulatory requirements related to climate change and water performance and reporting, we published an additional supplementary report on climate change and water on our website at www.arm.co.za in F2019. The report has been updated this year to reflect our noteworthy improvement in reporting and understanding of water balances throughout the organisation This report uses the recommendations of the Task Force on Climate Related Financial Disclosures (TCFD) and the ICMM Position Statement on Water Stewardship as the basis for reporting, but also ensures that various other stakeholder expectations and requirements are addressed, including:

- The CDP;
- The ICMM membership requirements, performance expectations and position statements;
- The Transition Pathways Initiative (TPI);
- The Johannesburg Stock Exchange (including the FTSE-Russel Responsible Investment ESG Index);
- The GRI; and
- Other reporting expectations as they arise.

The supplement provides additional data on our energy, climate change and water performance allowing stakeholders to analyse the data according to their needs. It replaces ARM's previous CDP climate change and CDP water responses, as we believe that this process may be more dynamic and could be used more effectively by a wider group of stakeholders. The F2020 supplementary report on climate change and water is available on our website at www.arm.co.za.

In the first quarter of 2020, the ICMM completed a desktop review of members' water reporting practices against the minimum disclosure standard using publicly available data from sustainable development reports, company websites and/or CDP disclosures. The purpose of the review was to develop a baseline of progress towards conformance and to better understand where common challenges lie so these could be discussed by the working group and the work plan adjusted where necessary. Positive feedback was received on ARM's supplementary report on climate change and water, which conformed 98% to the requirement.

The focus for F2021 and ahead is on continuing to understand our performance and improve reporting as efforts to align frameworks, such as the ICMM and the GRI Standards, evolve and the Minerals Council Australia WAF user guide is updated.

Water challenges and opportunities

Water is a material matter across the group, although for different reasons at different operations. Certain operations face significant catchment-level water risks arising from poor existing water infrastructure, a lack of funding and capacity to deliver new infrastructure, and the impacts of climate change on supply of water to adequately meet the growing need. Water availability, consumption and pollution are regarded as key risks to the group and are included in both the operational and the corporate risk registers. Water-related opportunities are identified through collective action at the catchment level.

Material water risks

Seven of our eight operations under direct or joint control are located in water stressed areas.

Operation	Water Management Area (WMA)	Catchment Stress	Operational water risk rating
Beeshoek Mine	Vaal WMA	Moderate	High
Black Rock Mine			High
Khumani Mine			High
Two Rivers Mine	Olifants WMA	Moderate	High
Modikwa Mine			High
Nkomati Mine	Inkomati-Usuthu WMA	High	High
Machadodorp Works			High
Cato Ridge Works	Pongola-Uzimkulu WMA	Not water stressed	N/A

ARM's enterprise risk management (ERM) process links the group's strategic intent factors to the water risks that may help or hinder each operation from achieving its objectives. Each operation's five-year business plan considers water availability and assesses the availability and use of appropriate technology to address water requirements or manage impacts.

Site-specific risk assessments were conducted at Beeshoek, Black Rock, Khumani, Nkomati, Modikwa and Two Rivers mines in F2017 and F2018 as part of a water performance and reporting gap analysis and compliance project. In F2019 the World Resources Institute's Aqueduct tools were used to support the identification and assessment of water-related risks at the operations.

Key risks to business value and performance relate to potential non-compliance with Water Use Licenses (WULs) (especially where mines have a positive water balance and risk discharge events), risks to adequate water supply and climate and water-related disruptions that affect our operations and suppliers and can result in production stoppages. The key risk areas are water availability, uncertainty in the existing policy environment, the state of existing water infrastructure (including pump stations and pipelines), Eskom power disruptions (impacting water supply) and the related socio-economic impacts. The security of the supply of water in the Northern Cape is a material risk at the group level (high residual risk).

The likelihood and impact of these risks is anticipated to increase over time as climate change results in more extreme weather events and drought. ARM has taken steps to mitigate these risks by investing in water purification and storage at the operations, and implementing various efficiency measures. In the Northern Cape, ARM has played a leading role in securing long term bulk water supplies. In addition to maximising the efficient use of water, affected mines are maximising stockpiling both on site and at the port to allow "catching up" if there are water supply disruptions.

There is limited catchment management in the area around Beeshoek, Black Rock and Khumani mines and while the Tshiping Water User Association mitigates this risk there is not a good understanding of the catchment-level water balance. Water restrictions have been experienced at the operations and in prior years operations had to implement procedures to ensure the availability of potable water for employees. The operations also face a relatively minor and localised risk of flooding during extreme weather events.

At Modikwa Mine, water supply is at risk due to socio-economic reasons rather than drought as community unrest and vandalism along the Lebalelo supply pipeline could impact water supply. Two Rivers Mine is less exposed to water supply risks but the area faces limited catchment management and efforts to develop a sub-catchment balance have not been successful. During F2020, water levels in the Dwarsrivier River, the mine's main source of water supply, fell to very low levels, and a pipeline was installed to secure an alternative supply of water.

High levels of groundwater necessitates de-watering of the area around the open pit at Nkomati Mine to keep in-pit mining operations safe. The mine consequently withdraws water from other sources at the mine as a last priority in the water use hierarchy and focuses on recycling water and using groundwater from the de-watering process. The physical risk of surface water contamination also presents a regulatory risk of non-compliance with the WUL and a reputational risk as discharge could potentially affect local farmers and the Vygeboom dam.

Reduced production activities at Machadodorp Works due to economic and market conditions have resulted in reduced re-use and consumption. Consequently, excess rainwater poses a potential risk of controlled discharge and associated non-compliance with waste management and WULs.

The ARM risk management function has embarked on facilitating a process to identify risk associated with critical suppliers that may result in a business continuity impact to the operations. We have not identified our supply chain as presenting a material water-related risk to our organisation, based on experience and initial investigations into potential risks in the future other than the need to secure the supply of water.

Material water opportunities

Emphasis on improving operational efficiency includes identifying opportunities to reduce water use. In addition, the cost of water is increasing and the investment required for bulk water infrastructure in areas of water scarcity is significant.

Investment in bulk water schemes have the potential to increase costs between four and five fold. At group operations, these relate to:

- The three mines in the Northern Cape via the Sedibeng pipeline; and
- Modikwa Mine, as part of the Lebalelo Water User Association and the Olifants River Water Resource Development Project (ORWRDP phase 2) investments.

During the first half of the year, a capital user charge on water of R6/t became effective as the Vaal Gamagara water system is upgraded, contributing to above-inflation increases in on-mine unit production costs at Khumani Mine.

Group operations are increasingly looking beyond operational borders to contribute to collective action at the catchment level. With water availability expected to decrease while demand continues to grow, ensuring adequate supply of water will contribute to building community resilience to adapt to a changing climate. This is an opportunity to improve community relations and strengthen our social license to operate.

Commitment and response

Water challenges are shared and addressing these challenges requires collaboration by governments, civil society, business and local communities. ARM recognises the need to manage water impacts at our operations and that responsible water stewardship and holistic risk mitigation require collaboration and collective action at the catchment level.

Water stewardship is integrated into our strategy

Water considerations are integrated into our business strategy by considering water risks and opportunities at the company and asset levels, measuring and managing our water withdrawals, consumption, outputs and re-use efficiency and taking action to mitigate risks and take advantage of opportunities. The ARM management risk and compliance committee and the social and ethics committee discuss information on the level of risk or opportunity and capacity to manage these. The output from these discussions feeds directly into the strategy development process.

The proactive and holistic water management strategy aims to facilitate the group's role in the sustainable management of water resources. The strategy is built around identifying and mitigating water-related risks, exploring opportunities and engaging with partners to achieve collective action. We focus on water balances, a hierarchy of water use and minimising withdrawal of clean/potable/municipal water. Our goal is to recycle 100% of water (excluding losses due to evaporation, seepage and entrainment) and to have no discharges.

Our revised approach to water stewardship is more catchment-based and aims to be more collaborative in delivering on our strategic objectives. For example, at Khumani Mine, ARM engages in the project management and engineering and maintenance issues around the provision of water (public/ maintenance service), which supports our growth objectives. We also emphasise the value of water and resultant efficiencies achieved are therefore aligned with our strategic objectives relating to operational efficiencies. Where water is material, relevant KPIs have been introduced at operational level.

Where available, operations invest in technology to reduce water requirements and consider these as part of new/ expansion projects to reduce our water dependency and competition with other water users. For example, Khumani Mine was designed with severely restricted water availability as a material consideration. The mine's tailings paste disposal facility minimises water use and discharge, ensures maximum recycling and significantly reduces evaporation losses compared to a conventional tailings deposition facility.

Operational water management

Operations withdraw water from a range of sources defined in the terms of their water use licences, including rivers, boreholes and municipal supplies. The main consumptive uses of water include evaporation (59%), water entrained in tailings and interstitial water in product (39%), seepage and outputs to third parties. 98% of water consumed through evaporation and entrainment is low quality water.

ARM's focus on operational efficiencies emphasises the value of water and the need to use it efficiently. Water balances at operations manage and optimise water use and relevant KPIs are in place to incentivise increased water efficiency.

All operations run closed water circuits to maximise recycling and re-use, and minimise discharge into the natural environment. Under certain conditions, discharges are unavoidable, such as heavy rainfall events or successive heavy rainfall. Dirty and clean water are separated and a hierarchy of water use is in place to ensure that used or "worked" or process water is recycled for re-use before clean water is withdrawn from the natural environment. Where appropriate, technologies such as reverse osmosis (RO) have been implemented to clean process water and we continue to investigate natural, sustainable alternatives such as wetland formation, particularly for mine closure plans and objectives. We monitor surface water and groundwater quality to measure compliance with WUL conditions, assess our impact on the receiving environment and flag the need for mitigation. Biomonitoring of aquatic/ riverine environments is performed as appropriate and as stipulated in each operation's WUL conditions.

Various measures are in place to reduce consumption, increase storage and mitigate production downtime, including the use of dust suppression surfactants to reduce evaporation. Specific recent operational initiatives in place include:

Beeshoek Mine

Invested in mobile pumps, a new stormwater dam, software to optimise dust suppression using water trucks and plans to build a new return water dam. A new ultra-thickened tailings facility is currently being constructed.

Nkomati Mine

Additional water storage and evaporation fans to manage excess water. The mine also improved reuse and recycling of water from their tailings storage facility.

Two Rivers Mine

Optimised flocculant and increased pump and pipe sizes to reduce spillage. A new lined tailings storage facility will reduce losses from seepage. The mine installed a brominator to improve drinking water quality and started using gel blocks when reusing dirty water underground.

Black Rock Mine

An RO plant and filters, and reuse of process water for gland services. The modernisation and expansion project at the mine will also include an ultra-thickened tailings facility. A new lined tailings storage facility is being commissioned and once functional, will improve water performance by reducing the loss of water through seepage. The mine has undertaken significant capital expenditure on water metering that has improved measurement and understanding of water impacts on the mine. The mine is investing in a combined sewage treatment plant that, subject to permission, will treat effluent using the RO plant to provide potable water for the village. A system to divert grey water to the village for irrigation is currently being developed. Water harvesting has commenced partially with recovery and re-use of sewage water. The Integrated Process Water Recovery, Clarification and Deposition Circuit at Nchwaneng commenced early 2019 and was completed and handed over early in 2020. A similar facility will be commissioned at Gloria to be completed in late 2021. The mine is implementing processes to optimise water recovery and clarification of process water.
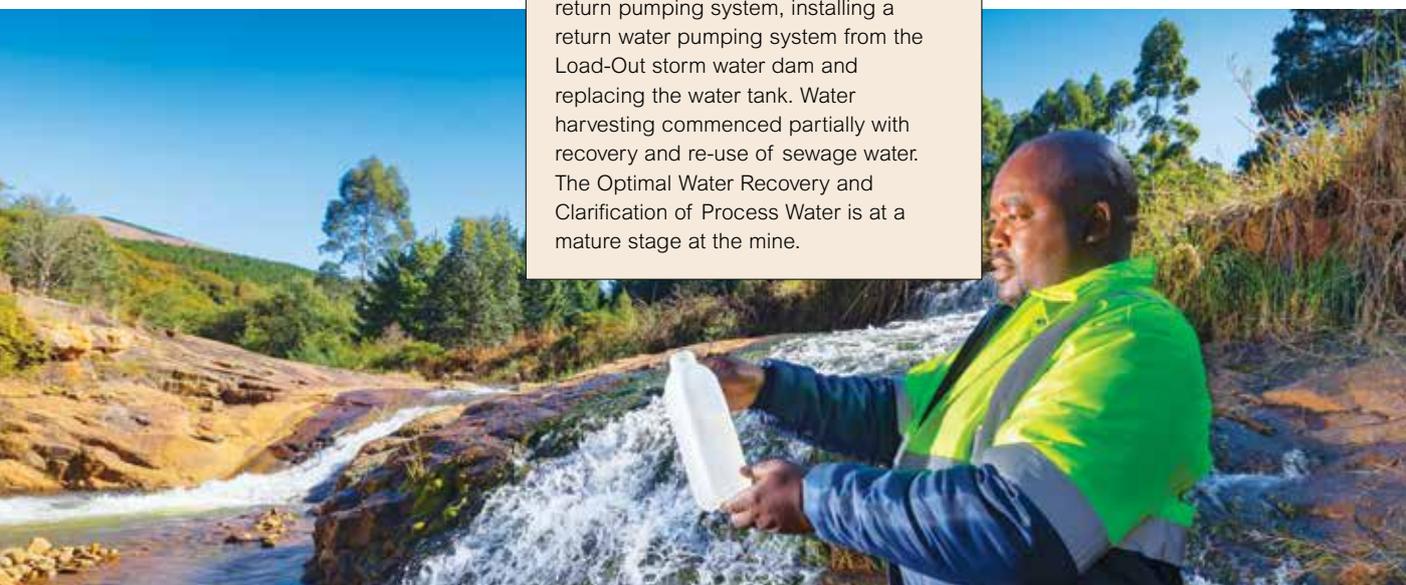
Khumani Mine

The mine uses a paste technology for tailings disposal that recovers up to 85% of water. It also invested in long-term on-site water storage and built additional stormwater trenches and dams that reduce safety risks during extreme weather. The mine commissioned a new cell in its tailings storage facility that will create significant water saving benefits once commissioned. A further three additional lined water storage dams are being built to provide a holding facility to mitigate the risk of water supply disruptions. Further measures undertaken in F2020 include lining of trenches, upgrading the storm water return pumping system, installing a return water pumping system from the Load-Out storm water dam and replacing the water tank. Water harvesting commenced partially with recovery and re-use of sewage water. The Optimal Water Recovery and Clarification of Process Water is at a mature stage at the mine.

Machadodorp Works

Established a water management project team and constructed cut off trenches, doubled the sump size and is investigating a reverse osmosis plant to mitigate the risk of discharge to the environment.

Modikwa Mine

Invested to reduce leaks and spillages, including by replacing plastic pipes with steel pipes and fixing water pipes and water spillages underground.
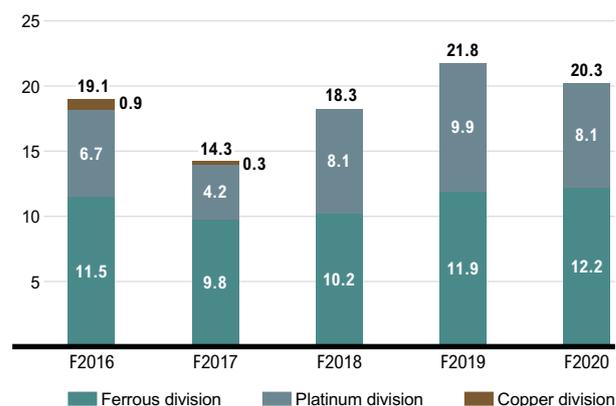
Water metrics

Implementation of the ICMM WAF in F2019 included implementing water accounting definitions that allow for better reporting on harvested rainfall and runoff from mining operations as well as the installation of additional flow meters to improve accuracy of measurement. A detailed water reporting flowsheet was developed for each operation in consultation with the engineering and environmental teams. As a result of these improvements in data collection and reporting, water withdrawal volumes reported by operations in F2019 increased by 19%. In F2020, water withdrawal decreased by 7% to 20.3 million m^3 due to decreased activity in the last quarter as a result of Covid-19 and ramping down at Nkomati Mine, which last year accounted for 20% of group water consumption (F2020: 12%).

The implementation of the WAF also improved our understanding of water re-use efficiency, which is above 72% and is a key performance indicator in monitoring and managing consumption and losses.

Beeshoek Mine accounted for 25% of total group water withdrawal, Khumani Mine 22% and Modikwa Mine 20%. Water withdrawal by the Ferrous division increased by 2% to 12.2 million m^3 (F2019: 11.9 million m^3) and decreased by 18% in the Platinum division to 8.1 million m^3 (F2019: 9.9 million m^3). The new flow meters installed at Black Rock Mine led to improved accuracy of measuring water impacts and led to a 35% increase in reported water consumption at the mine. Modikwa Mine pumped more water than in the previous year to improve underground water control and safety, resulting in an 8% increase in reported water consumption.

The table below shows ARM's water impacts in line with the ICMM definitions. Outputs are defined as water removed from the operational facility after it has been through a task, treated or stored for use, and include flows to surface water, groundwater and supply to third parties.

WATER WITHDRAWAL BY DIVISION (100% basis)
(m^3 million)

Consumption includes evaporation (and transpiration), water incorporated into product and/or waste streams (entrainment) and other operational losses.

Re-use efficiency is the volume of untreated water that has already been worked by the site which is used in tasks as a percentage of the total volume of all water used in tasks. Re-use efficiency varies across the operations and is underreported as some operations do not measure flows of worked water back into tasks.

Some operations supply water to neighbouring communities, farms and other users. This is water not intended for primary mining activity use and is classified as a "diversion".

We aim to continually improve our measurement and reporting of water metrics according to the new ICMM framework and in F2020 we focused on capturing all worked water flows, consumption sources and outputs.

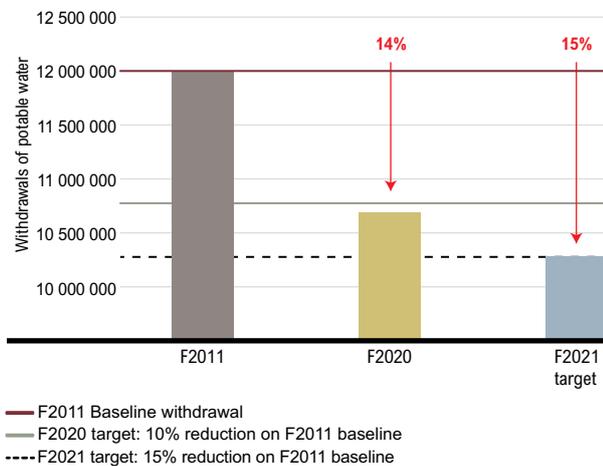| Metric | Source/destination/type | Volume of water by quality | | | | | |
| | | F2020 | | | F2019 | | |
		High (m³)	Low (m³)	Total (m³)	High (m³)	Low (m³)	Total (m³)
Withdrawal	Surface water (m³)	4 757 629	2 708 867	7 466 496	4 720 458	2 285 234	7 094 735
	Groundwater (m³)	7 088 971	5 712 200	12 801 171	7 869 186	6 809 520	14 678 706
	Total withdrawal (m³)	**11 846 601**	**8 421 067**	**20 267 668**	**12 589 643**	**9 094 754**	**21 773 441**
Output	Surface water (m³)	22 250	955 777	978 027	4 534	429 279	433 813
	Groundwater (m³)	–	23 427	23 427	–	215	215
	Supply to third party (m³)	29 620	14 573	44 194	–	3 840	3 840
	Total output (m³)	**51 870**	**993 777**	**1 045 647**	**4 534**	**433 334**	**437 868**
Consumption	Evaporation (m³)	201 745	4 876 586	5 078 331	350 888	1 607 272	1 918 247
	Entrainment (m³)	–	3 325 107	3 325 107	–	4 680 141	4 680 141
	Other (m³)	–	132 098	132 098	–	165 123	165 123
	Total consumption (m³)	**201 745**	**8 333 791**	**8 535 536**	**350 888**	**6 452 536**	**6 763 511**
Reuse efficiency	Total of all flows to tasks (m³/a)	16 021 124	58 992 638	75 013 763	6 946 468	63 912 089	70 858 557
	Total worked water flows to tasks (m³/a)	n/a	53 693 478	53 693 478	n/a	49 749 766	49 749 766
	Reuse efficiency (%)	**n/a**	**n/a**	**72%**	**n/a**	**n/a**	**70%**
Diversions	**Water diverted to neighbouring communities, farms and other users (m³)**	**586 190**	**714 249**	**1 300 439**	**504 376**	**942 348**	**1 446 724**

Water targets

F2020 FOCUS

Setting long-term water and carbon targets.

ARM set a water target in 2018 to reduce withdrawals of potable water (surface and municipal sources) by 10% by F2020 against the F2011 base. The target includes all existing ARM operations except Machadodorp Works and excludes divested operations since F2011 (Dwarsrivier and Lubambe mines). In F2020, potable water withdrawals were 14% below the F2011 base, achieving the water target.

PROGRESS TOWARDS ARM'S WATER TARGET

- F2011 Baseline withdrawal
- F2020 target: 10% reduction on F2011 baseline
- F2021 target: 15% reduction on F2011 baseline

Setting a new water target that is realistic but ambitious has been challenging for a number of reasons, including the choice of a realistic base year. Neither F2019, the first year of reporting according to the WAF, nor F2020, which was affected by Covid-19, represent appropriate baselines.

Engagements with operations as part of the annual climate and water workshops also confirmed that a number of targets will be needed to accommodate location- and process-specific contexts that affect the water opportunities and challenges relevant for each operation.

The benchmarking exercise undertaken as part of the target-setting process identified significant variation in the way water targets are set across mining companies. Targets related to withdrawals and recycling/re-use are the most common and it is not unusual to set sub-company level or commodity-based targets.

Consequently we chose to extend and increase the existing target while we focus on setting a more appropriate suite of targets. The extended target is to reduce withdrawals of potable water (surface and municipal sources) by 15% by FY2021 relative to FY2011 (excluding Machadodorp Works and divested operations). The next targets will likely include commodity-level targets as well as an ARM level target.

Engagements around water

Awareness is growing around the need for collective action to reduce water usage, fix leaks, restore ecosystem health, and to identify and manage water risks through stakeholder engagement. Investors and other stakeholders are increasingly

Water-related forums in which ARM participates or interacts with include:

- The Gladdespruit Forum;
- The Tubatse Environmental Forum;
- The Lebalelo Water User Association;
- The Olifants River Water Resources Development Project;
- The Tshiping Water User Association; and
- The Manganese Leadership Forum (engaging around the appropriate design of the Vaal Gamagara Water Supply Scheme).

calling for greater insight into catchment-level water balances, including projected demand and supply as well as water quality elements.

Our commitment to water stewardship is evidenced by our engagement with various stakeholders to find solutions appropriate to all water users' needs. These include a broad range of water-related stakeholders to ensure the sustainability of water resources and that all operations have the necessary controls in place to ensure that the quality of water around them is not negatively affected.

Engagements with communities help us to understand and mitigate their concerns, identify opportunities to contribute to community water security and increase transparency regarding our operations.

ARM participates in forums that discuss issues relating to sustainable water supply in the regions in which the operations are located. These include climate change and the potential influence changing climate and potential regulation could have on the supply and cost of water. The operations engage with catchment level forums that estimate current and future catchment balances. The Inkomati-Usuthu Catchment Management Agency where Nkomati Mine operates is effective in facilitating this. Tshiping Water User Association in the Northern Cape serves this function reasonably well but other forums or catchment management agencies are less effective and catchment-level water availability and quality are less well understood.

Other important water-related stakeholders include the Department of Water and Sanitation, authorities at the local, provincial and national levels, water forums, irrigation boards, catchment management agencies, farmers and other industry users.

ARM partners with local and regional government structures where appropriate to mitigate water risks that arise outside mine boundaries. Both our Northern Cape and Platinum operations engage in collective actions to ensure long term bulk water supplies.

For example, in 2017, Assmang[†] was instrumental in setting up the Mines Leadership Forum (MLF) as a collaborative platform under the MCSA. Funds raised through the MLF/Mines support ongoing technical, legal and financial engagements with the municipal water provider, Sedibeng Water. Due to the protracted finalisation of the Offtake Agreement, the MLF proposed a capital raising fee to address immediate funding requirements on the Vaal Gamagara Water Supply Scheme (VGGWSS), and a steering committee has been convened with Sedibeng Water to provide oversight on the ongoing VGGWSS work. An ARM executive is the vice chair of this committee.

In September 2019, the parties agreed on a capital raising fee of R17.58/kl in addition to consumptive charges to raise around R500 million additional funds from the industry over 24 months that will provide some relief to the immediate VGGWSS replacement funding costs. Work is ongoing to agree on contributions from various stakeholders and to clarify the scope, expenditure outlook and available funds for subsequent investments.

The SLPs in place at the operations include local water infrastructure projects to improve community access to sufficient potable water and increase community resilience. The ARM Trust funds water provision projects and has facilitated the sinking and equipping of boreholes for various schools and communities around South Africa.

CLIMATE CHANGE

Climate change is a critical global challenge that will have a lasting impact on our business, our communities and the world. To ensure sustainability of our business while remaining responsible stewards of environmental resources, we have identified climate change as an essential component of our strategy.

ARM's climate change policy expresses the recognition of the need for an urgent global response to the threat of climate change across all areas of society and the economy. We are committed to being part of the solution through industry collaboration towards a low carbon future and support the TCFD's recommendations. The ARM supplementary report on climate change and water (available on our website www.arm.co.za) provides more information regarding our response to climate change that aims to meet the increasing expectations of investors communicated through initiative such as the TCFD and the Transitions Pathways Initiative (TPI).

Climate change is integral to business considerations at the annual strategic planning session of the ARM board and executive committee, the strategic growth committee and various other mechanisms that feed into our strategy. Climate change risks and opportunities are evaluated at the company and asset levels.

Climate risks influence our short-term strategy through emphasising the need to manage related operating costs (including through reduced energy consumption) and our long-term strategy through expected changes in regulation that will affect costs (particularly energy costs in geographies where fossil fuels have traditionally been dominant), energy supply and the availability of water. Consideration is being given to establishing an internal carbon price to be used, initially, for evaluating new projects and acquisitions. This approach is being piloted in the feasibility study of solar PV and storage projects in the Northern Cape.

Climate change-related awareness training is part of the annual climate and water workshops conducted at the operations.

We are undertaking an initial qualitative climate scenario analysis as a tool for understanding and reporting on the strategic implications of the transition to a lower carbon, climate-resilient economy, which will input into our strategy. We will also assess long-term carbon pricing scenarios that impact our business, including the demand for our products. The analysis is expected to be completed in F2021.

Company level risks, such as the evolving climate change mitigation regulations (including the carbon tax and carbon budgets), are tracked by the Executive Technical Services, group electrical engineer, the executive: sustainable development, the environmental specialist, the divisional SHEQ managers, and the engineering managers.

A bottom-up assessment of mitigation potential is considered and used to inform engagement with government and the development of the company GHG emission reduction target. At an asset level, a comprehensive risk register, which includes aspects of climate change, is compiled and reviewed quarterly. This process is supplemented by board and management discussions, stakeholder needs and concerns raised, peer reporting, guidelines and frameworks, legislation, and industry initiatives such as these of the Minerals Council South Africa (MCSA), often jointly with Business Unity South Africa (BUSA) and the National Business Initiative (NBI) climate change advocacy work and media monitoring.
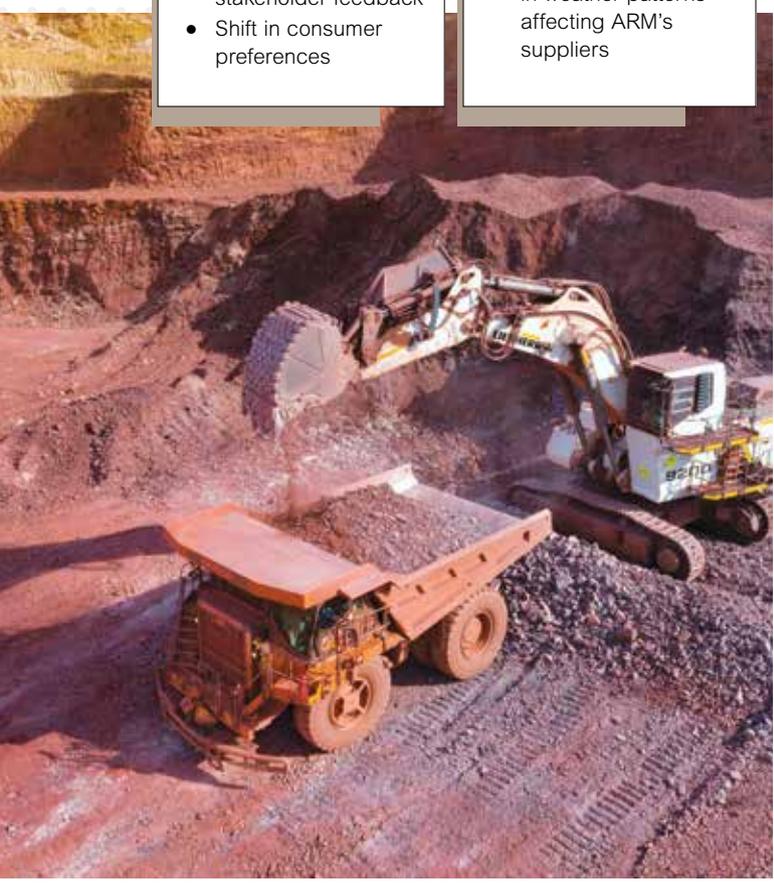
Climate change-related risks feature in ARM's top risks identified through the ERM process on an ongoing basis, although short-term risks related to Covid-19 displaced climate change from the top ten risks at year end.

† The joint venture between ARM Ltd and Assore Ltd, trading as Assmang (Pty) Ltd.

Material climate change risks

More information on the risks summarised below and the steps ARM is taking to respond to and mitigate these risks is available in the supplementary report on climate change and water.

Transition	Physical risks
Policy and legal risk	**Acute risk**
• Carbon tax • Carbon Budgets and associated Mitigation Plans • Global policies and measures to reduce GHG emissions • Mandatory reporting regulations	• Increased severity of extreme weather events affecting water availability, increasing the risk of discharges or affecting electricity costs and supply
Technology risk	**Chronic risk**
• Technology substitution (electric vehicles) reducing demand for platinum autocatalysts	• Rising mean temperatures affecting our workforce • Increasing social unrest related to inadequate water service delivery (exacerbated by climate change) • Changes in precipitation patterns and extreme variability in weather patterns affecting ARM's suppliers
Reputational risk	
• Increased stakeholder concern or negative stakeholder feedback • Shift in consumer preferences	

Opportunities arising from climate change

There are also a number of opportunities that present themselves. These include resource efficiency incentives in the form of tax incentives and cash grants in the area of energy and climate change which ARM could take advantage of. There is also the potential to access new markets for the commodities that ARM produces, including:

- High-quality iron and manganese ore that reduce energy consumption and GHG emissions in processing. Air pollution, energy efficiency, and climate change drivers have led Chinese authorities to stop local miners from mining low-grade manganese, leading to an increase in the import of the type of high-grade ore that ARM produces. This contributed to ARM's decision to modernise and expand Black Rock Mine.
- Platinum will have a key role to play in the hydrogen economy and it is expected that demand will increase given climate-related drivers in the transport sector (increasing demand for Fuel Cell Electric Vehicles) and in industry (increasing demand for hydrogen as a clean energy source and as a reductant that can reduce process emissions).
- Nickel and manganese used in energy storage solutions for technologies such as solar PV and electromobility.

Carbon emissions

Emissions attributable to our operations arise primarily from the consumption of electricity produced by coal-fired power stations and the combustion of fossil fuels during mining, load and haul, materials handling and processing activities. Emissions data is monitored and reported internally every quarter, discussed at operational sustainability meetings and assessed as part of quarterly risk management workshops.

ARM's estimated annual carbon footprint is based on our calculation of greenhouse gas (GHG) emissions[2], which assesses three sources of emissions:

SCOPE 1

Direct GHG emissions from sources owned or controlled by the company.	Diesel consumption (for load and haul activities) and reductants used at Cato Ridge Works account for most of Scope 1 emissions at ARM operations.

SCOPE 2

Indirect GHG emissions related to purchased energy.	Electricity consumption comprises 81% of ARM's total carbon footprint.

SCOPE 3

All indirect emissions not included in Scope 2 that occur in the upstream and downstream value chain.	ARM's most material sources of Scope 3 emissions arise from processing of our sold products (particularly iron ore), transport and distribution (both upstream and downstream) and our investments, and we work closely with our joint venture partners to ensure risks are mitigated.

2 ARM's GHG calculations are based on the Greenhouse Gas Protocol – Corporate Standard (GHG Protocol), published by the World Resources Institute and World Business Council for Sustainable Development in March 2004. The data collection process complies with the data quality requirements set out in ISO 14044, as well as the GRI Standards, and is verified externally on an annual basis.

Carbon emissions have been calculated based on joint operational control and in accordance with the GHG Reporting Protocol. This is also consistent with the operational boundary required by the Mandatory GHG Reporting Regulations.

How we manage carbon emissions

The operations focus on identifying appropriate energy and climate opportunities for long-term achievable emission reduction through investigating energy efficiency initiatives, alternative energy sources, new technology and diversification into less energy-intensive products. Operational and capital budgets are allocated at operations for energy efficiency projects as appropriate and energy targets are set.

Emissions data and intensity/efficiency measures, as appropriate to each operation's metrics, are reported quarterly, discussed at the individual operational, divisional and corporate sustainability meetings and assessed according to potential exposure, probability of impact and the consequence for the business.

Engineers and production staff are incentivised on measures appropriate to their operation over which they have control, for example energy efficiency per tonne of ore milled, time of energy use and the use of alternative energy sources. Remuneration and incentive packages of production teams at Cato Ridge Works include KPIs linked to emissions reduction initiatives. In F2019, carbon emission performance targets were included in ARM's remuneration policy and in the conditional share plan for ARM executives. The incentives are based on actual savings defined in the GHG Protocol over three years, with a stretch target of 2%+ reduction from new and existing carbon reduction initiatives still active since the 2014 base year.

Public policy engagement

ARM is committed to constructive engagement with government on measures aimed at achieving the movement towards a low carbon economy. Important issues to consider in South Africa regarding these measures include the utilisation of carbon tax to support targeted mitigation actions, alignment with other mechanisms such as carbon budgets, and clarity around carbon tax allowances and offsets.

ARM has engaged directly with the Department of Environment, Forestry and Fisheries (DEFF) and has been supportive in disclosing information that has fed into the design of various climate-related policy developments. There is also further engagement in these processes through industry associations.
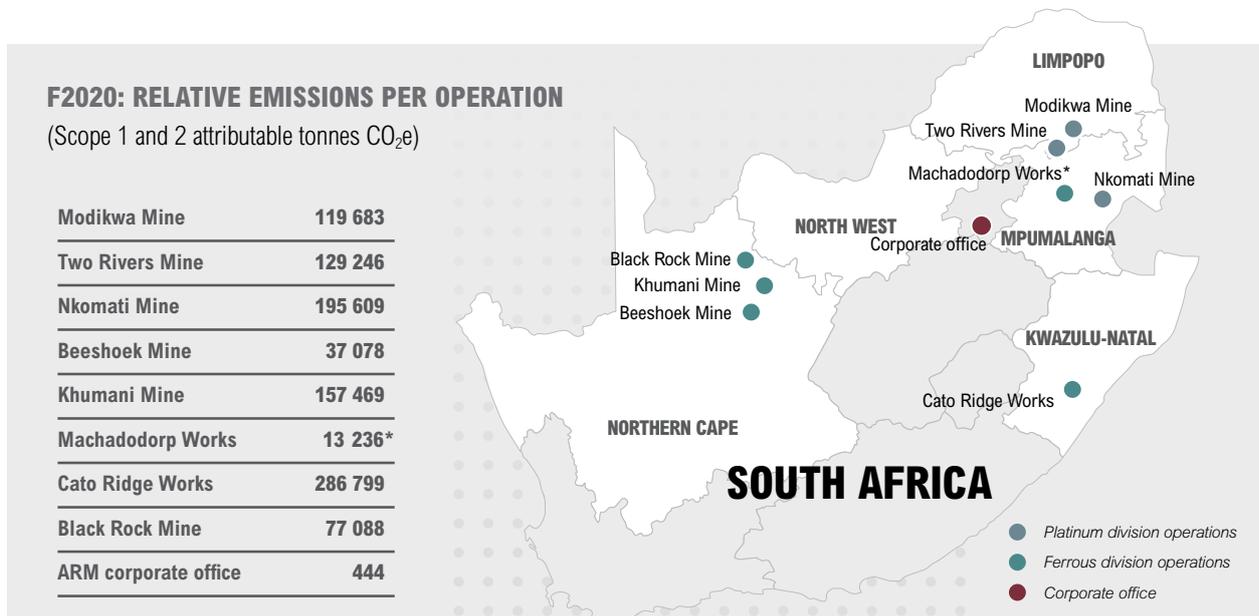
Participation in business and industry initiatives enables collective engagement with regulators and stakeholders and promotes benchmarking and sharing of good environmental practice. ARM participates in a number of such initiatives, including the MCSA (including the Environmental Policy Committee), Business Unity South Africa (BUSA), The Ferro Alloy Producers' Association and the ICMM. The joint venture partnership in the ARM Ferrous division with Assore provides access to important industry initiatives such as the Life Cycle Assessment and Life Cycle Inventory studies, waste management initiatives and energy efficiency initiatives of the IMnI and the ICDA.

Carbon emission metrics

ARM's F2020 estimated carbon footprint (Scope 1 and 2 attributable emissions) decreased by 7.8% to 1.02 million equivalent tonnes of CO_2 ($mtCO_2e$) from 1.10 $mtCO_2e$ in F2019. The year on year decrease is largely attributable to decreased activity in the last quarter of the year due to Covid-19, the maintenance of furnace 2 at Cato Ridge Works and ramping down of operations at Nkomati Mine. The F2020 carbon footprint represents a 18% decrease compared to the F2014 baseline.

Cato Ridge Works contributed 28% of the group's total Scope 1 and 2 emissions. Nkomati Mine contributed 19% and Khumani Mine 15%, mainly as a result of consumption during mining, load and haul activities in the open pits.

The graphic below shows F2020 Scope 1 and 2 attributable emissions for ARM operations expressed in tCO_2e.

F2020: RELATIVE EMISSIONS PER OPERATION
(Scope 1 and 2 attributable tonnes CO_2e)

Modikwa Mine	119 683
Two Rivers Mine	129 246
Nkomati Mine	195 609
Beeshoek Mine	37 078
Khumani Mine	157 469
Machadodorp Works	13 236*
Cato Ridge Works	286 799
Black Rock Mine	77 088
ARM corporate office	444

LIMPOPO
Modikwa Mine
Two Rivers Mine
Machadodorp Works*
Nkomati Mine
NORTH WEST
Corporate office
MPUMALANGA
Black Rock Mine
Khumani Mine
Beeshoek Mine
KWAZULU-NATAL
Cato Ridge Works
NORTHERN CAPE

SOUTH AFRICA

- Platinum division operations
- Ferrous division operations
- Corporate office

* 100% basis as Machadodorp Works is 100% owned by ARM.

Scope 1 and 2 emission intensity

F2020 FOCUS — **Continued reduction in carbon emissions**

Carbon emissions intensity ratios per full-time employee and per unit of production or processing are calculated to assess emissions against changes in production activity levels. Scope 1 and 2 carbon emissions per tonne of manganese alloy produced, decreased to 1.4 tCO_2e/tonne in F2020 from 1.5 tCO_2e/tonne. Scope 1 and 2 emissions per tonne of iron ore produced is 0.024 tCO_2e/tonne (F0219: 0.023 tCO_2e/tonne).

Scope 1 and 2 emissions per tonne of manganese ore produced decreased to 0.043 tCO_2e/tonne from 0.045 tCO_2e/tonne in F2019.

Carbon emissions per tonne of ore milled at our two primary platinum mines, Modikwa and Two Rivers mines, increased to 0.106 tCO_2e/tonne (F2019: 0.098 tCO_2e/tonne). Scope 1 and 2 emissions per full-time employee (FTE) decreased by 4.6% to 188.0 tonnes CO_2e (F2019: 197.1 tCO_2e).

Scope 1 and 2 emissions per man-hour worked increased to 53.3 kg CO_2e (F2019: 52.0 kg CO_2e).

Carbon emission reduction targets

F2020 FOCUS — **Continued reduction in carbon emissions**

A revised and more ambitious carbon emission reduction target was set in F2018 based on both a bottom-up assessment of opportunities to reduce GHG emissions at operations and a top-down assessment that included benchmarking of peer company targets and stakeholder expectations. The target is to achieve a 5% absolute reduction of Scope 1 and 2 emissions by F2020 against a F2014 baseline through emission reduction initiatives implemented since F2015, excluding divestments. We plan to set science-based targets in the future, as part of a phased approach.

While we achieved an overall reduction of 3.3% to F2020 against the F2014 baseline, we were unable to achieve the 5% targeted reduction. Carbon reduction initiatives can involve feasibility processes, followed by budgeting, capital allocation and finally procurement or construction (depending on the nature of the project) and can span over multiple financial years before actual reductions are recorded, e.g. the implementation of electric vehicles at Black Rock Mine. However, the process identified a number of areas for improvement that will be useful in setting future targets.

Various carbon-emission reduction initiatives were implemented during the year including:

- Installation of a new bricks plant at Cato Ridge Works;
- Modikwa Mine replaced underground haul trucks and road haulage with underground conveyor belts;
- Modikwa Mine replaced high profile machines with low profile machines; and
- Additional energy efficient illumination was rolled out at Khumani, Nkomati and Two Rivers mines.

In total, the new initiatives created GHG savings of 26 164 tCO_2e in F2020 (F2019: 4 211 tCO_2e).

We are actively exploring opportunities to invest in renewable energy technologies or to procure clean energy from renewable sources. This includes current feasibility studies for 30 MW of solar PV and 10 MWh of energy storage capacity in the Northern Cape.

ARM will be allocated a new carbon budget for the period 2021 to 2026 in terms of the Climate Change Bill and will have to develop a plan to stay within that budget. We are setting a new GHG emission reduction target for F2023 against the F2018 baseline through emission reduction initiatives (excluding divestments).

The target year was set for F2023 to allow for the subsequent target to align with the second phase of the carbon budget process (which will set an effective target, for a subset of ARM's activities, from 1 January 2023 to 31 December 2028). More detail is available in the supplementary report on climate change and water available on our website at **www.arm.co.za** **CW**

We plan to set a longer-term target that will be more ambitious, informed by the planned scenario analysis. In this, we will explore the inclusion of material Scope 3 emissions and will consider the scientific requirements to achieve the 1.5ºC global

temperature goal and associated efforts towards a net zero carbon industry by 2050.

Scope 3 emissions

ARM's systems consider Scope 3 activities, upstream and downstream of our operations, to assess and mitigate greenhouse gas-related risks in our value chain, and include more targeted climate change-related engagement with partners in our value chain. ARM's most material sources of Scope 3 emissions arise from the processing of our sold products (particularly iron ore), transport and distribution (both upstream and downstream) and our investments, and we work closely with our joint venture partners to ensure risks are mitigated.

In F2019, stakeholders requested disclosure of GHG emissions from the ARM Coal operations, which form part of a joint venture with Glencore. Glencore is the managing partner and reports on GHG emissions to the DEFF, consolidated with its reporting on all its South African operations. Following engagement with Glencore, the GHG emissions related data for the relevant operations is reported as part of ARM's Scope 3

inventory, which includes carbon emissions from our investment in coal mining, is available in the supplementary report on climate change and water available on our website at **www.arm.co.za**
CW 📖

Direct emissions

Direct emissions arising from the smelting process at Cato Ridge Works in addition to carbon dioxide include nitrogen oxides (397.8 tonnes), sulphur oxides (273.5 tonnes) and particulates (267.1 tonnes). These are disclosed in the table on page 6 of this report. Cato Ridge Works has an approved Air Emission Licence, issued in terms of the National Environmental Management: Air Quality Act. An air cleaning system manages emissions and the system's availability is continuously monitored and regularly reported to local and provincial authorities as required by their licence conditions.

Black Rock Mine received the award for the best Code of Practice in terms of the Management of Airborne Pollutants in the 2019 Northern Cape Hygiene Competition by the Department of Mineral Resources and Energy (DMRE).

ENERGY

Electricity and diesel are primary sources of energy consumed in our value chain. Mining activities rely on electricity to power ventilation fans, pumps for processing and dewatering, conveyor belt motors and the machines that crush and mill ore. Energy used for heating is one of the biggest cost inputs in the smelting process at Cato Ridge Works.

Production costs and future increases are significantly affected by the increasing cost of electricity and diesel. The operations also have to budget for carbon tax as well as the potential for pass-through in the second phase of carbon tax to consumers by Eskom.

The security of electricity supply in South Africa is recognised as a significant risk in the group risk register, specifically the reliability and cost of power from Eskom. Uncertain supply due to infrastructure failure, load shedding or load curtailment poses a risk to the sustainability of current operations and the feasibility of future operations. Electricity supply interruptions affect production efficiencies and, in the absence of emergency generators, could severely impact the safety of workers at underground operations if ventilation fans are not functioning. Inconsistent electricity supply has a negative effect on refractories and furnace life at Cato Ridge Works.

In F2020 load shedding affected production volumes at Two Rivers and Modikwa mines and forced increased use of backup electricity generators to support critical functions, such as ventilation fans, increasing diesel consumption and emissions. Quarterly liaison meetings are held with Eskom representatives to help mitigate electricity supply risk. Black Rock Mine is piloting a hybrid electricity model and other alternative energy solutions are being investigated to address electricity challenges created by load shedding.

Electricity consumption at ARM operations decreased 5.7% to 1 563 GWh (reported on a 100% basis) from 1 659 GWh in F2019. Electricity consumed by the Ferrous and Platinum divisions reduced 7.0% and 4.5% respectively. Nkomati Mine accounted for 21% of total electricity consumption, Modikwa Mine 17%, Two Rivers Mine 13%, Khumani Mine 13% and Cato Ridge Works 25%.

ARM's strategic focus on cost competitiveness makes improving energy efficiency a priority to reduce carbon emissions and improve operational efficiencies. This is particularly relevant given proposed above-inflation increases in electricity tariffs and the contribution of energy consumption to the carbon footprint, and the associated carbon taxes. Energy efficiency initiatives are included in the list of GHG reduction initiatives listed on page 92.

Energy consumption is expected to increase at a number of operations due to mining at deeper levels, increasing stripping rates, expansion projects and construction of new plant and equipment.

ARM Ferrous's Energy Efficiency Charter includes targets for energy efficient practices and energy reduction plans are also in place at the operations in the Platinum division. ARM Ferrous, trading as Assmang (Pty) Ltd (a joint venture with Assore Limited), is part of the Energy Intensive User Group, a consumer-led organisation working with government and other stakeholders to ensure South Africa has energy industries which provide reliable supply at acceptable quality and competitive prices.

Fuel consumption

Diesel is used to power mobile equipment (trackless machines and vehicles used for mining, loading, hauling and logistics) and standby electricity generators. Diesel consumption contributed 58% to total Scope 1 carbon emissions in F2020.

Total group diesel consumption decreased by 14% to 82.6 million litres in F2020 (F2019: 96.1 million litres) due to reduced activity in the final quarter and the ramping down of operations at Nkomati Mine.

Khumani (44% of total group diesel use), Nkomati (21%) and Beeshoek (17%) are large open pit mines that use diesel mainly to haul run-of-mine material to the concentrator plants.

LAND USE MANAGEMENT

Mining and associated activities have significant direct and indirect impacts on the physical environment, including disturbances of land, impacts on biodiversity and discharges into waterbodies or air. Mines often operate in remote and environmentally sensitive areas and are under increasing scrutiny regarding their environmental impacts.

The impact of our operations on local landscapes is considered at each stage from exploration to construction, operation and eventual decommissioning and closure. Safeguarding the biodiversity in the biomes around operations is a priority and waste management processes aim to minimise the impact on the natural environment and surrounding communities. We are committed to ensuring that disturbed land is rehabilitated to a stable and sustainable condition.

Biodiversity

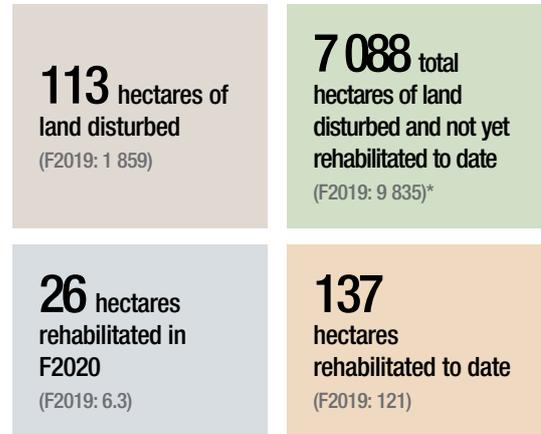ARM acknowledges its responsibility to conserve biodiversity around our operations and our approach to biodiversity conservation aligns with the ICMM guidelines for mining and biodiversity. We are committed to net positive biodiversity impact, or to compensation for negative impact, as appropriate. Two Rivers Mine, Cato Ridge Works and Machadodorp Works are located in close proximity to sensitive areas.

At the early stages of new and expansion projects, biodiversity studies establish baselines and identify potential risks to biodiversity and landscape. The land use planning aspects of EIA and/or EMP processes include structured engagements with community forums, local municipalities and other affected stakeholders. Biodiversity training is provided to employees, contractors and communities to raise awareness of sensitive and endangered species around our operations.

Biodiversity Action Plans (BAPs) and biodiversity management programmes are in place at all operations. BAPs are pivotal environmental management instruments and include commitments to conserve protected areas such as wetlands, zones of endemism, archaeological and heritage sites, protected and endangered species identified by the International Union for Conservation of Nature (IUCN). Operations monitor impacted areas on a continuous basis and operational biodiversity performance audits are conducted biennially as part of external EMP audits.

ARM provides access to sites for scientific research purposes if required and partners with government and/or academic institutions to promote biodiversity protection, including relocation of protected species and removal of alien vegetation.

Biodiversity in F2020

113 hectares of land disturbed
(F2019: 1 859)

7 088 total hectares of land disturbed and not yet rehabilitated to date
(F2019: 9 835)*

26 hectares rehabilitated in F2020
(F2019: 6.3)

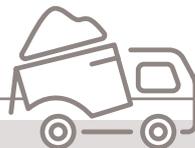**137** hectares rehabilitated to date
(F2019: 121)

*   Note: The F2020 review of total land disturbed to date resulted in a revision of the F2019 figure at Beeshoek and Khumani mines. Based on re-measurement, the F2019 figure of 9 835 hectares of land disturbed and not yet rehabilitated to date was reduced by approximately 3 338 hectares.

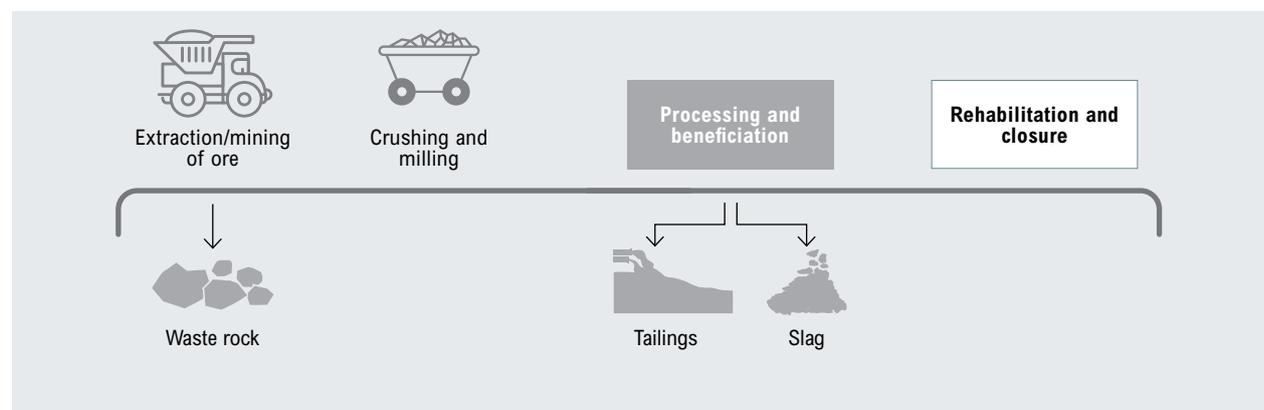**Operation-specific biodiversity initiatives include:**

Cato Ridge Works sponsors the Wildlands Trust to conserve grasslands in the Inanda Dam area through a memorandum of understanding with the eThekwini Municipality

Khumani Mine established a biodiversity offset area in collaboration with the DEFF and the Department of Nature Conservation in the Northern Cape that has been registered as a conservancy

Nkomati Mine has a full-time team that continuously manages alien invasive plant species within the mine boundaries as part of a stream flow reduction activity programme

At **Two Rivers Mine,** unfamiliar/alien plant species were found overgrown in one of the return water dams at the tailings storage facility. A botanist was appointed to recommend a procedure to eradicate the species and the draft report is currently being reviewed by the mine.

More information regarding ARM's biodiversity impact and management is available in the online sustainability data tables available at www.arm.co.za

WASTE MANAGEMENT

The approach to waste management is aimed at improving operational efficiencies by reducing waste production, effectively sorting waste and promoting recycling wherever possible. Waste that cannot be recycled is safely disposed at appropriate waste facilities and safe disposal certificates are obtained.

Extraction/mining of ore

Crushing and milling

Processing and beneficiation

Rehabilitation and closure

Waste rock

Tailings

Slag

Each operation maintains waste inventories that detail the source, volume and type of waste generated by each process, as well as the disposal method. Operations are registered on the South African Waste Information System (SAWIS) system and the volume and type of waste generated and disposed is reported on a monthly basis.

Material waste streams comprise slag, waste rock and tailings, which are by-products of the mining, beneficiation and smelting processes. The amount of material waste produced is directly linked to these activities and, beyond setting mining and process efficiency commitments, it is not possible to set targets to reduce these waste streams.

Other waste includes domestic waste from our offices and oil from trackless mobile mining and production machinery. These are strictly managed and, although there are no absolute reduction targets in place, there is a minimisation strategy through recycling of all waste.

Waste stream	Source	Disposal sites	F2020	F2019	F2018
Waste rock	Non-ore bearing rock removed in the ore extraction process.	Waste rock dumps or used to backfill and rehabilitate open pit workings.	67.2mt	82.3mt	88.8mt
Tailings	Finely milled waste material suspended in water produced during processing of metals and minerals.	Tailings storage facilities.	15.4mt	17.2mt	12.3mt
Slag	The main industrial waste product from the smelting process. Recycling of slag and recovery of residual metal is prioritised to minimise the volume of slag produced.	Designated, licensed slag disposal sites within the boundaries of the smelters.	3 260t disposed and 131 867t recycled	18 900t disposed and 136 000t recycled	180 500t*
Domestic waste	Produced by operational, administrative and support functions.	Licensed municipal landfill sites.	2 470t	3 498t	2 000t
Hazardous waste	Includes used oil, oil-contaminated material and used oil filters from vehicle maintenance as well as medical waste from the clinics.	Registered waste-disposal facilities. Safe disposal certificates are obtained for each hazardous waste stream. Used oil is recycled through specialist service providers.	0.8 million litres of used oil and 1 764t of other hazardous waste	1.1 million litres of used oil and 1 555t of other hazardous waste	1.2 million litres of used oil and 2 137t of other hazardous waste

t – tonnes, mt – million tonnes.
* Slag recycled was not reported in prior periods.

Recycled waste

	Scrap metal	Paper	Elec- tron- ic-waste	Wood/ Timber	Plastic	Cans	Fluores- cent tubes	Boxes	Building rubble (reused/ recycled)	Tyres
	Tonnes									Number
ARM Total	5 224.5	23.4	4.3	355.0	139.2	1.4	0.8	26.6	1 408.6	1 838.00

Waste controls

Discharges at operations are reported to the relevant authorities in terms of quality and volumes, while clean-up and rehabilitation processes are initiated immediately, documented and reported comprehensively to the respective internal governance structures as well as authorities. Incidents that occurred during F2020 are described in the table below.

Operations	Incident
Two Rivers Mine	On 24 July 2019, there was an overflow at the plant pollution control dam during which approximately 3 500 m³ of polluted water was spilled. The incident was reported to the Department of Water and Sanitation. A vacuum truck was used to clean up the spillage and the area affected was rehabilitated.
Nkomati Mine	On 31 October 2019, a water truck bowser overturned at the bypass road near the gate to the mining contractor's offices. Approximately 20 litres of diesel spilled and overflowed into the Adit stream. Clean-up was immediately implemented. The incident was reported to Inkomathi-Usuthu Catchment Management Agency (IUCMA) in terms of Section 20 of the NWA and Nkomati Mine WUL condition. Samples were taken upstream and downstream of the Gladdespruit River. No negative impact was observed.
Nkomati Mine	Due to the positive water balance, Pit 2 overtopped during the period 11 to 14 February 2020, resulting in water discharged to the Adit stream. The water quality at the downstream compliance point remained within the quality standards of the WUL. The incident was reported to the IUCMA as required.
Nkomati Mine	Due to the positive water balance, Pit 2 continued to overflow on occasions during April, resulting in water discharged to the Adit stream. The water quality at downstream compliance point G remained within the quality standards of the WUL. This was reported to the IUCMA as required.
Nkomati Mine	The storm water dam discharged into the environment on 18 May 2020 due to a corroded flange in the drain valve that led to discharge of water into the natural environment and surrounding stream that leads to the Gladdespruit River. Immediate measures were taken to stop the spillage and water samples were taken upstream and at various locations downstream of the spillage and submitted for analysis by an external laboratory. Water quality of samples taken at Nkomati Mine's compliance point was within the compliance parameters stipulated by the WUL. The incident was reported to the IUCMA as required.

There was a spillage of approximately 100 litres of hydrocarbon at the Black Rock Mine salvage yard on 29 January 2020. The spillage was cleaned up and an investigation report was submitted to the DMRE.

At Modikwa Mine, on 25 February 2020, during the paving of a road, there was unauthorised clearance of vegetation. A notification was submitted to the DMRE, setting out rehabilitation commitments.

Except for the incident at Black Rock Mine, no incidents of material hydrocarbon spillage of a scale reportable to the authorities occurred during F2020. However, a number of minor (Level 1) hydrocarbon spillage incidents were recorded at Beeshoek, Modikwa and Khumani mines.

As required by the amendments to the National Environmental Management: Waste Act regarding remediation of contaminated land, contaminated land surveys have been completed for Machadodorp Works and Cato Ridge. The information from these studies is included in closure and rehabilitation costs and related financial provisions.

Rehabilitation and closure

F2020 **FOCUS**   **Rehabilitation and closure**

Rehabilitation and closure plans and processes aim to ensure that at the end of a mine's life, the mine site is restored to an agreed land end use or state in line with the conditions in its environmental authorisations, such as EMPRs and agreed closure plans. This includes demolition and removal of infrastructure, filling open pits and shafts, rehabilitating mine residue deposits, disposing of waste and environmental remediation. ARM operations have plans in place to ensure that rehabilitation and closure are appropriately planned and budgeted for. To this effect, independent specialists conduct annual reviews of the estimated costs of closure and rehabilitation against the requirements of relevant legislation, EMPR closure commitments and applicable good practice. Financial provision is made to the Conservation Trust Fund at each operation to ensure liabilities are adequately funded. Wherever possible, operations undertake rehabilitation activities concurrently with ongoing mining activities.

Over the past two years, mining operations have been aligning the annual financial provision estimates with the requirements of the new NEMA: Financial Provisions Regulations. The due date for compliance with the Regulations was postponed during the year until 19 June 2021. A corporate guideline was developed to provide those operations that were not fully aligned with the methodology during 2019 with the minimum requirements for a scope of work for the assessment of the quantum of the financial provision required for rehabilitation and closure. The external independent review conducted in the last quarter of the year assessed the provisions against the NEMA:FP requirements and adjustments were made where necessary.

Nkomati Mine is being placed on care and maintenance from February 2021 (previously reported as September 2020) in preparation for closure. The mine's environmental responsibilities will be executed in line with the mine's EMP and relevant statutory requirements as well as good practice guidance from the ICMM on responsible mine closure. A specialist consulting company was appointed to conduct the financial provision/closure cost assessment for mining activities at Nkomati Mine, based on a comprehensive and integrated closure plan. The assessment estimated an undiscounted rehabilitation cost, at 30 June 2020, to be R1.2 billion (at 100%). A total of R213 million in restricted cash and guarantees has been provided to fund the rehabilitation obligations. The resulting shortfall is expected to be funded firstly from cash generated by Nkomati Mine during the production scale down and subsequently by the joint venture partners in proportion to their respective shareholding.

At the end of June 2020, the total estimated closure cost across the Ferrous and Platinum divisions on a 100% basis (as if ARM owned 100% of the joint ventures) was R2.4 billion (F2019: R1.3 billion). The estimated balance of the Trust Funds was R485.3 million at June 2020 and guaranteed facilities are in place for a further R798.9 million, representing a total closure cost provision of R1.3 billion.

While there are shortfalls in provisions at certain operations, apart from Nkomati Mine, these represent a relatively small value compared to the assets at the operations and the annual cash flows they generate.

| | | Contributions | | | | | |
| | | Trust Fund | | | | | |
Operation	Estimated closure cost as at 30 June 2020 (Rm)	2020 Trust Fund contribution (Rm)	Estimated fund balance as at 30 June 2020 (Rm)	Guarantees (Rm)	Total provision including guarantees (Rm)	Anticipated shortfall excluding guarantees (Rm)	Anticipated excess/ (shortfall) including guarantees (Rm)
Beeshoek Mine	136.2	7.7	102.6	51.4	153.9	33.6	**17.7**
Khumani Mine	383.5	8.3	110.0	255.0	365.0	273.5	**(18.5)**
Gloria Mine*	48.1	2.0	26.2	76.1	102.4	21.9	**54.2**
Nchwaning Mine*	92.2	1.6	21.3	–	21.3	70.9	**(70.9)**
Black Rock Mine	124.1	3.2	42.9	81.9	124.8	81.2	**0.7**
Two Rivers Mine	176.8	7.0	32.5	67.2	99.7	144.3	**(77.1)**
Nkomati Mine	1 175.9	–	114.1	99.3	213.3	1 061.9	**(962.6)**
Modikwa Mine	230.6	–	35.7	168.0	203.6	194.9	**(27.0)**
Total	2 367.4	29.8	485.3	798.9	1 284.1	1 882.2	**(1 083.3)**

*   Part of Black Rock Mine.

RESPONSIBLE TAILINGS MANAGEMENT

Tailings arise from the processing of mined ore. During processing and beneficiation the ore is finely ground and mixed with water and chemicals to separate minerals from waste. The waste that remains after beneficiation is a mix of finely ground waste rock and water known as tailings or slurry, which is disposed in tailings storage facilities.

F2020 FOCUS

Responsible tailings management

There are eleven tailings storage facilities (TSFs) at ARM operations, four at Nkomati Mine, three at Black Rock Mine, and one each at Beeshoek, Khumani, Two Rivers and Modikwa mines. The design and construction of TSFs include physical barriers appropriate to the risk to prevent pollution of groundwater. Ongoing monitoring of surface water runoff around waste rock dumps and TSFs is conducted to alert operations to negative impacts. Ground water modelling predicts the potential impact of tailings disposal on aquifers and allows for mitigation measures.

Our main priority is ensuring the stability of our TSFs. The responsible and safe management of tailings is a strategic issue with major financial and reputational value. As such, it is a corporate and board priority. Reporting on tailings is included in the agenda of the quarterly sustainable development committees of every Joint Venture board/exco, as well as the ARM audit and risk committee and social and ethics committee of the board and ultimately to the ARM board of directors.

A professional engineer is appointed by each operation to perform annual structural stability audits and quarterly monitoring of the safety and stability of each TSF. The latest structural stability reports confirm the TSFs at ARM's managed operations as stable.

Tailings management and governance measures

Recent international catastrophic failures of tailings storage facilities (TSFs) have increased the focus of investors, NGOs and other stakeholders on responsible tailings management. In 2016, the International Council on Mining and Metals (ICMM) published a Position Statement on "Preventing Catastrophic Failure of Tailings Storage Facilities" that includes a TSF

governance framework. This framework enhances focus on those key elements of management and governance necessary to maintain integrity of TSFs and minimise the risk of catastrophic failures.

ARM, as a member of the ICMM, undertook a review of its TSFs in accordance with the framework and included it in the annual review of management controls at ARM managed TSFs by a multi-disciplinary internal team. This process has subsequently been replaced by the external reviews that were commissioned in 2019.

Following the tragic failure of a TSF in Brumadinho, Brazil in January 2019, the Investor Mining and Tailings Safety Initiative called for a new independent and publicly accessible international standard for tailings dams based on the consequences of failure.

In February 2019, the ICMM Council committed to convening of an independent review of global tailings management practices, with co-convenors UNEP (United Nations Environmental Programme) and PRI (Principles for Responsible Investment) – under leadership of independent chair, Dr Bruno Oberle[3]. The outcome of this Global Tailings Review (GTR) process is a Global Industry Standard on Tailings Management (GISTM), which has as its main objective the safer operation of tailings facilities. ARM has been actively involved in the process and welcomes the GISTM, which was launched on 5 August 2020.

During April 2019, ARM (in collaboration with our joint venture partners) responded to a request for information by a number of investors represented by the Church of England Pensions Board and the Swedish Council of Ethics. ARM's comprehensive TSF disclosure is available on our website at www.arm.co.za. (link: https://www.arm.co.za/sd/files/arm-summary-tailings-storage-facilities-disclosure.pdf)

---

3 Dr Oberle is a Swiss biologist and environmental scientist, and Director General of the International Union for Conservation of Nature (IUCN)

TSF management at ARM operations

TSF management is overseen by the following roles:

Owner

At each operation managed by ARM, an internal competent person (in most cases the manager of the process plant) has been appointed as the responsible manager (the manager) in terms of the Mine Health and Safety Act (MHSA), to oversee the operation of each tailings storage facility (TSF).

Professional engineer

A professional civil/geotechnical engineer (the engineer) is appointed at each operation to conduct annual structural audits and quarterly surveillance monitoring of the TSFs.

Operator

A specialist TSF operating company (the operator) has been appointed at all mines (except Beeshoek Mine due to the low risk of the TSF) to operate the TSF in close cooperation with the manager and audited by the engineer each quarter.

Legislative requirements are assessed and incorporated into the TSF management system. Each operation has submitted and implemented the mandatory Code of Practice (COP) on the operation of mine residue facilities according to the guidelines of the South African Department of Mineral Resources and Energy (DMRE) and the South African National Standard on the management of Mine Residue, SANS 10286. Internal and external reviews take place as required. Operating manuals and procedures have been developed and are aligned with the COPs.

Routine daily, weekly and monthly inspections are performed both by the operating company and the operation. The engineer, the operator and mine personnel conduct quarterly inspections, and submit quarterly reports to the manager. The engineer is responsible to conduct annual structural stability audits. Records kept by operations include tailings dam designs, construction drawings, continuation reports, annual reports and minutes of mandatory meetings.

In 2019, ARM undertook to commission independent external review of the TSFs in alignment with global best practice to enhance our TSF management systems. The external review of the TSFs, which includes review of management systems and governance processes, was completed and we are in the process of implementing recommendations for improvement, both at operational and corporate level.

In addition, ARM committed to completing dam breach analysis of our TSFs to ensure a comprehensive understanding of the potential impact on stakeholders including communities, the environment and the infrastructure. These studies and reports have been slightly delayed by the Covid-19 pandemic, but draft reports have been received and are in the process of being finalised. These reports will inform enhanced emergency response planning.

Tailings storage facilities (TSFs)

Ensuring the safe and stable operation of the TSFs at the ARM mines is a priority, both at operational level and at the corporate level by the joint venture partners at each operation.

ARM Platinum division

The technical committees of each mine, represented by both joint venture partners, consider details regarding the status and compliance of the TSFs at quarterly meetings. A professional engineer is appointed by each mine to oversee operation and construction in compliance with designs, conduct quarterly inspections and annual stability audits. The TSFs at all three mines were certified as stable during the latest annual audits.

Each operation reports in terms of TSF compliance and status to the joint venture partners at quarterly steering committee and sustainable development committee meetings.

In line with industry best practice, independent external reviews of the TSFs at each operation were conducted during the year by a globally renowned expert at Nkomati and Two Rivers mines and an independent specialist consulting firm at Modikwa Mine. The independent external review at Two Rivers Mine included the current TSF as well as the design of the new TSF. At Modikwa Mine, the independent review team noted that "TSF operations, monitoring and surveillance are generally well managed and no major concerns were noted" and provided a number of key comments for improvement. A TSF team comprising the operational management and members of both joint venture partners, work together to review recommendations and the status of implementation.

At Nkomati Mine, the independent external reviewer noted that "the Onverwacht and Co-disposal facilities can be operated safely and effectively for their remaining design life. Designs have been optimised and are robust against reasonable expected deviations in environmental conditions, plant throughput and tailings properties. Monitoring and surveillance are done to a high standard and hence any deviation in performance from the design should be detected early enough to implement remedial action. The monitoring and surveillance should be continued after decommissioning until steady state conditions are evident". The Nkomati technical team oversees TSF management in collaboration with the operational team.

At Two Rivers Mine, the independent external reviewer found technical controls to be excellent and noted the management system as world class, with some recommendations around documentation and change management which are being implemented.

ARM Ferrous division

A professional engineer is appointed by each mine to oversee operation and construction in compliance with designs, conduct quarterly inspections and annual stability audits. The TSFs at all three mines were certified as stable during the latest annual audits.

An internal compliance dashboard to reflect critical parameters, has been developed and compliance is reported quarterly by each mine. The Assmang exco and social and ethics committee consider TSF compliance and status reports at each quarterly meeting.

Independent external reviews of the TSFs at each operation, were conducted by a globally renowned expert during the year. These reviews included the management systems, designs and stability related to TSFs. The independent reviewer noted at both Khumani and Black Rock mines, that the management of the TSFs is done to a high standard and that the level of assessment and auditing is considered as world class. There were no major findings or deviations identified and recommendations for improvement are being implemented by each operation.

After assessment of the risk and potential zones of influence upon failure of each TSF, dam breach analyses were conducted at Khumani and Black Rock mines. At Khumani Mine, the emergency response plan has been revised to address potential impact and an emergency drill including relevant stakeholders, including regional emergency services and traffic management authorities, is planned for November 2020. At Black Rock Mine, containment berms are being constructed to protect mine infrastructure which could potentially be affected in the event of failure.

ARM corporate

The external review of the TSFs identified the requirement for a TSF management policy and standard in addition to the governance standards which are already in place. These, as well as reporting dashboards on critical compliance elements, are in the process of development. The ARM TSF policy and management standard will be aligned with appropriate good practice standards nationally and internationally, including the GISTM. The ARM TSF management policy will be finalised before the end of October 2020. The TSF management standard is being developed by a corporate team with input from operations and their appointed professional engineers to align with the GISTM launched on 5 August 2020, for implementation during the next 3 to 5 years in accordance with the ICMM commitment.

In addition to governance and operational measures described elsewhere in this section, a review of tailings management at each TSF is conducted annually by the risk engineer from the International Mining Industry Underwriters (IMIU) during the annual risk survey. Detailed comments and recommendations relevant to TSFs are included in the IMIU report for each operation. The IMIU recommendations are added to each operational risk profile and progress is tracked quarterly. The IMIU recommendations are included in governance reporting to both the ARM audit and risk committee and the social and ethics committee as well as the joint venture sustainability and audit and risk committees.

Focus for F2021

Raising awareness and further educating the workforce on responsible environmental stewardship, especially focusing on climate change and water.

Setting long-term water and carbon targets.

Continued reduction in carbon emissions.

Continued improvement in understanding and reporting on performance in terms of climate change and water.

Continued engagement with stakeholders to understand concerns around environmental stewardship.

Further refinement in terms of implementation of the Water Accounting Framework.

Rehabilitation and closure.

Responsible tailings management.

The ARM TSF management standard and Global Industry Standard on Tailings Management (GISTM).

Supplementary information

INDEPENDENT ASSURANCE STATEMENT

To the management and stakeholders of African Rainbow Minerals Limited

As a JSE-listed company and a member of the International Council on Mining & Metals (ICMM), African Rainbow Minerals Limited (ARM) is committed to obtaining assurance over specified assertions related to its Sustainability Report in accordance with the ICMM's Sustainable Development (SD) Framework: Assurance Procedure. IBIS ESG Consulting Africa (Pty) Ltd (IBIS) was commissioned by ARM to conduct an independent third-party assurance engagement in relation to the sustainability information in its Sustainability Report (the Report) for the financial year that ended 30 June 2020.

IBIS is an independent licensed provider of sustainability

Gildenhuys with support from Adam Sutton-Pryce and Sharon Kekana from IBIS. Petrus is a Lead Certified Sustainability Assurance Practitioner (LCSAP) with more than 25 years' experience in sustainability performance measurement involving both advisory and assurance work. This assurance engagement is the fifth consecutive sustainability assurance engagement conducted for ARM by IBIS.

ASSURANCE STANDARD APPLIED

This assurance engagement was performed in accordance with the ICMM SD Framework: Assurance Procedure and AA1000AS (2008) with 2018 Addendum (AA1000AS) Type II moderate level requirements.

RESPECTIVE RESPONSIBILITIES AND IBIS' INDEPENDENCE

ARM is responsible for preparing their Sustainability Report and for the collection and presentation of sustainability information within the report.

ARM is also responsible for maintaining adequate records and internal controls that support the reporting processes.
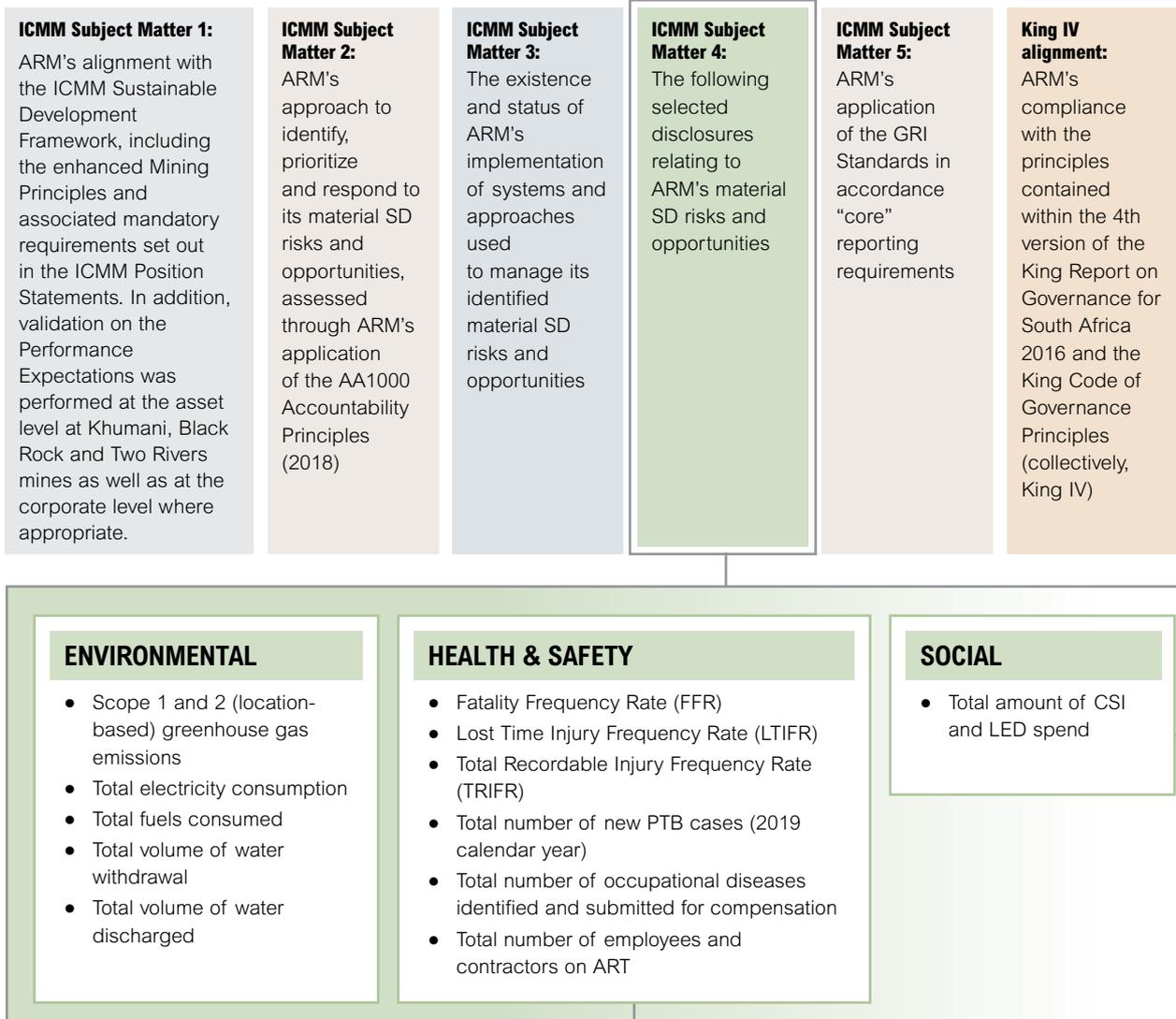

IBIS' responsibility is to management of ARM alone and in accordance with the scope of work and terms of reference agreed with ARM.

IBIS applies a strict independence policy and confirms its impartiality to ARM in delivering the assurance engagement.
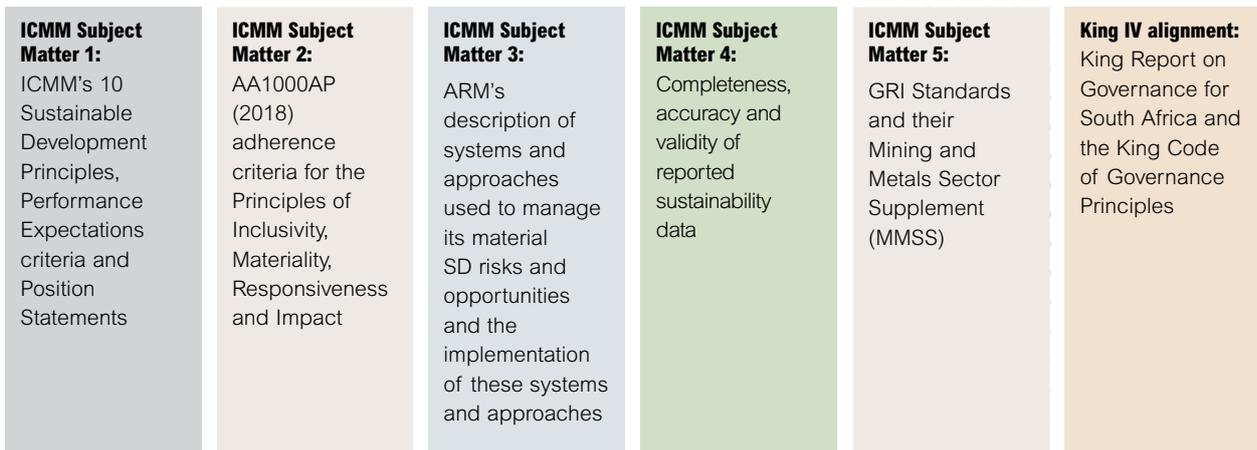
ASSURANCE SCOPE

The scope of the subject matter for moderate assurance in accordance with the AA1000AS assurance standard, as captured in the agreement with ARM is set out below:

ICMM Subject Matter 1:	**ICMM Subject Matter 2:**	**ICMM Subject Matter 3:**	**ICMM Subject Matter 4:**	**ICMM Subject Matter 5:**	**King IV alignment:**
ARM's alignment with the ICMM Sustainable Development Framework, including the enhanced Mining Principles and associated mandatory requirements set out in the ICMM Position Statements. In addition, validation on the Performance Expectations was performed at the asset level at Khumani, Black Rock and Two Rivers mines as well as at the corporate level where appropriate.	ARM's approach to identify, prioritize and respond to its material SD risks and opportunities, assessed through ARM's application of the AA1000 Accountability Principles (2018)	The existence and status of ARM's implementation of systems and approaches used to manage its identified material SD risks and opportunities	The following selected disclosures relating to ARM's material SD risks and opportunities	ARM's application of the GRI Standards in accordance "core" reporting requirements	ARM's compliance with the principles contained within the 4th version of the King Report on Governance for South Africa 2016 and the King Code of Governance Principles (collectively, King IV)

ENVIRONMENTAL	**HEALTH & SAFETY**	**SOCIAL**
• Scope 1 and 2 (location-based) greenhouse gas emissions • Total electricity consumption • Total fuels consumed • Total volume of water withdrawal • Total volume of water discharged	• Fatality Frequency Rate (FFR) • Lost Time Injury Frequency Rate (LTIFR) • Total Recordable Injury Frequency Rate (TRIFR) • Total number of new PTB cases (2019 calendar year) • Total number of occupational diseases identified and submitted for compensation • Total number of employees and contractors on ART	• Total amount of CSI and LED spend

ASSESSMENT CRITERIA

The following assessment criteria were used in undertaking the work:

ICMM Subject Matter 1:	**ICMM Subject Matter 2:**	**ICMM Subject Matter 3:**	**ICMM Subject Matter 4:**	**ICMM Subject Matter 5:**	**King IV alignment:**
ICMM's 10 Sustainable Development Principles, Performance Expectations criteria and Position Statements	AA1000AP (2018) adherence criteria for the Principles of Inclusivity, Materiality, Responsiveness and Impact	ARM's description of systems and approaches used to manage its material SD risks and opportunities and the implementation of these systems and approaches	Completeness, accuracy and validity of reported sustainability data	GRI Standards and their Mining and Metals Sector Supplement (MMSS)	King Report on Governance for South Africa and the King Code of Governance Principles

ASSURANCE PROCEDURES PERFORMED

Our assurance methodology included:

Review

Desktop reviews for three select operations: Black Rock, Khumani and Two Rivers, which involved testing, on a sample basis, the measurement, collection, aggregation and reporting processes in place

Interviews

Telephonic Interviews with relevant functional managers at ARM to understand and test the processes in place for maintaining information in relation with the subject matters in the assurance scope

Inspection

Inspection and corroboration of supporting evidence to evaluate the data generation and reporting processes against the assurance criteria.

Assessing

Assessing the presentation of information relevant to the scope of work in the Sustainability Report for consistency with the assurance observations

Reporting

Reporting the assurance observations to management as they arose to provide an opportunity for corrective action prior to completion of the assurance process

ENGAGEMENT LIMITATIONS

The procedures performed in a moderate assurance engagement vary in nature from, and are less in extent, than for a high assurance engagement. As a result, the level of assurance obtained for a moderate assurance engagement is lower than for high assurance as per AA1000AS.

Due to the global Covid-19 pandemic related travel restrictions and risks, all assurance work was desktop based. Evidence to support information reported for the sampled sites was obtained electronically for review and assessment as a basis for our assurance conclusion. Readers of the Sustainability Report are cautioned to understand this inherent limitation.

The scope of work did not extend to any subject matters other than specified in this assurance statement. IBIS experienced no limitations to the agreed extent of work required for the engagement.

ASSURANCE CONCLUSION

IBIS planned and performed the work to obtain all the information and explanations believed necessary to provide a basis for the assurance conclusion for a moderate assurance level in accordance with AA1000AS.

In our opinion, based on the work undertaken for moderate assurance as described, we conclude that the subject matters in the scope of this assurance engagement have been prepared in accordance with the defined criteria and are free from material misstatement.

KEY OBSERVATIONS AND RECOMMENDATIONS FOR IMPROVEMENT

Based on the work set out above, and without affecting the assurance conclusion, the key observations and recommendations for improvement are set out below.

In relation to ICMM subject matter 1

Group level policies, management standards and procedures observed adequately demonstrate ARM's corporate commitment to the ICMM Mining Principles and the related Position Statements.

The PE validation process identified alignment with the majority of the Performance Expectations except for Principle 3 where ARM has not yet formalized a Human Rights Policy commitment. It is recommended that ARM develop a corporate level Human Rights Policy that can be rolled down and adopted at an asset level.

In relation to ICMM subject matter 2

Inclusivity: ARM's Code of Conduct, which contains a Stakeholder Communication Policy, together with the Board Charter provide for inclusive stakeholder engagement and monitoring. Stakeholder and community engagement were observed to be an agenda item at operational, divisional and board meetings. Responsibilities were found to be appropriately assigned at all levels. Documented evidence assessed at select operations as well as board minutes inspected pointed to a high level of inclusivity in ARM's deliberations, decisions, and actions, which take the legitimate interests and expectations of the company's stakeholders into account.

Materiality: ARM has applied due process in mapping and disclosing its material stakeholder concerns in a transparent and balanced manner. Material matters for FY2020 were reviewed against board and executive committee deliberations, feedback from formal and informal engagements with stakeholders during the year, a review of media reports and peer analysis. The FY2020 sustainability report presents ARM's material matters along with the relevant components and descriptions. The Report also sets out material concerns from key stakeholders and what ARM's responses related to them were.

Responsiveness: ARM's responses to stakeholder issues observed across different stakeholder groups, at both corporate and operational levels, indicate a high level of maturity and accountability to issues raised. A sample of responses to stakeholders observed were found to be directly related to the stakeholder concerns and were conducted in a timely, fair and appropriate manner without prejudice to any one stakeholder group.

Impact: ARM reports on a range of material environmental, social and governance topics based on its ongoing monitoring, measurement, and evaluation of its impacts; both qualitatively and quantitatively. ARM's sustainable development policies and procedures aim to enhance the quality of outcomes from its interventions that will add value to society and contribute to the developmental aspirations set in the United Nations Sustainable Development Goals (SDGs). The SDGs that align with ARM's business have been adopted and reported on for FY2020, demonstrating ARM's impact related to each topic. It is recommended that ARM continue to report on the progress against the SDGs as well as monitor and measure the social changes that result from ARM's activities and the long-term impacts on its stakeholders and on ARM's business itself.

In relation to ICMM subject matter 3

The process observed to identify the group's material risks and opportunities is well established. It was found that the material risks and opportunities reported in FY2019 remained relevant for FY2020, although some components and descriptions have changed.

In relation to ICMM subject matter 4

It was observed that appropriate measures are in place to provide reliable source-data related to the selected disclosures assessed. Management's responses to issues raised from the previous assurance cycle resulted in a reduction in the number of issues noted. The general control environment for sustainability information could be further improved with the formalisation of a corporate-level sustainability reporting procedure to ensure the consistent interpretation of definitions across the group, and to provide guidance on key internal controls required. Data inconsistencies identified during the assurance process were subsequently corrected and IBIS is satisfied with the accuracy of the final data in the assurance scope.

In relation to ICMM subject matter 5

A review of the report against the GRI Standards indicated that ARM effectively reports in accordance with the GRI Standards – "core" disclosure requirements.

In relation to ARM's alignment with King IV™

Evidence observed during engagement with the Company Secretary as well as inspections of board minutes, policy and other related documents, confirmed due application of King IV™ as reported.

A comprehensive management report detailing specific findings and recommendations for continued sustainability reporting improvement has been submitted to ARM management for consideration.

Petrus Gildenhuys
Director

IBIS ESG Consulting Africa (Pty) Ltd

AA1000
Licensed Assurance Provider
000-156

Johannesburg
2 October 2020

Key stakeholder concerns and ARM's responses

Shareholders, potential shareholders, analysts and other investors

HOW WE ENGAGE	ISSUES RAISED	RESPONSE	REFERENCE
• Annual General Meeting. Decisions taken at shareholder meetings are disclosed on the company's website following the meetings • Provisional and interim results presentations • A comprehensive investor relations programme to communicate with domestic and international shareholders, fund managers and investment analysts. This includes one-on-one meetings with institutional investors in South Africa and internationally through roadshows after interim and provisional results • Conferences • ARM's website provides updates on the company's operations, financial performance and other information • Integrated annual report and the accompanying suite of reports.	• Growth • Unit cost reductions • Capital allocation • Labour relations, • Dividends • Share price performance • Environmental, social and governance (ESG) issues • Resilience and sustainability during Covid-19.	• Transparent, comprehensive and objective communications • Strategic focus on operating assets efficiently and disciplined allocation of capital • ARM's investor relations department communicates with institutional shareholders, the investment community and the media • Discussions with JV partners and management to raise awareness of the concerns and expectations of analysts and fund managers • Regular meetings, promoting open communication and transparency. • Summaries of the decisions taken at shareholders' meetings are disclosed on the company's website following the meetings.	Financial review (IAR) (pages 26 to 39)

Bankers, insurers and funders

HOW WE ENGAGE	ISSUES RAISED	RESPONSE	REFERENCE
• Ongoing maintenance of relationships through meetings and general discussions with bankers and insurance managers • Annual ARM engagement with insurance market visit to international and local markets around insurance renewal.	• Liquidity • Solvency • Funding • Insurance management • Resilience and sustainability during Covid-19.	• Responsible management of ARM's financial position to ensure that it continues to meet its financial needs • A comprehensive risk financing and transfer programme is in place.	Financial review (IAR) (pages 26 to 39)

Joint venture partners

HOW WE ENGAGE	ISSUES RAISED	RESPONSE	REFERENCE
• Ongoing management interaction during the ordinary course of business • Monthly executive management and quarterly board meetings.	• Sustainable development • Financial performance • Operational performance • Equitable treatment • Operational strategy.	• ARM holds itself to the highest ethical and governance standards in dealings with all stakeholders, including joint venture partners.	Financial review (IAR) (pages 26 to 39) Operational reviews (IAR) (pages 54 to 89) How we govern and manage sustainable value creation (pages 14 to 23)

Employees and organised labour

HOW WE ENGAGE	ISSUES RAISED	RESPONSE	REFERENCE
• Regular performance reviews and feedback • Annual internal results presentation • Regular internal roadshows • Annual employee surveys • Company intranet and website • Monthly shop steward meetings • Other meetings with unions as required • Wage negotiations • Regular electronic communication (emails and sms's) during lockdown	• Remuneration • Training • Health and safety • Safe working conditions during Covid-19 • Transformation.	• Human resources strategies aim to make ARM an employer of choice, including maintaining good relationships with unions • Commitment to fair treatment and remuneration of employees • Focus on skills development and career-planning programmes to assist employees to develop to their full potential • Recognition agreements with one or more unions where the required representation levels are reached • Return to Work procedures implemented after lockdown and ongoing in line with the SOPs from the MCSA and guidelines from the DMRE and DoH.	Ensuring a safe, healthy and appropriately skilled workforce (pages 49 to 77)

Communities, civil society and non-governmental organisations

HOW WE ENGAGE	ISSUES RAISED	RESPONSE	REFERENCE
• Specialised community discussions/ meetings to understand their specific concerns • Social investment forums discuss investment in communities surrounding the operations • Monthly/quarterly meetings are held to discuss Local Economic Development (LED) and Corporate Social Investment (CSI) projects • Future Forums • Attendance registers and minutes of these meetings are kept • The ARM Trust • Consultations with interested and affected parties for changes or expansions to current operations in terms of the Regulations of the National Environmental Management Act (NEMA) and other relevant legislation. • Community open days.	• Community needs, including socio-economic development, infrastructure development, employment and support during Covid-19 • Status of social projects, operational changes and expansions • Environmental issues affecting communities • Employment from local communities • Service delivery challenges • Transformation.	• Engagement with communities at specialised discussions/meetings to understand their specific concerns • Attendance registers and minutes of engagement meetings • Community open days support information sharing and relationship building • The ARM Trust invests in the upliftment of rural communities throughout South Africa by partnering with traditional and other community leaders • Changes or expansions to our current operations require engagement with interested and affected parties through stakeholder consultation processes as prescribed by NEMA and other relevant legislation • Coordinated industry-level and direct community support during Covid-19.	Stakeholder engagement (pages 26 to 29) Our performance (pages 36 to 101)

KEY STAKEHOLDER CONCERNS AND ARM'S RESPONSES continued

Government			
HOW WE ENGAGE	**ISSUES RAISED**	**RESPONSE**	**REFERENCE**
• ARM engages local and provincial government with respect to LED projects, licences and compliance with the relevant safety and environmental legislation • ARM also engages with national government on matters of policy-making as required • Regular reports are submitted by the operations on socio-economic development (SED) projects • Annual Mining Charter Scorecard reports are submitted to the DMRE by each mine • dti annual audit for BEE verification. • A workplace skills plan is submitted to the Mining Qualifications Authority (MQA) annually • Representation on various industry bodies that engage with government.	• Social investment • Health and safety • Environmental management • Transformation • Compliance with the dti Codes of Good Practice and Mining Charter • Regular progress reports and updates • Support for government Covid-19 priorities	• Engagements with local and provincial government with respect to LED projects, licences and compliance with relevant safety and environmental legislation • Engagements with national government on matters of policy-making as required • Regular reports are submitted by the operations on SED projects • Annual Mining Charter Scorecard reports are submitted to the Department of Mineral Resources and Energy (DMRE) by each mine • Coordinated industry-level and direct support for employees, communities and government during Covid-19.	Stakeholder engagement (pages 26 to 29) Our performance (pages 36 to 101)

Industry associations*			
HOW WE ENGAGE	**ISSUES RAISED**	**RESPONSE**	**REFERENCE**
• Regular scheduled association meetings.	• Sustainable development • Labour issues • Financial sustainability • Implementation of best practice • Industry-specific issues • Changes in legislation • Coordinated response to Covid-19.	• Representation in various executive and other roles within industry associations to engage and give input on various industry issues and communicate with industry and government stakeholders • Coordinated industry-level and direct support for employees, communities and government during Covid-19.	Stakeholder engagement (pages 26 to 29) Our performance (pages 36 to 101)

Customers

HOW WE ENGAGE	ISSUES RAISED	RESPONSE	REFERENCE
• Continual interactions in the ordinary course of business • Annual contractual negotiations. • Regular service level agreement renewals.	• Product quality • Timing of product delivery • Sustainability issues.	• Processes are in place to ensure consistency of product quality. • ARM contracts with logistics and freight service providers, including Transnet.	Stakeholder engagement (pages 26 to 29) Our performance (pages 36 to 101)

Suppliers and local business

HOW WE ENGAGE	ISSUES RAISED	RESPONSE	REFERENCE
• Continual interactions in the ordinary course of business • Annual contractual negotiations • Regular service level agreement renewals • Scheduled meetings with local business.	• Local economic development • Industry issues • Fair payment terms • Fair treatment • Valid BEE certification • Ethics • Sustainability issues.	• Support for local enterprise development through our CSR initiatives • Payment terms align with industry standards • ARM operates ethically and does not tolerate unfair discrimination • ARM requires valid BEE certificates to support transformation in its supply chain • Support provided to SMMEs and suppliers during Covid-19.	Communities (pages 37 to 42) Transformation (pages 43 to 45)

Media

HOW WE ENGAGE	ISSUES RAISED	RESPONSE	REFERENCE
• One-on-one interviews • Press releases • Stock Exchange News Service (SENS) announcements • Media contact function on the company website • Publications on the ARM website.	• Topical issues as they arise.	• ARM's investor relations department communicates with the investment community and the media, and facilitates access to information and management where possible.	ARM's suite of reports and website **www.arm.co.za**

* *Includes the Minerals Council South Africa, International Council on Mining and Metals, Ferro Alloy Producers' Association, Association of Mine Managers of South Africa, Association of Resident Engineers, Business Unity South Africa, Water User Associations and the Energy Intensive Users Group.*
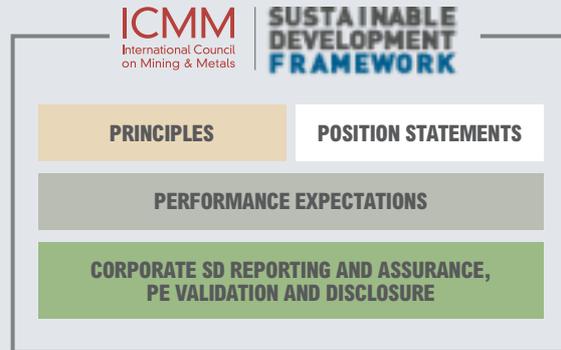
ARM's reporting in terms of the ICMM Sustainable Development Framework

THE ICMM SUSTAINABLE DEVELOPMENT FRAMEWORK

In 2018, the ICMM developed a comprehensive set of Performance Expectations (PEs) for members to manage and track performance in terms of a broad range of sustainability issues, especially at the asset level. The PEs were finalised and formally released in November 2018. ICMM member companies are expected to undertake self-assessments of all operational assets in 2020 and 2021, with third-party validation of the PEs initiated in 2022.

In February 2020, the ICMM launched enhanced membership requirements that build on the original ten Sustainable Development Principles and Position Statements in response to increasing societal expectations of the mining and metals industry. The ICMM Mining Principles strengthen members' social and environmental requirements and are underpinned by the 38 PEs. They include robust asset- and corporate-level validation, credible assurance and transparent disclosure to maximise the industry's benefits to host communities and minimise negative impacts to effectively manage issues of concern to society.

The Principles and PEs support progress towards the global targets of the UN Sustainable Development Goals and the Paris Agreement on climate change.

Although members are expected to implement the ICMM Assurance and Validation Procedure from 2021, it was recommended that pilot testing commence in 2020. ARM piloted self-assessment of the PEs at two assets in F2019 and in F2020 engaged IBIS ESG Consulting Africa (Pty) Ltd to conduct third-party validation around self-assessment the PEs conducted at Khumani, Two Rivers and Black Rock mines, as well as at ARM corporate as part of the external assurance of sustainability data. The validation process identified that ARM corporate and the sampled operations are aligned with the majority of the PEs, and the gaps in alignment are being addressed.

Members are required to apply and report on their implementation of the Mining Principles and PEs from 2021. We will report on our progress in next year's reporting cycle.

The graphic below shows provides references to where ARM's alignment with the ICMM Mining Principles is discussed.

ICMM MINING PRINCIPLE	REFERENCE
Apply ethical business practices and sound systems of corporate governance and transparency to support sustainable development.	Report of the social and ethics committee (IAR) (pages 130 to 133) How we govern and manage sustainable value creation (pages 14 to 23) Comment from the sustainability assurance provider (page 19) CGR ARM's corporate governance report available at **www.arm.co.za**
Integrate sustainable development in corporate strategy and decision-making processes.	Material matters (pages 34 and 35) Executive chairman's report (IAR) (pages 20 to 23) Social and ethics committee chairman's review (pages 30 to 33) How we govern and manage sustainable value creation (pages 14 to 23) Report of the social and ethics committee (IAR) (pages 130 to 133)

ICMM MINING PRINCIPLE	REFERENCE
Respect human rights and the interests, cultures, customs and values of employees and communities affected by our activities.	Report of the social and ethics committee (IAR) (pages 130 to 133) How we govern and manage sustainable value creation (pages 14 to 23) Comment from the sustainability assurance provider (page 19) CGR ARM's corporate governance report available at **www.arm.co.za**
Implement effective risk-management strategies and systems based on sound science, and which account for stakeholder perceptions of risk.	Material matters (pages 34 and 35) How we govern and manage sustainable value creation (pages 14 to 23) CGR ARM's corporate governance report available at **www.arm.co.za**
Pursue continual improvement in the health and safety performance with the ultimate goal of zero harm.	Executive chairman's report (IAR) (pages 20 to 23) Social and ethics committee chairman's review (pages 30 to 33) Safety (pages 49 to 54) Occupational health and wellness (pages 55 to 65) Impact of Covid-19 (pages 24 and 25)
Pursue continual improvement in environmental performance issues, such as water stewardship, energy use and climate change.	Ensuring responsible stewardship of natural resources (pages 78 to 101) Supplementary report on climate change and water available on our website **www.arm.co.za**
Contribute to the conservation of biodiversity and integrated approaches to land-use planning.	Ensuring responsible stewardship of natural resources (pages 78 to 101) Biodiversity tables in sustainability data tables available on our website **www.arm.co.za**
Facilitate and support the knowledge-base and systems for responsible design, use, re-use, recycling and disposal of products containing metals and minerals.	Our value chain (pages 46 and 47)
Pursue continual improvement in social performance and contribute to the social, economic and institutional development of host countries and communities.	Value contribution (pages 12 and 13) Transformation (pages 43 to 45) Communities (pages 37 to 42) Stakeholder engagement (pages 26 to 29) Impact of Covid-19 (pages 24 and 25)
Proactively engage key stakeholders on sustainable development challenges and opportunities in an open and transparent manner, effectively report and independently verify progress and performance.	Stakeholder engagement (page 26 to 29) Key stakeholder concerns and ARM's responses (pages 106 to 109)

ARM's reporting in terms of the UN Global Compact

The United Nations Global Compact (UNGC) challenges companies to align their strategies and operations with universal principles on human rights, labour, environment and anti-corruption, and take actions that advance societal goals by adopting the Ten Principles of the UNGC. These principles are derived from the Universal Declaration of Human Rights, the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development, and the United Nations Convention Against Corruption.

Acting in accordance with the Ten Principles improves long-term sustainability by supporting a culture of integrity, a sound system of values and a principles-based approach to doing business.

The UN Global Compact complements the UN Sustainable Development Goals (see opposite page) by ensuring that companies first do business responsibly while pursuing opportunities to solve societal challenges defined in the SDGs through business innovation and collaboration.

ARM is committed to the Ten Principles of the United Nations Global Compact (UNGC) and the social and ethics committee monitors the company's activities in the context of these principles.
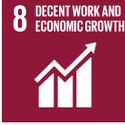
United Nations Global Compact Principles

UNITED NATIONS **GLOBAL COMPACT**

1 Businesses should support and respect the protection of internationally proclaimed human rights.

ETHICS AND HUMAN RIGHTS
Report of the social and ethics committee (IAR) (pages 130 to 133)
How we govern and manage sustainable value creation (pages 14 to 23)
Comment from the sustainability assurance provider (page 19)

CGR 📖 ARM's corporate governance report available at **www.arm.co.za**

2 Businesses should make sure that they are not complicit in human rights abuses.

Material matters (pages 34 and 35)
Executive chairman's report (IAR) (pages 20 to 23)
Social and ethics committee chairman's review (pages 30 to 33)
How we govern and manage sustainable value creation (pages 14 to 23)
Report of the social and ethics committee (IAR) (pages 130 to 133)

3 Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.

4 Businesses should uphold the elimination of all forms of forced and compulsory labour.

FAIR LABOUR PRACTICES
Human resources management (pages 66 to 77)
Human rights (page 19)
Report of the social and ethics committee (IAR) (pages 130 to 133)

5 Businesses should uphold the effective abolition of child labour.

6 Businesses should uphold the elimination of discrimination in respect of employment and occupation.

7 Businesses should support a precautionary approach to environmental challenges.

8 Businesses should undertake initiatives to promote greater environmental responsibility.

ENVIRONMENTAL STEWARDSHIP
Ensuring responsible stewardship of natural resources (pages 78 to 101)
Biodiversity tables in sustainability data tables and the supplementary report on climate change and water available on our website 🌐 **www.arm.co.za**

9 Businesses should encourage the development and diffusion of environmentally friendly technologies.

10 Businesses should work against corruption in all its forms, including extortion and bribery.

ETHICS AND HUMAN RIGHTS
Report of the social and ethics committee (IAR) (pages 130 to 133)
How we govern and manage sustainable value creation (pages 14 to 23)
Comment from the Sustainability Assurance Provider (page 19)

CGR 📖 ARM's corporate governance report available at **www.arm.co.za**

The United Nations Sustainable Development Goals (SDGs)

The 17 UN Sustainable Development Goals (SDGs) are a call to action to drive a global collaboration to achieve the goal of peace and prosperity for people and the planet. The underlying targets within each SDG aim to achieve the goals set in the 2030 Agenda for Sustainable Development by ensuring that growth and development do not lose sight of the many urgent social and environmental challenges that need to be addressed at the same time. While we do not currently integrate the SDGs and their underlying targets into our strategy or approach to sustainable value creation, we are starting a process to identify the SDGs where we can have the most impact. The table that follows shows where ARM's activities overlap with the SDGs and how they support prosperity and peace for people and planet.

SDG	How ARM contributes	For more information:
1 NO POVERTY	Providing direct employment, local sourcing of goods and services, enterprise and supplier development initiatives, educational support for community schools, building capacity in communities and payment of taxes and royalties. Our Corporate Social Investment (CSI) programmes provide support for the poor, sick and vulnerable in local communities. Infrastructure projects under Local Economic Development (LED) programmes are determined according to local government priorities and support community resilience by prioritising essential services such as water infrastructure in the water-scarce Northern Cape. Coordinated industry-level and direct community support during Covid-19.	Value contribution (pages 12 and 13) Impact of Covid-19 (pages 24 and 25) Human resources management (pages 66 to 77) Communities (pages 37 to 42) Transformation (pages 43 to 45)
2 ZERO HUNGER	The impact of mining on water, land and biodiversity resources in traditionally agricultural areas can be a concern for farmers and local communities, with the potential to become a source of social conflict. We take a precautionary approach to environmental stewardship that includes managing our impacts on natural resources, engaging about water at the catchment level, consultative land management, including biodiversity conservation and rehabilitation and closure planning. The focus of our CSI programmes includes projects that support the poor and vulnerable, including infants. Community support in response to Covid-19 included food parcels and water provision.	Ensuring responsible stewardship of natural resources (pages 78 to 101) Communities (pages 37 to 42) Impact of Covid-19 (pages 24 and 25)
3 GOOD HEALTH AND WELL-BEING	Employee health, hygiene and safety are critical to our long-term sustainability. Our wellness programme integrates safety, occupational hygiene and health, PTB, HIV & Aids and chronic disease management. ARM operations support awareness, testing campaigns and outreach initiatives to address PTB, HIV & Aids among employees and in communities. Beeshoek, Black Rock, Khumani and Modikwa mines partner with the provincial Department of Health through Memorandums of Understanding (MoUs) to strengthen the implementation of provincial PTB, HIV & Aids, STIs and chronic disease management strategies, and extend primary healthcare services to contractors and communities. Two Rivers Mine is in the process of establishing a similar MoU in its area of operation. Black Rock Mine also partners with the Northern Cape DoH to provide primary healthcare services to the Black Rock community. ARM's CSI and LED projects focus on building capacity in local communities and prioritise women, HIV & Aids projects, the advancement of people living with disabilities, youth and the socially destitute. ARM implemented comprehensive programmes to ensure the health and wellbeing of employees and contractors during Covid-19, and participated in coordinated industry-level and direct interventions to support community health.	Occupational health and wellness (pages 55 to 65) Communities (pages 37 to 42) Impact of Covid-19 (pages 24 and 25)
4 QUALITY EDUCATION	ARM works with local government to increase local capacity and through technical, vocational and educational training programmes for the current and future workforce. Our learnership programmes and graduate development programme provide opportunities for unemployed youth. Adult education and training (AET) provided at ARM operations to employees and community members helps to improve literacy and numeracy. Projects falling under the CSI and LED programmes and the ARM BBEE Trust include investments in infrastructure to build/upgrade or furnish schools. Investments in education through our CSI programme strengthen relationships with our communities.	Human resource management (pages 66 to 77) Communities (pages 37 to 42) Value contribution (pages 12 and 13)

THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS continued

SDG	How ARM contributes	For more information:
5 GENDER EQUALITY	ARM has a number of initiatives to improve representation of women, including through establishing women in mining committees at operations, developing a Female Leader Profile, conducting gender mainstreaming refresher courses and through our women development and women in leadership development training programmes. Training programmes include a focus on women development. We actively recognise women's rights to property and resources, include women as stakeholders in consultation processes, and build inclusive access to jobs and economic opportunities. ARM's CSI and LED projects focus on building capacity in local communities and prioritise women.	Human resources management (pages 66 to 77) Communities (pages 37 to 42)
6 CLEAN WATER AND SANITATION	Water is a critical resource for our mining and metals operations. It is essential for production, as well as the health and wellbeing of employees and the surrounding communities at every stage in a mine's life cycle. We consider availability and quality of water in our project planning, operational and closure considerations and consult with regulators and communities to ensure responsible stewardship and sharing of this essential natural resource. ARM's ongoing focus on improving water reporting promotes water-use efficiency and all operations run closed circuit water systems to the extent possible to maximise recycling and minimise discharge into the environment. Investing in improving water access and infrastructure for schools and communities is a focus for our CSR programme and the ARM Trust. Community support in response to Covid-19 included water infrastructure and water provision.	Ensuring responsible stewardship of natural resources (pages 78 to 101) Impact of Covid-19 (pages 24 and 25) Communities (pages 37 to 42) Supplementary report on climate change and water available on our website **www.arm.co.za**
7 AFFORDABLE AND CLEAN ENERGY	Our operations require significant energy resources and the smelting operations at Cato Ridge Works are energy intensive. We reduce carbon emissions by improving energy efficiency, implementation of focused emission reduction initiatives and investigating renewable technologies where appropriate. The metals and alloys ARM produces are used in clean energy solutions and are critical to creating a low carbon future.	Ensuring responsible stewardship of natural resources (pages 78 to 101) Value contribution (pages 12 and 13) Supplementary report on climate change and water available on our website **www.arm.co.za**
8 DECENT WORK AND ECONOMIC GROWTH	We provide direct and indirect employment, promote entrepreneurship and the growth of small, medium and micro-enterprises (SMMEs) through enterprise and supplier development programmes, and preference local procurement, which create large economic multipliers. Our skills development initiatives include opportunities for unemployed youth and graduates. Internal benchmarking ensures equal pay for work for equal value. ARM's safety initiatives promote safe and secure work environments and we have controls in place to ensure that labour rights are protected, and that we do not use forced or child labour. Our diversity programme focuses on raising awareness regarding people with disability (PWD) and increasing the representation of PWDs in the workforce wherever practical. To ensure that growth is fully inclusive, government needs to effectively manage revenues from mining and encourage linkages to the broader economy. Support in response to Covid-19 included support for small businesses in our enterprise and supplier development programmes.	Value contribution (pages 12 and 13) Human resources management (pages 66 to 77) Communities (pages 37 to 42) Transformation (pages 43 to 45)
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	Developing, operating and mining requires a meaningful investment in infrastructure, particularly in remote areas. Our LED projects include significant investments in community infrastructure that supports economic development and human well-being. ARM's enterprise and supplier development programmes promote the growth of entrepreneurs and SMMEs, and their inclusion in the mining value chain. These initiatives prioritise support for historically disadvantaged people and thereby promote inclusive growth. ARM conducts research and development to identify innovative applications in mining technology.	Communities (pages 37 to 42) Transformation (pages 43 to 45)
10 REDUCED INEQUALITIES	Our code of conduct emphasises our resolute stance against unfair discrimination and we promote equality, the inclusion of previously disadvantaged groups, including women, and people with disability. We embrace an inclusive approach to community consultation and participation in decision-making.	Human resources management (pages 66 to 77) Key stakeholder concerns and ARM's responses (pages 106 to 109) Communities (pages 37 to 42) Transformation (pages 43 to 45)

SDG	How ARM contributes	For more information:
11 SUSTAINABLE CITIES AND COMMUNITIES	Our operations produce metals and alloys that are essential for infrastructure development and the construction of cities. Our LED infrastructure projects in local communities provide basic services including access to water, sewage services, schools and roads.	Value contribution (pages 12 and 13) Communities (pages 37 to 42)
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Our commitment to sustainable practices and environmental responsibility promote sustainable management and efficient use of natural resources. The waste management programme aims to reduce waste production, promote recycling wherever possible and ensure safe disposal at appropriate facilities. Water discharges that are below the quality specified in their WULs are reported to the relevant authorities and clean-up and mitigation action undertaken. Direct emissions which could impact air quality at Cato Ridge Works are managed by cleaning equipment in line with the terms of its Air Emission Licence. The information in the integrated annual report and this sustainability report demonstrates ARM's integrated approach to sustainability reporting.	Value contribution (pages 12 and 13) Ensuring responsible stewardship of natural resources (pages 78 to 101) Supplementary report on climate change and water available on our website **www.arm.co.za**
13 CLIMATE ACTION	ARM is committed to participating in the global response to reduce carbon emissions and mitigate the physical impacts caused by climate change. We report publicly our carbon emissions in this sustainability report and in additional disclosures available on our website. Carbon emission reduction targets are included in executive incentives. We address climate change by reducing our carbon footprint and by engaging in dialogue with stakeholders to enhance adaptive capacities and integrate climate change measures into policies and strategies.	Ensuring responsible stewardship of natural resources (pages 78 to 101) Supplementary report on climate change and water available on our website **www.arm.co.za**
14 LIFE BELOW WATER	ARM operations are all inland and do not have a direct impact on marine resources. Our approach to water management aims to maximise recycling and minimise discharge into the environment, including freshwater ecosystems such as rivers and streams. We work closely with our partners to ensure safe and responsible shipping with minimal risk to marine ecology.	Our value chain (pages 46 and 47) Ensuring responsible stewardship of natural resources (pages 78 to 101)
15 LIFE ON LAND	We are committed to sustainable practices and environmental responsibility, and we manage the impact of our operations on freshwater ecosystems responsibly. We acknowledge our responsibility to conserve biodiversity around our operations, particularly in the context of the declining estate of global biodiversity. Our approach to biodiversity conservation aligns with the ICMM guidelines for mining and biodiversity. We are committed to net positive biodiversity impact, or to compensation for negative impact, as appropriate.	Ensuring responsible stewardship of natural resources (pages 78 to 101) Additional information about biodiversity around our operations is available in the sustainability data tables on our website **www.arm.co.za**
16 PEACE, JUSTICE AND STRONG INSTITUTIONS	We respect human rights, providing access to information, supporting representative decision-making, working to avoid company-community conflict and carefully manage our security approaches to ensure they decrease rather than increase the likelihood of conflict. As contained in our code of conduct, ARM has a zero-tolerance approach to unethical and improper conduct, including bribery, corruption and money laundering. We commit to transparency across the scope of our activities that impact society, from transparency of mineral revenues and payments to transparency in commitments made to local communities.	Key stakeholder concerns and ARM's responses (pages 106 to 109) Report of the social and ethics committee (IAR) (pages 130 to 133) How we govern and manage sustainable value creation (pages 14 to 23) Ethics (pages 17 and 18) Human rights (page 19)
17 PARTNERSHIPS FOR THE GOALS	We believe in partnering on SDG-related challenges at the local, national and global levels and in collaborative approaches to sustainable development with all our stakeholders. These include public-private partnerships around healthcare, as described under SDG3.	Key stakeholder concerns and ARM's responses (pages 106 to 109) How we govern and manage sustainable value creation (pages 14 to 23) Occupational health and wellness (pages 60 to 65)

GRI content index

This sustainability report has been prepared and is presented in accordance with the GRI Standards "Core" application level and its Mining and Metals Sector Disclosures.

The GRI Content Index below provides references to where the GRI's General Disclosures, Management Approach Disclosures and topic-specific disclosures for the relevant material topics can be found in ARM's F2020 reporting suite. This includes the integrated annual report and corporate governance report (available on our website at **www.arm.co.za**).

Reporting principles for defining report content:

Stakeholder inclusiveness – The information we receive from engagements with our key stakeholders provides the context for the way we do business, influences our strategy and helps us to decide what information we report. Key engagements during the year are discussed on page 26 of this report and a table of ARM's key stakeholders, engagement channels, key concerns and how we address these is available on pages 106 to 109 of this report.

| **Sustainability context –** An overview of the sustainability context for the matters reported is included at the start of each section. | **Materiality –** Our material matters are shown on pages 34 and 35. These inform our strategy, governance structures, risk management, operational management and reporting. | **Completeness –** We believe that this report covers all matters material to ARM during F2020 in appropriate detail. |

GRI 102: GENERAL DISCLOSURES

Disclosure number	Disclosure title	Description	Reference
102-1	Name of the organisation	Name of the organisation	About this report (page 1)
102-2	Activities, brands, products and services	a. A description of the organisation's activities. b. Primary brands, products, and services, including an explanation of any products or services that are banned in certain markets.	Where we operate (pages 8 and 9) How we create value: Business model (pages 10 and 11) Value contribution (pages 12 and 13)
102-3	Location of headquarters	Location of the organisation's headquarters.	Contact details (Inside back cover)
102-4	Location of operations	Number of countries where the organisation operates, and the names of countries where it has significant operations and/or that are relevant to the topics covered in the report.	Where we operate (pages 8 and 9)
102-5	Ownership and legal form	Nature of ownership and legal form.	ARM is a public company listed on the JSE Limited (JSE) and is subject to the JSE Listings Requirements.
102-6	Markets served	Markets served, including: i. geographic locations where products and services are offered; ii. sectors served; iii. types of customers and beneficiaries.	Where we operate (pages 8 and 9) Value contribution (pages 12 and 13)

Disclosure number	Disclosure title	Description	Reference
102-7	Scale of the organisation	Scale of the organisation, including: i. total number of employees; ii. total number of operations; iii. net sales (for private sector organisations) or net revenues (for public sector organisations); iv. total capitalisation (for private sector organisations) broken down in terms of debt and equity; v. quantity of products or services provided.	Sustainability performance year-on-year (page 6) Where we operate (pages 8 and 9) Financial Review (IAR) (pages 26 to 39) Operational reviews (IAR) (pages 54 to 89)
102-8	Information on employees and other workers	a. Total number of employees by employment contract (permanent and temporary), by gender. b. Total number of employees by employment contract (permanent and temporary), by region. c. Total number of employees by employment type (full-time and part-time), by gender. d. Whether a significant portion of the organisation's activities are performed by workers who are not employees. If applicable, a description of the nature and scale of work performed by workers who are not employees. e. Any significant variations in the numbers reported in Disclosures 102-8-a, 102-8-b, and 102-8-c (such as seasonal variations in the tourism or agricultural industries). f. An explanation of how the data have been compiled, including any assumptions made.	Human resources management (pages 66 to 77) 19% of our workforce is female and women in mining represent 19% of the workforce. Most employees are full-time or contractors More information on ARM's workforce breakdown is available in the 2020 sustainability data tables on the ARM website **www.arm.co.za** There is no significant seasonal variation in employment numbers Workforce data is compiled through the operational HR processes and systems, and discloses the total workforce as at 30 June 2020. *Note that occupational health and safety statistics use average annual employees and contractor numbers as discussed on page 1.*
102-9	Supply chain	a. A description of the organisation's supply chain, including its main elements as they relate to the organisation's activities, primary brands, products, and services.	Value contribution (pages 12 and 13) Our value chain (pages 46 and 47)
102-10	Significant changes to the organisation and its supply chain	Significant changes to the organisation's size, structure, ownership, or supply chain, including: i. Changes in the location of, or changes in, operations, including facility openings, closings, and expansions; ii. Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organisations); iii. Changes in the location of suppliers, the structure of the supply chain, or relationships with suppliers, including selection and termination.	About this report (page 1) Where we operate (pages 8 and 9)

Disclosure number	Disclosure title	Description	Reference
102-11	Precautionary Principle or approach	Whether and how the organisation applies the Precautionary Principle or approach.	Occupational health and wellness (page 55) Ensuring responsible stewardship of natural resources (page 79)
102-12	External initiatives	A list of externally-developed economic, environmental and social charters, principles, or other initiatives to which the organisation subscribes, or which it endorses.	Context, framework and reporting (pages 2 and 3) ARM's reporting in terms of the ICMM Sustainable Development Framework (pages 110 and 111) ARM's reporting in terms of the UN Global Compact (page 112) The United Nations Sustainable Development Goals (SDGs) (pages 113 to 115)
102-13	Membership of associations	a. A list of the main memberships of industry or other associations, and national or international advocacy organisations.	Executive chairman's report (IAR) (page 21) Social and ethics committee chairman's review (page 30) Stakeholder engagement (pages 26 to 29) Our value chain (pages 46 and 47) Value contribution (pages 12 and 13) Context, framework and reporting (pages 2 and 3) Ensuring responsible stewardship of natural resources (pages 78 to 101)
102-14	Statement from senior decision-maker	a. A statement from the most senior decision-maker of the organisation (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organisation and its strategy for addressing sustainability.	Executive chairman's report (IAR) (pages 20 to 23) Social and ethics committee chairman's review (pages 30 to 33)
102-15	Key impacts, risks, and opportunities	a. A description of key impacts, risks, and opportunities.	Material matters (pages 34 and 35) How we govern and manage sustainable value creation (pages 14 to 23) Risk report of the corporate governance report available at **www.arm.co.za**
102-16	Values, principles, standards, and norms of behaviour	A description of the organisation's values, principles, standards, and norms of behaviour.	Strategy and values (page 7) Social and ethics committee chairman's review (pages 30 to 33) How we govern and manage sustainable value creation (pages 14 to 23)

Disclosure number	Disclosure title	Description	Reference
102-17	Mechanisms for advice and concerns about ethics	A description of internal and external mechanisms for: i. seeking advice about ethical and lawful behaviour, and organisational integrity; ii. reporting concerns about unethical or unlawful behaviour, and organisational integrity.	How we govern and manage sustainable value creation (pages 14 to 23)
102-18	Governance structure	a. Governance structure of the organisation, including committees of the highest governance body. b. Committees responsible for decision-making on economic, environmental, and social topics.	How we govern and manage sustainable value creation (pages 14 to 23) Summarised corporate governance report (IAR) (pages 96 to 133) Corporate governance report available at **www.arm.co.za**
102-19	Delegating authority	Process for delegating authority for economic, environmental, and social topics from the highest governance body to senior executives and other employees.	How we govern and manage sustainable value creation (pages 14 to 23) Summarised corporate governance report (IAR) (pages 96 to 133) Corporate governance report available at **www.arm.co.za**
102-20	Executive-level responsibility for economic, environmental, and social topics	a. Whether the organisation has appointed an executive-level position or positions with responsibility for economic, environmental, and social topics. b. Whether post holders report directly to the highest governance body.	How we govern and manage sustainable value creation (pages 14 to 23) Summarised corporate governance report (IAR) (pages 96 to 133) Corporate governance report available at **www.arm.co.za**
102-21	Consulting stakeholders on economic, environmental, and social topics	a. Processes for consultation between stakeholders and the highest governance body on economic, environmental, and social topics. b. If consultation is delegated, describe to whom it is delegated and how the resulting feedback is provided to the highest governance body.	Stakeholder engagement (pages 26 to 29) Key stakeholder concerns and ARM's responses (pages 106 to 109)

Disclosure number	Disclosure title	Description	Reference
102-22	Composition of the highest governance body and its committees	Composition of the highest governance body and its committees by: i. executive or non-executive; ii. independence; iii. tenure on the governance body; iv. number of each individual's other significant positions and commitments, and the nature of the commitments; v. gender; vi. membership of under-represented social groups; vii. competencies relating to economic, environmental, and social topics; viii. stakeholder representation.	Summarised corporate governance report (IAR) (pages 96 to 133) Corporate governance report available at **www.arm.co.za**
102-23	Chair of the highest governance body	a. Whether the chair of the highest governance body is also an executive officer in the organisation. b. If the chair is also an executive officer, describe his or her function within the organisation's management and the reasons for this arrangement.	Summarised corporate governance report (IAR) (pages 96 to 133) Corporate governance report available at **www.arm.co.za**

102-24	Nominating and selecting the highest governance body	a. Nomination and selection processes for the highest governance body and its committees.
		b. Criteria used for nominating and selecting highest governance body members, including whether and how:
		   i. stakeholders (including shareholders) are involved;
		   ii. diversity is considered;
		   iii. independence is considered;
		   iv. expertise and experience relating to economic, environmental, and social topics are considered.
			Summarised corporate governance report (IAR) (pages 96 to 133)
			
			Corporate governance report available at **www.arm.co.za**

102-25	Conflicts of interest	a. Processes for the highest governance body to ensure conflicts of interest are avoided and managed.
		b. Whether conflicts of interest are disclosed to stakeholders, including, as a minimum:
		   i. Cross-board membership;
		   ii. Cross-shareholding with suppliers and other stakeholders;
		   iii. Existence of controlling shareholder;
		   iv. Related party disclosures.
			Ethics (pages 17 and 18)
			
			Statement of commitment to good governance (IAR) (page 18)
			
			Corporate governance report available at **www.arm.co.za**

102-26	Role of highest governance body in setting purpose, values, and strategy	Highest governance body's and senior executives' roles in the development, approval, and updating of the organisation's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental, and social topics.	Summarised corporate governance report (IAR) (pages 96 to 133) Corporate governance report available at **www.arm.co.za**
102-27	Collective knowledge of highest governance body	Measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental, and social topics.	Summarised corporate governance report (IAR) (pages 96 to 133) Corporate governance report available at **www.arm.co.za**

Disclosure number	Disclosure title	Description	Reference
102-28	Evaluating the highest governance body's performance	a. Processes for evaluating the highest governance body's performance with respect to governance of economic, environmental, and social topics. b. Whether such evaluation is independent or not, and its frequency. c. Whether such evaluation is a self-assessment. d. Actions taken in response to evaluation of the highest governance body's performance with respect to governance of economic, environmental, and social topics, including, as a minimum, changes in membership and organisational practice.	Summarised corporate governance report (IAR) (pages 96 to 133) Corporate governance report available at **www.arm.co.za**
102-29	Identifying and managing economic, environmental, and social impacts	a. Highest governance body's role in identifying and managing economic, environmental, and social topics and their impacts, risks, and opportunities – including its role in the implementation of due diligence processes. b. Whether stakeholder consultation is used to support the highest governance body's identification and management of economic, environmental, and social topics and their impacts, risks, and opportunities.	How we govern and manage sustainable value creation (pages 14 to 23) Material matters (pages 34 to 35) Stakeholder engagement (pages 26 to 29) Risk report of the corporate governance report available at **www.arm.co.za**)
102-30	Effectiveness of risk management processes	Highest governance body's role in reviewing the effectiveness of the organisation's risk management processes for economic, environmental, and social topics.	How we govern and manage sustainable value creation (pages 14 to 23) Risk report of the corporate governance report available at **www.arm.co.za**)
102-31	Review of economic, environmental, and social topics	Frequency of the highest governance body's review of economic, environmental, and social topics and their impacts, risks, and opportunities.	How we govern and manage sustainable value creation (pages 14 to 23) Report of the social and ethics committee (IAR) (pages 130 to 133)
102-32	Highest governance body's role in sustainability reporting	The highest committee or position that formally reviews and approves the organisation's sustainability report and ensures that all material topics are covered.	The ARM board has overall responsibility. Responsibility for overseeing the reporting process is delegated to the ARM social and ethics committee How we govern and manage sustainable value creation (pages 14 to 23)
102-33	Communicating critical concerns	Process for communicating critical concerns to the highest governance body.	How we govern and manage sustainable value creation (page 19) Communities (page 37) Summarised corporate governance report (IAR) (page 131) Corporate governance report available at **www.arm.co.za**

Disclosure number	Disclosure title	Description	Reference

102-35	Remuneration policies	a. Remuneration policies for the highest governance body and senior executives for the following types of remuneration:
		
		  i. Fixed pay and variable pay, including performance-based pay, equity-based pay, bonuses, and deferred or vested shares;
		
		  ii. Sign-on bonuses or recruitment incentive payments;
		
		  iii. Termination payments;
		
		  iv. Clawbacks;
		
		  v. Retirement benefits, including the difference between benefit schemes and contribution rates for the highest governance body, senior executives, and all other employees.
		
		b. How performance criteria in the remuneration policies relate to the highest governance body's and senior executives' objectives for economic, environmental, and social topics.
			How we govern and manage sustainable value creation (pages 14 to 23)
			
			Summarised remuneration report (IAR) (pages 109 to 129)
			
			The full remuneration report is available in the corporate governance report at **www.arm.co.za**

102-36	Process for determining remuneration	a. Process for determining remuneration. b. Whether remuneration consultants are involved in determining remuneration and whether they are independent of management. c. Any other relationships that the remuneration consultants have with the organisation.	Summarised remuneration report (IAR) (pages 109 to 129) The full remuneration report is available in the corporate governance report at **www.arm.co.za**
102-37	Stakeholders' involvement in remuneration	a. How stakeholders' views are sought and taken into account regarding remuneration. b. If applicable, the results of votes on remuneration policies and proposals.	Summarised remuneration report (IAR) (pages 109 to 129) The full remuneration report is available in the corporate governance report at **www.arm.co.za**
102-40	List of stakeholder groups	a. A list of stakeholder groups engaged by the organisation.	Key stakeholder concerns and ARM's response (pages 106 to 109) Stakeholder engagement (pages 26 to 29)
102-41	Collective bargaining agreements	a. Percentage of total employees covered by collective bargaining agreements.	Labour relations (page 76)
102-42	Identifying and selecting stakeholders	a. The basis for identifying and selecting stakeholders with whom to engage.	Stakeholder engagement (pages 26 to 29)
102-43	Approach to stakeholder engagement	a. The organisation's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.	Stakeholder engagement (pages 26 to 29) There was no stakeholder engagement undertaken specifically as part of the report preparation process

Disclosure number	Disclosure title	Description	Reference

102-44	Key topics and concerns raised	a. Key topics and concerns that have been raised through stakeholder engagement, including:
		
		  i. how the organisation has responded to those key topics and concerns, including through its reporting;
		
		  ii. the stakeholder groups that raised each of the key topics and concerns.
			Stakeholder engagement (pages 26 to 29)
			
			Key stakeholder concerns and ARM's response (pages 106 to 109)

102-45	Entities included in the consolidated financial statements	a. A list of all entities included in the organisation's consolidated financial statements or equivalent documents. b. Whether any entity included in the organisation's consolidated financial statements or equivalent documents is not covered by the report.	About this report (page 1) All ARM's operations are Joint Ventures (JVs), both incorporated and unincorporated, with the exception of Machadodorp Works, which is wholly owned. This report covers those JVs over which we have direct or joint management control, as well as Machadodorp Works. All sustainability data is reported on a 100% basis, except for carbon emissions and where stated otherwise.
102-46	Defining report content and topic Boundaries	a. An explanation of the process for defining the report content and the topic Boundaries. b. An explanation of how the organisation has implemented the Reporting Principles for defining report content.	About this report (page 1) Introduction to this table (page 116) Material matters (pages 34 and 35) How we govern and manage sustainable value creation (pages 14 to 23)
102-47	List of material topics	a. A list of the material topics identified in the process for defining report content.	Material matters (pages 34 and 35)
102-48	Restatements of information	a. The effect of any restatements of information given in previous reports, and the reasons for such restatements.	There were no restatements of information given in previous reports.
102-49	Changes in reporting	a. Significant changes from previous reporting periods in the list of material topics and topic Boundaries.	About this report (page 1) Material matters (page 34)
102-50	Reporting period	a. Reporting period for the information provided.	About this report (page 1)
102-51	Date of most recent report	a. If applicable, the date of the most recent previous report.	The previous report was released in October 2019 and covered the 12-month period ending 30 June 2019.
102-52	Reporting cycle	a. Reporting cycle.	Annual
102-53	Contact point for questions regarding the report	a. The contact point for questions regarding the report or its contents.	Contact details (Inside back cover)
102-54	Claims of reporting in accordance with the GRI Standards	a. The claim made by the organisation, if it has prepared a report in accordance with the GRI Standards.	About this report (page 1) Introduction to this table (page 116)

Disclosure number	Disclosure title	Description	Reference

102-55	GRI content index	a. The GRI content index, which specifies each of the GRI Standards used and lists all disclosures included in the report.
		
		b. For each disclosure, the content index shall include:
		
		  i. the number of the disclosure (for disclosures covered by the GRI Standards);
		
		  ii. the page number(s) or URL(s) where the information can be found, either within the report or in other published materials;
		
		  iii. if applicable, and where permitted, the reason(s) for omission when a required disclosure cannot be made.
			This table (pages 116 to 143)

102-56	External assurance	a. A description of the organisation's policy and current practice with regard to seeking external assurance for the report.
		
		b. If the report has been externally assured:
		
		  i. A reference to the external assurance report, statements, or opinions. If not included in the assurance report accompanying the sustainability report, a description of what has and what has not been assured and on what basis, including the assurance standards used, the level of assurance obtained, and any limitations of the assurance process;
		
		  ii. The relationship between the organisation and the assurance provider;
		
		  iii. Whether and how the highest governance body or senior executives are involved in seeking external assurance for the organisation's sustainability report.
			About this report (page 1)
			
			Independent assurance statement (pages 102 to 105)

GRI 200: ECONOMIC

Disclosure number	Disclosure title	Description	Reference
201	**Economic performance** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	About this report (page 1) Summarised corporate governance report (IAR) (pages 96 to 133) Financial review (IAR) (pages 26 to 39)

Disclosure number	Disclosure title	Description	Reference
201-1	Direct economic value generated and distributed	a. Direct economic value generated and distributed (EVG&D) on an accruals basis, including the basic components for the organisation's global operations as listed below. If data are presented on a cash basis, report the justification for this decision in addition to reporting the following basic components: i. Direct economic value generated: revenues; ii. Economic value distributed: operating costs, employee wages and benefits, payments to providers of capital, payments to government by country, and community investments; iii. Economic value retained: 'direct economic value generated' less 'economic value distributed'. b. Where significant, report EVG&D separately at country, regional, or market levels, and the criteria used for defining significance.	Value contribution (pages 12 and 13)
201-2	Financial implications and other risks and opportunities due to climate change	a. Risks and opportunities posed by climate change that have the potential to generate substantive changes in operations, revenue, or expenditure, including: i. a description of the risk or opportunity and its classification as either physical, regulatory, or other; ii. a description of the impact associated with the risk or opportunity; iii. the financial implications of the risk or opportunity before action is taken; iv. the methods used to manage the risk or opportunity; v. the costs of actions taken to manage the risk or opportunity.	Ensuring responsible stewardship of natural resources (page 88) Value contribution (pages 12 and 13) Additional carbon emission reporting is available in the supplementary report on climate change and water on our website **www.arm.co.za**
201-4	Financial assistance received from government	a. Total monetary value of financial assistance received by the organisation from any government during the reporting period, including: i. tax relief and tax credits; ii. subsidies; iii. investment grants, research and development grants, and other relevant types of grant; iv. awards; v. royalty holidays; vi. financial assistance from Export Credit Agencies (ECAs); vii. financial incentives; viii. other financial benefits received or receivable from any government for any operation. b. The information in 201-4-a by country. c. Whether, and the extent to which, any government is present in the shareholding structure.	ARM did not receive financial assistance from government during F2020 in any of its countries of operation.

Disclosure number	Disclosure title	Description	Reference
201-4	Financial assistance received from government *continued*	**MMSD:** Report countries of operation that are either candidate to or compliant with the Extractive Industries Transparency Initiative (EITI).	South Africa and Malaysia are not candidate to or compliant with the EITI.
		MMSD: Land use payments	Modikwa Mine has one lease agreement with local communities on which it makes annual payments. Two Rivers Mine has two lease agreements with local communities on which it makes monthly payments.
202	**Market presence** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Value contribution (pages 12 and 13) Human resources management (pages 66 to 77)
202-2	Proportion of senior management hired from the local community	a. Percentage of senior management at significant locations of operation that are hired from the local community. b. The definition used for 'senior management'. c. The organisation's geographical definition of 'local'. d. The definition used for 'significant locations of operation'.	63% of full-time employees in the senior management category are from communities local to the operations. MMSD: 73% of Group employees are from local communities.
203	**Indirect economic impacts** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Communities (pages 37 to 42)
203-1	Infrastructure investments and services supported	a. Extent of development of significant infrastructure investments and services supported. b. Current or expected impacts on communities and local economies, including positive and negative impacts where relevant. c. Whether these investments and services are commercial, in-kind, or pro bono engagements.	Communities (pages 37 to 42) Corporate Social Responsibility initiatives are delivered through Corporate Social Investment projects and Local Economic Development projects. ARM tracks the capital invested, the number of jobs created through the projects and a range of other relevant indicators as discussed on page 37.
205	**Anti-corruption** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Context, framework and reporting (pages 2 and 3) How we govern and manage sustainable value creation (pages 17 and 18)) Statement of commitment to good corporate governance (IAR) (pages 18 and 19)

Disclosure number	Disclosure title	Description	Reference
205-1	Operations assessed for risks related to corruption	a. Total number and percentage of operations assessed for risks related to corruption. b. Significant risks related to corruption identified through the risk assessment.	Analysing for risk of corruption is inherent to the risk management process which is applied to all our operations and at a corporate level. An anti-fraud, anti-bribery and anti-corruption self-assessment was conducted at all our operations. The implementation of identified improvement initiatives is monitored by the risk management department.
205-2	Communication and training about anti-corruption policies and procedures	a. Total number and percentage of governance body members that the organisation's anti-corruption policies and procedures have been communicated to, broken down by region. b. Total number and percentage of employees that the organisation's anti-corruption policies and procedures have been communicated to, broken down by employee category and region. c. Total number and percentage of business partners that the organisation's anti-corruption policies and procedures have been communicated to, broken down by type of business partner and region. Describe if the organisation's anti-corruption policies and procedures have been communicated to any other persons or organisations. d. Total number and percentage of governance body members that have received training on anti-corruption, broken down by region. e. Total number and percentage of employees that have received training on anti-corruption, broken down by employee category and region.	The code of conduct is available to employees on the intranet and on the company website. All new employees receive training in the code and online annual refresher training is provided to all employees. The code was most recently amended with effect August 2020.
205-3	Confirmed incidents of corruption and actions taken	a. Total number and nature of confirmed incidents of corruption. b. Total number of confirmed incidents in which employees were dismissed or disciplined for corruption. c. Total number of confirmed incidents when contracts with business partners were terminated or not renewed due to violations related to corruption. d. Public legal cases regarding corruption brought against the organisation or its employees during the reporting period and the outcomes of such cases.	There were no confirmed incidents of corruption reported in F2020.

GRI 300: ENVIRONMENTAL

Disclosure number	Disclosure title	Description	Reference
302	**Energy** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Ensuring responsible stewardship of natural resources (pages 93 and 94)

302-1	Energy consumption within the organisation	a. Total fuel consumption within the organisation from non-renewable sources, in joules or multiples, and including fuel types used.
		b. Total fuel consumption within the organisation from renewable sources, in joules or multiples, and including fuel types used.
		c. In joules, watt-hours or multiples, the total:
		   i. electricity consumption
		   ii. heating consumption
		   iii. cooling consumption
		   iv. steam consumption
		d. In joules, watt-hours or multiples, the total:
		   i. electricity sold
		   ii. heating sold
		   iii. cooling sold
		   iv. steam sold
		e. Total energy consumption within the organisation, in joules or multiples.
		f. Standards, methodologies, assumptions, and/or calculation tools used.
		g. Source of the conversion factors used.
			Fuels consumed in our operations include diesel, petrol, aviation fuel, paraffin, acetylene, natural gas and LPG.
			
			Diesel is the most used fuel and accounts for 58% of the Scope 1 carbon emissions.
			
			Diesel use in F2020 totalled 83 million litres, which equates to 3.0 million gigajoules (F2019: 3.5 million GJ).
			
			Khumani Mine has a solar PV plant that harvested approximately 177 520 kWh during F2020.
			
			ARM's corporate offices have a 52 kWp solar PV solution that generates ± 7 400 kWh per month.
			
			Total electricity consumption in F2020 of 1.6 million megawatt hours equates to 5.6 million gigajoules (F2019: 6.0 million GJ).
			
			No electricity or other forms of energy were sold during F2020.
			
			Total energy consumed (including electricity and diesel) in F2020 was 8.6 million gigajoules (F2019: 9.5 million GJ).
			
			Fuel and electricity consumption is collected directly from supplier notes and by monitoring electricity meters and metering on fuel tanks. Diesel is converted to GJ using the conversion factor supplied in the GRI G3.1 indicator protocol set.

Disclosure number	Disclosure title	Description	Reference
302-3	Energy intensity	a. Energy intensity ratio for the organisation. b. organisation-specific metric (the denominator) chosen to calculate the ratio. c. Types of energy included in the intensity ratio; whether fuel, electricity, heating, cooling, steam, or all. d. Whether the ratio uses energy consumption within the organisation, outside of it, or both.	Gigajoules of energy used per full-time employee decreased to 794 GJ/FTE in F2020 (F2019: 837). This calculation includes diesel and electricity consumed within the organisation.
303	**Water** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Ensuring responsible stewardship of natural resources (pages 82 to 88) The supplementary report on climate change and water is available on our website **www.arm.co.za**

303-1	Water withdrawal by source	a. Total volume of water withdrawn, with a breakdown by the following sources:
		  i. Surface water, including water from wetlands, rivers, lakes, and oceans;
		  ii. Ground water;
		  iii. Rainwater collected directly and stored by the organisation;
		  iv. Waste water from another organisation;
		  v. Municipal water supplies or other public or private water utilities.
		b. Standards, methodologies, and assumptions used.
			Ensuring responsible stewardship of natural resources (pages 82 to 88)
			Water withdrawal is measured directly in litres through flow meters installed in the water system.
			The supplementary report on climate change and water is available on our website **www.arm.co.za**

304	**Biodiversity** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Ensuring responsible stewardship of natural resources (pages 94 and 95)

304-2	Significant impacts of activities, products, and services on biodiversity	a. Nature of significant direct and indirect impacts on biodiversity with reference to one or more of the following:
		  i. Construction or use of manufacturing plants, mines, and transport infrastructure;
		  ii. Pollution (introduction of substances that do not naturally occur in the habitat from point and non-point sources);
		  iii. Introduction of invasive species, pests, and pathogens;
		  iv. Reduction of species;
		  v. Habitat conversion;
		  vi. Changes in ecological processes outside the natural range of variation (such as salinity or changes in groundwater level).
		b. Significant direct and indirect positive and negative impacts with reference to the following:
		  i. Species affected;
		  ii. Extent of areas impacted;
		  iii. Duration of impacts;
		  iv. Reversibility or irreversibility of the impacts.
			Ensuring responsible stewardship of natural resources (pages 94 and 95)
			Online biodiversity table available on the ARM website **www.arm.co.za**

Disclosure number	Disclosure title	Description	Reference

304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	a. Total number of IUCN Red List species and national conservation list species with habitats in areas affected by the operations of the organisation, by level of extinction risk:
		  i. Critically endangered
		  ii. Endangered
		  iii. Vulnerable
		  iv. Near threatened
		  v. Least concern
			Ensuring responsible stewardship of natural resources (pages 94 and 95)
			Online biodiversity table available on the ARM website **www.arm.co.za**

		MMSD: Include impacts identified as a consequence of any resettlement and closure activities reported under indicators MM9 and MM10 respectively.	There were no resettlements in F2020. Online biodiversity table available on the ARM website **www.arm.co.za**
305	**Emissions** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Ensuring responsible stewardship of natural resources (pages 89 to 93) Supplementary report on climate change and water available on our website **www.arm.co.za**

305-1	Direct (Scope 1) GHG emissions	a. Gross direct (Scope 1) GHG emissions in metric tons of CO_2 equivalent.
		b. Gases included in the calculation; whether CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3, or all.
		c. Biogenic CO_2 emissions in metric tons of CO_2 equivalent.
		d. Base year for the calculation, if applicable, including:
		  i. the rationale for choosing it;
		  ii. emissions in the base year;
		  iii. the context for any significant changes in emissions that triggered recalculations of base year emissions.
		e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source.
		f. Consolidation approach for emissions; whether equity share, financial control, or operational control.
		g. Standards, methodologies, assumptions, and/or calculation tools used.
			Ensuring responsible stewardship of natural resources (pages 89 to 93)
			Additional information regarding ARM's GHG emissions is available in the supplementary report on climate change and water available on our website **www.arm.co.za**

Disclosure number	Disclosure title	Description	Reference

305-2	Energy indirect (Scope 2) GHG emissions	a. Gross location-based energy indirect (Scope 2) GHG emissions in metric tons of CO_2 equivalent.
		b. If applicable, gross market-based energy indirect (Scope 2) GHG emissions in metric tons of CO_2 equivalent.
		c. If available, the gases included in the calculation; whether CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3, or all.
		d. Base year for the calculation, if applicable, including:
		   i. the rationale for choosing it;
		   ii. emissions in the base year;
		   iii. the context for any significant changes in emissions that triggered recalculations of base year emissions.
		e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source.
		f. Consolidation approach for emissions; whether equity share, financial control, or operational control.
		g. Standards, methodologies, assumptions, and/or calculation tools used.
			Ensuring responsible stewardship of natural resources (pages 89 to 93)
			Additional information regarding ARM's GHG emissions is available in the supplementary report on climate change and water available on our website **www.arm.co.za**

305-3	Other indirect (Scope 3) GHG emissions	a. Gross other indirect (Scope 3) GHG emissions in metric tons of CO_2 equivalent.
		b. If available, the gases included in the calculation; whether CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3, or all.
		c. Biogenic CO_2 emissions in metric tons of CO_2 equivalent.
		d. Other indirect (Scope 3) GHG emissions categories and activities included in the calculation.
		e. Base year for the calculation, if applicable, including:
		   i. the rationale for choosing it;
		   ii. emissions in the base year;
		   iii. the context for any significant changes in emissions that triggered recalculations of base year emissions.
		f. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source.
		g. Standards, methodologies, assumptions, and/or calculation tools used.
			Ensuring responsible stewardship of natural resources (pages 89 to 93)
			Additional information regarding ARM's GHG emissions is available in the supplementary report on climate change and water available on our website **www.arm.co.za**

305-4	GHG emissions intensity	a. GHG emissions intensity ratio for the organisation. b. organisation-specific metric (the denominator) chosen to calculate the ratio. c. Types of GHG emissions included in the intensity ratio; whether direct (Scope 1), energy indirect (Scope 2), and/or other indirect (Scope 3). d. Gases included in the calculation; whether CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3, or all.	Ensuring responsible stewardship of natural resources (pages 89 to 93)

Disclosure number	Disclosure title	Description	Reference
305-6	Emissions of ozone-depleting substances (ODS)	a. Production, imports, and exports of ODS in metric tons of CFC-11 (trichlorofluoromethane) equivalent. b. Substances included in the calculation. c. Source of the emission factors used. d. Standards, methodologies, assumptions, and/or calculation tools used.	We do not have ozone-depleting substances at our operations, no Persistent Organic Pollutants (POPs) and no volatile organics.

305-7	Nitrogen oxides (NOx), sulphur oxides (SOx), and other significant air emissions	a. Significant air emissions in kilograms or multiples, for each of the following:
		  i. NOx
		  ii. SOx
		  iii. Persistent organic pollutants (POP)
		  iv. Volatile organic compounds (VOC)
		  v. Hazardous air pollutants (HAP)
		  vi. Particulate matter (PM)
		  vii. Other standard categories of air emissions identified in relevant regulations
		
		b. Source of the emission factors used.
		
		c. Standards, methodologies, assumptions, and/or calculation tools used.
			Sustainability performance year-on-year (page 6)
			
			We do not have ozone-depleting substances at our operations, no Persistent Organic Pollutants (POPs) and no volatile organics.

		MMSD: Include emissions from both major mobile sources and on-site stationary sources.	Scope 1 emissions include emissions resulting from both trackless mobile machinery used for production and loading and hauling activities on site; as well as emissions from stationary combustion of fuel by power generators used in the event of power failure. Cato Ridge Works is a stationary source of emissions through combustion of reductants for smelting processes Sustainability performance year-on-year (page 6) Ensuring responsible stewardship of natural resources (pages 89 to 93) Additional information regarding ARM's GHG emissions is available in the supplementary report on climate change and water available on our website **www.arm.co.za**

Disclosure number	Disclosure title	Description	Reference
306	**Effluents and waste** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Ensuring responsible stewardship of natural resources (pages 95 to 97)

306-1	Water discharge by quality and destination	The reporting organisation shall report the following information:
		a. Total volume of planned and unplanned water discharges by:
		  i. destination;
		  ii. quality of the water, including treatment method;
		  iii. whether the water was reused by another organisation.
		b. Standards, methodologies, and assumptions used.
			Ensuring responsible stewardship of natural resources (page 97)
			Additional information regarding ARM's water management during F2020 is available in the supplementary report on climate change and water available on our website **www.arm.co.za**

306-2	Waste by type and disposal method	a. Total weight of hazardous waste, with a breakdown by the following disposal methods where applicable:
		  i. Reuse
		  ii. Recycling
		  iii. Composting
		  iv. Recovery, including energy recovery
		  v. Incineration (mass burn)
		  vi. Deep well injection
		  vii. Landfill
		  viii. On-site storage
		  ix. Other (to be specified by the organisation)
		b. Total weight of non-hazardous waste, with a breakdown by the following disposal methods where applicable:
		  i. Reuse
		  ii. Recycling
		  iii. Composting
		  iv. Recovery, including energy recovery
		  v. Incineration (mass burn)
		  vi. Deep well injection
		  vii. Landfill
		  viii. On-site storage
		  ix. Other (to be specified by the organisation)
		c. How the waste disposal method has been determined:
		  i. Disposed of directly by the organisation, or otherwise directly confirmed
		  ii. Information provided by the waste disposal contractor
		  iii. organisational defaults of the waste disposal contractor
			Ensuring responsible stewardship of natural resources (pages 95 to 97)

Disclosure number	Disclosure title	Description	Reference

306-3	Significant spills	a. Total number and total volume of recorded significant spills.
		b. The following additional information for each spill that was reported in the organisation's financial statements:
		  i. Location of spill;
		  ii. Volume of spill;
		  iii. Material of spill, categorised by: oil spills (soil or water surfaces), fuel spills (soil or water surfaces), spills of wastes (soil or water surfaces), spills of chemicals (mostly soil or water surfaces), and other (to be specified by the organisation).
		c. Impacts of significant spills.
			Ensuring responsible stewardship of natural resources (page 97)
			Additional information regarding ARM's water management during F2020 is available in the supplementary report on change and water available on our website **www.arm.co.za**

		MMSD: Include spillage of tailings, slimes or other significant process materials.	There were no significant spills of tailings, slimes or other significant process materials Ensuring responsible stewardship of natural resources (page 97)

306-4	Transport of hazardous waste	a. Total weight for each of the following:
		  i. Hazardous waste transported
		  ii. Hazardous waste imported
		  iii. Hazardous waste exported
		  iv. Hazardous waste treated
		b. Percentage of hazardous waste shipped internationally.
		c. Standards, methodologies, and assumptions used.
			ARM does not transport, import or export any waste categorised as hazardous under the terms of the Basel Convention.

307	**Environmental compliance** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	How we govern and manage sustainable value creation (pages 14 to 23) Ensuring responsible stewardship of natural resources (pages 78 to 81)

307-1	Non-compliance with environmental laws and regulations	a. Significant fines and non-monetary sanctions for non-compliance with environmental laws and/or regulations in terms of:
		  i. total monetary value of significant fines;
		  ii. total number of non-monetary sanctions;
		  iii. cases brought through dispute resolution mechanisms.
		b. If the organisation has not identified any non-compliance with environmental laws and/or regulations, a brief statement of this fact is sufficient.
			Legal compliance in the corporate governance report available at **www.arm.co.za**
			There were no fines for non-compliance with environmental laws in F2020.

GRI 400: SOCIAL

Disclosure number	Disclosure title	Description	Reference
401	**Employment** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Human resources management (pages 66 to 77)
401-1	New employee hires and employee turnover	a. Total number and rate of new employee hires during the reporting period, by age group, gender and region. b. Total number and rate of employee turnover during the reporting period, by age group, gender and region.	Human resources management (page 69) Sustainability performance year-on-year (page 6) More information on new employee hires and turnover is available in the sustainability data tables available on the ARM website **www.arm.co.za**
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	a. Benefits which are standard for full-time employees of the organisation but are not provided to temporary or part-time employees, by significant locations of operation. These include, as a minimum: 　i. life insurance; 　ii. health care; 　iii. disability and invalidity coverage; 　iv. parental leave; 　v. retirement provision; 　vi. stock ownership; 　vii. others. b. The definition used for 'significant locations of operation'.	Benefits we offer to full-time employees include standard benefits such as pension fund, medical aid and group life insurance. In addition, the company offers study assistance and bursaries for employees and their children. The company sponsors year-end events, team building interventions, community sports and fun days and wellness days. Employees also have access to comprehensive employee assistance programmes.

Disclosure number	Disclosure title	Description	Reference
401-3	Parental leave	The reporting organisation shall report the following information: a. Total number of employees that were entitled to parental leave, by gender. b. Total number of employees that took parental leave, by gender. c. Total number of employees that returned to work in the reporting period after parental leave ended, by gender. d. Total number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work, by gender. e. Return to work and retention rates of employees that took parental leave, by gender.	All female full time employees are entitled to four months of maternity leave and, from January 2020, all full time employees are entitled to 10 days parental leave on the birth of a child in terms of the amended Basic Conditions of Employment Act. From 1 January 2020, all full time employees (10 258 male and 2 420 female) were entitled to parental leave. 182 female employees took maternity leave during the year, 60 (33%) of these had returned to work in the reporting period after maternity leave ended and 34 (39%) who returned from maternity leave in F2019 were still employed at year end. 343 male employees took parental leave and 196 (57%) returned to work during the reporting period.
402	**Labour/management relations** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Labour relations (page 76)
402-1	Minimum notice periods regarding operational changes	a. Minimum number of weeks' notice typically provided to employees and their representatives prior to the implementation of significant operational changes that could substantially affect them. b. For organisations with collective bargaining agreements, report whether the notice period and provisions for consultation and negotiation are specified in collective agreements.	The minimum notice period regarding operational changes is specified in collective agreements, and varies between one month and three months, on average.
403	**Occupational health and safety** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Safety (pages 49 to 54) Occupational health and wellness (pages 55 to 65)
403-1	Workers representation in formal joint management-worker health and safety committees	a. The level at which each formal joint management-worker health and safety committee typically operates within the organisation. b. Percentage of workers whose work, or workplace, is controlled by the organisation, that are represented by formal joint management-worker health and safety committees.	Occupational health and wellness (pages 55 to 65) Health and safety agreements are concluded at every operation and are agreements between employees (including organised labour) and the employer.

Disclosure number	Disclosure title	Description	Reference
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	a. Types of injury, injury rate (IR), occupational disease rate (ODR), lost day rate (LDR), absentee rate (AR), and work-related fatalities, for all employees, with a breakdown by: 　i.　region; 　ii.　gender. b. Types of injury, injury rate (IR), and work-related fatalities, for all workers (excluding employees) whose work, or workplace, is controlled by the organisation, with a breakdown by: 　i.　region; 　ii.　gender. c. The system of rules applied in recording and reporting accident statistics.	Safety (pages 49 to 54) Occupational health and wellness (pages 55 to 64) ARM tracks fatalities, Lost Time Injuries, Reportable Injuries and various occupational and other disease rates that are material to our operations. These are not disclosed by gender. More information on absenteeism, injuries and lost days is available in the Sustainability Data Tables available on the ARM website **www.arm.co.za**
		MMSD: Provide a description of each accident resulting in a fatality and actions taken following the accident.	Executive chairman's report (IAR) (pages 20 to 23) Social and ethics committee chairman's review (page 31) Safety (page 51)
403-3	Workers with high incidence or high risk of diseases related to their occupation	a. Whether there are workers whose work, or workplace, is controlled by the organisation, involved in occupational activities who have a high incidence or high risk of specific diseases.	Occupational health and wellness (pages 55 to 65)
403-4	Health and safety topics covered in formal agreements with trade unions	a. Whether formal agreements (either local or global) with trade unions cover health and safety. b. If so, the extent, as a percentage, to which various health and safety topics are covered by these agreements.	Operational management consults regularly with trade unions on a range of issues, including wages, conditions of employment, health and safety, training and development, community care and PTB, HIV & Aids. Representation is recorded in minutes of these meetings and records kept at the operations. Percentage representation is not centrally recorded.
404	**Training and education** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Human resources management (pages 66 to 77)

Disclosure number	Disclosure title	Description	Reference
404-1	Average hours of training per year per employee	a. Average hours of training that the organisation's employees have undertaken during the reporting period, by: i. gender; ii. employee category.	We measure the effectiveness and investment in learning, retraining and development activities by monitoring measures such as training spend as a percentage of total payroll, rather than hours of training. Our training is linked to the MQA for national recognition of learning, which prescribes the minimum hours required per specific training intervention. Average training hours per employee were 4.5 in F2020. More information on training hours is available in the Sustainability Data Tables available on the ARM website **www.arm.co.za**
404-2	Programs for upgrading employee skills and transition assistance programs	a. Type and scope of programs implemented and assistance provided to upgrade employee skills. b. Transition assistance programs provided to facilitate continued employability and the management of career endings resulting from retirement or termination of employment.	Human resources management (pages 66 to 77)
404-3	Percentage of employees receiving regular performance and career development reviews	a. Percentage of total employees by gender and by employee category who received a regular performance and career development review during the reporting period.	All full-time employees receive various levels of regular performance and career development reviews as part of the ARM remuneration and incentive system.
405	**Diversity and equal opportunity** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Human resources management (pages 66 to 77) Transformation (pages 43 to 45) Social and ethics committee chairman's review (pages 30 to 33)

Disclosure number	Disclosure title	Description	Reference

405-1	Diversity of governance bodies and employees	a. Percentage of individuals within the organisation's governance bodies in each of the following diversity categories:
		  i. Gender;
		  ii. Age group: under 30 years old, 30-50 years old, over 50 years old;
		  iii. Other indicators of diversity where relevant (such as minority or vulnerable groups).
		b. Percentage of employees per employee category in each of the following diversity categories:
		  i. Gender;
		  ii. Age group: under 30 years old, 30-50 years old, over 50 years old;
		  iii. Other indicators of diversity where relevant (such as minority or vulnerable groups).
			Human resources management (pages 73 to 76)
			Transformation (pages 43 to 45)
			Social and ethics committee chairman's review (pages 30 to 33)
			More information on the workforce breakdown is available in the sustainability data tables available on the ARM website **www.arm.co.za**

406	**Non-discrimination** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Human resources management (pages 66 to 77) Transformation (pages 43 to 45) Human rights (page 19)

406-1	Incidents of discrimination and corrective actions taken	a. Total number of incidents of discrimination during the reporting period.
		b. Status of the incidents and actions taken with reference to the following:
		  i. Incident reviewed by the organisation;
		  ii. Remediation plans being implemented;
		  iii. Remediation plans that have been implemented, with results reviewed through routine internal management review processes;
		  iv. Incident no longer subject to action.
			Ethics (pages 17 and 18)
			No material non-compliance incidents relating to discrimination were reported during F2020

407	**Freedom of association and collective bargaining** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Human resources management (page 76) Human rights (page 19)

407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	a. Operations and suppliers in which workers' rights to exercise freedom of association or collective bargaining may be violated or at significant risk either in terms of:
		  i. type of operation (such as manufacturing plant) and supplier;
		  ii. countries or geographic areas with operations and suppliers considered at risk.
		b. Measures taken by the organisation in the reporting period intended to support rights to exercise freedom of association and collective bargaining.
			No operations or suppliers have been identified in which employee rights to exercise freedom of association or collective bargaining may be violated or at significant risk. We respect our employees' rights to collective bargaining.

Disclosure number	Disclosure title	Description	Reference
408	**Child labour** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Human rights (page 19)
408-1	Operations and suppliers at significant risk for incidents of child labour	a. Operations and suppliers considered to have significant risk for incidents of: i. child labour; ii. young workers exposed to hazardous work. b. Operations and suppliers considered to have significant risk for incidents of child labour either in terms of: i. type of operation (such as manufacturing plant) and supplier; ii. countries or geographic areas with operations and suppliers considered at risk. c. Measures taken by the organisation in the reporting period intended to contribute to the effective abolition of child labour.	We do not use child labour and all operations monitor the ages of employees and contractors. We conduct risk assessments/screening in terms of human rights practices in respect of prospective transactions, contracting parties and business partners and have not detected such significant risk.
409	**Forced or compulsory labour** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Human rights (page 19)
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labour	a. Operations and suppliers considered to have significant risk for incidents of forced or compulsory labour either in terms of: i. type of operation (such as manufacturing plant) and supplier; ii. countries or geographic areas with operations and suppliers considered at risk. b. Measures taken by the organisation in the reporting period intended to contribute to the elimination of all forms of forced or compulsory labour.	ARM's operations do not pose such risk. Our policies are compatible with international human rights standards and with the South African Constitution. Through the implementation of our supplier engagement plan we review the practices of suppliers and contractors and have not detected significant risk.
410-1	Security personnel trained in human rights policies or procedures	a. Percentage of security personnel who have received formal training in the organisation's human rights policies or specific procedures and their application to security. b. Whether training requirements also apply to third-party organisations providing security personnel.	Human rights training is provided to all security personnel, including contractors, and includes regular refresher training.
411	**Rights of indigenous peoples** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Human rights (page 19)

Disclosure number	Disclosure title	Description	Reference

411-1	Incidents of violations involving rights of indigenous peoples	a. Total number of identified incidents of violations involving the rights of indigenous peoples during the reporting period.
		b. Status of the incidents and actions taken with reference to the following:
		  i. Incident reviewed by the organisation;
		  ii. Remediation plans being implemented;
		  iii. Remediation plans that have been implemented, with results reviewed through routine internal management review processes;
		  iv. Incident no longer subject to action.
			Ethics (pages 17 and 18)
			There were no recorded incidents of human rights violations of indigenous peoples. ARM believes that its operations do not pose such risk, but should any such violations occur, there are mechanisms in place for their detection, reporting and resolution.

413	**Local communities** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Communities (pages 37 to 42)

413-1	Operations with local community engagement, impact assessments, and development programs	a. Percentage of operations with implemented local community engagement, impact assessments, and/or development programs, including the use of:
		  i. social impact assessments, including gender impact assessments, based on participatory processes;
		  ii. environmental impact assessments and ongoing monitoring;
		  iii. public disclosure of results of environmental and social impact assessments;
		  iv. local community development programs based on local communities' needs;
		  v. stakeholder engagement plans based on stakeholder mapping;
		  vi. broad based local community consultation committees and processes that include vulnerable groups;
		  vii. works councils, occupational health and safety committees and other worker representation bodies to deal with impacts;
		  viii. formal local community grievance processes.
			Communities (pages 37 to 42)

413-2	Operations with significant actual and potential negative impacts on local communities	a. Operations with significant actual and potential negative impacts on local communities , including:
		  i. the location of the operations;
		  ii. the significant actual and potential negative impacts of operations.
			ARM's operations comply with environmental and social legal requirements and thereby manage and minimise as far as practically possible significant actual or potential negative impacts on local communities.

419	**Socio-economic compliance** Management approach disclosures	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Report of the social and ethics committee (IAR) (pages 130 to 133) Ensuring responsible stewardship of natural resources (page 81)

Disclosure number	Disclosure title	Description	Reference
419-1	Non-compliance with laws and regulations in the social and economic area	a. Significant fines and non-monetary sanctions for non-compliance with laws and/or regulations in the social and economic area in terms of: 　i. total monetary value of significant fines; 　ii. total number of non-monetary sanctions; 　iii. cases brought through dispute resolution mechanisms. b. If the organisation has not identified any non-compliance with laws and/or regulations, a brief statement of this fact is sufficient. c. The context against which significant fines and non-monetary sanctions were incurred.	Refer to the Section 54 Notices discussed on page 53 of the Safety section. Apart from the Section 54 Notices, there were no significant fines or non-monetary sanctions for non-compliance with laws and regulations in F2020
		MMSD: Report a summary of judgements made against the organisation in the areas related to health and safety and labour laws.	No judgements were made against ARM in terms of health and safety, and labour laws in F2020.

GRI SECTOR SUPPLEMENT: METALS AND MINING

Disclosure Number	Description	Reference
MM1	Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated.	Land use management (pages 94 to 95) Online biodiversity table available on the ARM website **www.arm.co.za**
MM2	The number and percentage of total sites identified as requiring biodiversity management plans according to stated criteria, and the number (percentage) of those sites with plans in place.	Land use management (pages 94 and 95) Online biodiversity table available on the ARM website **www.arm.co.za**
MM3	Total amounts of overburden, rock, tailings, and sludges presenting potential hazards.	Material waste streams, while not necessarily presenting hazards, are discussed on pages 95 to 97 of this report. Overburden forms part of the renewal reserves record of each operation and is recorded and reported at operational level as appropriate. Additional information regarding ARM's tailings facility management is available on our website **www.arm.co.za**

Disclosure Number	Description	Reference
MM4	Number of strikes and lockouts exceeding one week's duration, by country.	Human resources management (page 76)
MM5	Total number of operations taking place in or adjacent to indigenous peoples' territories, and number and percentage of operations or sites where there are formal agreements with indigenous peoples' communities.	Two Rivers Platinum Mine, Nkomati Mine and Modikwa Mine operate adjacent to local communities.
MM6	Number and description of significant disputes relating to land use, customary rights of local communities and indigenous peoples.	No disputes have been raised relating to land use or customary rights specifically.
MM7	The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and indigenous peoples, and their outcomes.	No grievances have been raised regarding land use, customary rights of local communities and indigenous peoples.
MM8	Number (and percentage) of company operating sites where artisanal and small-scale mining (ASM) takes place on, or adjacent to, the site; the associated risks and the actions taken to manage and mitigate these risks.	The previously reported illegal chrome mining activity at Modikwa Mine and illegal sand mining at a property owned by the Cato Ridge Development Company Ltd (located close to Cato Ridge Works) have ceased following reports made to the South African Police Service (SAPS) and the Department of Mineral Resources and Energy (DMRE).
MM9	Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process.	No resettlements took place in F2020.
MM10	Number and percentage of operations with closure plans.	Ensuring responsible stewardship of natural resources (page 98) All operations have closure plans in accordance with Environmental Management Programme Reports (EMPRs) (in the case of the mines) and as part of Environmental Impact Assessments (EIAs), as well as Water Use Licences (all operations). All operations have estimated closure costs and made provision towards closure and rehabilitation. Closure cost assessments are reviewed annually.

Glossary

AA1000APS	Accountability Principles Standard 2008
ABC	Anti-Fraud Bribery and Corruption
AET	Adult Education and Training
AFS	Annual Financial Statements
AGM	Annual General Meeting
Aids	Acquired Immune Deficiency Syndrome
AMCU	Association of Mineworkers and Construction Union
AMMSA	The Association of Mine Managers South Africa
AR	Absentee Rate
ARM	African Rainbow Minerals Limited
ART	Anti-Retroviral Treatment
ASM	Artisanal and Small-scale Mining
BAP	Biodiversity Action Plan
BCEA	Basic Conditions of Employment Act
BCM	Business Continuity Management
BEE	Black Economic Empowerment
B-BBEE	Broad-Based Black Economic Empowerment
BUSA	Business Unity South Africa
CCM	Critical Control Management
CDP	Carbon Disclosure Project
CEO	Chief Executive Officer
CGR	Corporate Governance Report
CoGP	Codes of Good Practice
COP	Code of Practice
CSI	Corporate Social Investment
CSR	Corporate Social Responsibility
CTF	Culture Transformation Framework
CTPV	Coat Tar Pitch Volatiles
Cu	Copper
CVT	Counselling and Voluntary Testing
dB	Decibels
DEFF	Department of Environment, Forestry and Fisheries

DMP	Disease management plan
DMRE	Department of Mineral Resources and Energy
DOH	Department of Health
DOEL	Department of Employment and Labour
dti	Department of Trade and Industry
EAP	Economically Active Population
EBITDA	Earnings before interest, tax, depreciation and amortisation
ECA	Export Credit Agency
EE	Employment Equity
EIA	Environmental Impact Assessment
EITI	Extractive Industries Transport Initiative
EMEs	Exempt Micro Enterprises
EMP	Environmental Management Plan
EMPR	Environmental Management Programme Report
EMS	Environmental Management System
EQ	Emotional Intelligence
ESG	Environmental, Social and Governance
ERM	Enterprise Risk Management
ETQA	Education and Training Quality Assurance
EVG&D	Economic Value Generated & Distributed
EVP	Employee Value Proposition
FAPA	The Ferro Alloy Producers' Association
Fe	Iron
FFR	Fatality Frequency Rate
FTE	Full-Time Employees
GDP	Gross Domestic Product
GGV	Goedgevonden
GJ	Gigajoules
GJ/FTE	Gigajoules of energy per full-time employee

GHG	Greenhouse Gas
GHS	Globally Harmonised System
GISTM	Global Industry Standard on Tailings Management
GRI	Global Reporting Initiative
GTR	Global Tailings Review
GWP	Global Warming Potential
HAP	Hazardous Air Pollutants
HDSAs	Historically Disadvantaged South Africans
HDP	Historically Disadvantaged Persons
HIV	Human Immunodeficiency Virus
HLC	Housing and Living Conditions
HR	Human Resources
IAR	Integrated Annual Report
ICDA	International Chrome Development Association
ICMM	International Council on Mining and Metals
IDP	Integrated Development Plan
IFRS	International Financial Reporting Standards
IIRC	International Integrated Reporting Council
IMIU	International Mining Industry Underwriters
IMnI	International Manganese Institute
IOM	Institute of Medicine
IPT	Isoniazid Preventative Therapy
IQ	Intellectual capacity
ISO	International Organisation for Standardisation
IR	Injury Rate
IUCMA	Inkomati Usuthu Catchment Management Agency
IUCN	International Union for Conservation of Nature
JSE	Johannesburg Stock Exchange Ltd
JV	Joint Venture
King IV	King Report on Governance for South Africa 2016 and the King Code of Governance Principles
KPI	Key Performance Indicator

LCSAP	Lead Certified Sustainability Assurance Practitioner
LDR	Lost Day Rate
LED	Local Economic Development
LOM	Life of Mine
LTI	Lost Time Injury
LTIFR	Lost Time Injury Frequency Rate
MBOD	Medical Bureau for Occupational Diseases
MCA	Minerals Council of Australia
MCSA	Minerals Council South Africa
MDR PTB	Multi-Drug Resistant Pulmonary Tuberculosis
MERSETA	Manufacturing, Engineering and Related Services Sector Education and Training Authority
MHSA	Mine Health and Safety Act
MHSC	Mine Health and Safety Council
MLF	Mines Leadership Forum
MMSD	(GRI) Mining and Metals Sector Disclosures
MMSS	(GRI) Mining and Metals Sector Supplement
Mn	Manganese
MOSH	Mining Industry Occupational Safety and Health
MOU	Memorandum of Understanding
MPRDA	Mineral and Petroleum Resources Development Act
MQA	Mining Qualifications Authority
NBI	National Business Initiative
NDP	National Development Plan
NEMA	National Environmental Management Act
NGO	Non-Governmental Organisation
NCID	National Institute of Communicable Disease
NIHL	Noise-Induced Hearing Loss
NOx	Nitrogen Oxides
NPO	Non-profit Organisation
NSP	National Strategic Plan (for South Africa)
NUM	National Union of Mineworkers

GLOSSARY continued

NUMSA	National Union of Metalworkers of South Africa
NWA	National Water Act
ODR	Occupational Disease Rate
ODS	Ozone-Depleting Substances
OHSA	Occupational Health and Safety Act
OHSAS 18001	Occupational Health and Safety Assessment Series
ORWRDP	Olifants River Water Resources Development Project
PCB	Participating Coal Business
PCR	Polymerase Chain Reaction
PE	Performance Expectations
PGMs	Platinum Group Metals
PHC	Primary Health Care
PLH	Percentage Loss of Hearing
PM	Particulate Matter
POP	Persistent Organic Pollutants
PPE	Personal Protective Equipment
PRI	Principles for Responsible Investment
PTB	Pulmonary Tuberculosis
PV	Photovoltaic
RA&T	Risk appetite and tolerance
PWD	People with Disabilities
QSEs	Qualifying Small Enterprises
RIFR	Reportable Injury Frequency Rate
RO	Reverse Osmosis
ROI	Return on Investment
RUT	Rural Upliftment Trust
SABPP	South African Board for People Practices
SAMREC	South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves
SANAS	South African National Accreditation System
SANS	South African National Standard
SAWIS	South African Waste Information Centre
SD	Sustainable Development

SDGs	Sustainable Development Goals
SED	Socio-Economic Development
SENS	Stock Exchange News Service
SETA	Sector Education and Training Authority
SHE	Safety, Health and Environment
SHEQ	Safety, Health, Environment and Quality
SLP	Social and Labour Plan
SMME	Small, Medium and Micro Enterprise
SOx	Sulphur Oxides
SOP	Standard Operating Procedures
SR	Sustainability Report
STI	Sexually Transmitted Infections
TB	Tuberculosis
TCFD	Task Force on Climate-related Financial Disclosures
TPI	Transition Pathways Initiative
TRI	Total Recordable Injuries
TRIFR	Total Recordable Injury Frequency Rate
TSF	Tailing Storage Facility
UASA	United Association of South Africa
UIF	Unemployment Insurance Fund
UN	United Nations
UNEP	United Nations Environment Programme
UNGC	United Nations Global Compact
UN SDGs	United Nations Sustainable Development Goals
URTI	Upper Respiratory Tract Infections
VGGWSS	Vaal Gamagara Water Supply Scheme
VOC	Volatile Organic Compounds
WAF	Water Accounting Framework
WASH	Water, Sanitation and Hygiene
WHO	World Health Organisation
WMA	Water management Area
WUL	Water Use Licence
XDR PTB	Extensively Drug Resistant Pulmonary Tuberculosis

Stakeholder feedback form

ARM F2020 SUSTAINABILITY REPORT

Feedback form

Your opinion matters. Please share your views with us.

Which stakeholder group do you belong to? (You may tick more than one)

☐ Employee ☐ Shareholder ☐ Investor ☐ Customer ☐ Analyst

☐ Supplier ☐ Community ☐ NGO ☐ Other

Does the report address issues of greatest interest to you?

☐ Comprehensively ☐ Partially ☐ Not at all

Please identify any additional matters that you think should be reported on:

_____
_____
_____
_____

What was your overall impression of the report in terms of:

	Excellent	Good	Fair	Poor
1. Content and scope	☐	☐	☐	☐
2. Design and layout	☐	☐	☐	☐

Do you have any additional comments on the report – or on ARM's performance in general?

_____
_____
_____
_____
_____

Your name, email address and/or other contact details

_____
_____
_____
_____
_____

Contact details:

Nerine Botes-Schoeman
Executive: sustainable development

Physical address: Office block 1, 29 Impala Road, Chislehurston, Sandton, 2146
Postal address: PO Box 786136, Sandton, 2146, Johannesburg
Telephone: +27 11 779 1545 **Fax:** +27 86 575 9024 **Email:** nerine.botes@arm.co.za

Contact details

African Rainbow Minerals Limited

Registration number: 1933/004580/06
Incorporated in the Republic of South Africa
JSE share code: ARI
A2X share code: ARI
ISIN: ZAE000054045

Registered and Corporate Office

ARM House
29 Impala Road
Chislehurston
Sandton
2196

PO Box 786136, Sandton, 2146
Telephone: +27 11 779 1300
Fax: +27 11 779 1312
E-mail: ir.admin@arm.co.za
Website: **www.arm.co.za**

Sustainable Development

Nerine Botes-Schoeman
Executive: sustainable development
Telephone: +27 11 779 1545
Fax: +27 86 575 9024
E-mail: nerine.botes@arm.co.za

Cheryl Munitich
Sustainable Development
Telephone: +27 11 779 1540
Fax: +27 11 779 1341
E-mail: cheryl.munitich@arm.co.za

Group company secretary and governance officer

Alyson D'Oyley BCom, LLB, LLM
Telephone: +27 11 779 1300
Fax: +27 11 779 1312
E-mail: cosec@arm.co.za

Investor Relations

Jongisa Magagula
Executive director: Investor relations and new business
Telephone: +27 11 779 1507
Fax: +27 11 779 1312
E-mail: jongisa.magagula@arm.co.za

Auditors

External auditor: Ernst & Young Inc.
Internal auditors: Deloitte & Touche and
BDO South Africa

External Assurance Provider

IBIS ESG Consulting Africa (Pty) Ltd

Bankers

Absa Bank Limited
FirstRand Bank Limited
The Standard Bank of South Africa Limited
Nedbank Limited

Sponsors

Investec Bank Limited

Transfer Secretaries

Computershare Investor Services Proprietary Limited
Rosebank Towers
15 Biermann Avenue
Rosebank, 2196

Private Bag X9000, Saxonwold, 2132
Telephone: +27 11 370 5000
Fax: +27 11 688 5222
E-mail: web.queries@computershare.co.za
Website: www.computershare.co.za

Directors

Dr PT Motsepe (executive chairman)
MP Schmidt (chief executive officer)
F Abbott*
M Arnold**
TA Boardman*
AD Botha*
JA Chissano (Mozambican)*
WM Gule*
AK Maditsi*
J Magagula
TTA Mhlanga (finance director)
HL Mkatshana
P Mnisi*
DC Noko*
Dr RV Simelane*
JC Steenkamp*

*   *Independent non-executive*
** *Non-executive*

FORWARD-LOOKING STATEMENTS

Certain statements in this report constitute forward-looking statements that are neither reported financial results nor other historical information. They include statements that predict or indicate future earnings, savings, synergies, events, trends, plans or objectives. Such forward-looking statements may or may not take into account and may or may not be affected by known and unknown risks, uncertainties and other important factors that could cause actual results, performance or achievements of the company to be materially different from future results, performance or achievements expressed or implied by such forward-looking statements. Such risks, uncertainties and other important factors include: economic, business and political conditions in South Africa; decreases in the market price of commodities; hazards associated with underground and surface mining; labour disruptions; changes in government regulations, particularly environmental regulations; changes in exchange rates; currency devaluations; inflation and other macro-economic factors; and the impact of the Covid-19 pandemic. The forward-looking statements apply only as of the date of publication of these pages. The company undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after the date of publication of these pages or to reflect any unanticipated events.

ARM
African Rainbow Minerals

www.arm.co.za