

ARM

African Rainbow Minerals



2019 SUSTAINABILITY REPORT



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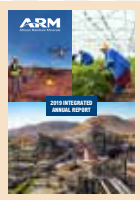
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OUR 2019 SUITE OF REPORTS

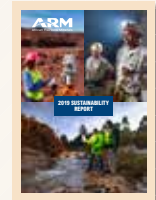
and additional material are available at www.arm.co.za



2019 INTEGRATED ANNUAL REPORT



2019 ANNUAL FINANCIAL STATEMENTS



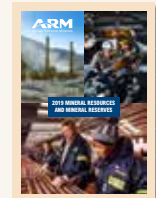
2019 SUSTAINABILITY REPORT



2019 CORPORATE GOVERNANCE REPORT



2019 KING IVTM 1 APPLICATION REGISTER



2019 MINERAL RESOURCES AND RESERVES REPORT

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REFERENCES TO 2019 SUITE OF REPORTS



2019 Integrated annual report



2019 Annual financial statements



2019 Sustainability report



2019 Mineral Resources and Mineral Reserves report



2019 Corporate governance report



www.arm.co.za

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

ABOUT THIS REPORT

This 2019 Sustainability Report provides additional information for stakeholders regarding African Rainbow Minerals Limited's (ARM or the Company) environmental, social and governance (ESG) practices, and sustainable development performance for the year to 30 June 2019 (F2019). It should be read with ARM's 2019 Integrated Annual Report (available on our website www.arm.co.za), which provides more information on financial and operational performance to meet the information needs of shareholders, potential investors and other providers of capital.

Cross references throughout this report link to the other reports in the suite (contents page) where further information on an issue can be found. ARM's sustainability data tables provide additional detail on various sustainability indicators and are available on ARM's website.

Reporting guidelines

The report aims to provide readers with an understanding of the most material ESG matters that ARM considers while implementing our strategy to create long-term sustainable value for our stakeholders. Disclosures are primarily 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 graphic on pages 2 and 3 shows the legislation, industry initiatives, frameworks and guidelines that shape ARM's sustainability reporting and approach to sustainable development.

Our 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.

Boundary and basis for inclusion

The sustainability information in this report covers 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

ARM's combined assurance model comprises six lines of assurance that define what constitutes appropriate assurance. This ensures a coordinated and integrated approach that identifies potential gaps and duplication in assurance and provides input to strengthen the control environment.

The model draws from ARM's Enterprise Risk Management (ERM) processes, internal audit initiatives, external audit activities and various management assurance interventions by specialists/subject matter experts to further reinforce comprehensive management assurance processes and reporting.

IBIS ESG Assurance (Pty) Ltd provided independent assurance over the Sustainability Report and the engagement was performed in accordance with the AccountAbility AA1000AS guidelines (assurance Type II, moderate). This includes a review of the reporting process and an assessment of the report against AccountAbility's guiding principles of inclusivity, materiality and responsiveness. Key sustainability information was also assured and data verification was performed at three operations: Beeshoek, Black Rock and Modikwa mines.

The process used a combination of 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 90 to 92 of this report.

Basis for inclusion

Sustainability information in this report covers ARM's activities for the year to 30 June 2019 on a 100% basis (as if ARM owned 100% of all the operations) and is consistent throughout, with the following exceptions:

- » Information regarding pulmonary tuberculosis (PTB) infection and cure rates, as well as the information sourced from the Mining Charter Scorecard reports, is disclosed for the calendar year ending 31 December 2018 to align with the legislation regulating these disclosures.
- » 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 20 634 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 21 417 is the headcount recorded as at 30 June 2019.

Stakeholder feedback

We welcome feedback on our sustainability reporting practices and ESG performance. Contact details, and a stakeholder feedback form is included in 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 2019 Integrated Annual Report, it provides an accurate and balanced reflection of the Company'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

11 October 2019

HOW WE REPORT SUSTAINABLE VALUE CREATION

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Our 2019 Sustainability Report is structured around our most material matters and shaped by the relevant legislation, industry initiatives, guidelines and frameworks that apply to our business. These include:

- » The six capitals defined in the International <IR> Framework;
- » the GRI Standards;
- » the Principles of the United Nations Global Compact (UNGC);
- » the Sustainable Development Principles of the International Council on Mining and Metals (ICMM); and
- » the United Nations Sustainable Development Goals (SDGs).
- » the FTSE/Russell Responsible Investment Index;

RELEVANT LEGISLATION INCLUDES

- > The Mining Charter
- > The dti CoGP
- > The National Environmental Management Act and Regulations
- > The National Water Act
- > The Climate Change Act
- > The National Greenhouse Gas Emission Reporting Regulations
- > The Mine Health and Safety Act
- > The Occupational Health and Safety Act
- > The Labour Relations Act
- > The Employment Equity Act
- > The Basic Conditions of Employment Act
- > The Skills Development Act

INDUSTRY INITIATIVES

- > The Minerals Council South Africa (MCSA)
- > The International Council on Mining and Metals (ICMM)
- > The Culture Transformation Framework
- > The Mining Industry Occupational Safety and Health (MOSH) initiative, facilitated by the MCSA
- > The occupational health and safety Milestones set during the Tripartite Summit of the Mine Health and Safety Council (MHSC)

GUIDELINES AND FRAMEWORKS

- > The King IV Code™ *Copyright and trade marks are owned by the Institute of Directors in Southern Africa NPC and all of its rights are reserved*
- > The Extractive Industries Transparency Index (EITI)
- > The FTSE/Russell Responsible Investment Index
- > The GRI Standards
- > 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 (SDGs)
- > The ICMM Sustainable Development Framework
- > The International Integrated Reporting Council (IIRC) Integrated Reporting <IR> Framework

ABOUT ARM

Provides an overview of the Company and operations – how we are structured, our values and where we operate

CREATING SUSTAINABLE VALUE FOR OUR STAKEHOLDERS

Introduces how we consider sustainable value creation and integrate it into our strategy, how we create value and how our products and activities add value to society.

CREATING SUSTAINABLE VALUE IN CONTEXT

Discusses how sustainability is integrated into our governance structures and processes to ensure that it is appropriately managed, monitored and assured.

Includes a review from the Chairman of our Social and Ethics Committee.

OUR PERFORMANCE

ARM's 2019 Integrated Annual Report focuses primarily on information regarding financial and operational performance. ARM's social and environmental performance is presented in the chapters from page 32 to page 89 of this Sustainability Report.

Each section starts with a high-level overview of the context relating to the issue, includes a detailed discussion of our performance for the year and ends with focus areas for the year ahead.



SALIENT FEATURES

Adjusted headline earnings* increased by 35% to R5 177 million. Headline earnings per share (unadjusted) increased by 8% to R27.18 compared to R25.26 in F2018.

We benefitted from our diverse portfolio of commodities as higher US dollar prices for iron ore, palladium and rhodium more than offset lower prices realised for manganese ore, manganese alloy, platinum, nickel and thermal coal. Capital allocation remained a priority and we continued to focus on the operational factors within our control to maximise margins and ensure the long-term sustainability of our business.

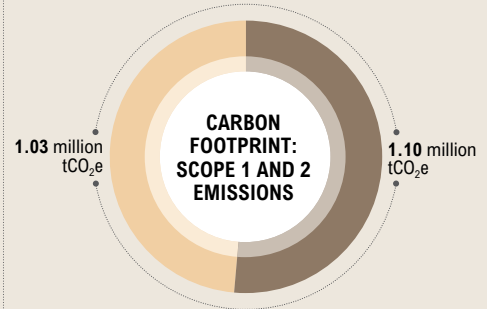
We paid our highest final dividend to date of R9.00 per share, bringing the total dividend for F2019 to R13.00 per share (F2018: R10.00 per share), underscoring our commitment to pay competitive dividends.

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 came close to our 25% target for female Directors.

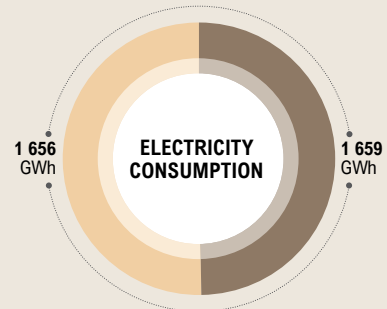
With effect from 28 February 2019, ARM acquired Assore's effective 50% interest in Machadodorp Works and now owns 100% of the operation. We will use the existing infrastructure to explore alternative smelting technology for manganese, chrome and other ores. During the year the joint venture partners in Nkomati Mine agreed to start the process of placing the mine on care and maintenance in preparation for closure as it has reached the end of its economic life.

Our commitment to safety remains resolute. Despite our initiatives and determination to achieve the target of zero harm, we lost a colleague, Mr Thomas Maluleke in a fatal accident at Modikwa Mine in March 2019. Mr Ishmael Malatji was fatally injured in an accident at the Two Rivers Mine on 8 September 2019. We again extend our sincere condolences to Mr Maluleke's and Mr Malatji's families, friends and colleagues.

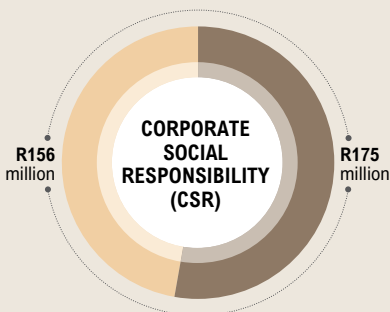
* Adjusted for net fair value and re-measurement adjustments.



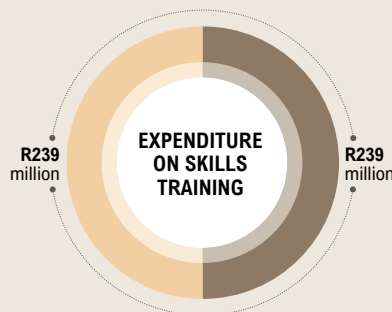
Carbon footprint increased by **7%** to 1.10 million tCO₂e



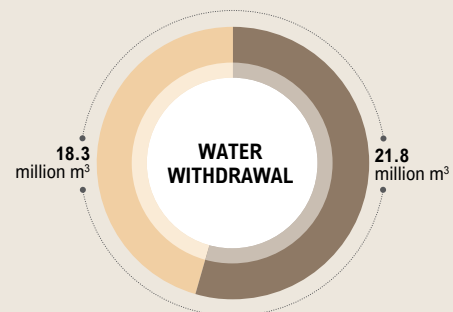
Electricity consumption increased by **0.1%** to 1 659 GWh



Expenditure on CSR through Social Labour Plans, Local Economic Development, and Corporate Social Investment increased by **12%**



Skills training expenditure remained at **R239 million**



Implementation of a **detailed water accounting framework** completed. **19%** increase in water withdrawals reported, with a 70% re-use efficiency

SUSTAINABILITY PERFORMANCE

YEAR-ON-YEAR

5

OVERVIEW CONTENT

Performance indicator	F2019	F2018	F2017	F2016	F2015
Economic and related core baseline indicators					
Sales (Rm)	26 641	21 916 ⁺	21 298	19 072	19 824
Taxes (Rm)	2 135	2 023	858	478	860
Headline earnings (Rm)	5 226	4 814	3 196	1 051	1 744
EBITDA from continuing operations (Rm)	9 336	8 024	6 372	3 964	4 994
Net cost of products and services (Rm)	12 404	9 491 ⁺	10 816	10 891	10 808
Wealth created (Rm)	12 966	13 571	8 622	6 276	7 217
Number of environmental administrative penalties/fines	0	0	0	0	0
Employee indicators – on a 100% basis – at 30 June 2019*					
Total number of ARM employees and contractors	21 417	21 862	24 106	23 128	27 276
– Employees (permanent)	12 771	12 420	13 218	13 793	15 080
– Contractors (mainly used in capital projects)	8 646	9 442	10 871	9 319	12 141
– Expatriates	0	0	17	16	55
Employee turnover (excluding contractors) (%)	5.7	6.9	1.1	15.0	11.5
Investment in employee training and development					
– Total expenditure (Rm)	239	239	180	184	232
– % of payroll	7.7	8.8	6	6.9	8.3
Employment equity** (% representation of previously disadvantaged groups in permanent employees)					
– Top management	56	56	42	38	38
– Senior management	51	50	49	49	44
– Professionally qualified	66	64	60	57	54
– Technically qualified	77	75	71	68	67
Lost-time injury frequency rate (LTIFR)/200 000 man-hours*	0.42	0.38	0.28	0.32	0.35
Reportable/serious accidents	76	68	47	60	78
Man days lost to industrial action	8	5 904	0	3 024	0
Environmental indicators – on a 100% basis†					
Total water withdrawn (m ³) (municipal, surface and groundwater)	21 773 440	18 296 551	14 295 993	19 066 300	18 334 106
Energy use					
– Electricity (MWh)	1 658 629	1 656 263	1 784 491	1 820 802	2 102 451
– Diesel (000 litres)	96 055	94 234	87 494	91 974	99 812
Emissions (attributable[^])					
Carbon emissions (equivalent tonnes CO ₂)					
– Scope 1 and 2	1 102 614	1 026 249	1 047 418	1 077 746	1 246 131
– Scope 1	235 956	235 354	226 744	226 972	322 034
– Scope 2	866 659	790 895	820 674	850 774	924 097
Direct emissions [#] :					
– NO _x (tonnes)	434	461	437	405	601
– SO _x (tonnes)	298	312	346	316	386
– Particulate matter (tonnes)	274	202	242	216	237
Corporate social responsibility (CSR) – on a 100% basis					
Total community upliftment and CSR (Rm)	175.3	155.8	114.6	98.5	157.6
– CSI (Rm)	27.4	20.5	22.1	18.0	54
– LED (Rm)	147.9	135.3	92.5	80.5	103.6
ARM Trust projects (Rm)	16.4	11.2	8.2	7.4	11.7

Non-financial data is stated on a 100% basis, unless otherwise indicated.

* Total number of ARM employees, contractors and expatriates as at 30 June 2019.

• LTIFR: injury rates are measured per 200 000 man-hours and include both ARM employees and contractor incidents.

^ Values attributable to shareholding percentages.

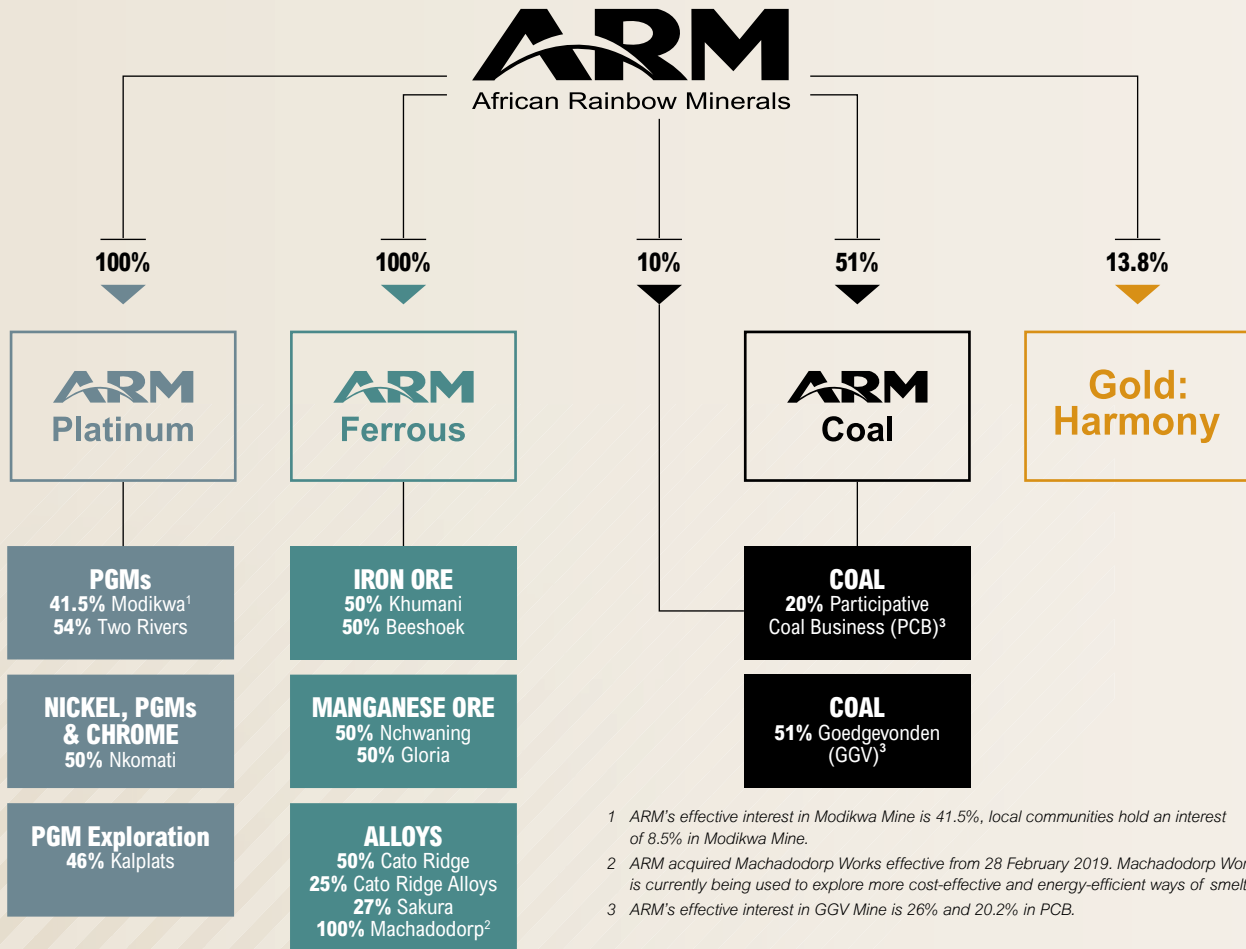
Direct emissions as a result of smelting operations at Cato Ridge Works only in F2019. No smelting operations were conducted at Machadodorp Works after F2017. While included in Scope 1 emissions, direct CO₂ emissions were previously reported separately but on a 100% basis and using a mass balance approach and site-specific emission factors. Calculations for Scope 1 and direct emissions have now been aligned using the IPCC tier 2 mass balance approach.

+ Restated from F2018 as a result of implementing IFRS 15.

ABOUT ARM

STRUCTURE

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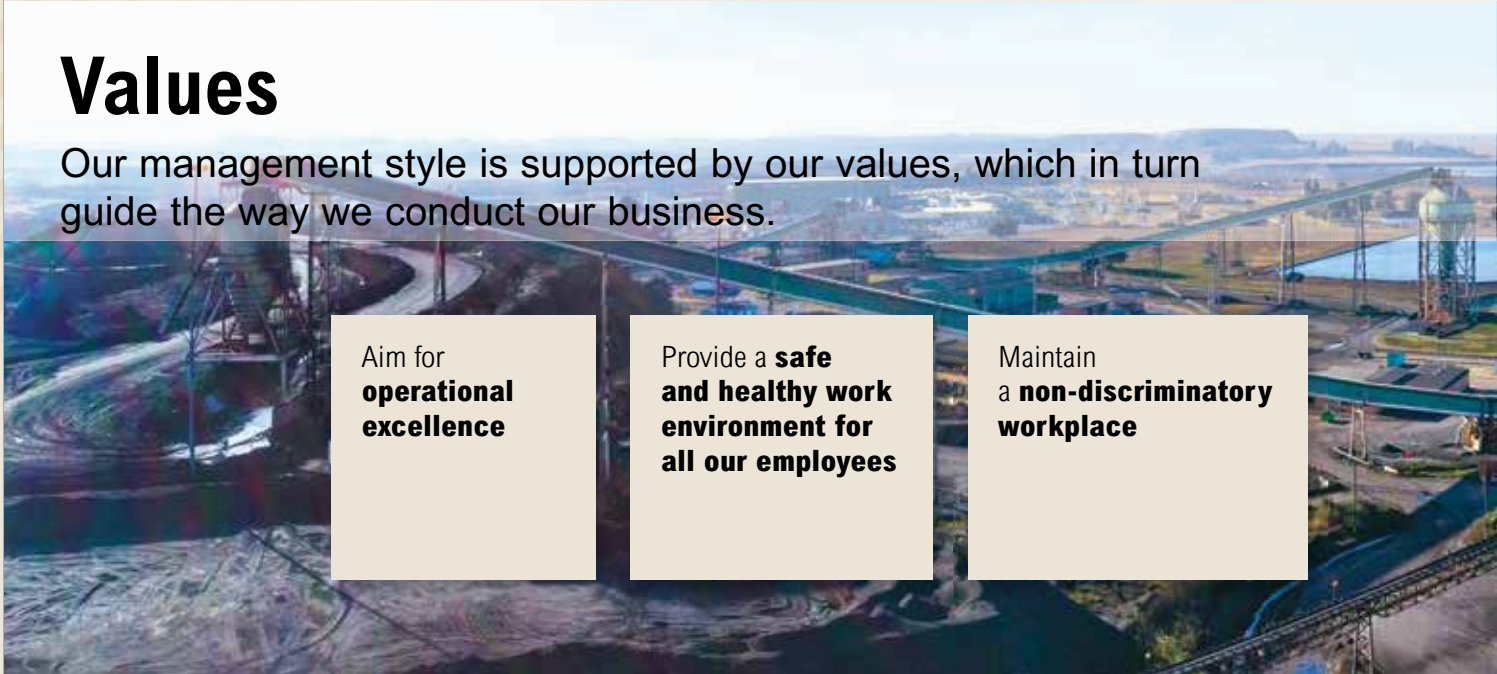
Values

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

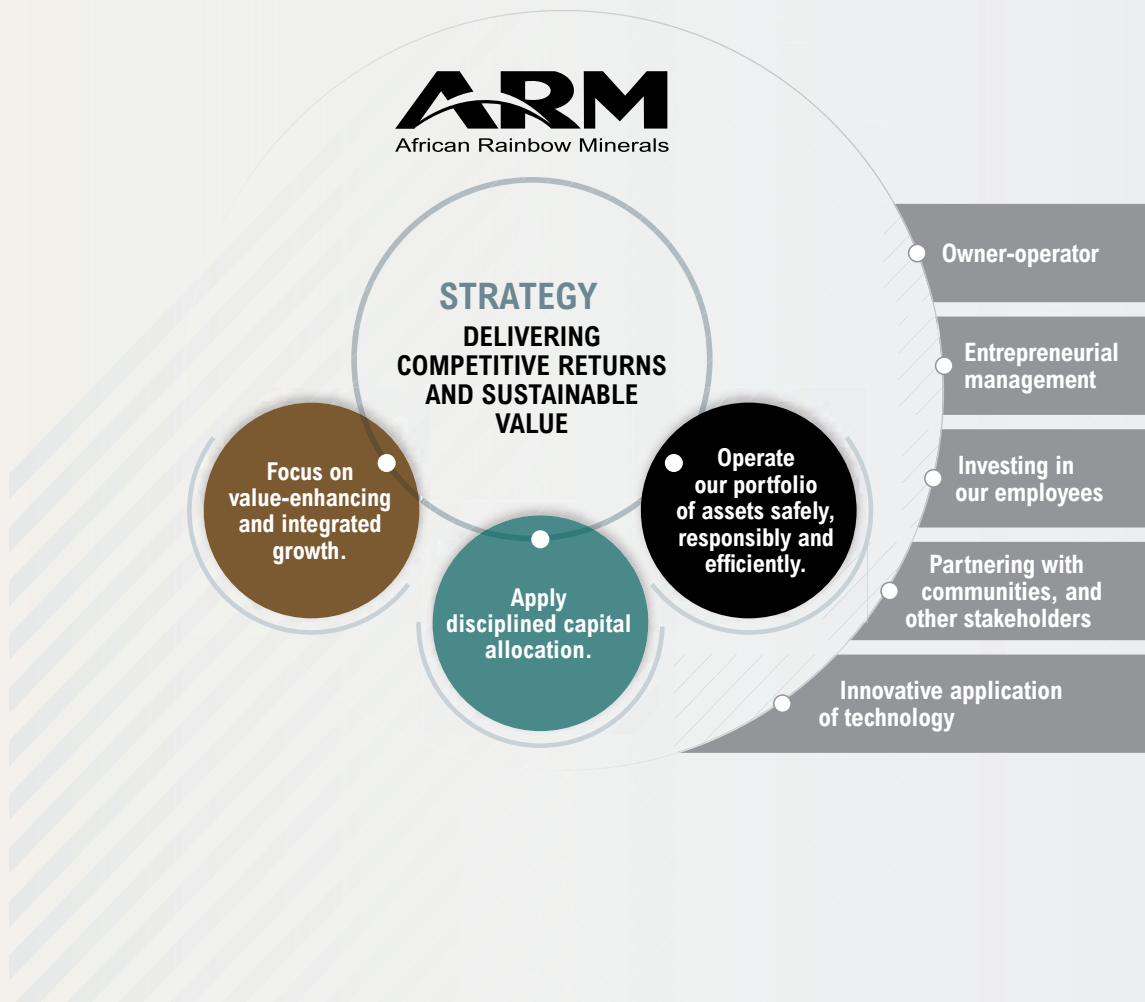
Aim for **operational excellence**

Provide a **safe and healthy work environment for all our employees**

Maintain a **non-discriminatory workplace**



STRATEGY



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**

WHERE WE OPERATE

8



Khumani

Iron ore

- Open-pit mechanised mine
- Δ 14.5Mt iron ore**
- LOM** 21 years
- EMPL** 3 827
- LTIFR** 0.08
- 60th percentile

IAR See page 64 for the ARM Ferrous operational review.

Beeshoek

Iron ore

- Open-pit mechanised mine
- Δ 3.5Mt iron ore**
- LOM** 7 years
- EMPL** 1 445
- LTIFR** 0.06
- 60th percentile

IAR See page 64 for the ARM Ferrous operational review.

Nchwaning and Gloria (collectively Black Rock)

Manganese ore

- Underground mechanised mine
- Δ 3.4Mt manganese ore**
- LOM** >30 years
- EMPL** 5 528
- LTIFR** 0.33
- 40th percentile

IAR See page 64 for the ARM Ferrous operational review.

Cato Ridge Works

Ferromanganese

- Smelter
- Δ 206 000t ferromanganese**
- EMPL** 552
- LTIFR** 0
- 70th percentile

IAR See page 64 for the ARM Ferrous operational review.

Sakura Ferroalloys

Ferromanganese

- Smelter
- Δ 249 000t ferromanganese**
- LOM** >30 years
- EMPL** Not reported by ARM
- LTIFR** Not reported by ARM
- 45th percentile

IAR See page 64 for the ARM Ferrous operational review.

Two Rivers

6E PGM metals

- Underground mechanised mine
- Δ 313 000 6E PGM oz**
- LOM** >30 years
- EMPL** 3 261
- LTIFR** 0.47
- 40th percentile

IAR See page 52 for the ARM Platinum operational review.



- ARM Platinum
- ARM Ferrous
- ARM Coal

Modikwa

6E PGM metals

- Underground mine
- Δ 307 000 6E PGM oz**
- LOM >30 years**
- EMPL 4 439**
- LTIFR 0.90**
- 55th percentile

IAR See page 52 for the ARM Platinum operational review.

Nkomati

Nickel (by-products including PGM, chrome, copper and cobalt)

- Open-pit mechanised mine
- Δ 14 200t nickel, 110 000 oz PGM, 443 000t chrome, 7 000t copper, 820t cobalt**
- LOM 1 year**
- EMPL 1 994**
- LTIFR 0.07**
- 75th percentile

IAR See page 52 for the ARM Platinum operational review.

Goedgevonden (GGV)

Thermal coal

- Open-pit mechanised mine
- Δ 7.0Mt saleable thermal coal**
- LOM 21 years**
- EMPL Not reported by ARM**
- LTIFR Not reported by ARM**
- 35th percentile

IAR See page 78 for the ARM Coal operational review.

Participative Coal Business (PCB)

Thermal coal

- Open-pit and underground mechanised mine
- Δ 15.3Mt saleable thermal coal**
- LOM 20 years**
- EMPL Not reported by ARM**
- LTIFR Not reported by ARM**
- 30th percentile

IAR See page 78 for the ARM Coal operational review.

- Mt** Million tonnes
- PGM** platinum group metals
- Mine/operation type
- Δ** F2019 approximate production volumes on a 100% basis
- LOM** Approximate life-of-mine
- EMPL** Number of employees at 30 June 2019 (full-time employees and contractors)
- LTIFR** F2019 lost-time injury-frequency rate (LTIFR) per 200 000 man-hours
- Position on the global commodity unit cost curve (F2019)

CREATING SUSTAINABLE VALUE

(BUSINESS MODEL)

ARM's values explicitly acknowledge that social responsibility, good corporate governance and environmental stewardship are essential aspects of generating economic value for shareholders and social benefit for stakeholders. Taking a broader view to include non-financial aspects ensures ARM's long-term sustainability.

– Mike Schmidt

Chief executive officer

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INPUTS


FINANCIAL CAPITAL

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

IAR  Refer to the financial review on pages 32 to 47.



PEOPLE

Our people are crucial to our ability create 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 skilled, engaged and motivated employees.

IAR  SR  See section on ensuring a safe, healthy and appropriately skilled workforce on pages 44 to 68 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.

IAR  SR  Refer to the section on maintaining our social licence to operate on pages 32 to 33 as well as pages 93 to 95 of this report.

NATURAL CAPITAL

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

IAR  SR  Refer to the section on ensuring responsible stewardship of natural resources on pages 69 to 89 of this report.

INNOVATION

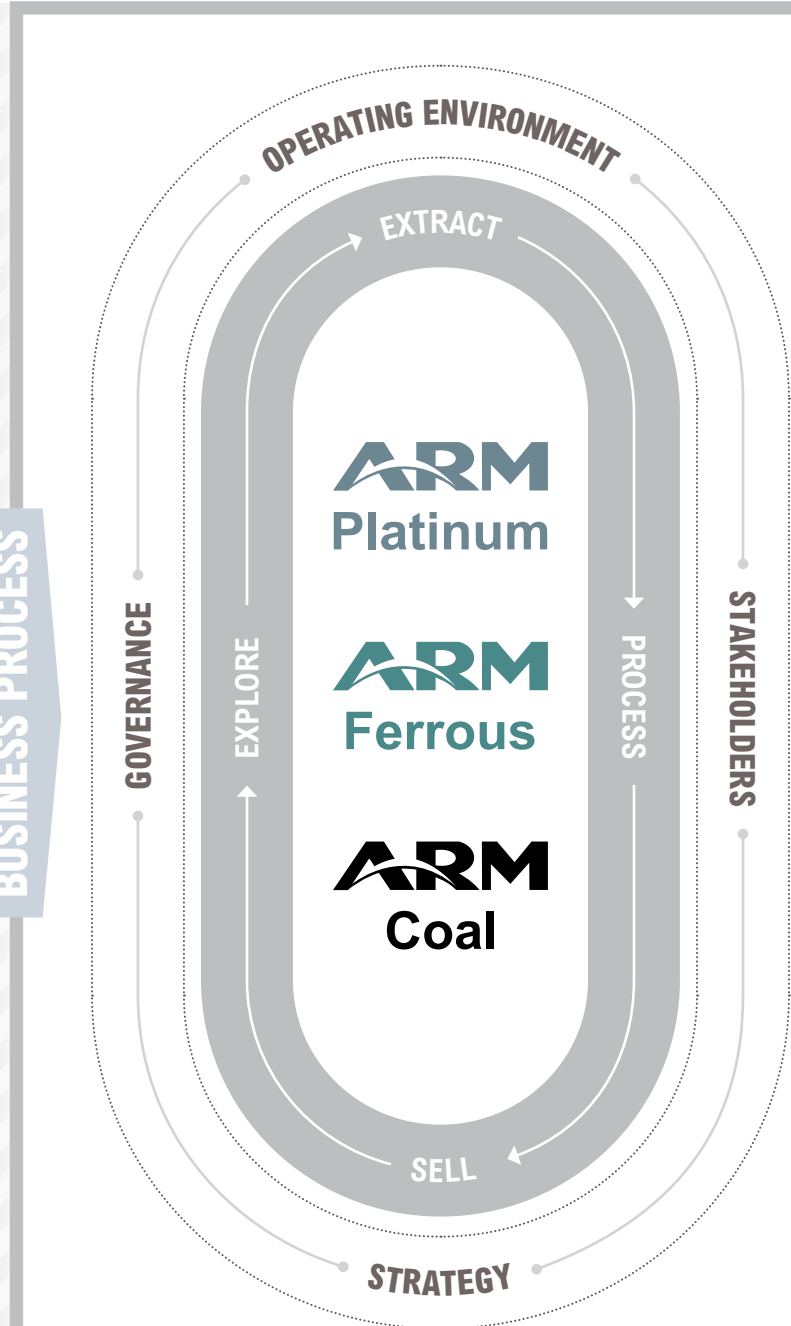
Access to and investment in innovation and technology allows ARM to continuously improve production processes. Mining is a technology intensive industry. The knowledge, experience and expertise that we have among our subject matter experts is key in differentiating ARM. Our innovation also includes information technology systems, risk management processes, and research and development.

CGR  Refer to the information technology report in the 2019 Corporate governance report.

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



OUTPUTS

PRODUCTION

730 000 6E PGM ounces
17.8Mt iron ore
3.4Mt manganese alloys
455 000t ferromanganese
22.3Mt thermal coal
662 000t chrome concentrate
14 200t nickel
7 200t copper
820t cobalt

Consumption of energy generated from fossil fuels and hydro

CO₂ emitted

Water consumed

Waste generated

OUTCOMES

FINANCIAL CAPITAL

Headline earnings:
R5 226 million

(F2018: R4 814 million)

Segmental EBITDA: R9 336 million
(F2018: R8 016 million)

Net cash to equity ratio: 9% (F2018: 4%)

Dividends paid: R2 206 million
(F2018: R1 714 million)

Return on capital employed: 18%
(F2018: 19%)

PEOPLE

One fatality

at our managed operations in F2019¹
(F2018: 1)

LTIFR of **0.42** per 200 000 man-hours
(F2018: 0.38 per 200 000 man-hours)

RELATIONSHIPS

R175 million invested in host communities through corporate social responsibility initiatives
(F2018: R156 million)

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

NATURAL CAPITAL

7% increase

in scope 1 and 2 carbon emissions

Concurrent rehabilitation of land

Responsible waste disposal

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

19% increase in water withdrawals reported, with a 70% re-use efficiency

INNOVATION

New patents registered for alternative smelting technology

MANUFACTURED ASSETS

R3 242 million

in capital expenditure (segmental basis)
(F2018: R2 464 million)

TRADE-OFFS

Financial capital is prudently allocated to maintain the appropriate balance between corporate sustainability and stakeholder benefit.

Disciplined capital allocation ensures our continued growth, and supports our ability to add value to all our other capitals.

Safety/health and skills development underpin productivity, so while our top priorities are 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 real community needs and contribute to improving the lives of those living in our host communities.

Our investment in natural capital utilises financial capital and is essential to protect resources for future generations.

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

¹ An employee was fatally injured at the Two Rivers mine in September 2019, after the financial year end.

VALUE ADDED BY METALS AND MINERALS

The benefit of metals to modern life is indisputable. The metals and minerals that ARM operations produce are essential to support many aspects of modern society. They also have important roles to play in contributing to the developmental aspirations set in the United Nations Sustainable Development Goals (SDGs).



Iron ore, manganese and nickel are used to make steel, which is a key component in the infrastructure that is needed to sustain and support development in cities and communities. This includes hospitals and schools improving health and education outcomes. Steel is not only essential as a manufacturing input, but also for the machinery and equipment used in industry, which drives 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.

Platinum group metals (PGMs) in catalytic converters contribute to improving air quality by reducing harmful emissions from motor vehicles. Hydrogen fuel cells are a promising source of clean energy that use platinum to generate energy from hydrogen and oxygen, with water being the only emission.

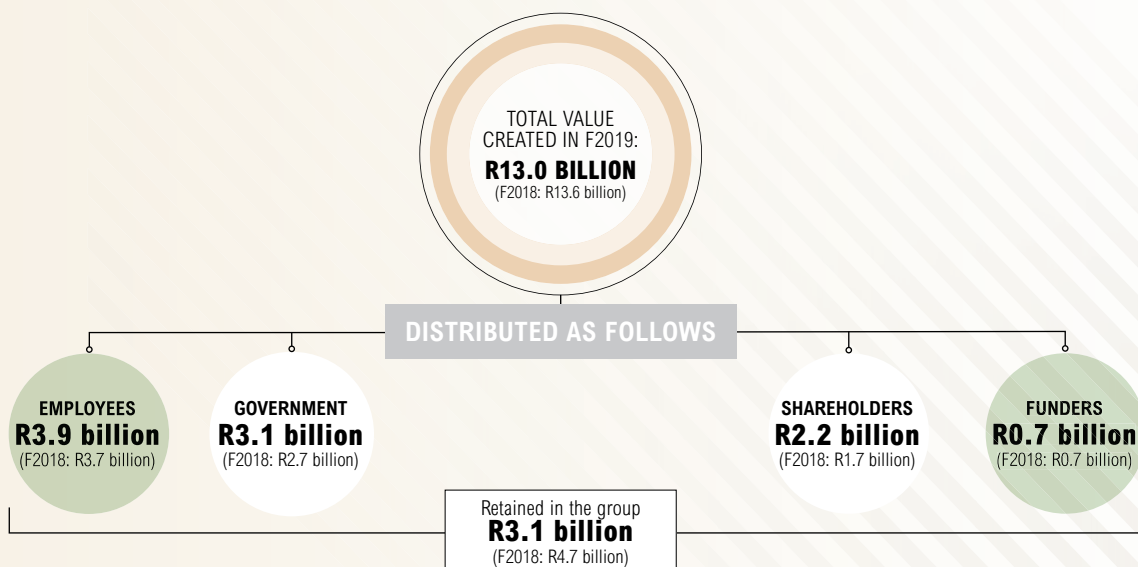
Nickel and manganese are used in certain types of lithium-ion energy storage technologies, which play a role in the growth in renewable energy and electromobility. Nickel is also used in corrosion-resistant alloys used in desalination plants to convert sea water into potable water.

Metals can be recycled almost indefinitely without losing their essential properties and performance, and support the growth of the circular economy. Recycled metal can be produced more efficiently, saving water and energy, and produces less waste and fewer greenhouse gas emissions than metal from newly mined ore.

China's focus on addressing its pollution challenges through improved efficiencies in heavy industries has increased demand for higher quality ore, which produces fewer emissions when processed. The iron and manganese ore from ARM Ferrous's mines offer customers the ability to optimise production and reduce emissions by offering greater blending options. For example, use of lumpy iron ore in the steel making process reduces Scope 1 emissions associated with the sintering process.

Our social impacts

ARM's activities create value for our stakeholders in a variety of ways. In F2019, ARM's activities created R13.0 billion in financial value (F2018: R13.6 billion). The diagram below summarises how the value we created was distributed to our stakeholders.



Over the last five years, ARM has created total value of **R48.7 billion** and distributed **R9.6 billion** of this to the government in the form of taxes and royalties.

ARM operations are located in some of the poorest and most remote parts of the country and provide employment opportunities, skills development and educational support in these areas. Infrastructure investments and support for social projects in local communities support socio-economic development and improve community resilience and sustainability.

ARM's preferential procurement and enterprise development programmes support entrepreneurship and economic growth among historically disadvantaged South Africans (HDSAs) and in local communities, create jobs, improve market access for South African capital goods and services, and increase economic activity in the areas around our operations.

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

R9.6 billion paid as taxes and royalties.

R757 million invested in community development.

Providing employment for **21 417** employees and contractors (as at 30 June 2019).

Improved HDSA representation in management from **51%** in F2015 to **62%** in F2019.

R54 billion paid in procurement. In the year to December 2018, 84% of services, 79% of capital equipment and 86% of consumables procured were allocated to HDSA suppliers.

Paid **R18.4 billion** to employees as salaries, wages and benefits.

Invested **R1.07 billion** in training initiatives to improve the skills of employees.

Provided **1 198** bursaries.

Provided adult education and training (AET) to **745** employees and **1 833** community members at ARM facilities since F2015, increasing their confidence and employability.

* On a 100% basis.
Reported for F2019 (as at 30 June 2019).





CREATING SUSTAINABLE VALUE IN CONTEXT

HOW WE GOVERN AND MANAGE SUSTAINABLE VALUE CREATION

The Board is the foundation of ARM's corporate governance system and is accountable and responsible for the performance of the Company. 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.

We take a responsible, sustainable approach to mining and beneficiation that aligns with our values, which 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 ARM Social and Ethics Committee comprises five non-executive Board members and is chaired by Dr R V Simelane. It monitors and reports on the manner and extent to which ARM 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. Sustainable development matters and performance are included in the formal agenda of the Management Risk and Compliance Committee.

The Chief Executive Officer is responsible for implementing ARM's sustainable development policies and procedures. This responsibility is delegated to the Chief Executives of each division and the Executive: Sustainable Development, who is responsible for reviewing sustainable development-related policies, strategies and targets and ensuring that these are aligned with the Board's commitment to zero harm.

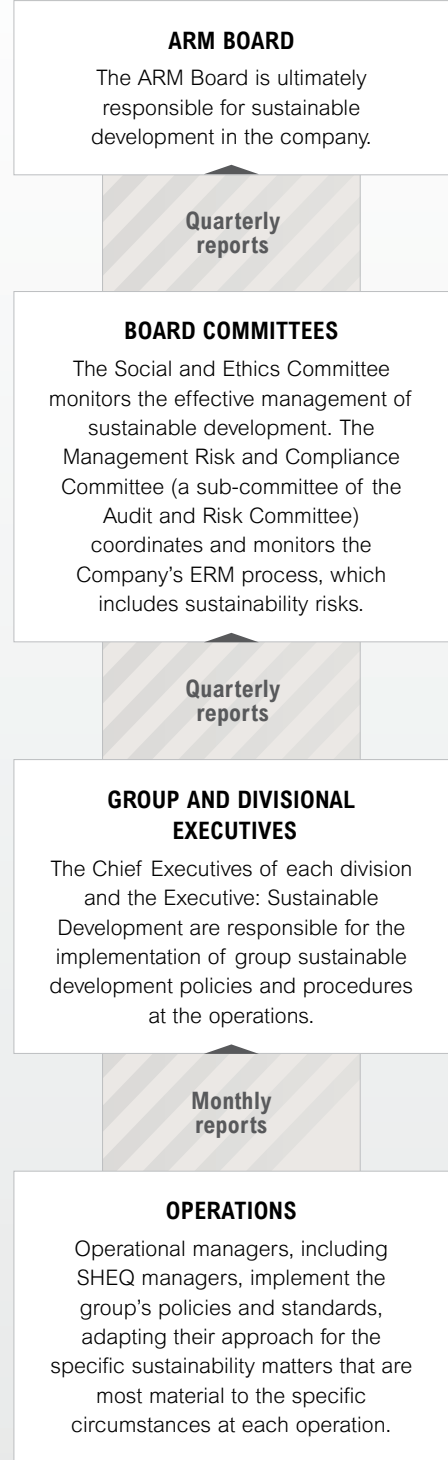
Our strategic approach to sustainable development and the relevant policies and standards are set at corporate level. The operations adapt their approach to the specific sustainability matters that are most material to their circumstances.

We assess the effectiveness of our approach to sustainable development by regularly monitoring relevant indicators and benchmarks at operational, divisional, executive and Board level, as well as the information received from engagements with our key stakeholders. 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.

SUSTAINABILITY COMPLIANCE AND VERIFICATION

- 6 Regulator inspections**
 - » Inspections by regulators and authorities, including the Department of Mineral Resources and Energy, Department of Environment, Forestry and Fisheries and Department of Health.
- 5 External assurance providers**
 - » External Safety, Health and Environmental (SHE) compliance audits facilitated every second year by the ARM Corporate Office (performed in F2019).
 - » External certification audits, certification in terms of management standards (ISO 9001, OHSAS 18001/45001, SANS 16001 and ISO 14001).
 - » Annual external assurance of sustainability data.¹
- 4 External auditors**
 - » External financial audits.
 - » Annual external audits of operating procedures and safety practices.
 - » Annual external legal compliance audits assess compliance with legislation and Company policies, including safety.
- 3 Internal auditors**
 - » Internal auditors, internal fraud and forensic investigators, safety and process assessors.
 - » Annual internal audit of operating occupational health procedures and practices by an independent occupational medical practitioner and nursing staff.
- 2 Internal assurance – risk and compliance functions**
 - » ARM Corporate office functions/subject matter experts, systems and processes.
 - » Reviews of occupational health procedures and practices by an external expert (quarterly) and by an external certified wellness auditor (annual) of performance of operations against the ARM Group’s Health and Wellness Standard.
- 1 Management oversight**
 - » Management review of and responsibility for sustainability risks and controls, including policies, procedures, systems and processes.
 - » Regular inspections and reviews by SHEQ 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.

GOVERNANCE OF SUSTAINABILITY



¹ IBIS ESG Assurance (Pty) Ltd provided independent assurance over select subject matter included in the 2019 Sustainability Report. The assurance statement is included on pages 90 to 92 and includes comment on data collection in ARM.

CGR ARM’s 2019 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.

CGR ARM’s combined assurance model is discussed in the Risk Report in the Corporate Governance Report.

HOW WE GOVERN AND MANAGE SUSTAINABLE VALUE CREATION continued

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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. She 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.

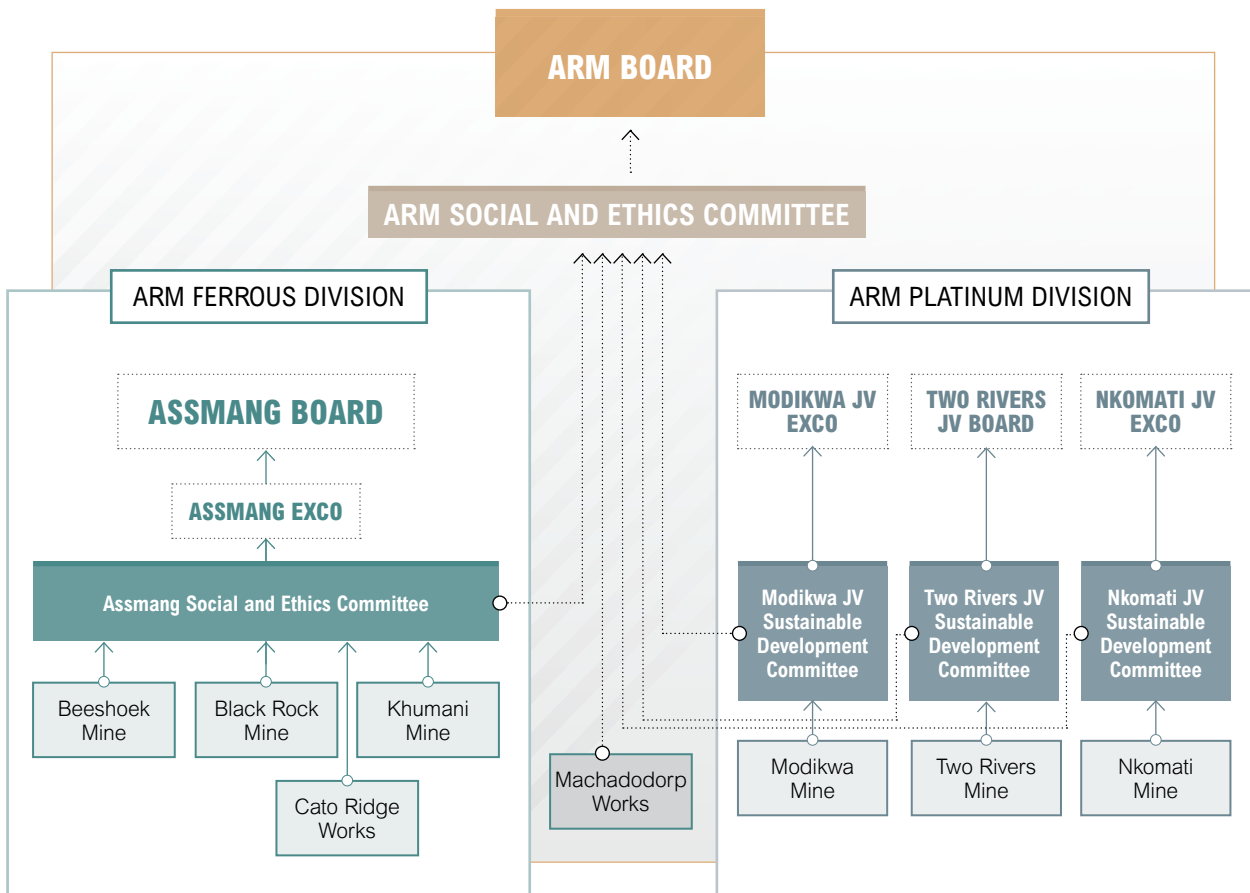
The terms of reference for the Board and its committees, as well as those of divisional and operational committees, are regularly reviewed and updated to ensure that they continue to appropriately address industry and regulatory developments.

The Assmang Social and Ethics Committee monitors sustainability performance in the Ferrous division and is chaired by the ARM Head of Investor Relations. Quarterly compliance meetings at the ARM Ferrous operations ensure comprehensive reporting is covered at operational level.

The operations in the ARM Platinum division each have standalone Sustainable Development Committees chaired by

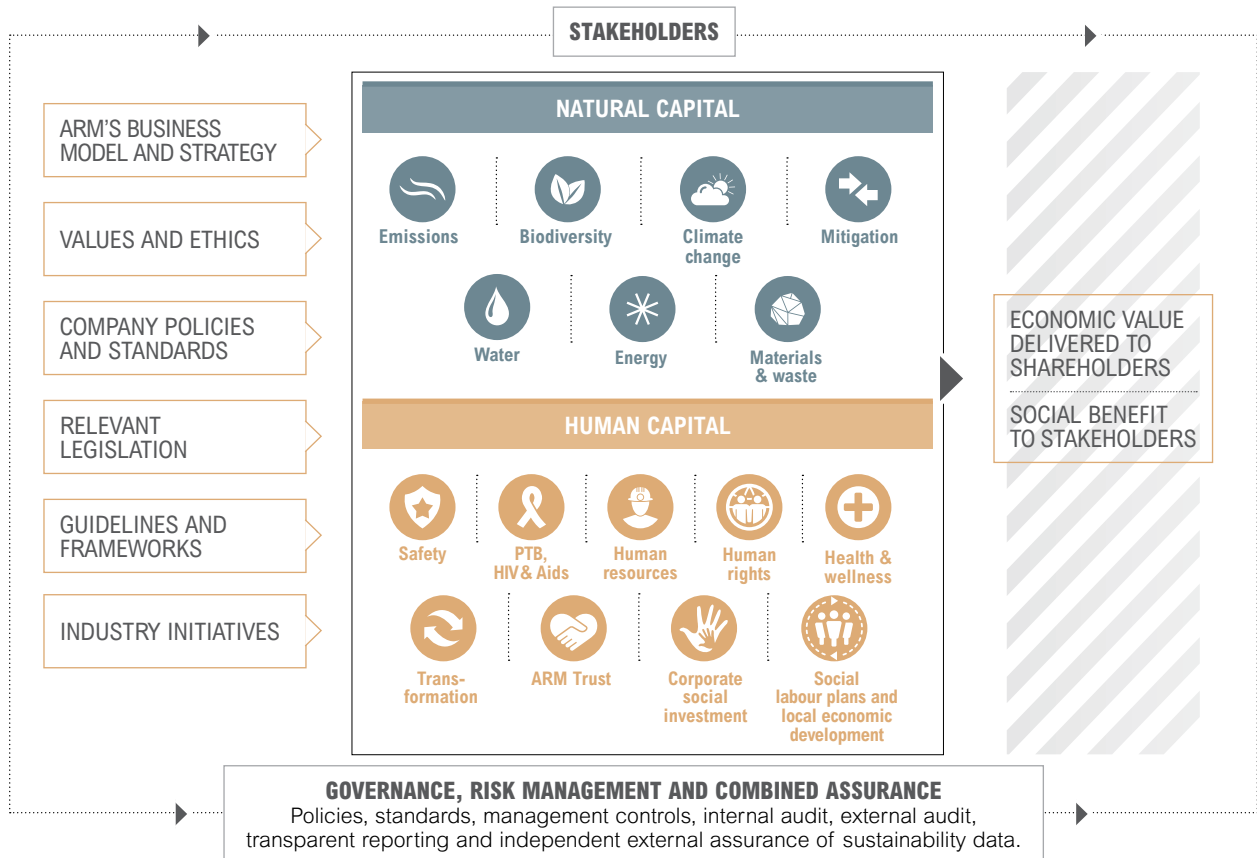
the ARM Executive: Sustainable Development. These committees report to the Exco or Board of the respective joint ventures, as appropriate.

The Assmang Social and Ethics Committee and the Sustainable Development Committees in the ARM Platinum division report regarding operational performance and compliance to the ARM Social and Ethics Committee at quarterly meetings.



ARM's sustainable development model

Our approach to sustainable development is represented in our sustainable development model, which shows the inputs that shape our approach and the aspects we consider in the creation of value.



These inputs include:

- » Our values and ethics, which drive our commitment to sustainable development and are embedded in our business model and strategy.
- » Relevant Group policies and standards that formalise our approach to sustainability.
- » Developments in current and proposed legislation and regulations. ARM regards regulatory compliance as the minimum requirement for sustainable development, rather than the end goal.
- » 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.

- » 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.

Ongoing engagements with our key stakeholders provide insights into their needs, interests and expectations that frame our approach to sustainable development and the way we conduct our business. The governance and risk management frameworks, as well as the combined assurance model, support implementation and management of sustainability drivers.



HOW WE GOVERN AND MANAGE SUSTAINABLE VALUE CREATION continued

Ethics

We are committed to a culture of ethical behaviour and integrity, and aim to lead ethically and effectively in the conduct of our business. It is critical to the sustainability of the business to embrace and embody the foundation stones of King IV, which include ethical leadership, stakeholder inclusivity and corporate citizenship.

ARM's Code of Conduct (the Code) is based on the ethical values 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 and joint ventures. All employees receive training on the Code at induction and through a compulsory online training programme.

 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

We have a zero tolerance approach to unethical and improper conduct, including bribery, corruption and money laundering. The Code of Conduct training programme is introduced by the Chief Executive Officer and emphasises top management's commitment to ARM's anti-bribery and anti-corruption policies. 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.

STAKEHOLDER ENGAGEMENT

The Code encourages complete, accurate and timely communication with the public. The Chief Executive Officer, the Financial Director, the Head of Investor Relations and the Company Secretary oversee compliance with disclosure requirements, including those in the JSE Listings Requirements.

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.

HEALTH AND SAFETY

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

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.

CONFLICTS OF INTEREST

Conflicts of interest, whether real or perceived, are prohibited by the Code, 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. The Code mandates compliance with ARM's Dealings in Securities Policy and relevant insider trading provisions.

SHARE DEALING

Directors, officers and designated persons are precluded from dealing in the Company's securities during closed periods by the Dealings in Securities and Insider Trading Policy, 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.

Updated online competition law training was delivered across the Group in F2019.

An internal fraud risk self-assessment was developed in F2017 to measure management's view of the adequacy and effectiveness of the control environment. The self-assessment was conducted at ARM operations in F2018 and in F2019 at ARM Corporate. Areas for improvement were assessed and mitigating controls, risk mitigation plans and target dates to address these areas were set and followed up.

Human rights

ARM's 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. We are committed to the ten principles of the United Nations Global Compact (UNGC) and conduct human rights assessments aligned with the United Nations' Protect, Respect and Remedy Framework.

Human rights principles are integrated into business policies and management systems 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 emphasises the Company's strong stance against unfair discrimination and, together with the Employment Equity Policy and ARM's human resources management policies, promotes 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 all non-management employees are afforded freedom of association. We do not use forced, compulsory or child labour.

Security personnel, including contractors, receive human rights training as well as regular refresher training. Operational community relations strategies 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 anonymously through the whistleblower facility, directly to their supervisors or managers, or to the Human Resources Department.

We expect our suppliers and contractors to behave ethically and with respect for human rights.

Whistleblower facility

ARM's anonymous whistleblowers' hotline (0800 006792) is operated by an independent service provider that has been certified by the Ethics Institute, and includes a 'Please Call Me' option. Details about the hotline are included in the Code and are posted at the Company's offices and operations. The hotline is available to employees, contractors, suppliers, communities, and other stakeholders to report unethical behaviour.

ARM's whistleblower policy emphasises our zero tolerance approach to retaliation or occupational detriment to whistleblowers.

Incidents reported through the whistleblower facility are investigated and progress and 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.

A whistleblower awareness campaign was implemented across the Group in June 2019. The campaign included new posters in three official languages, leaflets that were attached to payslips, banners at reception of the management offices and vinyl

stickers placed on telephones and laptops. ARM Corporate will conduct further sessions to workshop employees on the whistleblowing process and provide information in terms of fraud awareness.

In F2019, 62 reports were received through the facility (F2018: 53). 26 reported incidents are currently under investigation, 4 were substantiated, 8 were partially substantiated and 24 were unsubstantiated.

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 Assurance (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."



IBIS ESG Assurance's comprehensive Assurance Statement is available on pages 90 to 92 of this report.

Managing risk and opportunities

Managing risks and opportunities is an important business driver for us and our stakeholders. It is an entrenched discipline and a recognised business management tool, to enable sustainable value creation.

Outputs from successful risk management include more informed decisions, a learning organisation that does not repeat mistakes, full compliance and effective assurance. These in turn provide benefits from improved efficiency of operations and effective tactics.

ARM's Enterprise Risk Management (ERM) Policy aligns with the risk management requirements of King IV™ and assesses the risks and opportunities 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.

To continuously improve the risk management process, we initiated a review of the Company's current risk management methodology, processes, maturity and culture in April 2018.

A key output of this process has been the full alignment of the current risk methodology with ISO 31000, which is the International Standards' Organisation (ISO) standard for risk management. ISO 31000 is globally acknowledged as a leading risk management practice and is the most universally adopted risk management standard.

HOW WE GOVERN AND MANAGE SUSTAINABLE VALUE CREATION continued

Enhanced risk methodology

Developing an impact rating scale required aligning ARM's strategy to the strategic factors through which we drive and measure business performance.

The risk rating methodology links strategic factors to impact factors as follows:

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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.

1 Non-achievement of operational efficiency	2 Social unrest	3 The security of supply of water in the Northern Cape	4 Loss of social license to operate
5 Deterioration in safety performance	6 Security of supply of electricity in South Africa	7 Inefficient allocation of the Group's resources	8 Poor employee wellness resulting in a decline in productivity
9 Exchange rate and commodity price volatility	10 Preparedness for cyber breach	■ Risk rank □ Risk name	

CGR More detail on the composition and activities of the Management Risk and Compliance Committee and ARM's Risk Report is available in the 2019 Corporate Governance Report at www.arm.co.za.

Legal compliance

ARM's Legal Compliance Policy and the Code stipulate our commitment to complying with all applicable laws and regulations as a minimum requirement. The Management Risk and Compliance Committee, the Audit and Risk Committee and the Social and Ethics Committee monitor the Company's compliance.

Internal and external legal compliance and operational audits are regularly conducted at all operations, and any instances of non-compliance with regulatory requirements are reported to management for corrective action.

Environmental and social compliance is monitored through a variety of reviews and audits, as depicted in the sustainability compliance and verification graphic on page 15.

Rewarding value creation

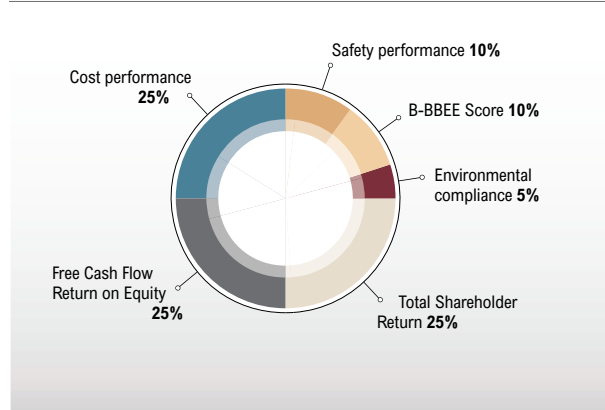
ARM's executive remuneration philosophy aims to attract and retain high-calibre executives and to motivate and reward them for developing and implementing the Company's strategy, while promoting positive outcomes, an ethical culture and corporate citizenship.

The Remuneration Committee oversees remuneration and its 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.

The senior executive long-term incentive calculation includes sustainability performance conditions comprising 25% of the total weighting to ensure that non-financial sustainability issues are appropriately prioritised. Climate change performance targets are included in the environmental 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 for operational, divisional and corporate staff. Employees in the relevant functions at operations, such as engineers and production teams, are incentivised against energy targets and KPIs linked to climate change emissions reduction initiatives.

CONDITIONAL SHARE PLAN PERFORMANCE CONDITIONS (%)



Combined assurance

ARM's 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 ARM Audit and Risk Committee. 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.

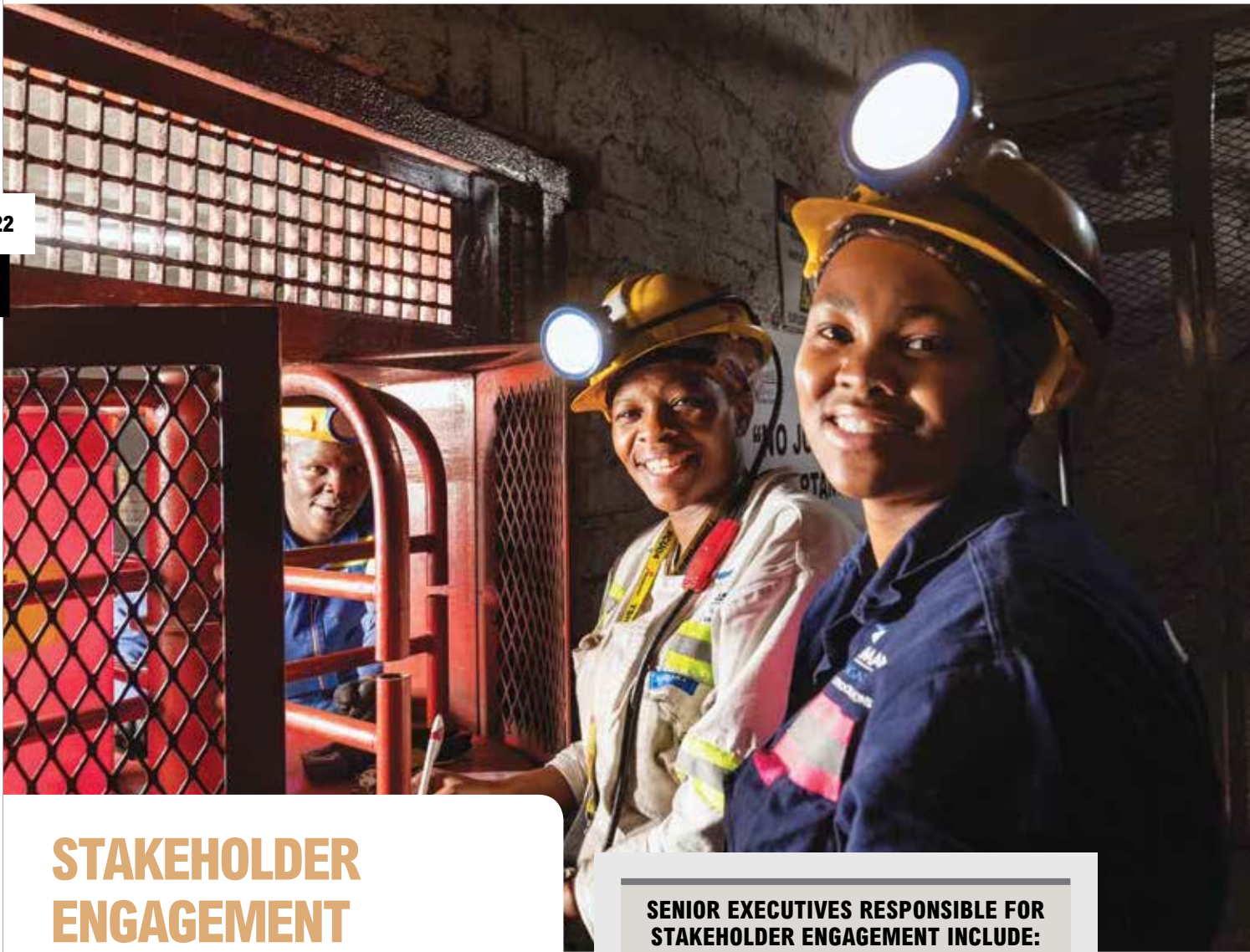
ARM's overriding policy and philosophy is that the management of risk is the responsibility of management at every level in ARM.

Moderate independent third party assurance over selected non-financial disclosures in this report was provided by IBIS ESG Assurance (Pty) Ltd. The independent assurance statement by IBIS is included on pages 90 to 92 of this report and includes comments on ARM's data collection.

CGR ARM's Combined Assurance Model is discussed in the Risk Report of the 2019 Corporate Governance Report available at: www.arm.co.za.

The table below shows the operations sampled and the indicators assured over the last five years.

	F2019	F2018	F2017	F2016	F2015
Mines visited					
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	✓	✓	✓	✓
	- Lost Time Injury Frequency Rate	✓	✓	✓	✓
	- Recordable Injury Frequency Rate	✓	✓	✓	✓
	- PTB cases detected	✓	✓	✓	
	- Occupational diseases identified and submitted for compensation	✓	✓	✓	
	- Employees and contractors on ART	✓	✓	✓	
	Social Licence Indicators				
	- CSR spending	✓	✓	✓	✓
Environmental Indicators					
	- Electricity consumption	✓	✓	✓	✓
	- Fuel consumption	✓	✓	✓	✓
	- Water withdrawal	✓	✓	✓	✓
	- Water discharges	✓	✓	✓	✓
	- Scope 1 and 2 emissions	✓	✓	✓	✓



STAKEHOLDER ENGAGEMENT

We recognise that our ability to create long-term sustainable value depends on our ability to create value for others. Balancing the needs, interests and expectations of our stakeholders with those of the group in a dynamic and ongoing process is critical to secure ARM's success and the sustainability of its operations.

Interactions with our stakeholders provide us with new ideas, create a broader context, inform our most material matters, risks and opportunities and provide input into the strategy and long-term direction.

We define our stakeholders as those individuals or groups that have a material interest in, or are affected by our operations. The Board is responsible for identifying stakeholders and developing appropriate strategies, and has mandated the Social and Ethics Committee to monitor stakeholder relationships. Stakeholder and community engagement are agenda items at operational, divisional and Board meetings.

SENIOR EXECUTIVES RESPONSIBLE FOR STAKEHOLDER ENGAGEMENT INCLUDE:

- » Executive chairman
- » CEO
- » Finance director
- » Divisional chief executives
- » Executive: Corporate Affairs, Head of Investor Relations
- » Executive: Compliance and Stakeholder Relations
- » Executive: Sustainable Development
- » Senior management.

The ARM Code of Conduct contains a Stakeholder Communication Policy that includes measurable outcomes for all engagements. Engagements occur at the corporate, divisional and operational level as appropriate to the stakeholder and can take the form of formal or informal interactions. Operational engagement reports record the content of engagements to ensure that learnings are documented and shared effectively. More information on how we manage community relationships is available on pages 33 to 37.

Significant engagements with stakeholders during F2019 included those discussed below.

Safety Days were held at all South African mining operations in August 2018 in alignment with the Minerals Council South Africa's National Safety Day. The event marks the remembrance of those whose lives have been lost in mining as well as the industry's reaffirmation and recommitment to the shared goal of zero harm.

ARM engaged with a coalition of investors represented by the Church of England Pension Fund and the Council of Ethics for the Swedish National Pension Funds that wrote to 680 mining companies requesting disclosure of information on tailings storage facilities. ARM's detailed disclosure is available on our website at www.arm.co.za.

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 programmes.

Meetings with joint venture partners and providers of capital on an ongoing basis.

ARM management engaged with shareholders and investors at the 85th Annual General Meeting, roadshows and at ad hoc investor meetings.

Operational engagements with employee representatives and labour unions.

Frequent engagements with regulators regarding health, safety, environmental compliance and socio-economic development.

Since August 2016, ARM Ferrous has taken a strategic role in the Manganese Leadership Forum, which was established with the Minerals Council South Africa and various Northern Cape mines. The Forum is engaging around the appropriate design of the Vaal Gamagara Water Supply Scheme, which will upgrade and increase the supply of water from the Vaal River to mines and municipalities in the Northern Cape, and to Botswana.

Beeshoek, Black Rock and Khumani mines 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. Two Rivers and Modikwa mines are currently negotiating similar agreements with the Departments of Health in their provinces.

Regular engagements with employees and contractors through Safety and Health/Wellness Committees.

ARM engages with non-governmental organisations on an ad hoc basis, primarily around environmental matters.

Meetings with community representatives to understand their needs and concerns to assess to what degree we can meet their needs. Regular meetings are held regarding infrastructure and socio-economic development through our Local Economic Development (LED) commitments in terms of the Social and Labour Plans (SLPs).

Customer-driven audits of environmental, social and governance practices and performance at certain ARM Ferrous operations.









Key stakeholders and their material concerns

Our key stakeholders and the primary channels we use to engage with them are shown in the graphic below. More information regarding our stakeholders, their concerns and our response is available in the table on pages 93 to 95.

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The most material concerns of our key stakeholders can be grouped into three thematic areas. These can be linked to our most material matters and the initiatives in place to address these concerns, as shown in the table that follows.

STAKEHOLDER GROUPS	AREAS OF INTEREST	MATERIAL MATTERS	INITIATIVES IN RESPONSE
Being a responsible employer			
Government Customers Labour and unions	Health and safety in the workforce		<ul style="list-style-type: none"> » Comprehensive wellness programme; » Policies and management systems align with OHSAS 18001 (safety and health), ISO 45001 (risk), and SANS 16001 (wellness and disease management) systems; and » Regular internal and external assurance.
Labour and unions Communities and NGOs	Skills development		<ul style="list-style-type: none"> » ARM's Human Resources (HR) strategy prioritises capacity building; » Investment in skills development; and » Benchmarking against industry good practice.
Corporate citizenship			
Government Customers Communities and NGOs Industry Associations	Environmental responsibility		<ul style="list-style-type: none"> » Alignment with the ICMM Sustainable Development Framework; » ISO 14001-aligned operational environmental management systems; » Regular internal and external assurance; and » 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		<ul style="list-style-type: none"> » Significant investments in building capacity in local communities through Corporate Social Investment and Local Economic Development initiatives.
Government Suppliers Labour and unions	Transformation		<ul style="list-style-type: none"> » Transformation is embedded into all business processes and particularly HR, Procurement and Corporate Social Responsibility; and » Performance is assessed against the Mining Charter and dti Codes.
Financial sustainability			
Joint venture partners Providers of capital Industry associations Labour and unions	Financial performance		<ul style="list-style-type: none"> » Enterprise Risk Management incorporating elements of the COSO Framework, 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; and » Regular internal and external assurance.
Labour and unions Communities and NGOs Providers of capital Suppliers	Fair exchange of value	 	<ul style="list-style-type: none"> » Equitable remuneration practices; » Significant investment in communities; » Returns for shareholders and consistent dividend payer; and » Fair payment terms.

SOCIAL AND ETHICS COMMITTEE CHAIRMAN'S REVIEW

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ARM's 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 socioeconomic realities. We recognise that we have a responsibility to manage and mitigate the potential negative impacts of our business activities. At the same time, 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.

Our ability to create value depends on the value realised for others, which underpins the good relationships we strive to sustain with all stakeholders. ARM's values commit us to the highest moral, ethical and legal compliance standards in dealing with our stakeholders, and are formalised through our Code of Conduct.

While the Board retains ultimate responsibility for sustainable development, it delegates responsibility for monitoring the effective management of this area to the Social and Ethics Committee. The Committee oversees the sustainability risks identified by the enterprise risk management programme and is supported by executive management and relevant Executive Committees and forums, including the Employment Equity and Skills Development Committee.

ARM is a member of the International Council on Mining and Metals (ICMM) and shares its commitment to 'Mining with Principles'. Responsible social and environmental practices are integral to our strategic priorities to operate safely, responsibly and efficiently, and to partner with communities and other stakeholders.

We view the increasing focus on environmental and social responsibility by investors, funders, customers and civil society, among others, as a positive development towards the principle of sustainability.

The ICMM performance expectations, which were developed with input from NGOs, international organisations and academia, will set a benchmark for responsible mining practices.

We are committed to zero harm and employee and contractor safety, health and wellness is a constant focus. Safety Days were held at the mining operations in support of the Minerals Council South Africa's (MCSA) National Safety Day to reaffirm this commitment and emphasise the critical importance of collaborative action between management, employees and regulators to ensure the safety and health of all employees.

The implementation of the Critical Control Management (CCM) process across operations continues as part of our commitment to continued safety improvement. CCM is globally recognised as a process that could help to prevent major unwanted events, including disabling or fatal accidents.

Despite our ongoing focus on zero harm, a tragic accident in March 2019 claimed the life of Mr Thomas Maluleke*, a Rock Drill Operator at Modikwa Mine. In September 2019, Mr Ishmael Malatji*, a load haul dump truck operators, was fatally injured in an accident at Two Rivers Mine. We offer our deepest condolences to their wives, children, families, friends and colleagues.

* Both Mr Maluleke and Mr Malatji were full-time employees.



ARM's integrated wellness management programmes have an emphasis on managing hearing conservation, pulmonary tuberculosis (PTB), HIV & Aids, occupational lung diseases and chronic conditions. The Department of Health's (DoH) Test and Treat Policy for HIV & Aids has been implemented at ARM Ferrous operations and is in the process of being implemented in ARM Platinum. Operations have also made good progress in implementing the DoH's 90-90-90 principle relating to PTB, HIV & Aids through memorandums of understanding with the DoH at Modikwa and Two Rivers mines.

The increased incidence of hypertension in the workforce is a concern and monitoring and management of those affected is a priority. While hypertension is primarily a lifestyle disease, operations are implementing specific initiatives to assist employees in managing their health and mitigating the risks associated with chronic health conditions.

Awareness and outreach initiatives to address PTB and HIV & Aids in communities remains an important focus of ARM's contribution to addressing these diseases. Public-private partnerships are powerful tools in bringing healthcare to communities. To this effect, the mines in the Ferrous division have partnered with the Northern Cape DoH 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 and Modikwa mines are in the process of establishing similar partnerships with the Limpopo DoH.

Developing our human capital and driving transformation

The Employment Equity and Skills Development Committee manages and monitors transformation progress across the Company and representation remains well above the Mining

Charter targets in all management categories across the Group. Workshops were held in the first half of the financial year to deepen the understanding of diversity and inclusion.

Gender mainstreaming remains an area of focus. While the feedback from the gender transformation review by the Commission for Gender Equality in F2019 showed progress since their last review in F2016, action plans are in place to address the areas identified for improvement.

We invested R239 million in skills development in F2019, which represents 8% of payroll spend. Our skills development programmes emphasise the development of women and previously disadvantaged individuals in support of the Group's transformation strategy. This year we added a Junior Development Programme and another Women Development Programme, which aims to develop leadership competencies, create talent pools to accelerate development and improve promotional opportunities for A to C band female employees.

ARM is a Level 4 Contributor in terms of the dti Codes of Good Practice. At the time of publication of this report, the F2019 verification was still being finalised. The F2019 B-BBEE verification certificate will be available on our website as soon as this process is completed.

The joint venture partners in Nkomati Mine have agreed to place the mine on care and maintenance from 30 September 2020 in preparation for closure. We are committed to managing the process in a responsible manner and are engaging with affected stakeholders on an ongoing basis. Employees are being supported through the process and the mine's environmental responsibilities will be executed in line with its environmental management programme and all relevant statutory requirements as well as good practice guidance from the ICMM on responsible mine closure.



SOCIAL AND ETHICS COMMITTEE CHAIRMAN'S REVIEW continued

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Community relations

One of the opportunities we have to contribute to socio-economic development is through partnering with local communities to improve the lives of those living there. Conditions in many of the communities around mines are challenging and ARM invests in these communities in a number of ways to strengthen them and support their resilience and sustainability.

We contribute to educational support at community schools, provide bursaries to promising students from these communities and offer adult education and training (AET) opportunities. Youth opportunities include learnerships and a graduate development programme. Targeted supplier development and enterprise development initiatives at the operations aim to promote local job creation and economic development by accelerating the development of local black-owned and black women-owned companies. These programmes provide business development support, mentoring and coaching, and financial support in certain instances. During F2019, R160 million was invested into these initiatives.

70% of our total of R175 million Corporate Social Responsibility investment in F2019 related to infrastructure development through local economic development commitments identified in partnership with local government and community representative structures. Projects include upgrades to essential water and sewerage infrastructure, as well as construction of roads.

Responsible environmental stewardship

Tailings management and water reporting were particular areas of focus during F2019. Reviews were conducted at all tailings storage facilities (TSFs) to assess legal compliance, risk assessments and emergency response plans, and progress undertaken was reported to the ARM CEO and divisional Chief Executives at a workshop in May 2019. Independent external review of the TSFs is being conducted in line with global best practice and dam break analyses have been commissioned to inform enhanced emergency response planning.

Water quality and availability are recognised as a top ten risk for the Group. ARM initiated a project in 2017 to align our reporting of water 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 second phase of implementation of the ICMM Water Accounting Framework was completed during F2019. As part of the process, water accounting definitions were implemented which allowed for better reporting on harvested rainfall and runoff from mining operations. Additional flow meters were also installed to improve accuracy of measurement. A detailed water reporting flowsheet was developed for each operation in consultation with the engineering and environmental teams, to assist in this process.

As a result, F2019 water withdrawal volumes reported by operations increased by 19% to 21.7 million m³ from 18.3 million m³ in F2018.

The most material increases include:

- » At Modikwa Mine, 2 million m³ of groundwater, which was previously not reported, was accounted for;
- » A further 1.2 million m³ increase in water withdrawal, mainly due to dewatering of the pit to ensure safe mining conditions, was reported at Beeshoek Mine;
- » Nkomati Mine reported a 0.7 million m³ increase due to more efficient recovery of water from the tailings storage facility; and
- » Black Rock Mine reported an increase of 0.3 million m³ as a result of new flow meters being installed and improved accuracy of measuring.

As a result of the implementation of the Water Accounting Framework, we have improved our understanding of water re-use efficiency, which is above 70% and is a key indicator in monitoring and managing consumption and losses.

ARM's F2019 estimated carbon footprint (Scope 1 and 2 attributable emissions) increased by 7% to 1.1 mtCO₂e while electricity consumption remained in line with F2018 at 1 659 GWh.

We have set a revised greenhouse gas (GHG) emissions target to reduce absolute Scope 1 and 2 emissions by 5% by F2020 against the F2014 baseline through emission reduction initiatives (excluding divestments). We will provide further information on such initiatives implemented and our progress towards this target in a climate change and water supplementary report that will be available on our website by the end of December 2019. The supplementary report will aim to meet the requirements of a broad range of stakeholders for increased transparency and comparability in water and climate change reporting.

Legal compliance is regarded as the minimum requirement while we implement targeted continuous improvement initiatives, including reduction in water consumption and reducing carbon emissions. We regularly engage with regulators 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. As operations expand and projects evolve, amendments to licences and permits are an ongoing process underpinned by internal and external compliance monitoring processes. There were no major environmental incidents at our operations in F2019.

In closing, I would like to thank my fellow Social and Ethics Committee members and colleagues on the Board for their support during the year. We believe that operational excellence goes beyond financial returns and production targets to include acting with integrity and delivering on our environmental and social priorities. Achieving this is only possible with the buy-in and diligence of ARM's employees and management, and we thank them for their commitment in this regard.

We also appreciate the support of our broader stakeholders and look forward to working with them in the year ahead to continue to 'do it better'.

Dr R V Simelane

Chairman of the Social and Ethics Committee

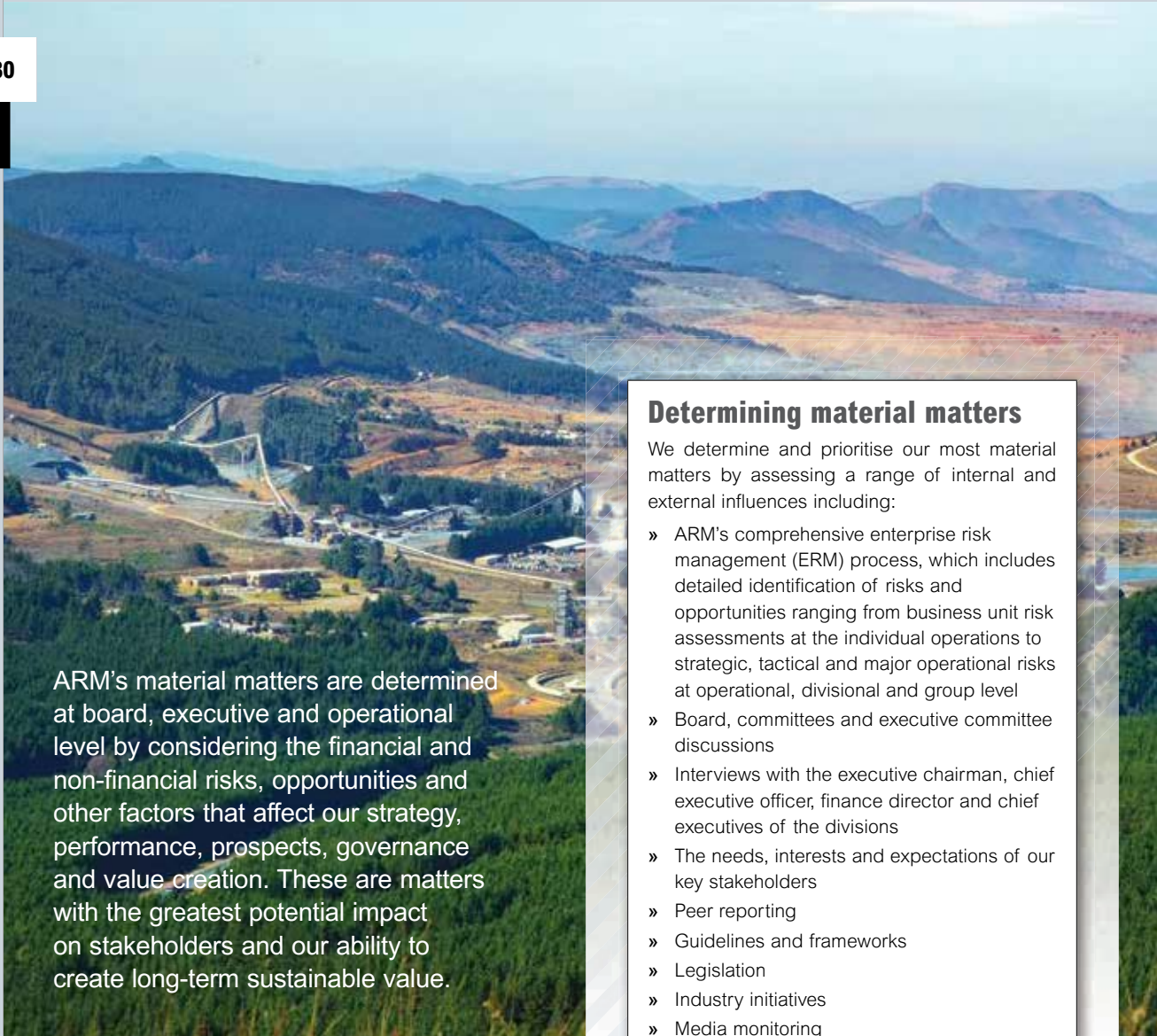
FOCUS FOR F2020

The safety of our workforce and achieving zero harm are our primary priorities. 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:

- » completing the implementation of the Critical Control Management process developed by the ICMM to enhance current risk controls across operations followed by external audit;
- » actively participating in new safety initiatives and leading practices;
- » continuing our progress in achieving the DoH 90-90-90 goals for PTB, HIV & Aids;
- » achieving the occupational health and safety Milestones for 2024 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;
- » 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;
- » reducing water and energy consumption in line with our F2020 targets;
- » continuously improving on water reporting and effective management and re-use across operations; and
- » continued reduction in carbon emissions and mitigating the risks presented by climate change both to operations and surrounding communities.



MATERIAL MATTERS



ARM's material matters are determined at board, executive and operational level by considering the financial and non-financial risks, opportunities and other factors that affect our strategy, performance, prospects, governance and value creation. These are matters with the greatest potential impact on stakeholders and our ability to create long-term sustainable value.

The material matters inform ARM's strategy, governance frameworks, risk management and operational management processes. Performance against material matters is assessed using relevant indicators that are regularly reported to the executive committee and board, and closely monitored through integrated risk management and combined assurance processes.

The material matters affect and are affected by movements in the six capitals defined in the <IR> Framework (financial, social and relationship, human, natural, manufactured and intellectual capitals).

While our material matters are grouped into broad themes that cover ARM as a whole, their potential impact on the different operations in the group may vary. For example, stakeholder engagement and relationships include positive and constructive relationships with host communities at certain operations and more challenging interactions at others.

Determining material matters

We determine and prioritise our most material matters by assessing a range of internal and external influences including:

- » ARM's comprehensive enterprise risk management (ERM) process, which includes detailed identification of risks and opportunities ranging from business unit risk assessments at the individual operations to strategic, tactical and major operational risks at operational, divisional and group level
- » Board, committees and executive committee discussions
- » Interviews with the executive chairman, chief executive officer, finance director and chief executives of the divisions
- » The needs, interests and expectations of our key stakeholders
- » Peer reporting
- » Guidelines and frameworks
- » Legislation
- » Industry initiatives
- » Media monitoring

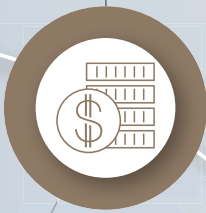
Securing a consistent supply of water is a risk at our Northern Cape operations, while Modikwa and Nkomati mines in Mpumalanga have to overcome the challenge of excessive water in mining areas.



Material matters for each division are detailed in the operational reviews on pages 52 to 77 of the 2019 Integrated Annual Report, available on our website www.arm.co.za.

The board assesses the material matters and approves the bases used in their determination.

In F2019, 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. The review concluded that the material matters reported in F2018 remained broadly relevant for the current reporting period although some of the components and descriptions have changed.



Delivering financial returns to shareholders and other providers of capital



Continuously improving operational performance



Ensuring a safe, healthy and appropriately skilled workforce



Maintaining our social licence to operate



Ensuring responsible stewardship of natural resources

Components

- » Balancing growth and dividends within a robust and flexible financial position
- » Addressing loss-making and cash-negative operations.

F2019 responses

- » Capital allocation guiding principles were refined and a dividend formula was approved by the board
- » All operations were headline earnings positive except Nkomati Mine and Sakura Ferroalloys. A decision was taken to scale down Nkomati Mine and place it on care and maintenance
- » Sakura Ferroalloy is being negatively impacted by high input costs (particularly manganese ore and reductant prices). Various initiatives have been introduced to improve costs.

Components

- » High unit-cost production escalations across all operations
- » Consistency and security of water supply at the Northern Cape operations
- » Progressing the Black Rock Mine and Gloria modernisation projects on schedule and on time.

F2019 responses

- » Unit costs affected by production volume decreases and above-inflation diesel, electricity and labour cost increases
- » The Northern Cape operations continued to work with the Sedibeng Water Board and a capital user charge was agreed
- » Black Rock Mine and Gloria modernisation projects on schedule.

Components

- » Maintaining safety performance at all operations
- » Attracting and retaining key skills, particularly at Nkomati Mine.

F2019 responses

- » Initiatives implemented at all operations to improve safety
- » A decision was made to scale down Nkomati Mine; and retaining skills remains a challenge at this mine.

Components

- » Community unrest.

F2019 responses

- » Each operation continued to invest in host communities through social and labour plans, local economic development and corporate social investment. This investment spanned infrastructure, education, health, skills development and creating employment
- » ARM also continues to work with community forums, municipalities and government on community investment.

Components

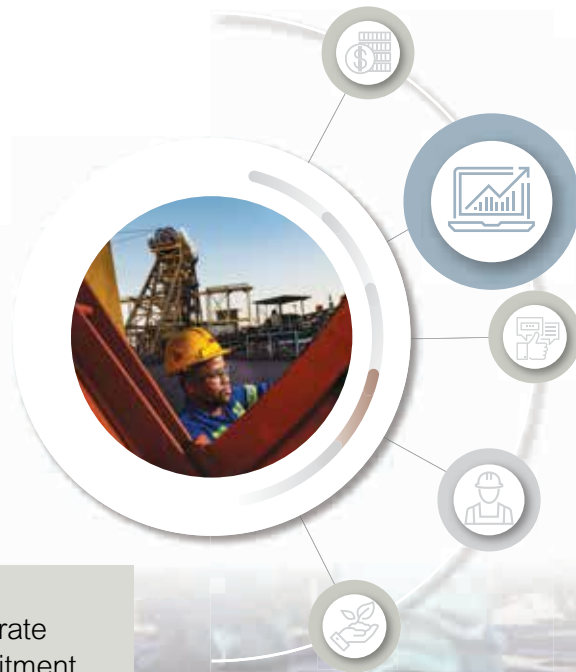
- » Climate change and reducing carbon emissions
- » Efficient energy use
- » Responsible water use
- » Safe and responsible management of tailings.

F2019 responses

- » Implementation of the water accounting framework finalised
- » External review and dam breach analysis of failings storage facilities have been commissioned.



MAINTAINING OUR SOCIAL LICENCE TO OPERATE



“Maintaining our social licence to operate requires us to demonstrate our commitment to responsible and ethical business practices and constructive relationships with stakeholders, particularly our host communities and government.”

– **Mike Schmidt**
Chief executive officer

Communities

Transformation

Product stewardship

REFERENCE: **2019** *F2019 focus*

COMMUNITIES

“ARM’s commitment to being a responsible corporate citizen drives our support of the development of the communities in which we operate through social investment and local economic development projects. These initiatives aim to build capacity in communities and prioritise women, HIV and Aids projects, the upliftment of people living with disabilities, youth and the socially destitute.”

– **Dr Patrice Motsepe**
Executive chairman

Partnering with communities and other stakeholders for social upliftment is a strategic priority. Investment in local communities is aimed at driving socio-economic development and improving community resilience and sustainability.

Most of ARM’s operations are located in remote areas near communities with pressing socio-economic challenges. This provides an opportunity to make a meaningful difference by investing in infrastructure and social projects that can have a significant positive impact. Delivering these initiatives strengthens our relationships with local communities and benefits 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.

South Africa is experiencing high levels of unemployment and socio-economic challenges. Aligned with increased community unrest, the ARM Group risk register recognises loss of social licence to operate and social unrest as top ten risks.

How we manage community relationships


The Executive: Compliance and Stakeholder Relations and divisional senior management oversee stakeholder engagement at operational level. 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.

Formal stakeholder engagement strategies and policies guide community engagements and are implemented according to stakeholder engagement plans that are revised regularly.

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

Reporting context

REPORTING FRAMEWORKS

<p>ICMM</p> 	<p>UN SDGs:</p> <table style="display: flex; justify-content: space-around; text-align: center;"> <tr> <td style="background-color: #e91e63; color: white; padding: 5px;">1 NO POVERTY</td> <td style="background-color: #e91e63; color: white; padding: 5px;">4 QUALITY EDUCATION</td> <td style="background-color: #e91e63; color: white; padding: 5px;">5 GENDER EQUALITY</td> <td style="background-color: #e91e63; color: white; padding: 5px;">9 INDUSTRY INNOVATION AND INFRASTRUCTURE</td> <td style="background-color: #e91e63; color: white; padding: 5px;">10 REDUCED INEQUALITIES</td> </tr> </table>	1 NO POVERTY	4 QUALITY EDUCATION	5 GENDER EQUALITY	9 INDUSTRY INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES
1 NO POVERTY	4 QUALITY EDUCATION	5 GENDER EQUALITY	9 INDUSTRY INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES		

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)

that represent a particular interest, such as business, youth or women forums. Engagements are both formal and informal, and formal engagements are generally minuted.

Progress on projects implemented and impact in the communities are monitored according to various 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 agreed 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.

Community grievances can be raised through the formal stakeholder structures in place 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.

MAINTAINING OUR SOCIAL LICENCE TO OPERATE continued

Formal and informal community-related engagement structures



Where possible, operations collaborate with other industry bodies to improve coordination and increase social impact in communities. The General Manager of Modikwa and Two Rivers mines participate in a working group with other CEOs of local mining companies and the Minerals Council South Africa (MCSA) to identify solutions to the various

socio-economic challenges in the area. ARM Ferrous participates in the Northern Cape shared value working committee with other manganese producers and the MCSA to coordinate and deliver sustainable corporate social responsibility projects in the region.

Challenges related to implementation of projects in local communities include:

Ensuring that initiatives meet the different expectations of the range of stakeholders in each project.	Undermining of elected structures by self-appointed community groups and the increasing number of ad-hoc forums (business, youth, women) with different demands.
Continuity in stakeholder representatives.	Increasing community expectations, particularly at marginal operations.
Ensuring that funding provided is spent effectively and on the agreed projects.	Ensuring municipalities accept handover of completed projects timeously and continue to maintain the infrastructure.
Ensuring the sustainability of projects and timing of exit, particularly in enterprise and supplier development programmes.	Ensuring that funding is effectively deployed by understanding whether beneficiaries (local businesses, NGOs etc.) are already receiving funding or support from other sources.

Our contribution to communities

ARM supports education, skills development, entrepreneurship, social projects and infrastructure programmes in local communities to promote socio-economic upliftment, improve living conditions and build our relationships with host communities.

EMPLOYMENT

49% of total Group full-time employees and 52% in the senior management category are from communities local to the operations. Infrastructure and other projects supported by the operations are encouraged to use local labour wherever possible and in F2019 83 permanent and 537 temporary jobs were created through these projects.

HEALTHCARE INITIATIVES

2019 Continue our focus on community health and wellness initiatives in partnership with the Department of Health.

Operations support awareness, testing campaigns and outreach initiatives to address PTB, HIV & Aids among employees and in communities. The three mines in the Ferrous division partner with the Department of Health through implementation of Memorandums of Understanding (MoUs) to strengthen the implementation of provincial PTB, HIV & Aids, STIs and chronic conditions management strategies, and extend primary healthcare services to contractors and communities. Two Rivers and Modikwa mines are in the process of establishing similar MoUs in their areas of operation. Black Rock Mine also partners with the

Northern Cape DoH to provide primary healthcare services to the Black Rock community.

Operations engage with local Aids councils where possible to ensure community projects address the most pressing wellness and health needs, and support community health initiatives, including wellness centres and home-based care groups.

In F2019, ARM operations provided R1.95 million to support community health and HIV & Aids projects through the corporate social investment (CSI) programme (F2018 R2.1 million).

MAINTAINING OUR SOCIAL LICENCE TO OPERATE continued

SKILLS DEVELOPMENT

439 community members received nationally aligned Adult Education and Training (AET) through training centres at operations to support the development of basic skills to improve career prospects and future employability.

Community cadetship training increases employability of participants.

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

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

EDUCATION

ARM bursars included students from local communities in relevant fields of study.

ARM participates in a number of initiatives that support youth development, increase employability in local communities and develop the pool of future industry skills. These 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. ARM also supports Science, Technology, Engineering and Maths (STEM) in rural communities to help students to acquire formal qualifications.

During F2019, ARM provided R7.5 million towards educational initiatives through the CSI programme (F2108: R6.8 million).

THE ARM BROAD-BASED ECONOMIC EMPOWERMENT TRUST (ARM TRUST)

The ARM Trust was established to drive rural development. Rural Upliftment Trusts have been established in every province and support initiatives including welfare, community development and anti-poverty initiatives with an emphasis on education. The Trusts and individual unit holders are funded by the dividends accruing to their combined equity interest in ARM. ARM also provides resources to build administrative and project management capacity to the Trust to manage the development initiatives. During F2019, R16.4 million was provided to the projects facilitated by the Trust (F2018: R11.2 million).

PREFERENTIAL PROCUREMENT AND ENTERPRISE AND SUPPLIER DEVELOPMENT

2019

Continue enterprise development in partnership with government, development agencies and communities.

Supplier development initiatives to incorporate SMMEs into preferential procurement programmes.

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

ARM's operations prioritise support for black-owned and black women-owned businesses. Where appropriate,

operations ring-fence opportunities for suppliers that meet these requirements. Initiatives include a Young Entrepreneurs Incubation Programme and a Business Skills Development Programme. Support includes 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.

During F2019, R160 million was invested in enterprise and supplier development initiatives.

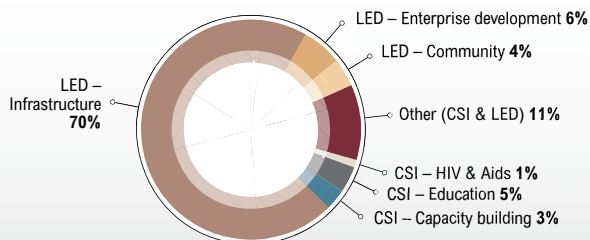
INFRASTRUCTURE DEVELOPMENT

Community infrastructure development projects are implemented as part of the Local Economic Development (LED) programmes and support regional IDPs. These projects form part of the five-year Social and Labour Plans (SLPs) the mines commit to in terms of the MPRDA. SLP projects are agreed and regularly revised in close consultation with communities, the DMRE, Department of Health, Department of Education and local government.

Progress on SLP projects is monitored on an ongoing basis and 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 F2019, R147.9 million was invested in LED infrastructure projects (F2018: R106 million), which comprises 70% of the Group's total corporate social responsibility (CSR) spend.

F2019 TOTAL CSR SPEND R175.3 million (%)



CORPORATE SOCIAL INVESTMENT (CSI)

Community needs 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 R27.4 million (F2018: R20.5 million), with 31% invested in supporting educational initiatives and 20% in capacity building.

The HR function at Corporate Office and the HR or CSR functions at the operations encourage employee volunteering through initiatives such as Mandela Day.



CASE STUDY

Community water

Access to water is a challenge in the Northern Cape and the ARM Ferrous mines support various projects that aim to address these challenges. Khumani and Black Rock mines contributed to the construction of the new Kuruman bulk water reservoir to replace the old reservoir and help to address the bulk water storage challenges in Kuruman, which will benefit around 11 000 households. Khumani Mine implemented a project in partnership with Gamagara municipality to upgrade the waste water treatment plant that services the Dibeng area (approximately 7 800 residents).

The mine also provided R14.5 million to construct 321 water-borne toilets for 321 stands in the Olifantshoek community and upgraded and secured sewerage pump stations in Kathu and Mopoteng.

Beeshoek Mine upgraded water infrastructure at Postmasburg Hospital, which serves Tsantsabane. The project improved water availability and included the renovation of 14 ablution facilities. The mine also erected a fence around the hospital to improve security.

TRANSFORMATION

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“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.”

We unequivocally support transformation in the South African mining industry as an effective means to redress historical inequality, facilitate broader social development and give all South Africans a stake in the country’s mineral wealth. Mining licences are contingent on transformation performance and compliance with the relevant legislation is a key focus.

Reporting context

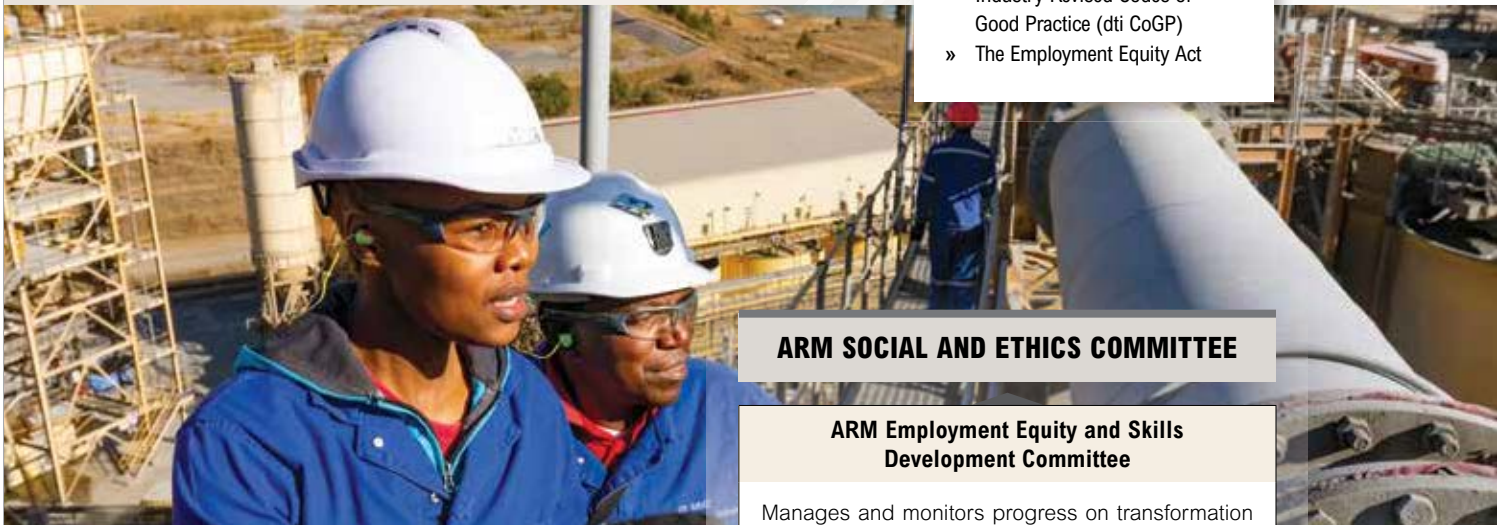
REPORTING FRAMEWORKS

UN SDGs:



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



ARM SOCIAL AND ETHICS COMMITTEE

ARM Employment Equity and Skills Development Committee

Manages and monitors progress on transformation in the workforce, skills attraction, development and retention.

Reviews recruitment processes, follows up on deviations in EE performance and monitors the technical skills required to meet our transformation goals.

How we manage transformation

The ARM Social and Ethics Committee is responsible for monitoring transformation. Transformation principles are integrated into business process across the Group with specific focus in those areas most directly involved in promoting transformation such as the human resources, procurement and corporate social responsibility functions.

Transformation in the workforce is guided and monitored by the Employment Equity and Skills Development Committee, which reports to Exco. The Group Executive: Compliance and Stakeholder Relations and Compliance 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. ARM’s employment equity performance is discussed in the human resources development section of this report on pages 58 to 68.

Transformation performance against 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.

Preferential procurement and enterprise and supplier development

Preferential procurement initiatives offer opportunities to 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. Preferential procurement and enterprise and supplier development are also significant elements of the Mining Charter and dti CoGP scorecards.

ARM's procurement department assists divisional Chief Executives to drive the process of improving preferential procurement. Our contracting process requires suppliers and service providers to supply valid and current B-BBEE certificates at the contract commencement stage. Submission of B-BBEE improvement plans is also required when proposals are submitted. Suppliers and service providers are encouraged to continuously improve their B-BEE ratings and to communicate any changes in their status.

A pre-audit was conducted in February 2019 to assess preferential procurement and enterprise and supplier development performance against the requirements of the dti CoGP. Operations prepared improvement plans to address the findings highlighted in the feedback report and training was provided on the requirements of the verification audit.

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 actively track and flag supplier's B-BBEE certificates prior to expiry to ensure the availability of valid accreditation certificates.

All operations have compiled draft procurement plans to align to the requirements of the new Mining Charter and an action plan is being implemented to improve preferential procurement performance that, where feasible, prioritises EMEs, QSEs, black owned, black youth and black women owned suppliers.

Initiatives to improve preferential procurement include:

<p>Graduating businesses from enterprise development programmes into the supply chain.</p>	<p>Providing continuous training and support for small, medium and micro enterprises, as well as providing procurement opportunities to help the businesses grow.</p>	<p>Delivering awareness workshops with suppliers to educate them on B-BBEE requirements and ARM operations' preferential procurement policies, with a particular focus on non-compliant companies.</p>
<p>Aligning enterprise and supplier development targets to current business plans.</p>	<p>Encouraging 26% black-held businesses to partner to increase black ownership.</p>	<p>Conducting half-yearly reviews on Top 20 suppliers to ensure compliance and validity of BEE certificates.</p>

SR More information on enterprise and supplier development is available in the Communities section on page 36.

Performance against the Mining Charter Scorecard

ARM's six South African mines report their transformation performance in terms of the Broad-Based Socio-Economic Empowerment Charter for the South African Mining Industry (the Mining Charter) which aims to achieve the transformation goals of the Mineral and Petroleum Resources Development Act (MPRDA).

The revised Mining Charter 2018 (MC18) was gazetted in September 2018 and the implementation guidelines outlining processes, procedures, forms and templates to facilitate compliance came into effect from 1 March 2019. The Department of Mineral Resources and Energy (DMRE) acknowledged that it would not be practical for companies to prepare their 2019 Mining Charter compliance reports using MC18 and implementation will be required for reports filed in March 2020 that relate to the 2019 calendar year.

ARM continues to monitor these developments as we prepare to report against MC18. Workshops were held with operations during F2019 to update employment equity and procurement reporting and processes.

MAINTAINING OUR SOCIAL LICENCE TO OPERATE continued

ARM's mines submitted reports to the DMRE in March 2019 regarding their performance for the 12 months to December 2018 in terms of the current reporting requirements set in Mining Charter.

	2014 target	Year to 31 December	
		2018	2017
1. Reporting		Submitted	Submitted
2. HDSA ownership	26%	49.9%	33.8%
ARM has an effective 50.41% HDP ownership base through African Rainbow Minerals & Exploration Investments (42.24%), Botho-Botho Commercial Enterprises (0.53%), the ARM Broad-Based Economic Empowerment Trust (7.60%) and Black ARM directors (0.03%). These percentages are calculated excluding the treasury shares held by the 100% ARM owned subsidiary, Opilac Proprietary Limited. The performance figure noted in the table is the average across ARM's six mines. In March 2019, Khumani, Beeshoek and Two Rivers mines reported ownership recognising ARM's shareholding in full as HDP ownership in line with the current legal interpretation. Black Rock, Modikwa and Nkomati mines reported using the flow through principle (as in prior years), which attributes the HDP ownership of a holding company to a subsidiary in proportion to the percentage held by the holding company. In the 2019 Mining Charter reports, to be submitted in March 2020, all of the mines will report recognising ARM's shareholding in full as HDP ownership.			
3. Housing and living conditions		Achieved	Achieved
All operations achieved the 2014 housing and living conditions targets, which related to hostel conversions, occupancy rates and facilitating home ownership. ARM's 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. Our housing initiatives are discussed on page 67.			
4. Preferential procurement (2014 Mining Charter)			
– Capital	40%	79.4%	85.3%
– Services	70%	84.0%	79.2%
– Consumables	50%	85.6%	80.8%
Enterprise development			
– Levy withheld from multinational suppliers allocated to social development	0.50%	Note 1	Note 1
<i>Note 1: Modikwa Mine is collecting levies from some multinational suppliers of capital goods and continues to engage with others on implementing the requirements. Beeshoek, Black Rock and Khumani mines are collecting the required levies and contributing them to the Northern Cape Mine Managers Association Trust Fund for distribution. Two Rivers and Nkomati mines are also collecting the required levies. ** Preferential procurement performance excludes Goedevonden.</i>			
5. Employment equity (HDSA representation)			
– Top management	40%	52.1%	56.3%
– Senior management	40%	59.1%	50.3%
– Middle management	40%	66.0%	63.8%
– Junior management	40%	76.4%	74.5%
– Core skills	40%	88.0%	88.8%
ARM's initiatives to ensure a diverse and representative workforce are discussed on page 64.			
6. Human resources development (% of payroll invested)			
ARM's skills development initiatives are discussed on page 61.	5%	5.2%	5.1%
7. Mine community development (% of net profit after tax)			
ARM's socio-economic development initiatives in local communities are discussed on page 33.	1%	1.7%†	0.8%†
<i>† Percentage excludes Modikwa Mine, which is an unincorporated joint venture and therefore does not report a standalone net profit after tax figure.</i>			
8. Sustainable development and growth Health and safety performance (discussed on page 50).		95%	87%
9. Facilitate local beneficiation		Note 2	Note 2
<i>Note 2: 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.</i>			

Performance against the Revised Codes of Good Practice (dti CoGP)

We measure ARM's overall Group transformation performance and that of the smelters at Cato Ridge and Machadodorp against the dti CoGP.

ARM is a Level 4 Contributor in terms of the dti Codes of Good Practice. At the time of publication of this report, the F2019 verification was still being finalised. The F2019 B-BBEE verification certificate will be available on our website as soon as this process is completed.

The table below provides a summary of ARM's performance against the categories of the dti CoGP from F2016 to F2018.

Category	Target	F2018	F2017	F2016
Ownership	25	21.54	21.4	22.14
Management control	15	12.86	10.52	10.17
Skills development	20	14.46	11.5	12.7
Enterprise and supplier development	40	33.43	22.43	18.81
Socio-economic development	5	5	5	5
Overall score		87.29	70.99	68.82
Contributor level		4	7*	8

* Overall F2017 score: Level 6 discounted to Level 7.



OUR VALUE CHAIN



SUPPLIERS

We acknowledge our responsibility to consider the broader impacts of our activities upstream and downstream from the operations.

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

Operations prioritise preferential procurement that supports local enterprise and supplier development, with a focus on black-owned and black women-owned businesses. This approach helps to develop local small, medium and micro enterprises (SMMEs) to 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
- » Upstream climate change risks
- » Upstream carbon emissions

Consideration is given to the upstream and downstream activities in our carbon footprint when we assess and mitigate greenhouse gas-related risks in our value chain. Assessments of climate change risks and opportunities are being expanded across ARM's value chain and to meet the increasing expectations of investors of initiatives such as the Task Force on Climate Related Financial Disclosures (TCFD) and the Transitions Pathways Initiative (TPI).

ARM OPERATIONS

EXTRACTION/MINING OF ORE

CRUSHING AND MILLING



PROCESSING AND BENEFICIATION

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

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



CASE STUDY

Enterprise development in action: Bakhidi Bricks and Paving

Bakhidi Bricks and Paving was formed in 2017 when small scale brickmakers, Thabo Matshidiso and Chris de Klerk joined forces. The company participated in Khumani Mine's enterprise development programme, which included mentoring, coaching and access to capital to establish the site, purchase equipment and for working capital. Gamagara local municipality provided the land for the business.

Khumani Mine also helped the company to achieve certification by the South African Bureau of Standards (SABS), which was officially handed over in August 2019. This makes Bakhidi Bricks the first SABS certified cement brick and paving manufacturing company in the Northern Cape.

This support helped to grow the business from eight employees manufacturing 10 000 building bricks and 7 500 paving bricks a day, to 24 employees and the capacity to manufacture 35 000 building bricks and 25 000 paving bricks a day. The company serves industrial, commercial and residential clients.

Enterprise development initiatives such as this are an important means to support entrepreneurship and local businesses outside the mining supply chain that can contribute to economic development and job creation in local communities.



MINING WITH PRINCIPLES

Metals and mineral-related industry forums in which ARM or its joint venture partners participate

- » The ICMM
- » The Minerals Council South Africa
- » The International Manganese Institute
- » The International Chrome Development Association
- » The Ferro Alloy Producers' Association

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. Ore and Metal, the marketing company for Assore, ARM's joint venture partner in the ARM Ferrous division (which trades as Assmang), 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 facilitated customer ESG audits of operations as required.

Material Safety Data Sheets have been developed where required, to provide information regarding the potential health, safety and environmental impacts of our products and operations.

The products of the Ferrous division require more stringent management and monitoring during shipment as a result of the progressive modification of the International Maritime Organisation's Codes. Products may also need to be registered in terms of "REACH" initiatives being developed and implemented in key markets such as China, Japan, South Korea, India and Brazil. 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.

We encourage responsible use, re-use, recycling and disposal of our products. ISO 9001 quality management systems are in place at most operations to support product quality and customer complaints are addressed comprehensively at operational level.



ENSURING A SAFE, HEALTHY AND APPROPRIATELY SKILLED WORKFORCE



“The safety and health of our employees is of paramount importance and we consistently review the effective safety and health controls that we have implemented to support safety in the workplace, manage occupational health and hygiene and demonstrate good labour practices.”

– **Dr Patrice Motsepe**
Executive chairman

Safety

Occupational health and wellness

Human resources management

REFERENCE: **2019** *F2019 focus*

SAFETY

“Our commitment to the safety and health of all our employees lies at the heart of our culture and the way we run and manage the Company.”




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.

Safety is a critical component of operational performance and directly affects our most important stakeholder – our employees. Safety also directly affects productivity, efficiency, financial capital and our relationships with our broader stakeholders.

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

Reporting context

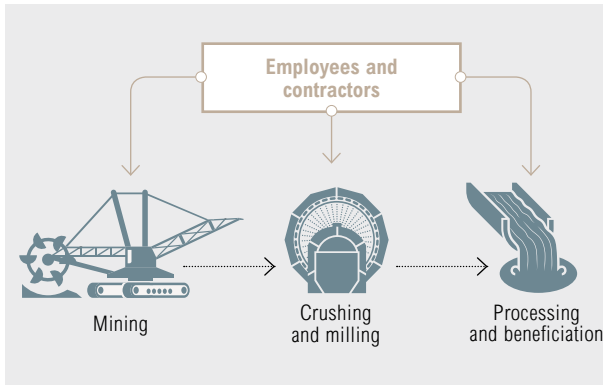
REPORTING FRAMEWORKS

<p>ICMM</p> 	<p>UN SDGs:</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>3 GOOD HEALTH AND WELL-BEING</p> </div> <div style="text-align: center;">  <p>8 DECENT WORK AND ECONOMIC GROWTH</p> </div> </div>
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FTSE/Russel SHS

PRINCIPAL LEGISLATION

- » The Mine Health and Safety Act (MHSA)
- » The Occupational Health and Safety Act (OHSa)
- » The Mining Charter



How we manage safety

ARM takes a holistic approach to employee wellness that considers occupational hygiene, health and safety.

Risk assessments are performed and continuously reviewed at each operation to identify and assess their specific safety and health risks. These assessments include input from regulators, specialists, our employees and labour representatives. Risk assessments are also conducted before commencing any new tasks, expansions or changes to current operations as well as in planning and execution of projects.

Safety policies are set at Group level and inform operational safety policies and strategies that are adapted to meet the specific safety challenges at each operation.

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. All operations except for Machadodorp Works are certified in terms of either standard. Black Rock, Beeshoek and Khumani mines are certified in terms of ISO 45001 while Nkomati and Two Rivers mines are in the process of converting from OHSAS 18001 to ISO 45001 certification. Machadodorp Works was OHSAS 18001 certified and while not formally undergoing re-certification in F2019, remains aligned with the standard. Modikwa Mine and Cato Ridge Works remain OHSAS 18001 certified.

Contractors are treated as employees, receiving the same training and are included in our safety reporting, as required by legislation and industry standards.

Leading and lagging safety indicators are included in the calculation of performance incentives for operational, divisional and corporate staff.

Assurance of safety processes and practices includes external Safety, Health and Environmental (SHE) audits facilitated every second year by the ARM Corporate Office (performed in F2019) and annual OHSAS 18001 and ISO 45001 certification audits. Safety metrics are also included in the annual external assurance of sustainability data.

ENSURING A SAFE, HEALTHY AND APPROPRIATELY SKILLED WORKFORCE continued

Safety training is provided to employees and contractors at induction and on an ongoing basis to entrench a culture of safe working practices.

All operations have implemented fatigue management guidelines in line with the Fatigue Management COP issued by the DMRE. An awareness campaign was rolled out and supervisors have been instructed to assess workers for signs of fatigue and take appropriate steps. In support of this, ARM Ferrous prepared and distributed a fatigue management calendar and booklet that provides information about the

causes and effects of fatigue, ways to prevent fatigue and what to do in the event of fatigue.

An awareness campaign was run across operations regarding the court ruling on private cannabis use. The campaign highlighted the safety impacts of cannabis usage and the legal framework through the Mines Health and Safety Act that prohibits intoxication in the workplace. The campaign emphasised our zero tolerance strategy regarding substance abuse in the workplace.

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We assess and monitor our safety performance through:

Leading and lagging indicators that 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.

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

Benchmarking against industry peers.



2019 Zero harm to our employees.

A tragic fatal accident occurred in a fall of ground incident at Modikwa Mine on 27 March 2019. Mr Thomas Maluleke, employed as a Rock Drill Operator, was fatally injured in the accident. Mr Maluleke is survived by his wife and five children. After year end, Mr Ishmael Malatji, a load haul dump truck operator at Two Rivers Mine, was fatally injured in an accident involving trackless mobile machinery.

ARM operations recorded 90 Lost Time Injuries¹ (LTIs) in F2019 (F2018: 91) and 76 Reportable Injuries (F2018: 68). Total man-hours worked for the year reduced 11% in F2019 and the ARM Group Lost Time Injury Frequency Rate (LTIFR) increased to 0.42 per 200 000 man hours (F2018: 0.38).

LTIFR increased in both the Platinum and Ferrous divisions. Inherent risk is higher at Modikwa Mine than at the other mines in the Group as it is the only conventional stope/mining

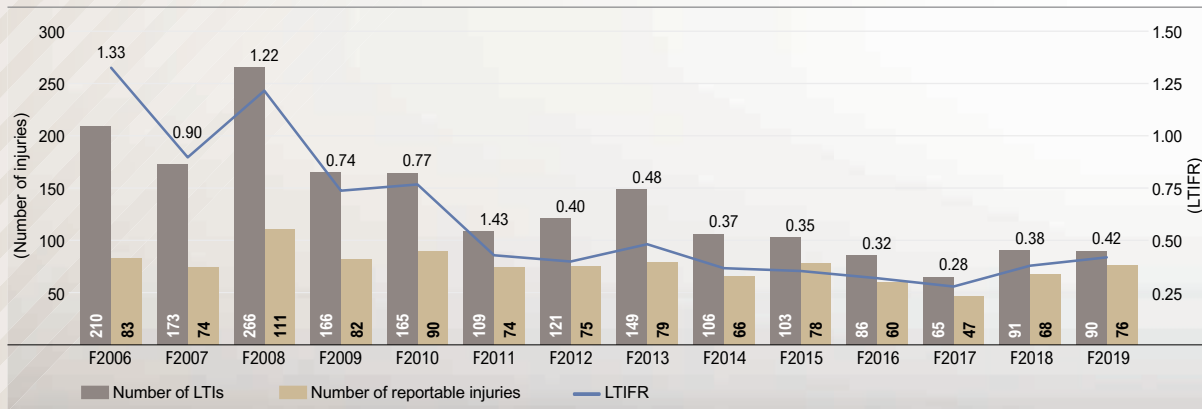
operation. Fifty six of the total LTIs were recorded at Modikwa Mine.

LTIs and the LTIFR increased at Black Rock Mine due to the expansion project currently underway, which 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. A concentrated safety initiative was launched at Black Rock Mine to improve safety performance.

Injuries and action plans to prevent recurrences are discussed comprehensively in every operational safety meeting, in operational sustainability meetings, quarterly joint venture sustainable development committees and the quarterly ARM Social and Ethics Committee meeting.

¹ Safety definitions and additional safety statistics are available in the sustainability data tables available at www.arm.co.za

SAFETY PERFORMANCE: LAGGING INDICATORS (LTI AND REPORTABLE INJURIES)



2019 **Zero harm to our employees.** (continued)

ARM tracks Total Recordable Injuries (TRI) in terms of the definitions of the ICMM. TRI includes Non-Lost Time Injuries (Medical Treatment Cases), Lost Time Injuries and fatalities. A total of 225 TRIs were reported during F2019 (F2018: 195), resulting in a TRIFR per 200 000 man hours of 1.05 (F2018: 0.81).

Safety achievements during the year included:

- » Two Rivers Platinum Mine achieved 5 million fatality free shifts on 18 February 2019.
- » Nkomati Mine achieved 7 million fatality free shifts on 28 June 2019 over a period of 10 years and 9 months.
- » As at 30 June 2019, Cato Ridge Works completed 35 months without a Lost Time Injury.
- » As at 30 June 2019, Machadodorp Works completed 40 months without a Lost Time Injury.
- » Beeshoek Mine was awarded the first prize for the most improved safety performance and the second prize for the best safety performance in its class during the 2018 Mine Safe Conference.
- » On 13 May 2019, Khumani Mine achieved 3 000 fatality-free production shifts and received a trophy from the DMRE in recognition of this significant milestone.
- » Khumani Mine achieved the lowest LTIFR in the history of the mine (0.08) in F2019.
- » Beeshoek Mine recorded 17 000 fatality free production shifts on 18 September 2018, an accomplishment that took 15 years and 6 months to achieve. The mine was announced as second runner-up for the Best Performing Surface Mine in the annual Northern Cape Mine Managers' Association convention in November 2018.
- » Black Rock Mine achieved 7 million fatality free shifts on 7 March 2019, an achievement that took ten years to complete. Black Rock was recognised as second runner-up for the Best Performing Underground Mine in the annual Northern Cape Mine Managers' Association convention in November 2018.

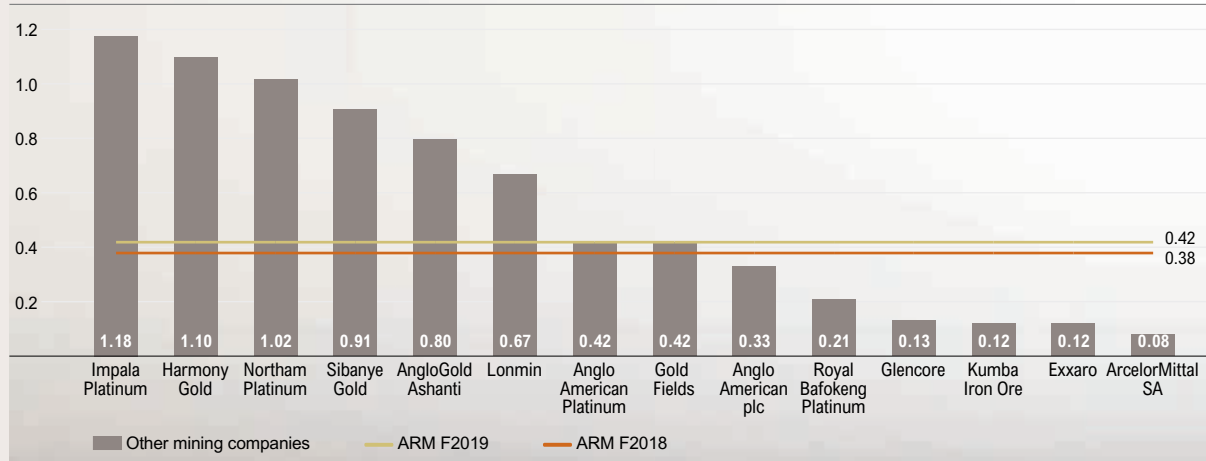
Operation	Total fatality-free shifts worked*	Last fatality*
Beeshoek Mine	4 163 581	March 2003
Black Rock Mine	7 282 943	April 2009
Khumani Mine	2 733 621	April 2015
Cato Ridge Works	2 442 821	February 2008
Machadodorp Works	1 103 713	February 2011
Modikwa Mine	313 501	March 2019
Two Rivers Mine	5 250 729	January 2012
Nkomati Mine	7 003 970	September 2008

* As at 30 June 2019.

Benchmarking our LTIFR against industry peers provides context against which we can monitor our safety performance. However, it is important to note that mining companies are not directly comparable due to the risks inherent in different mining and extraction processes, equipment and levels of complexity. The graph below compares ARM's LTIFR relative to the LTIFRs sourced from the latest published reports of peer mining companies.

The priority safety focus area in terms of safety related to transport and machinery is 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 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.

LTIFR INDUSTRY BENCHMARK (LTIFR)



ENSURING A SAFE, HEALTHY AND APPROPRIATELY SKILLED WORKFORCE continued

2019 Zero harm to our employees. (continued)

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

	F2019			F2018			
	ARM Ferrous	ARM Platinum	ARM total	ARM Ferrous	ARM Platinum	ARM Copper*	ARM total
Lost Time Injuries	17	73	90	11	77	3	91
LTIFR ¹	0.19	0.60	0.42	0.13	0.49	0.26	0.38
Reportable Injuries	15	61	76	11	55	2	68
RIFR ²	0.16	0.50	0.35	0.13	0.39	0.17	0.28
Fatalities	–	1	1	–	1	–	1
FFR ³	–	0.008	0.005	–	0.007	–	0.004

1 LTIFR: Lost Time Injury Frequency Rate
 2 RIFR: Reportable Injury Frequency Rate
 3 FFR: Fatality Frequency Rate
 * Lubambe Mine was disposed of in December 2017.

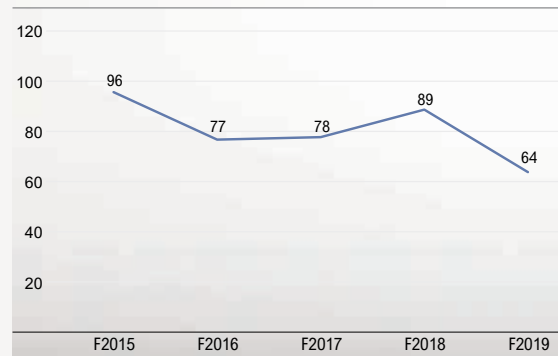
2019 Improving compliance to regulatory and internal standards, thereby reducing stoppages due to Section 54 and Section 55 Notices.

There were 19 Section 54 Notices issued by the DMRE at ARM operations in F2019 (F2018: 31) and shifts (or part of shifts)⁴ affected by these stoppages reduced from 89 to 64. Eighteen of these notices were issued in the ARM Platinum division – 12 at Modikwa Mine and 6 at Two Rivers Mine. One Section 55 Notice was issued at Modikwa Mine, not affecting any shifts.

The smelters in the Group were not issued with any Compliance or Prohibition Notices in terms of the Occupational Health and Safety Act during F2019 (F2018: 0).

4 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 not all shifts affected are completely lost, and quantification of shifts lost is challenging.

SHIFTS AFFECTED⁴ BY SECTION 54 NOTICES



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

	F2019			F2018		
	ARM Ferrous	ARM Platinum	ARM total	ARM Ferrous	ARM Platinum	ARM total
Section 54 Notices	1	18	19	2	29	31
Shifts affected by Section 54 Notices	0	64	64	3	86	89
Section 55 Notices	1	1	2	1	7	8
Shifts affected by Section 55 Notices	0	0	0	0	0	0

2019 **Continued focus on monitoring and implementation of existing leading practices. Active participation in new initiatives and leading practices.**

ARM participates in a number of industry forums and initiatives related to health and safety to help us improve our health and safety performance by adopting good practice. These initiatives include:

THE MINING INDUSTRY OCCUPATIONAL SAFETY AND HEALTH (MOSH) INITIATIVES

The Minerals Council South Africa (MCSA) established the MOSH Learning Hub in 2009 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 is represented by the Executive: Sustainable Development and the Group Occupational Health and Wellness Superintendent on the MOSH Task Force of the MCSA and the Occupational Health and Safety Policy Committee of the MCSA.

THE CULTURE TRANSFORMATION FRAMEWORK (CTF)

The CTF arose from a tripartite process between government, labour and industry with the goal of fostering collaboration between these stakeholders. The Framework 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 INTERNATIONAL COUNCIL ON MINING AND METALS (ICMM)

As a member of the ICMM, ARM benefits from access to a network for learning from peers and implementing good practice.

2019 **Implementation of the Critical Control Management process developed by the ICMM to enhance current risk controls.**

ARM is implementing the Critical Control Management (CCM) process across operations as part of our commitment to continued improvement. The CCM process focuses on prevention of major unwanted events and the critical controls to be put in place to prevent these. Early implementation is complete at some operations and good practice is being shared within the Group. Full implementation is on track for completion during F2020, after which an external audit of the process will be conducted. The CCM process is globally recognised as a process that could significantly help to prevent disabling or fatal accidents.

2019 **Continued alignment with the occupational health and safety Milestones¹ 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.

During F2019, Safety Days were held at all mines in alignment with the MCSA's National Safety Day.

¹ The Tripartite Summit committed government, employers and employees to achieve the 2024 goals, which address occupational health and safety; PTB, HIV & Aids; and culture transformation.

FOCUS FOR F2020

- » Zero fatalities, zero harm to our employees.
- » Implementation of the Critical Control Management process to enhance current risk controls.
- » Improving compliance to regulatory and internal standards, thereby reducing stoppages due to Section 54 and Section 55 Notices.
- » Continued focus on monitoring and implementation of existing leading practices. Active participation in new initiatives and leading practices.
- » 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.

OCCUPATIONAL HEALTH AND WELLNESS

50

“Mining presents various hazards that can be of significant consequences, but through effective risk management strategies, neither safety incidents nor the onset of occupational diseases are inevitable.”



Our values are at the core of our commitment to integrated wellness management. Occupational hygiene surveillance provides important leading indicators regarding exposure to hazards in the workplace, such as noise, particulate matter and fumes. Occupational health and wellness monitoring and management constitute integrated wellness management.

The Department of Health (DoH) has identified mine workers and peri-mining communities as key populations for certain diseases, including pulmonary tuberculosis (PTB), HIV and sexually transmitted infections (STIs). Our approach to employee wellness integrates these government initiatives to reduce and prevent these and other primary health challenges, and includes community awareness and outreach initiatives to address PTB, HIV & Aids and other chronic conditions among employees and in communities.

Employee wellness is identified as a top 10 risk in the Group Risk Register in recognition of the impact that various diseases and health risks can have on the quality of life, safety performance and productivity of the workforce.

Reporting context

REPORTING FRAMEWORKS

ICMM



UN SDGs:



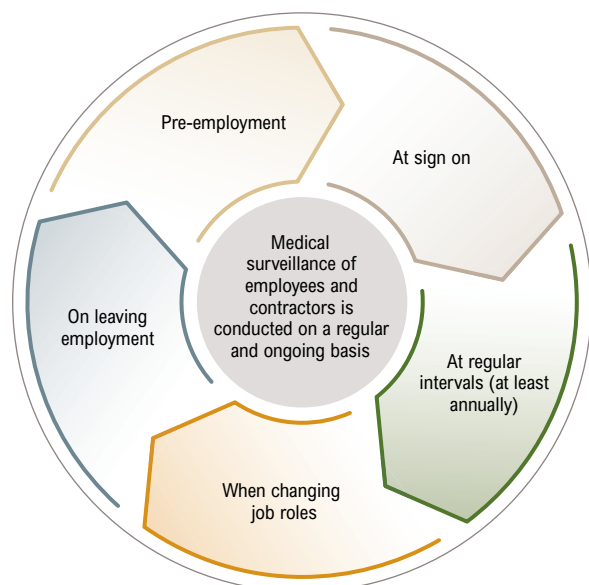
PRINCIPAL LEGISLATION

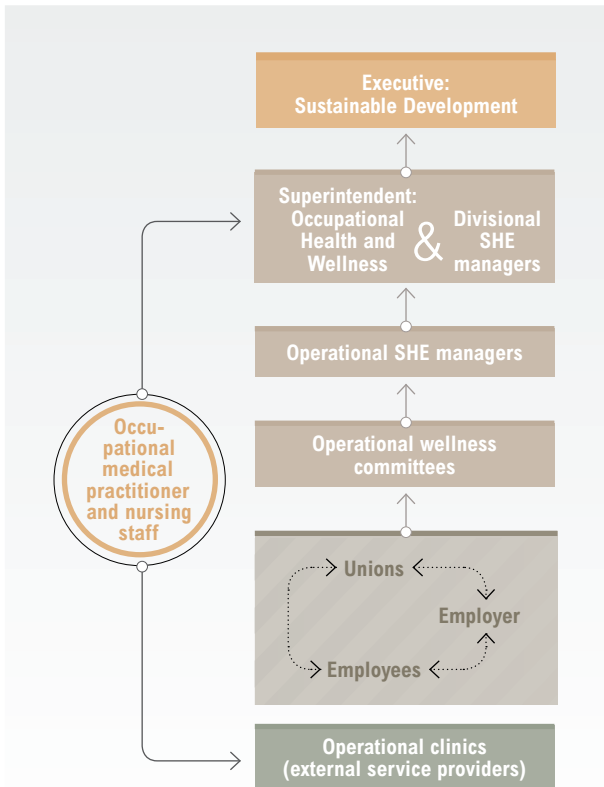
- » The Mine Health and Safety Act (MHSA)
- » The Occupational Health and Safety Act (OHSA)
- » The Mining Charter
- » The Occupational Diseases in Mines and Works Act
- » The Compensation for Occupational Injuries and Diseases Act

How we manage occupational health and wellness

Occupational hygiene surveillance is combined with comprehensive risk-based occupational medical surveillance programmes that identify and monitor for the health risks relevant to each workplace and occupation. These programmes are managed at the operations as part of the SHEQ management system and align with SANS 16001 (the South African National Standard on disease and wellness management). The three mines in the ARM Ferrous division are SANS 16001 certified.

All operations except for Machadodorp Works are certified in terms of either OHSAS 18001 or ISO 45001, the international Standards on occupational health and safety management systems. Black Rock, Beeshoek and Khumani mines are certified in terms of ISO 45001 while Nkomati and Two Rivers mines are in the process of converting from OHSAS 18001 to ISO 45001 certification. Modikwa Mine and Cato Ridge Works remain OHSAS 18001 certified. Machadodorp Works was OHSAS 18001 certified and while not formally undergoing re-certification in F2019, remains aligned with the standard.





Occupational health and wellness services are delivered at site clinics at the mining operations. Contractors are treated as employees and are screened at the start of, during and at completion of contracts. Induction training includes occupational health and hygiene training, and Wellness Officers and Peer Educators provide ongoing training and awareness.

Operational Wellness Committees at operations include representatives from the employer, employees and organised labour. These Committees meet regularly to promote engagement in a partnership approach to managing wellness.

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

Occupational hygiene, health and wellness practices and processes are assessed and assured at a number of levels on an ongoing basis. These include:

- » Quarterly reviews by an external occupational health expert.
- » Annual audit by an external certified wellness auditor of the performance of operations against the ARM Group's Health and Wellness Standard. The Standard is based on the requirements of relevant legislation, reporting frameworks, industry good practice and the SANS 16001:2013 Wellness and Disease Management Standard. The audit identifies areas for improvement at operations, measures year-on-year progress and benchmarks performance between operations. In F2019, the average score across the operations was 86.5%, in line with the F2018 score and above our current target of 81%.

- » Annual internal audits of operating procedures and practices by an independent occupational health nurse and doctor 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 sustainability data.

Occupational health and wellness

ARM takes a precautionary approach that aims as far as possible to limit at-source workplace exposure to hazards, which include noise, particulate matter, fumes and hazardous substances. Exposure is managed through a combination of:

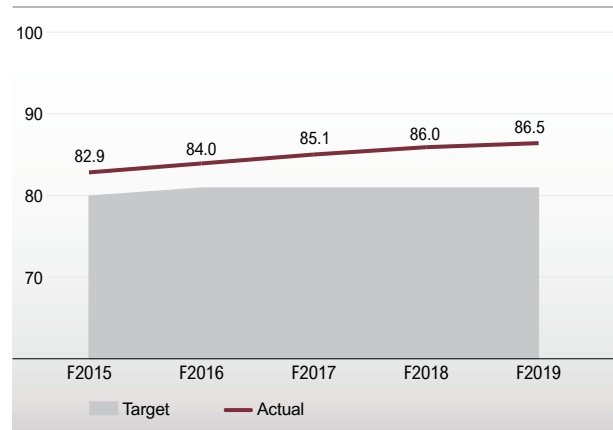
- » control at source
- » identification of potential hazards;
- » occupational hygiene and personal monitoring;
- » awareness campaigns;
- » personal protective equipment; and
- » formalised safe operating procedures to limit exposure.

Medical surveillance is conducted for employees and contractors before they start working in risk areas to establish baselines for the relevant metrics, such as hearing and lung capacity. Mandatory medical surveillance programmes then regularly monitor these indicators to assess and follow up on shifts from the baselines. This includes counselling, training on the use of personal protective equipment, reporting to the DMRE (at the threshold required) and, if occupational exposure is suspected, referral for specialist examination to confirm this.

Noise-induced hearing loss (NIHL) remains a material health risk in the mining industry and at the operations. While occupational respiratory diseases have been reported at our operations, baseline indicators from pre-employment occupational medical surveillance show that these relate to exposure that arose before commencing employment with ARM. Our clinics facilitate the compensation submissions regardless of the origin of diseases.

ARM INTERNAL HEALTH AND WELLNESS STANDARD

Average Group Audit Score vs Target (%)



ENSURING A SAFE, HEALTHY AND APPROPRIATELY SKILLED WORKFORCE continued



How we manage hearing conservation

Hearing conservation and NIHL¹

The occupational health and wellness programme has a strong focus on hearing conservation and aligns with the Mining Industry Occupational Safety and Health (MOSH) leading practice on noise. Specialist early warning programmes have been introduced to effectively manage NIHL. These programmes detect deformity in the sensory hair before actual hearing loss occurs. Affected employees undergo counselling and coaching about hearing protection. Deterioration from the individual's hearing baseline as at employment, referred to as the shift in percentage loss of hearing (PLH), of 5% or more is reported to the DMRE and investigated in terms of Section 11.5 of the Mine Health and Safety Act (MHSA).

Where hearing loss suggests NIHL, 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 employee².

Hearing conservation		
36 572 audiometric tests (F2018: 33 812)	2.7% of employees showed PLH shifts between 5% and 10% (F2018: 2.4%)	1.4% of employees showed PLH shifts > 10% (F2018: 1.7%)

AUDIOMETRIC TESTING

- » Performed prior to employment and when transferring between work environments to establish baselines.
- » Regular periodic hearing tests 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.
- » Training employees in the use of hearing protection devices (HPDs).
- » Personalised HPDs at some operations (Modikwa and Nkomati mines).
- » Hearing safety awareness campaigns in high noise areas.

IF HEARING DETERIORATES

- » Counselling is provided.
- » 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.

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

Respiratory complications can arise from long-term exposure to high levels of dust. Complications can include pneumoconiosis and increased pulmonary tuberculosis (PTB) infection rates. Silica content in the orebodies of our base metals and platinum mines are monitored routinely as part of occupational hygiene monitoring programmes and silica levels are consistently below analytical detection limits. There is therefore minimal risk of exposure to silica at our operations. Six cases of silicosis were reported during F2019 (F2018: 53), all of which arose from exposure to silica before commencing work at ARM operations.

Dust suppression nevertheless remains a core occupational hygiene focus and airborne dust levels are controlled using water sprays and surfactants. Employees at source are supplied with dust masks where appropriate and extractor fans minimise exposure to dust in the workplace where relevant.

Information regarding the silicosis settlement agreement is available on page 33 of ARM's 2019 Integrated Annual Report.

ASBESTOS

Asbestos fibres are present in the ore body at Nkomati Mine but not at any of the other mines in the Group. The mine has implemented extensive dust suppression and exposure mitigation measures. A comprehensive surveillance and control programme was implemented in consultation with leading experts from the Institute of Medicine (IOM) in Scotland.

Three cases of asbestosis were diagnosed at Modikwa Mine and reported to the Medical Bureau for Occupational Diseases (MBOD) in F2019 and eight in F2018. Investigation into these cases confirmed that they relate to exposure to asbestos during prior employment. Compensation claims are nevertheless facilitated by the Modikwa site clinic.

MANGANESE

Cato Ridge Works processes manganese ore and has a medical surveillance and biological monitoring protocol developed by leading occupational health specialists. The manganese protocol has been implemented at Black Rock Mine as well as for employees who handle manganese ore at the Saldanha and Port Elizabeth port terminals.

ARSENIC

Elevated levels of arsenic were reported in concentrate at Nkomati Mine in 2018, which subsequently returned to normal levels. Sampling of the concentrate showed that the arsenic does not become an airborne pollutant and does not pose a health risk to employees.

OTHER

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

2019

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

The table below shows ARM's progress against the ten-year goals set by the Mine Health and Safety Council (MHSC) Occupational Health Milestones in 2014.

Mine Health and Safety Council (MHSC) Occupational Health Milestones

ELIMINATE OCCUPATIONAL LUNG DISEASE (NO NEW CASES OF SILICOSIS)

No new silicosis infections have been diagnosed arising from exposure at ARM-managed mining operations since 2009. Where silicosis is diagnosed that arises from prior exposure, the cases are submitted for compensation but not included in the Milestone statistics.

ELIMINATE NOISE-INDUCED HEARING LOSS (NO HEARING SHIFTS >25 DB FROM HEARING BASELINE)

The audiometric testing equipment at the operations' clinics was upgraded to monitor Standard Threshold Shifts (STS) and specialised early warning programmes have been introduced to effectively manage NIHL. Affected employees receive counselling and coaching about hearing protection.

PREVENTION OF HIV & AIDS AND PTB (PTB INCIDENCE TO BE BELOW NATIONAL LEVEL, CURRENTLY 567/100 000)

PTB incidence at ARM operations is 320 per 100 000 employees. This is significantly below the national rate and the industry rate for 2018 of 435.

During F2019, ergonomic and vibration surveys were conducted on trackless mobile machines and other equipment at Nkomati and Beeshoek mines. The assessments were conducted by external service providers to determine the health impact ergonomics and vibration could have on operators. The surveys identified a number of risks and associated controls which are being implemented specifically related to operator wellness.

ENSURING A SAFE, HEALTHY AND APPROPRIATELY SKILLED WORKFORCE continued

Primary health

ARM's Integrated Wellness Management Standard includes comprehensive programmes to manage PTB, HIV & Aids, STIs and chronic diseases and ensures a consistent approach across all operations in the Group.

Wellness centres at all of the mines, except for Nkomati Mine, have primary healthcare (PHC) facilities that provide treatment and counselling to employees and contractors. At Nkomati Mine, a full-time PHC nurse provides daily PHC services at the mine clinic. The wellness center at Beeshoek Mine is approved to dispense HIV & Aids, STI and PTB treatment. 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.

Trained occupational health and wellness coordinators supervise operational programmes. The wellness coordinators

at Two Rivers, Modikwa, Khumani, Beeshoek and Black Rock mines have completed training on the implementation of SANS 16001, which includes HIV & Aids management.

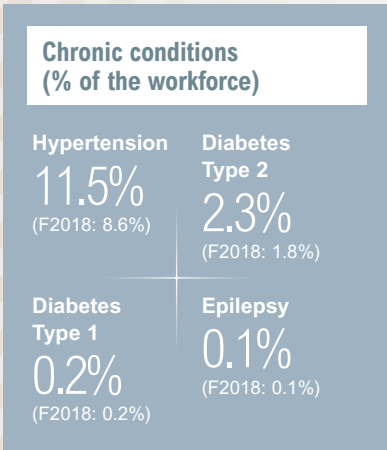
Beeshoek, Black Rock and Khumani mines have Memorandums of Understanding (MOUs) in place with the Northern Cape Department of Health to strengthen the implementation of the provincial pulmonary tuberculosis (PTB), HIV & Aids, STIs and chronic diseases strategies. The partnerships build capacity of local clinic staff and engage communities and other stakeholders to decrease the morbidity and mortality associated with these diseases. Two Rivers and Modikwa mines are in the process of finalising similar MOUs with their provincial Departments of Health.

ARM's 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.

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Chronic conditions

2019 Continued risk-based monitoring and treatment of chronic conditions.



Chronic diseases are monitored as part of the integrated health risk and wellness management programmes at the operations and tracked in chronic disease registers. Chronic conditions are monitored by specific occupational risk exposure profiles with specific reference to high risk occupations.

Systems have been implemented to notify supervisors of due dates for employees' scheduled medical examinations to ensure that medical examinations are valid and up to date. Operational access control systems restrict entry to the workplace in cases of expired certificates of fitness.

The incidence of hypertension at ARM operations increased by 28% in F2019 from 1 852 to 2 363 cases, with the highest prevalence rates evident at Beeshoek, Nkomati and Two Rivers mines. Hypertension is primarily a lifestyle disease and operations have implemented programmes to raise awareness about hypertension. The clinics monitor employees with hypertension and manage compliance with prescribed treatment regimes.

During F2019, all mines formalised systems for the monitoring of chronic conditions per occupational risk exposure profile. 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. Dieticians have been appointed to the clinic teams in the Northern Cape mines 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.

12 194 cases of upper respiratory tract infections (URTI) were diagnosed and treated during F2019, which includes repeat cases (F2018: 12 721). URIs are diagnosed based on a medical screening questionnaire rather than on a full diagnostic process and are more frequent during the cold winter months.

PTB, HIV & Aids

ARM's occupational health and wellness program integrates management of PTB, HIV & Aids and sexually transmitted infections (STIs), and prioritises their early identification.

2019

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.

2019

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

ARM's approach to managing PTB, HIV & Aids and STIs aligns with the DoH's National Strategic Plan 2017 – 2022 (NSP) and the requirements of the Mining Charter. The NSP is South Africa's master plan for preventing and treating PTB, HIV & Aids and STIs, and focuses on reducing new infections, facilitating treatment and ensuring the cure of PTB and the suppression of HIV viral loads.

HIV & Aids

The HIV & Aids Policy emphasises the right of all employees to confidentiality and non-discrimination on the basis of HIV status. Employees are encouraged to know their status and to take responsibility for managing their wellness. HIV counselling and voluntary testing (CVT) is offered at initial, periodical and exit medicals, and upon request of employees.

Permanent employees belong to medical aid schemes that provide disease management programme (DMP) benefits, including HIV & Aids treatment. Peer Educators are trained and provide formal feedback on their activities. PTB, HIV & Aids and STI awareness and education is part of induction training and wellness days, including World Aids Day on 1 December. This year, several operations participated in the Cheka Impilo campaign launched on World Health day. Cheka Impilo is an accelerated national wellness campaign that focusses on testing and treating people with HIV, PTB, STIs and non-communicable diseases such as hypertension and diabetes.

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 Group is 7.8% (F2018: 7.7%).

HIV & Aids management

34 246
counselling
sessions*
(+16%)
(F2018: 29 498)

11 617
employees*
tested (+4%)
(F2018: 11 145)

4 767
employees*
on ART
(-25%)
(F2018: 6 379)

34 246 HIV & Aids counselling sessions were delivered during F2019 and 12 765 employees and contractors were tested. The number of employees and contractors receiving ART at our operations decreased by 25% in F2019 due to reporting issues at the occupational health service provider at Modikwa Mine as well as turnover of short-term contractors out of ARM operations, and their consequent movement off ARM DMPs. ARM Ferrous has fully implemented the new test and treat policy and all patients receiving ART in the division have been enrolled on DMPs. The policy is still in the process of being implemented in ARM Platinum through the MoU with the DoH.

	F2019			F2018		
	ARM Ferrous	ARM Platinum	ARM total	ARM Ferrous	ARM Platinum	ARM total
Employees and contractors						
Counselled*	18 078	16 168	34 246	11 199	18 299	29 498
Tested	5 802	6 963	12 765	3 438	7 707	11 145
Enrolled in disease management programmes	1 715	2 049	3 764	1 172	2 207	3 379
Receiving anti-retroviral treatment (ART)	1 715	3 052	4 767	1 172	5 207	6 379

* CVT is offered at every visit to the PHC facilities, including at induction and during regular follow-up visits for chronic disease management. The number of people counselling sessions therefore exceeds the total number of employees.

ENSURING A SAFE, HEALTHY AND APPROPRIATELY SKILLED WORKFORCE continued

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Pulmonary tuberculosis (PTB)

Passive PTB screening is conducted using the DoH cough questionnaire at all visits to our occupational health clinics. All new PTB cases are reported to the DMRE and submitted to the Medical Bureau for Occupational Disease (MBOD) for possible compensation. Contact tracing at the workplace is conducted for all new PTB cases to manage infection control and site clinics notify the community clinic in the area where the employee resides to arrange for contact tracing at home.

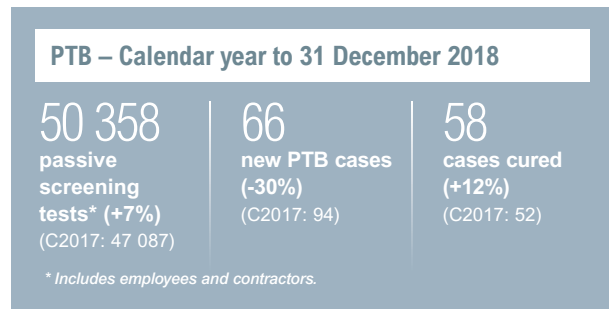
ARM participates in the Masoyise health programme, a multi-stakeholder initiative led by the Minerals Council South Africa aimed at addressing the challenge to eliminate PTB, HIV and non-communicable diseases in the mining industry. The project committed to offer HIV counselling and testing (HCT) and PTB screening to all employees in the mining sector over three years from 2016 to 2018. All ARM mining operations submit quarterly Masoyise reports to the Minerals Council using the online Healthsource reporting system.

Employees with PTB are monitored according to the national PTB management protocol. In alignment with the MOUs with the DoH, last year all mines except Two Rivers Mine introduced 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.

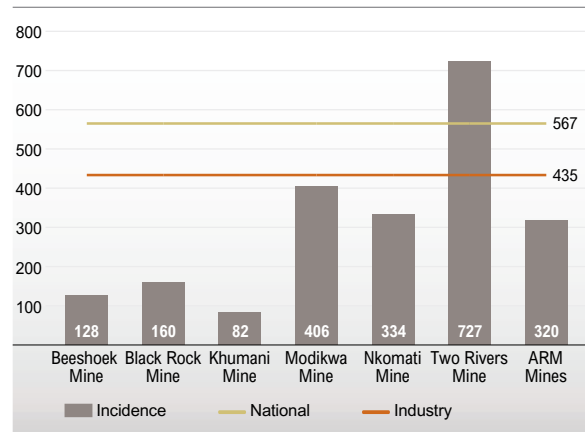
PTB incidence is below national and industry rates at all ARM mines except Two Rivers Mine, which is currently negotiating an MOU with the Limpopo DoH that will enable the operation to implement IPT to reduce PTB rates.

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 2018 (C2018).

There were 50 358 PTB screening tests conducted on employees and contractors and 66 new cases detected in the 12 months to 31 December 2018. The cure rate improved to 87.9% in C2018, slightly below the DoH's 2014/2015 target of 90%, but a significant improvement on the 55.3% reported in



PTB INCIDENCE PER 100 000 WORKERS



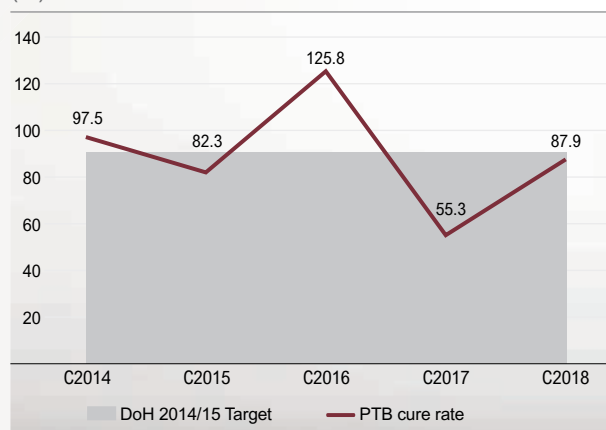
C2017. However, the C2017 cure rate was negatively affected by an increase in silicosis among contractors exposed to silica in prior employment before joining ARM (which increased the PTB infection rate), as well as infected short-term contractors on treatment who moved out of our operations (reducing the cure rate). Five cases of multi-drug resistant (MDR) PTB were detected at ARM operations during the year (C2017: nine). 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, the results were submitted to the DMRE and the progress of the patients is monitored at site clinics during treatment.

2019

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

ARM facilitates and supports various community outreach initiatives that address PTB, HIV & Aids, as well as 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. Initiatives supported include community wellness centres and home-based care groups.

PTB CURE RATE (%)



	January to December 2018			January to December 2017		
	ARM Ferrous	ARM Platinum	ARM total	ARM Ferrous	ARM Platinum	ARM total
Employees and contractors:						
Screened**	33 587	16 771	50 358	29 650	17 437	47 087
New cases	13	53	66	17	77	94
Cured	8	50	58	10	42	52
MDR/XDR*	1	4	5	0	9	9

* Multi-drug resistant/Extensively drug resistant TB.

** All visits to the PHC facilities include passive TB screening, including induction and regular follow-up visits for chronic disease management. The number of screenings is therefore higher than the total number of employees.

2019 Continue progress towards achieving the DoH Strategic Plan in terms of the 90-90-90 goals for PTB, HIV & Aids.

The DoH introduced the 90-90-90 principle relating to PTB, HIV & Aids counselling and testing in 2017. This refers to Goal Three of the NSP, which 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 and is at or above the goal for the second and third HIV & Aids goals. However the percentage of employees living with HIV that know their status declined from 82% in 2018 to 69% in 2019. This is an industry-wide challenge and the Masoyise data shows the industry testing rate at 61% in 2018. ARM mining operations are implementing a significant HIV testing programme to improve this indicator. The programme includes all stakeholders, including unions, NGOs and the local Departments of Health.

FOCUS FOR F2020

- » Continued focus on reaching the 2014 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.
- » 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.
- » Continue passive PTB screening and offering HIV counselling and voluntary testing to all employees visiting our clinics.
- » Reinforce our PTB-related community outreach projects to focus on early detection and treatment of PTB for communities around our operations.
- » Continue progress towards achieving the DoH Strategic Plan in terms of the 90-90-90 goals for PTB, HIV & Aids.

HUMAN RESOURCES MANAGEMENT

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“Our employees are at the centre and at the heart of everything we do. ARM continues to strive to be an employer of choice and to create a safe and healthy work environment.”

– **Dr Patrice Motsepe**
Executive chairman

ARM’s ability to create sustainable value for our stakeholders is dependent on how successful we are at sourcing, attracting, retaining and developing the skills needed to deliver on our Group strategy. The activities of our human capital facilitate the conversion of natural capital in the form of mineral and ore reserves, into financial capital.

Labour productivity is a key aspect of achieving our production targets, in line with our strategy of low-cost production. The ARM strategy is supported by the Human Resources strategy, which aims to increase efficiency, foster an entrepreneurial culture, provide leadership development opportunities and entrench ARM as an employer of choice.

Our values drive our commitment to maintaining a non-discriminatory workplace 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.



Reporting context

REPORTING FRAMEWORKS

ICMM



UN SDGs:



PRINCIPAL LEGISLATION

» Refer to the table on the facing page.

HOW WE MANAGE HUMAN CAPITAL

The Group Executive: Human Resources is the senior executive responsible for the implementation of the four Human Resources Strategic Pillars. Human capital policies, procedures and practices are regularly reviewed and updated. These align with South African labour laws and the South African Board for People Practices (SABPP) National Standards. This ensures that our human capital practices meet the stipulated legal requirements, which include conditions of employment, pay, and leave regulations, and limit excessive working hours.

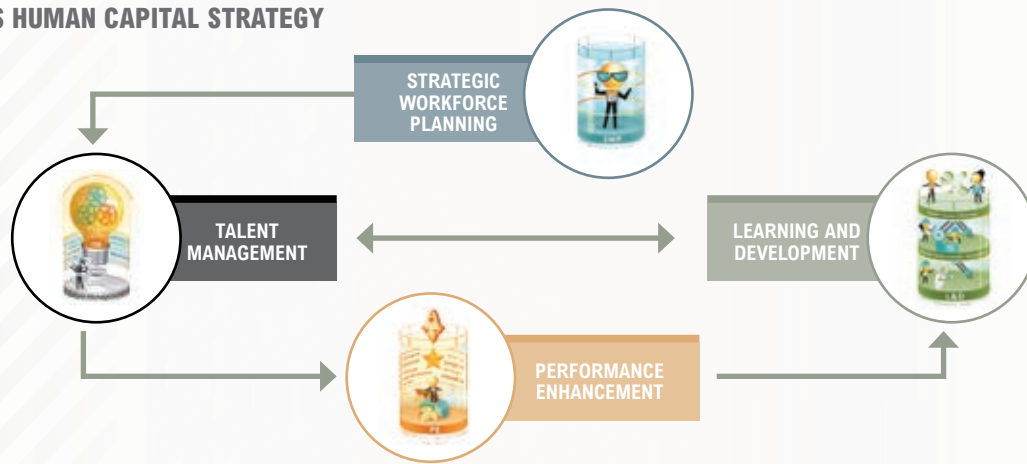
We regularly review industry benchmarks to ensure that ARM’s remuneration practices with regard to minimum wages are

aligned to national industry standards and legislative requirements. ARM conducted an internal benchmark on equal pay for work of equal value, in line with Section 6.4 of the Employment Equity Act, to ensure that non-discriminatory pay practices are in place.

ARM recognises 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.

Quarterly meetings are held by the management of Human Resources, Human Resources Development and Employee Relations, to drive the implementation of the HR strategy.

ARM'S HUMAN CAPITAL STRATEGY

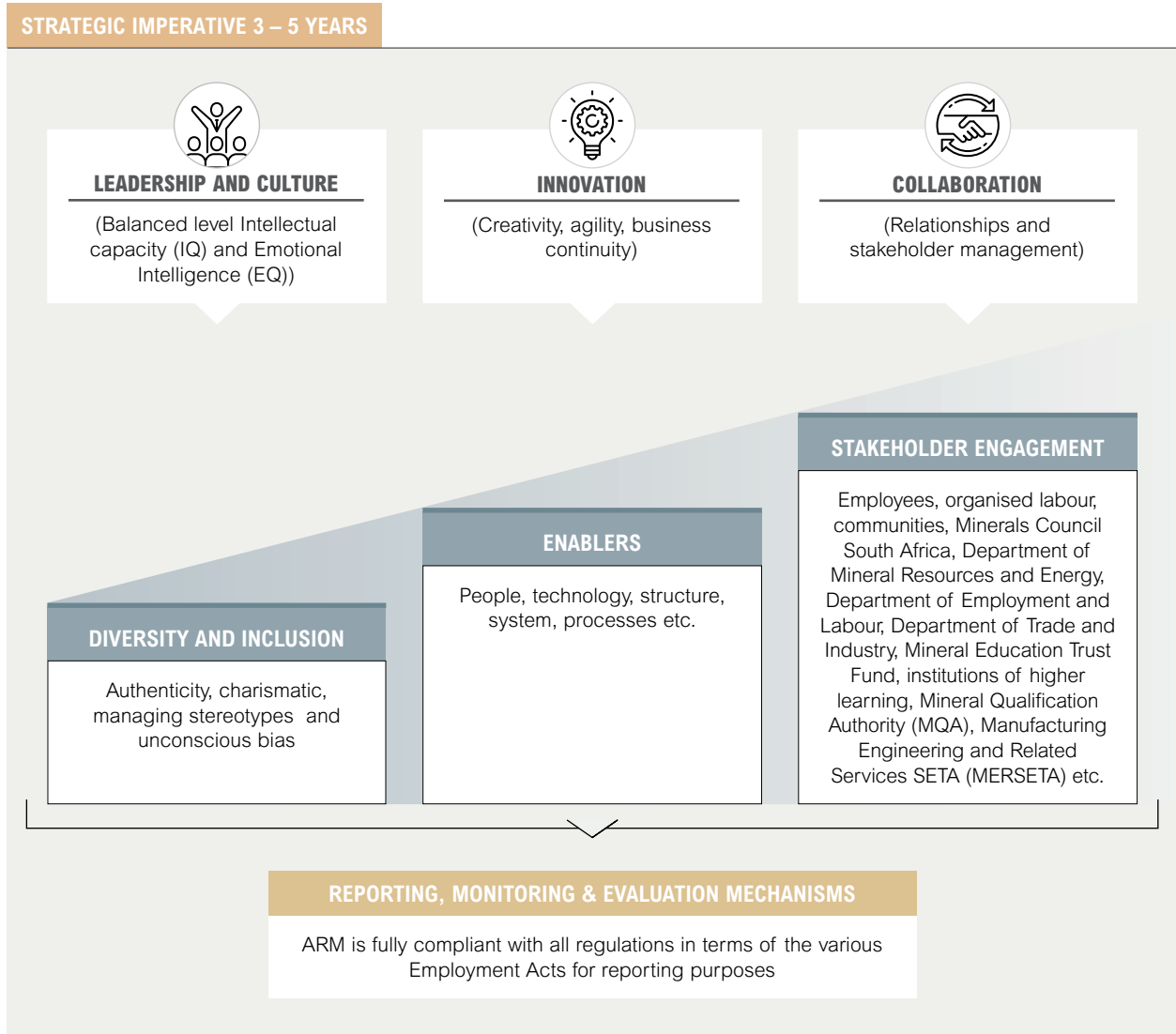


The Group Executive Human Resources is the executive accountable for HR's legal compliance. The compliance matrix below outlines the various reporting timelines.

Regulating Body	Relevant Act/Authority	Report/Submission	Frequency	Reporting Period	Submission Date
Mining Qualifications Authority	Skills Development Act 97 of 1998	MQA Workplace Skills Plan	Annually	01 Jan - 31 Dec	30 April
Mining Qualifications Authority	Skills Development Act 97 of 1998	Annual Training Report	Annually	01 Jan - 31 Dec	30 April
Sector Education and Training Authority	Skills Development Act 97 of 1998	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 October (Manual)
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
Department of Employment and Labour	Ministerial Determinations in terms of the BCEA to work continuous operations	Basic Conditions of Employment continuous operations	Annually	September to September	30 June
Department of Employment and Labour	Basic Conditions of Employment Act	Sunday Labour permission	Bi-annually	On date of approval	Bi-annually as per expiry date
Department of Mineral Resources and Energy	Mineral and Petroleum Resources Development Act No 28 of 2002	Social Labour Plan Quarterly Report	Quarterly	5 years	5 years
Department of Mineral Resources and Energy	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
Department of Mineral Resources and Energy	Mineral and Petroleum Resources Development Act No 28 of 2002	Social Labour Plan	Every 5 years	5 years	As per 5 year expiry 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	Department of Trade and Industry	dti Scorecard	Annually	1 July – 30 June	01 August
Commission for Gender Equality	Commission for Gender Equality	On request	On request	On request	On request

ENSURING A SAFE, HEALTHY AND APPROPRIATELY SKILLED WORKFORCE continued

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



We monitor our Human Capital performance through:

- Human capital performance indicators, which are monitored and reported on at quarterly operational, divisional, Executive Committee, Steering Committee, Management Risk Committee and Social and Ethics Committee meetings.
- Quarterly compliance roadshows led by the Group Executive: Human Resources and the Group Executive: Compliance and Stakeholder Relations to monitor and evaluate compliance, performance and implementation across operations
- Benchmarking of HR practices against international best practices, through participation and contribution to professional bodies, including the SABPP and the Global Top Employer Certification Programme.



2019 During F2019, data was migrated into the HR system to integrate the four strategic HR pillars for reporting, data analytics and data management.

The four pillars of the human resources strategy

STRATEGIC WORKFORCE PLANNING

The right people, in the right place, at the right time



The strategic workforce planning process systematically identifies and analyses workforce needs to produce a workforce plan that supports the achievement of our strategic and operational objectives. Workforce planning was mapped over a three to five-year period, which will be monitored and reported on annually. Gap analyses of current core and critical skills against future needs and forecast attrition rates identify focus areas for our talent management framework. This ensures that the required positions are filled through recruitment and by developing suitable internal candidates for these roles.

Workforce (30 June 2019)

21 417
(F2018: 21 862)

40%
Contractors
(F2018: 43%)

TALENT MANAGEMENT

Source, attract, deploy, develop, retain and optimise talent



ARM's talent management framework proactively designs and implements an integrated talent-driven organisational strategy to source, attract, deploy, develop, retain and optimise the appropriate talent requirements identified in the workforce plan to ensure a sustainable organisation. Our talent management system integrates with our talent portal and employment equity system to ensure talent, succession, career development and transformational goals are aligned. This also enables monitoring and tracking of talent across the Company to support delivery on our Employment Equity and Gender Transformation plans.

Our compelling Employee Value Proposition (EVP) creates an innovative environment and encourages an entrepreneurial culture. The EVP includes competitive remuneration, study assistance, performance management and career development opportunities.

Succession planning is an important focus of the talent management strategy to create an active talent pipeline to

meet current and future workforce needs identified in the strategic workforce planning pillar.

Attract

97%
of job offers made in
F2019 were accepted
(F2018: 97%)

ARM certified as a
Top Employer in F2019

Turnover

5.7%
employee turnover¹
(F2018: 6.9%)

LEARNING & DEVELOPMENT

Develop skills to meet current and future needs



The learning and development pillar of the HR strategy aims to provide occupationally-directed and other learning interventions that enable and enhance the knowledge, practical skills and workplace experience and behaviour of individuals and teams. Training interventions are based on current and future occupational requirements for optimal organisational performance and sustainability.

The total investment in skills development stayed relatively stable at 8% of payroll (F2018: 9%) and remained above the Mining Charter target of 5%. This represents training spend of R11 159 per worker (including contractors) compared to R10 486 in F2018.

Training and development is planned and budgeted for at an operational level and delivered through accredited training centres at each operation. While our skills development programmes prioritise the development of core and critical skills for the business in support of the Skills Development Act, a range of programmes that support the development of future industry skills as well as leadership in the workforce, have been implemented.

¹ 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.

ENSURING A SAFE, HEALTHY AND APPROPRIATELY SKILLED WORKFORCE continued

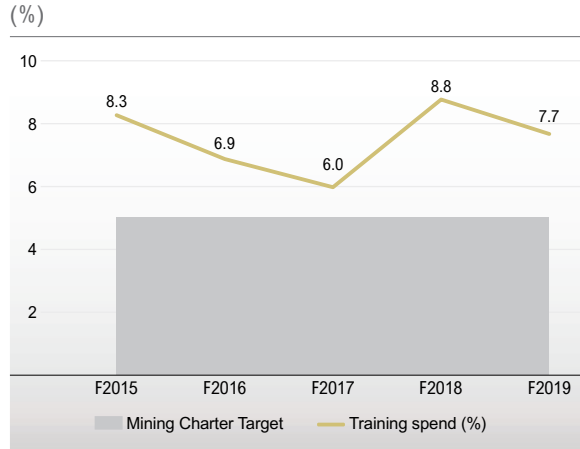
Workforce (30 June 2019)

R239
million spent on skills development in F2019
(F2018: R239 million)

6.8
training days per employee
(F2018: 6.3)

During F2019, the Leadership Development Framework was implemented for all employees across the Group, which aims to ensure all employees acquire leadership and managerial competencies. We also participated in the GradStar programme for the first time this year. The programme recognises the Top 100 students across the country based on leadership qualities and readiness for the workplace. Nineteen of ARM's bursars took part in the GradStar nomination process, of which four were successful and made it to the final stage.

TRAINING SPEND AS A PERCENTAGE OF PAYROLL



SKILLS OF THE FUTURE TALENT POOL

- » 115 bursaries in industry-relevant fields of study (F2018: 101).
- » 55 unemployed youth gaining work exposure through the ARM Graduate Development Programme (F2018: 46).
- » 299 learnerships for eligible candidates from outside academic streams (F2018: 188).
- » 142 employees and 439 community members receiving Adult Education and Training (AET) at ARM training centres (F2018: 134 employees and 243 community members).
- » Educational support for Science, Technology, Engineering and Maths (STEM) in community schools.
- » Participation in the Minerals Education Trust Fund, to support tertiary teaching staff in mining, metallurgy/chemical engineering and geology.

DEVELOP CORE AND CRITICAL SKILLS IN THE ORGANISATION

- » The training centres at each operation have full SETA accreditation with either the Mining Qualifications Authority (MQA) or the Manufacturing, Engineering and Related Services Sector Education and Training Authority (MERSETA).
- » In April 2019, ARM initiated a Junior Development Programme to empower delegates to acquire the knowledge, skills, attitudes and values required to operate confidently in their current and future roles. 16 delegates are in this externally facilitated program.
- » This year, ARM also introduced another Women Development Programme, which aims to develop leadership competencies, create talent pools to accelerate development and improve promotional opportunities for A to C band female employees. 17 delegates are participating in this externally facilitated programme.

DEVELOPING FUTURE LEADERS

- » 32 employees graduated from ARM's Future Leadership Development Programme, which is delivered in partnership with Wits Business School (F2018: 32).
- » 41 employees graduated from ARM's Women in Leadership Development Programme, which is run in partnership with Henley Business School (F2018: 41).
- » ARM participates in the Rising Star and GradStar Programmes, which celebrate the achievements of young talented people, connects them with other young professionals and supports them to develop their leadership skills. Four ARM bursars were nominated among the Top 500 applicants to go through to phase two of the selection phase of the GradStar programme.

ARM formed partnerships with various industry stakeholders and educational institutions to keep abreast with local and global trends in skills of the future requirements. These include:

The Minerals Education Trust Fund (METF)

Participation in the METF, which aims to attract, retain and develop teaching staff in tertiary education across the disciplines of mining, metallurgy/chemical engineering and geology.

The Educational Advisory Committee of the Minerals Council SA (EAC)

ARM participates in the EAC, at which representatives from mining companies engage to address training of employees and future skills.

Department of Trade and Industry (dti)

ARM partnered with the dti to implement the Youth Employment Service (YES) initiative, a business-led collaboration with government and labour to create work opportunities for youth.

Department of Mineral Resources and Energy (DMRE)

ARM participated in the DMRE's annual Learner Focus week, which seeks to promote mining through career guidance for learners from Gr 9 – 12, with a long-term vision of addressing the shortage of skills in the mining and minerals sector.

Department of Mineral Resources and Energy

We also took part in the DMRE's Girl Learner Bursary Programme through which ARM adopted two female learners studying towards Mining Engineering degrees at Wits University.

Institute of Higher Learning

A number of partnerships are in place with institutions of higher learning across the country supporting industry-relevant departments including mining engineering, metallurgy, chemical engineering, engineering and geology.

PERFORMANCE ENHANCEMENT

Direct, develop, support, align and improve individual and team performance



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. The ARM Performance Enhancement Group Policy was introduced to employees in F2018 and was translated into Standard Operating Procedures (SOPs).

An in-house Performance Enhancement System was developed and piloted to employee groups at all levels. The system will go live early in F2020.

ARM's remuneration strategy aims to link and align personal reward with Company performance through short- and long-term incentives that promote a culture that supports enterprise and innovation, and are fair and achievable.



More details about ARM's Remuneration Policy are available in the Remuneration Report in the 2019 Corporate Governance Report available on our website at www.arm.co.za.



ENSURING A SAFE, HEALTHY AND APPROPRIATELY SKILLED WORKFORCE continued

Diversity and inclusion

ARM believes that an inclusive and representative workforce greatly benefits and enriches our company and our country. We are committed to creating opportunities and employment for all people regardless of race, religion, gender, age, sexual orientation, nationality or disability. The strategic workforce planning process is aligned with our transformational goals. The talent management strategy includes talent pool identification and management, which drives career path programmes to support the rapid development of historically disadvantaged South Africans (HDSAs) to senior levels in the workforce. ARM's skills development initiatives place significant emphasis on, and play a key role in, driving employment equity (EE) in the workplace.

Transformation in the workforce is overseen and monitored by the Group Executive: Human Resources and the Group Executive: Compliance and Stakeholder Relations, with the support of top leadership. ARM's Diversity Management Policy is overseen by the Employment Equity and Skills Development Committee, which reports to the ARM Social and Ethics Committee. 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.

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.

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.

All ARM operations under the former Department of Labour Director General Review, now the Department of Employment and Labour, have submitted their EE plans. Progress in terms of Section 43 of the Employment Equity Act, 55 of 1998, as amended, and all other scorecard transformational targets, is assessed during the quarterly HR roadshows.

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. Fifteen employees, out of the total workforce, were found to be paid under 80% of the comparative ratio and adjustments were made to close the income differentials gaps.

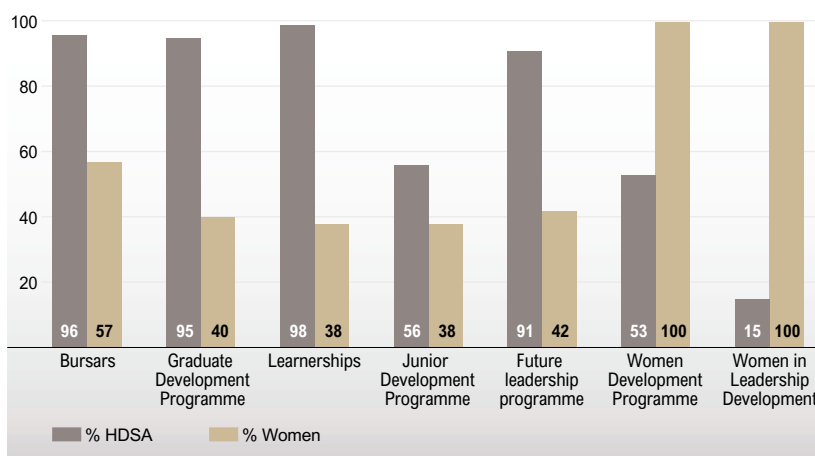
ARM SOCIAL AND ETHICS COMMITTEE

ARM Employment Equity and Skills Development Committee

Responsible for managing and monitoring progress on transformation in the workforce, skills attraction, development and retention. Reviews recruitment processes, follows up on deviations in EE performance and monitors the technical skills required to meet our transformation goals.

DIVERSITY IN SKILLS DEVELOPMENT PROGRAMMES

(%)



ARM HDSA in management

56%
in top management
(F2018: 56%)

51%
in senior management
(F2018: 51%)

66%
in middle management
(F2018: 64%)

77%
in junior management
(F2018: 75%)

2019

During F2019 transformation targets were linked to the four pillars of the HR strategy to improve reporting, monitoring and evaluation.

Diversity reflective sessions and teambuilding were implemented at the ARM Corporate Office.

ARM Corporate, Diversity and Inclusion Programme

ARM Corporate launched its Diversity and Inclusion Programme on 01 June 2018, as part of our organisational culture change initiatives. The programme aims to facilitate a 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 launch included a diversity symbol to ensure sustainable change and to entrench conversations regarding diversity and inclusion in the organisational culture change journey.

A series of 12 diversity and inclusion workshops were facilitated from June to October 2018 that covered four conversations. The first conversation provided orientation to the programme and the second explored the core concepts of diversity, inclusion and diversity management, which aided in a deeper understanding of diversity and inclusion.

Conversation three enabled delegates to understand the psychology of diversity and explored our reference systems, ladder of inference, unconscious bias, and our 'single stories'

of people. The last conversation dealt with how the insights gained during this workshop can be applied in the workplace, creating a more inclusive ARM culture.

A diversity and inclusion report, which includes general themes that emerged from these workshops, was presented to the Employment Equity Committee and Steering Committee. The themes in this report are discussed during departmental diversity and inclusion coffee conversations. Action items to effect inclusivity, are also identified during the discussions for implementation and escalation to the Employment Equity Committee and also Steering Committee meetings.

Our diversity programme includes a focus on raising awareness regarding people with disability (PWD) and increase the representation of PWDs in the workforce wherever practical. A Disability Policy is in place at the Northern Cape operations to achieve these goals. In F2019, there were 139 PWDs working at ARM (F2018: 115), 53 of whom are women (F2018: 41). 22 of the learnerships at ARM's operations were offered to PWDs (F2018: 40).

Gender mainstreaming

2019

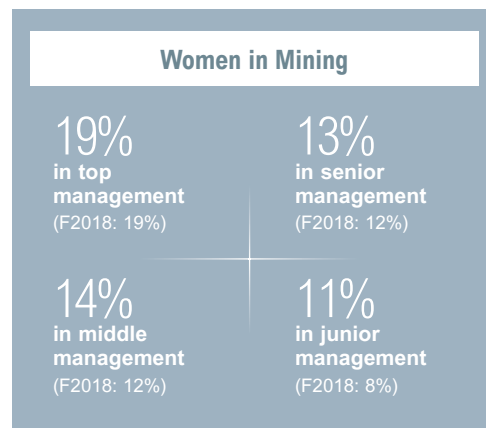
Ensure all ARM Group policies are aligned to gender mainstreaming.

Facilitate the gender mainstreaming action plan, as adopted by the Commission for Gender Equality and the ARM Group.

Gender Units to be established at all operations by the end of F2019.

Gender mainstreaming is an area of significant focus and is overseen by the ARM 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. A gender focal person with gender competence was appointed to facilitate and drive the implementation of gender mainstreaming. An action plan for gender mainstreaming was developed with clear focus and performance measuring criteria, and execution on the plan was reported to the Social and Ethics Committee. The goal of these structures is to improve diversity and inclusion across all occupational levels.

During F2019, the Commission for Gender Equality conducted a review of gender transformation at ARM Corporate as well as Two Rivers, Khumani and Nkomati mines to assess progress against a study conducted at these sites in F2016. The focus of the F2016 study was on gender representation and participation in decision making, mainstreaming gender in organisational culture and systems and measures to create an enabling environment for gender mainstreaming. The findings showed improvement across most categories. Areas for improvement include implementing gender mainstreaming policies at all operations, establishing dedicated internal units at all operations and conducting ongoing monitoring and evaluation of gender mainstreaming. Action plans are in place to ensure that these areas are addressed.



ENSURING A SAFE, HEALTHY AND APPROPRIATELY SKILLED WORKFORCE continued

INITIATIVES TO MONITOR AND IMPROVE WOMEN IN MINING INCLUDE:

- » ARM's Women in Mining Forum.
- » Women representatives included in the Employment Equity Committees.
- » ARM participation in provincial DMRE Women in Mining structures.
- » ARM's Girl Child initiative, which 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.
- » Gender-based access control at change houses at operations.
- » Personal Protective Equipment (PPE) designed for women.
- » Awareness campaigns focussing on sexual harassment and on women and child abuse.

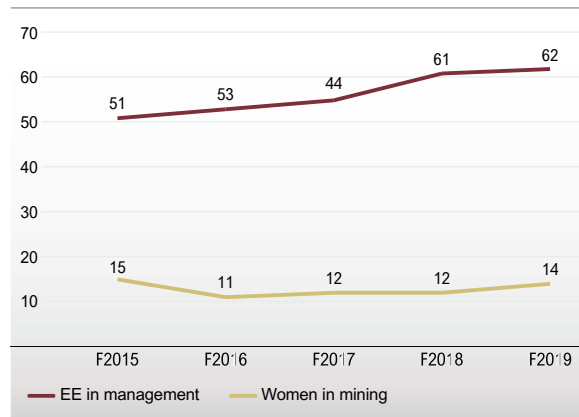
Employment equity performance

HDSA representation in management increased to 62% (F2018: 61%) and Women in Mining increased to 14% (F2018: 12%). 90% of ARM's workforce represents core and critical skills (F2018: 88.8%) compared to the Mining Charter target of 60%. Board diversity improved to 50% by the end of F2019, in line with our target. Female representation on the Board was 18%.

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 below shows performance against national demographics as it covers all ARM operations across the country. Each operation tracks and monitors their performance against the provincial demographics relevant to their respective areas.

REPRESENTATION

(%)



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	44%	50%	96%	17%	20%	51%
Executive management	56%	50%	96%	19%	20%	51%
Senior management	51%	60%	96%	17%	25%	51%
Middle management	66%	60%	96%	24%	25%	51%
Junior management	77%	70%	96%	17%	30%	51%
People with disabilities	1%	1.5%	N/A			
Core and critical skills	90%	60%	96%			

Labour relations

We respect the rights of our employees to bargain collectively to ensure engagement on labour-related matters and recognises organised labour as a key stakeholder of the Group. Our relationship with organised labour is cordial and we are committed to continuing to engage in a mature and constructive way.

Policies and guidelines for managing employee relations are set at Corporate level and implemented at operations, with the operational HR managers primarily responsible for union negotiations and employee relations consultative matters. 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.

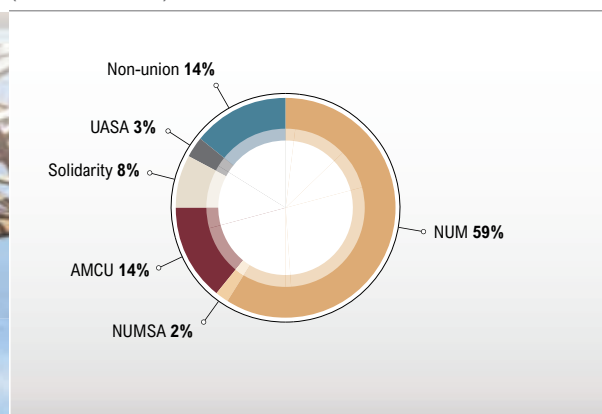
86% of the workforce is unionised and recognition agreements are in place with five unions across our operations. Thresholds for recognition vary from operation to operation. Eight man days were lost due to a strike in F2019 at Khumani Mine (F2018: 5 904 man days).

Certain of our operations have been affected by the emerging trend of non-recognised unions in the mining industry. Some of these unions demand organisational rights despite not meeting recognition agreement thresholds. These developments create an atmosphere of rivalry and can lead to industrial action that causes business interruption.

Nkomati Mine will be placed on care and maintenance from 30 September 2020 in preparation for closure. Employees of the mine are being supported with counselling, financial planning advice, outplacement services and reskilling as well as skills development.

TRADE UNION REPRESENTATION

(% of workforce)



Employee housing

ARM's housing strategy aligns with the requirements of the Mining Charter, the draft Housing and Living Conditions Standards for the Minerals Industry and other municipal and spatial planning legislation. ARM promotes ownership of affordable housing to employees at our operations so that every employee has access to decent accommodation. A shortage of suitable housing for staff can also affect the ability of our mines to attract and retain skilled staff.

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 established a high-level working committee comprising labour representatives and management who met several times during the year 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.

Modikwa, Two Rivers and Nkomati mines offer assistance through a home ownership allowance for qualifying employees as most of their employees live in local communities.

The infrastructure development programmes that ARM delivers in local communities through our Social and Labour Plans (SLPs) and Local Economic Development (LED) projects (discussed on pages 33 to 37) 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.



ENSURING A SAFE, HEALTHY AND APPROPRIATELY SKILLED WORKFORCE continued

HR FOCUS 5 TO 10 YEARS



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.



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.



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".



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

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.





RESPONSIBLE STEWARDSHIP OF ENVIRONMENTAL RESOURCES



“Responsible environmental practices are critical to achieving our strategic goals.”

REFERENCE: **2019** *F2019 focus*

ARM's commitment to responsible environmental stewardship derives from our values and our aspiration to zero harm.

How we manage natural resources

ARM takes a precautionary approach to environmental stewardship across business processes. Material environmental matters and risks are identified at quarterly operational risk workshops and consolidated at Group level.

Environmental management is facilitated by the SHEQ department, but every employee and contractor is responsible for compliance to the standards and policies which are specific to each operation. Employees and contractors receive training on relevant environmental policies, standards and procedures during induction and in regular refresher courses and job-specific training.

Environmental management systems (EMSs) align with ISO 14001, the international standard on environmental management, and with the exception of Machadodorp Works, all operations are certified in terms of this standard. Machadodorp Works was ISO 14001 certified and, while not formally undergoing re-certification in F2019, remains aligned with the standard. The EMSs use the "plan-do-check-act" principle to identify potential environmental impacts and guide our environmental management plans and performance monitoring to mitigate environmental impact.

Reporting context

REPORTING FRAMEWORKS

ICMM



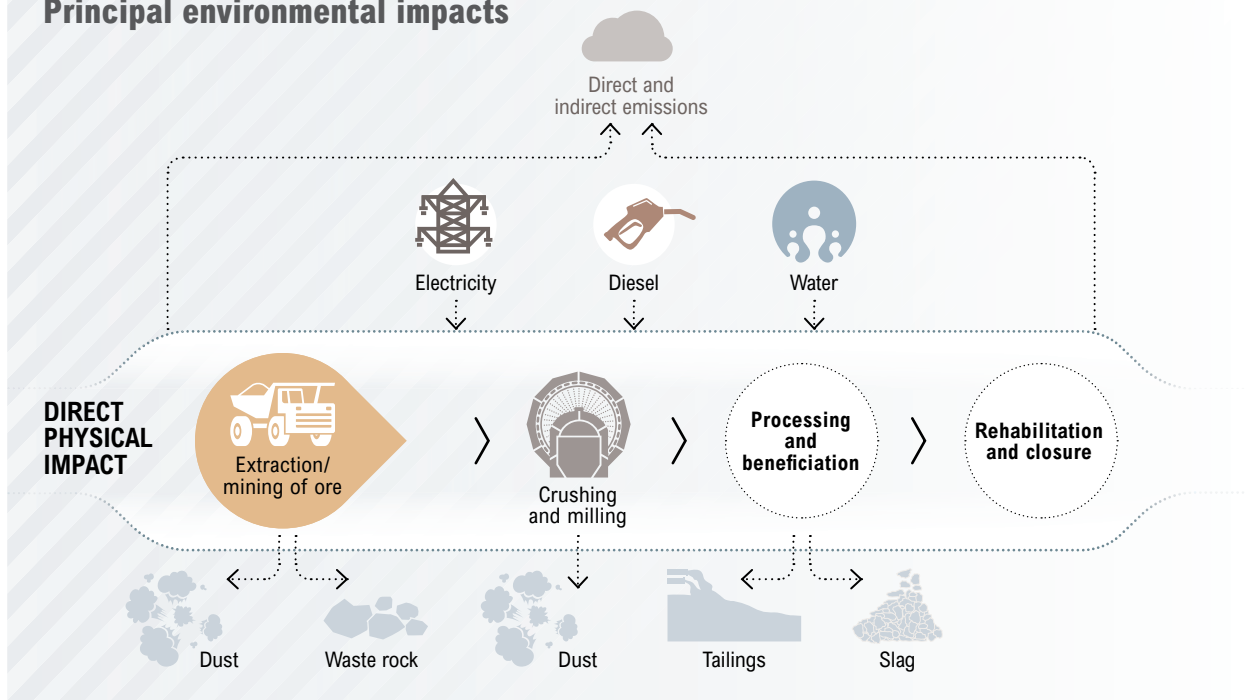
UN SDGs:



PRINCIPAL LEGISLATION

- » The National Environmental Management Act (NEMA) and its Regulations
- » The National Environmental Management: Air Quality Act
- » The National Environmental Management: Biodiversity Act
- » The National Environmental Management: Waste Act
- » The Mineral and Petroleum Resources Development Act (MPRDA)
- » 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

Principal environmental impacts





ARM'S MOST MATERIAL ENVIRONMENTAL MATTERS ARE:

- » Water;
- » 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 biodiversity conservation, rehabilitation and closure planning; and
- » Responsible tailings management.

Key environmental indicators are monitored and benchmarked, and regularly reviewed at the operational and corporate level. Environmental performance is reported at the quarterly operational, divisional sustainable development/social and ethics committee meetings and the ARM Social and Ethics Committee meetings.

Planning of new projects and changes to existing operations include Environmental Impact Assessments (EIAs) and establish Environmental Management Programmes (EMPs) as required by the National Environmental Manager Act (NEMA) and Regulations.

Assuring environmental performance and compliance

Internal operational environmental inspections and audits

External legal compliance audits

ISO 14001 certification audits

Biennial external environmental compliance audits facilitated by the corporate office

Compliance audits on authorisations, e.g. commitments in EIAs, EMPs and water use licences

External assurance of sustainability data for reporting in the Integrated Annual Report and Sustainability Report.

Environmental compliance

Mining and beneficiation are highly regulated industries which are affected by the developing environmental regulatory framework. Our values commit us to responsible environmental stewardship and ensuring ongoing regulatory compliance is an important aspect to achieve this goal. The ARM 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. Regular internal and external legal compliance and operational audits are conducted and instances of non-compliance with regulatory requirements are reported to management for corrective action. 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 F2019. Black Rock Mine received a Compliance Notice in terms of Section 31L of NEMA in respect of non-compliance to the conditions of the environmental authorisation. The non-compliance related to storage of hydrocarbons and waste, the requirement for drip trays to be placed under stationary vehicles and for improvement in the environmental education and awareness programme. All mitigation steps set out in the Notice were immediately implemented and the status reported to the DMRE.

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.

ARM's 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 International Manganese Institute and the International Chrome Development Institute.

2019 Finalising our corporate environmental reporting database.

The environmental reporting database, which covers managed and jointly managed operations, was implemented during F2019 and provides a consolidated view of divisional and Group environmental performance.

ARM's Enterprise Risk Management process includes an assessment of environmental risks where relevant. Operational and corporate risk registers are reviewed and updated at quarterly risk workshops. Risks are reported to the ARM Management Risk and Compliance Committee, the ARM Social and Ethics Committee and the ARM Audit and Risk Committee.

Water

Continued improvement in climate change and water reporting

There has been an increase in stakeholder expectations and regulatory requirements related to climate change and water performance as well as reporting on that performance.



To meet the multiple and evolving stakeholder reporting requirements, ARM has decided to publish an additional climate change and water supplementary report on our website. This will use the Task Force on Climate Related Financial Disclosures' (TCFD's) recommendations and the ICMM Position Statement on Water Stewardship as the basis for reporting, but will also ensure that various other stakeholder expectations and requirements are met, including those of:

- » The ICMM's performance expectations and position statements;
- » The Transition Pathways Initiative (TPI);
- » The Johannesburg Stock Exchange (including the FTSE-Russel ESG Index);
- » The GRI; and
- » Other reporting expectations as they arise.

This supplement will include more detailed data on our energy, climate change and water performance allowing stakeholders to analyse the data according to their needs.

This supplementary report will replace our prior CDP responses in terms of climate change and water, as we believe that this process may be more dynamic and could be used more effectively to meet our stakeholders' needs which are continually evolving.

Water management

Water is a precious shared resource with high social, cultural, environmental and economic value. Access to water is a right; integral to wellbeing and livelihoods and the spiritual and cultural practices of communities. It is also essential to the healthy functioning of ecosystems and their services. Water resources are increasingly under pressure from industrialisation,

urbanisation, climate change and the needs of a growing global population.

We support the ICMM position statement on water stewardship and have implemented the Water Accounting Framework as part of the commitment.

Interactions with water

Water is a vital input for all mining and metals operations. We use water 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, 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.

Without access to water our business could not operate. Water is consequently a material operational and strategic concern, and water stewardship is fundamental to achieving our strategic objectives.

Water metrics

Operations withdraw water from a range of sources defined in the terms of their water use licences, which include rivers, boreholes and municipal supplies.

The second phase of implementation of the ICMM Water Accounting Framework was completed during F2019. As part of the process, water accounting definitions were implemented which allowed for better reporting on harvested rainfall and runoff from mining operations. Additional flow meters were also installed to improve accuracy of measurement. A detailed water reporting flowsheet was developed for each operation in

consultation with the engineering and environmental teams, to assist in this process.

As a result, F2019 water withdrawal volumes reported by operations increased by 19% to 21.8 million m³ from 18.3 million m³ in F2018.

The most material increases include:

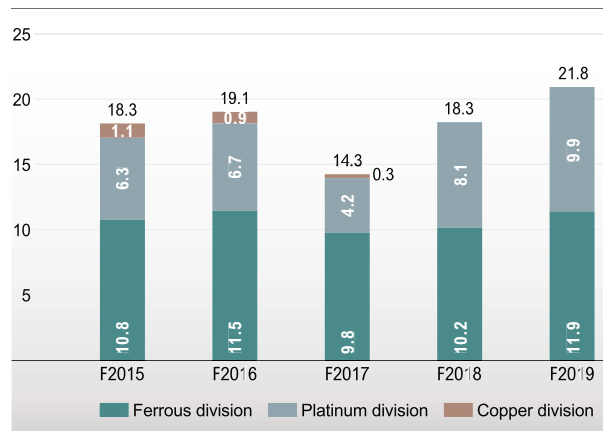
- » At Modikwa Mine, 2 million m³ of groundwater, which was previously not reported, was accounted for;
- » A further 1.2 million m³ increase in water withdrawal was reported at Beeshoek Mine, mainly due to dewatering of the pit to ensure safe mining conditions;
- » Nkomati Mine reported a 0.7 million m³ increase due to more efficient recovery of water from the tailings storage facility; and
- » Black Rock Mine reported an increase of 0.3 million m³ as a result of new flow meters being installed and improved accuracy of measuring.

As a result of the implementation of the Water Accounting Framework, we have improved our understanding of water re-use efficiency, which is above 70% and is a key indicator in monitoring and managing consumption and losses.

Beeshoek Mine accounted for 24% of total Group water withdrawal, Nkomati Mine 20% and Khumani Mine 21%. Water withdrawal by the Ferrous division increased by 17% to 11.9 million m³ (F2018: 10.2 million m³) and 22% in the Platinum division to 9.9 million m³ (F2018: 8.1 million m³). The reason for general increases is due, in part, to better reporting of harvested rainfall and runoff as a result of implementing the new ICMM-based water reporting system.

Outputs include flows to surface water, groundwater and supply to third parties as per ICMM definitions (volume of water which is removed from the operational facility after it has been through

WATER WITHDRAWAL BY DIVISION (100% BASIS)
(m³ million)



a task, treated or stored for use). “Discharges” in this report refer to discharges at operations as defined in their Water Use Licences (WULs). Discharges in F2019 are reported on page 86.

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 used in tasks which has already been worked by the site 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”.

Metric	Source/destination/type	Volume of water by quality		
		High (m ³)	Low (m ³)	Total (m ³)
Withdrawal	Surface water (m ³)	4 720 458	2 285 234	7 094 735
	Groundwater (m ³)	7 869 186	6 809 520	14 678 706
	Total withdrawal (m³)	12 589 643	9 094 754	21 773 441
Output	Surface water (m ³)	4 534	429 279	433 813
	Groundwater (m ³)	0	215	215
	Supply to third party (m ³)	0	3 840	3 840
	Total output (m³)	4 534	433 334	437 868
Consumption	Evaporation (m ³)	350 888	1 607 272	1 918 247
	Entrainment (m ³)	0	4 680 141	4 680 141
	Other (m ³)	0	165 123	165 123
	Total consumption (m³)	350 888	6 452 536	6 763 511
Re-use efficiency	Total of all flows to tasks (m ³ /a)	6 946 468	63 912 089	70 858 557
	Total worked water flows to tasks (m ³ /a)	na	49 749 766	49 749 766
	Reuse efficiency (%)	na	na	70%
Diversions	Water diverted to neighbouring communities, farms and other users (m³)	504 376	942 348	1 446 724

RESPONSIBLE STEWARDSHIP OF ENVIRONMENTAL RESOURCES continued

We aim to continually improve our measurement and reporting of water metrics according to the new ICMM framework. F2020 will include a focus on capturing all worked water flows, consumption sources, outputs and changes in water storage.

74 Water challenges and opportunities

Certain of our operations face significant catchment-level water risks that arise 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

Water is a material matter across the Group, although for different reasons at different operations.

Seven of our eight operations under direct or joint control are located in water stressed areas. In the Vaal Water Management Area (WMA) this includes Beeshoek, Khumani and Black Rock mines in the Northern Cape (representing 85% of EBITDA). In the Olifants WMA this includes Two Rivers Platinum and Modikwa Mines (representing 17% of EBITDA). And in the Inkomati-Usuthu WMA this includes Nkomati Mine and Machadodorp Works.

At Nkomati mine, excess water requires de-watering of the area around the open pit mine to keep it safe. Our priority is to minimise withdrawal from other sources by 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 Water Use License (WUL) and reputational risk as discharge could potentially affect local farmers and the Vygeboom dam. Reduced production activities due to economic and market conditions have resulted in pressure put on the system at Machadodorp Works. There is reduced re-use and consumption and therefore any rainwater poses a potential risk of controlled discharge and associated non-compliance with the waste management and WULs.

At the operations in the Northern Cape (Beeshoek, Black Rock and Khumani mines), issues around water scarcity can potentially impede our growth plans and in addition, are a core concern for local communities. 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 and the related socio-economic impact. There is limited catchment management in the area 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. During the year, water had to be trucked in and bottled water bought for employees working underground at Black Rock Mine. The operations also face a relatively minor and localised risk of flooding during extreme weather events.

Water supply is at risk at Modikwa Mine due to socio-economic reasons rather than drought. Community unrest and vandalism could impact water supply to the mine. Inadvertent discharge also presents a regulatory and reputational risk. Two Rivers Mine is less exposed to water supply risks but the area faces poor catchment management and efforts to develop a sub-catchment balance have not been successful.

Material water opportunities

Our focus on improving operational efficiency includes identifying opportunities to reduce water use. Investment in bulk water schemes have the potential to increase costs between four and fivefold. Specifically, 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.

Reducing water consumption reduces costs and the need for investment in bulk water supply infrastructure in areas where water is scarce.

We are also increasingly looking beyond our operational borders to contribute to collective action at the catchment level. Ensuring adequate supply of water will build community resilience to adapt to a changing climate where projected water availability is expected to decrease (and demand is expected to grow). This is an opportunity to improve community relations and strengthen our social license to operate.

Commitment and response

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

Water stewardship is integrated into our strategy

We have integrated water considerations 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. Information on the level of risk or opportunity and capacity to manage these are tabled and discussed at the ARM Management Risk and Compliance Committee as well as the Social and Ethics Committee whose outputs feed directly into the strategy development process.

We have an important role to play in the sustainable management of water resources and aim to achieve this through a proactive and holistic water management strategy 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 and to have no discharges.

We have set a water target to reduce withdrawals of potable water (surface and municipal sources) by 10% by F2020 relative to F2011. This target includes all existing ARM operations except Machadodorp Works and excludes divested operations since F2011 (Dwarsrivier and Lubambe mines). As part of annual workshops at our operations, focusing on climate and water compliance, we explored the development of a new water target related to withdrawals. Operations were consulted on what would constitute an appropriate water target for ARM based on site-specific considerations of what is realistic but ambitious. A realistic target has been set and represents the first step on ARM's water target setting journey. Based on lessons learned in setting ARM's first target, the process of measuring performance in achieving the target and any new developments and best practice that emerge, ARM will set new more ambitious targets going forward. The new water reporting system, in line with the ICMM framework, has delivered more consistent metrics across the operations and will allow ARM to set more appropriate water targets in the future.

We have also adopted a more catchment-based approach and have thus become more collaborative in delivering on our strategic objectives. For example, at Khumani Mine, ARM engaged in the project management and engineering and maintenance issues around the provision of water (public/maintenance service). This is fundamental to our growth objectives. Similarly, we have increasingly recognised 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.

We invest in technology to reduce water requirements, considered as part of new/expansion projects, reducing 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 invested in a tailings paste disposal facility rather than a conventional tailings deposition facility to minimise water use and discharge, and to ensure maximum recycling and minimum evaporation losses.

Engagements around water

There is a growing awareness of 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 calling for greater insight into catchment-level water balances, including projected demand and supply as well as water quality elements.

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).

ARM's commitment to water stewardship drives our engagements with various stakeholders to find solutions appropriate to all water users' needs. We engage with 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. These stakeholders 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. Engagements with communities help us to understand and mitigate their concerns, identify how ARM can contribute to community water security and increase transparency regarding our operations. We partner with local and regional government structures where appropriate to mitigate water risks that arise outside mine boundaries.

ARM participates in forums that discuss issues relating to sustainable water supply in the region. These include climate change and the potential influence changing climate and potential regulation could have on the supply and cost of water.

ARM's 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.



CASE STUDY

Collective investment in bulk water infrastructure in the Northern Cape

Increasing cost and unreliable supply of water in the Northern Cape present a material risk to our operations in the area. We have played an active role in a collaborative process to proactively mitigate this risk.

In 2017, Assmang¹ was instrumental in setting up the Mines Leadership Forum (MLF) as a collaborative platform under the MCSA. Funds were raised through the MLF/Mines to support ongoing technical, legal and financial engagements with the municipal water provider, Sedibeng Water. Due to the protracted finalisation of the offtake agreement, a capital raising fee was proposed by the MLF 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.

This capital raising fee will raise additional funds from the industry over 24 months, which 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.

1 ARM Ferrous division trades as Assmang (Pty) Ltd, a joint venture with Assore Limited.



CASE STUDY

Improving our water reporting



2019 Further improvement in water accounting at operational level.

The ICMM released a Position Statement on Water Stewardship in January 2017, followed by the “Practical guide to consistent water reporting” in March 2017. The comprehensive guideline, based on the Water Accounting Framework (WAF) for the Minerals Industry of the Minerals Council of Australia, is at the core of Water Accounting Principles referred to in the Position Statement.

During May 2017, ARM commissioned a project to ensure that our water management and reporting methodology aligns fully with the commitments of the ICMM. One of the key commitments is for members to report consistently and transparently on water management and accounting. Phase 1 of the project (which was completed in F2018), focused on the quantitative water accounting process which included aligning the detailed water balances and classification of sources of water withdrawal at each operation. While each operation has an approved water balance which is used to report to the Department of Water and Sanitation, there is more detail in the Guidance from the ICMM and hence additional sources such as storm water were included in the water balances. This led to the identification of water withdrawal sources not previously included in the operational water balances, specifically in the Platinum division.

Phase 2 of the project (completed in F2019) focused mainly on the qualitative aspects of reporting, while further refining the water balances and ensuring consistent application of the methodology. This report represents the first publication of our water performance according to the WAF and ICMM requirements. In addition, we have decided to publish a climate change and water supplementary report on our website towards the end of 2019, aimed at providing a comprehensive corporate water summary in line with the ICMM water reporting guidelines.

As part of the next phase, we will continue to improve reporting as efforts to align frameworks, such as the ICMM and the GRI Standards, evolve and the MCA WAF user guide is updated.

Identifying and managing water risks at the operational level

The Enterprise Risk Management (ERM) process links ARM's strategic intent factors to the water risks that may help or hinder the operation from achieving its objectives. Water is inherently included in the strategic intent factors. Water availability is considered as part of each operation's five-year business plan and these assess the availability and use of appropriate technology to address water requirements or manage impacts.

In F2017 and F2018 ARM undertook site-specific risk assessments at Beeshoek, Black Rock, Khumani, Nkomati, Modikwa and Two Rivers mines 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.

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.

Our 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 circuit water systems to the extent possible to maximise recycling and minimise discharge into the environment. Dirty and clean water are separated and operations implement a hierarchy of water use to ensure that "dirty" 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) 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. Surface water and groundwater quality is monitored 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.

Mines use dust suppression surfactants to reduce evaporation as well as various other measures to reduce consumption, increase storage and mitigate production downtime.

Beeshoek Mine invested in mobile pumps, a new storm water dam and plans to build a new return water dam. Black Rock Mine invested in a RO plant and filters, and reuses process water for gland services. In addition to a design that uses a paste technology for tailings disposal (recovering up to 85% of water) Khumani Mine invested in long term on-site water storage and built additional storm water trenches and dams that also reduce safety risks during extreme weather, thus limiting production downtime.

Nkomati Mine invested in additional water storage and evaporation fans to manage excess water. Two Rivers Mine optimised flocculant and increased pump and pipe sizes to reduce spillage.

At Machadodorp works a water management project team has been established. The smelter has constructed cut off trenches, doubled the sump size and is investigating a RO plant to mitigate the risk of discharge to the environment.

We are increasingly looking beyond our operational boundaries to contribute to collective action at the catchment level. For both our Northern Cape and Platinum operations we are engaging in collective actions to ensure long term bulk water supplies.

ARM and its joint venture partners, through its operations, invest in local water infrastructure through their SLPs 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 recognised as a critical global challenge that will require leadership from all parts of society. In line with our values, ARM is committed to being part of the solution through industry collaboration towards a low carbon future.



ARM monitors evolving climate change risks, associated opportunities and adaptation measures to ensure that the Group is kept aware of these developments and to further integrate these aspects into our business strategy. Our assessments include risks and opportunities across our value chain and aim to meet the increasing expectations of investors communicated through initiative such as the Task Force on Climate Related Financial Disclosures (TCFD) and the Transitions Pathways Initiative (TPI).

Annual climate change and water workshops at each operation examine evolving climate change and water risks and opportunities. These workshops include explicit assessment of

upstream (supply chain) and downstream (customer) risks that have the potential to impact operations directly and our stakeholders. Feedback is incorporated in the ERM process and informs strategic planning processes.

ARM submitted responses in terms of climate change and water to the CDP in 2018 and received an A- score for Climate Change and a B score for Water Security. We have decided to replace our participation in the CDP with an online supplement (due by the end of 2019) on climate change and water to cover a wider agenda and address the needs of stakeholders. One such request was to disclose performance in these areas by the ARM Coal operations which are effectively managed by Glencore.

PRIMARY CLIMATE CHANGE RISKS

- » Water quality and availability, particularly in water-stressed regions such as the Northern Cape, which affects Black Rock, Beeshoek and Khumani mines.
- » Water shortages and electricity supply concerns have been identified as significant risks at operational level and these may be exacerbated by the physical effects of climate change.
- » Operations could be affected by extreme weather, such as storms, flooding and higher temperatures, causing shutdowns and lost production. Production at Nkomati Mine was affected by lightning during F2019.
- » Transport of products to customers and raw materials to our smelters could be affected by storms and floods as these are transported over long distances by rail, road and sea. Nickel shipments were delayed by bad weather in April and May 2019, affecting sales at Nkomati Mine.
- » Changing weather patterns could affect food security and change distribution of diseases such as malaria. This could create negative health implications, increasing costs and impacts on our workforce and the communities around our operations.
- » Failure to demonstrate responsible environmental stewardship could damage our reputation and relationships with customers, investors, business partners, regulators and broader society.
- » Global emission reduction initiatives and the move to cleaner mobility and energy could reduce demand for platinum group metals and thermal coal.
- » Increased compliance and energy costs arising from regulatory change.
- » The financial impact of carbon tax through both the direct tax and pass-throughs from electricity producers after 2020.

OPPORTUNITIES ARISING FROM CLIMATE CHANGE

- » Pollution concerns and tightening emission regulations globally could support the demand for high-quality bulk commodities, including high-grade iron and manganese ore.
- » Reputational benefits of an environmentally responsible approach.
- » ARM continues to evaluate new production technologies to reduce electrical energy consumption and carbon emissions.
- » Financial energy and climate change incentives, including tax incentives, research and development incentives and government grants.

Carbon tax

The Carbon Tax Act No 15 of 2019 has been signed into law and came into effect from 1 June 2019. The tax will play an important role in achieving the objectives set out in the National Climate Change Response Policy of 2011 and contribute to meeting the country's commitments to reduce GHG emissions. ARM is not expected to experience significant impact in the first phase to 2020, but once free allowances are removed beyond 2021, costs will increase. The MCSA and BUSA have identified a number of concerns with the carbon tax that are likely to limit effective implementation. These include a lack of policy alignment with the draft

Climate Change Bill, a lack of consultation regarding the post-2022 regime, concerns around administration of the Act, policy uncertainty regarding reporting requirements and a lack of clarity regarding allowances and offsets.

ARM supports the trend towards a low carbon economy and is committed to constructive engagement with government on the measures aiming to achieve this outcome. We remain concerned about the potential impact on local industry resilience and international competitiveness, as well as the significant direct and indirect costs of ensuring compliance with these new initiatives.

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) emissions¹, which assesses three sources of emissions:

SCOPE 1

Direct GHG emissions from sources owned or controlled by the Company.

At ARM operations, Scope 1 emissions mainly relate to diesel consumption (for load and haul activities) and reductants (Cato Ridge Works).

SCOPE 2

Indirect GHG emissions related to purchased energy.

Electricity consumption comprises 79% 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.

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.

The carbon emissions from ARM's investment in coal mining will be specified in the Scope 3 inventory which will be available in a supplementary report, to be published by the end of 2019.

How we manage carbon emissions

ARM's strategic focus on cost efficiencies and operational cost reduction projects supports the focus on reducing energy consumption and emissions. ARM's energy and climate change strategy aims to identify and develop 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.

Engineers and production staff are incentivised on 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 and other appropriate positions at the smelters 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.

¹ 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.

RESPONSIBLE STEWARDSHIP OF ENVIRONMENTAL RESOURCES continued

Evolving regulatory and policy developments include:

Department of Environment, Forestry and Fisheries (DEFF)

THE NATIONAL CLIMATE CHANGE ACT AND RESPONSE POLICY

The Climate Change Bill is closed for comment and scheduled to be presented to parliament in the second half of 2019. The Bill includes requirements for mandatory reporting and the establishment of Sectoral Emission Targets, Sectoral Emissions Reduction Plans and the associated budgets that will be allocated to companies. The current carbon budget was allocated for 2016 to 2020 under the policy.

GREENHOUSE GAS (GHG) REPORTING REGULATIONS AND POLLUTION PREVENTION PLANS

The requirements of regulations on GHG reporting and pollution prevention plans are incorporated into the carbon emissions monitoring and management programme. ARM submitted its annual GHG Emissions Report and first annual GHG Pollution Prevention Plan progress report to the DEFF in March 2019.

Department of Mineral Resources and Energy (DMRE)

ENERGY MANAGEMENT PLANS

Regulations requiring companies to measure and report energy consumption and develop and submit Energy Management Plans are being developed by the DMRE. ARM's operations consume more than the reporting threshold of 400 TJ per year and will be required to measure and report energy, develop Energy Management Plans and report on progress against those plans. The Regulations are not yet finalised and there is consequently uncertainty about what their final form will be. There is significant overlap between the DEFF's carbon budget and reporting processes and it is possible that these will be aligned with the DMRE's reporting and energy management plan processes.

ARM continues to engage regarding the developing policy framework directly with relevant stakeholders and through active participation in collective industry engagement processes with regulators through the MCSA, BUSA and the National Business Initiative (NBI), to comment and to gain clarity to prepare for potential impacts on business activities.

Carbon emission reduction targets



Continued reduction in carbon emissions.

Working with operations to set long-term water and carbon targets.

During F2018, we set a revised carbon emission reduction target 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 (excluding divestments). We plan to set science-based targets in the future, as part of a phased approach.

ARM's F2019 estimated carbon footprint (Scope 1 and 2 attributable emissions) increased 7% to 1.10 million equivalent tonnes of CO₂ (mtCO₂e) from 1.03 mtCO₂e in

F2018. This represents a 10% decrease compared to the F2014 baseline.

We will provide further information in this regard in an online water and climate change report that will be published by the end of 2019.

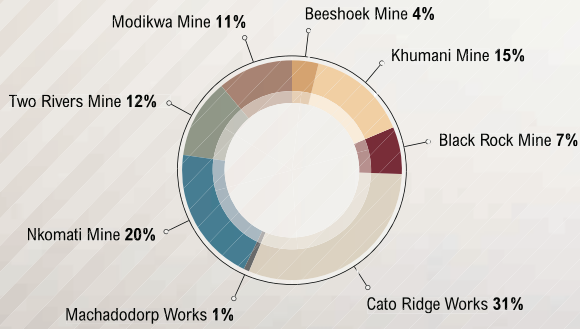
Cato Ridge Works contributed 31% of the Group's total Scope 1 and 2 emissions. Nkomati Mine contributed 20% and Khumani Mine 15%, mainly as a result of diesel consumption during mining, load and haul activities in the open pits.

The graphic on the next page shows F2019 Scope 1 and 2 attributable emissions for ARM operations expressed in tCO₂e.

2019 Continued reduction in carbon emissions. (continued)

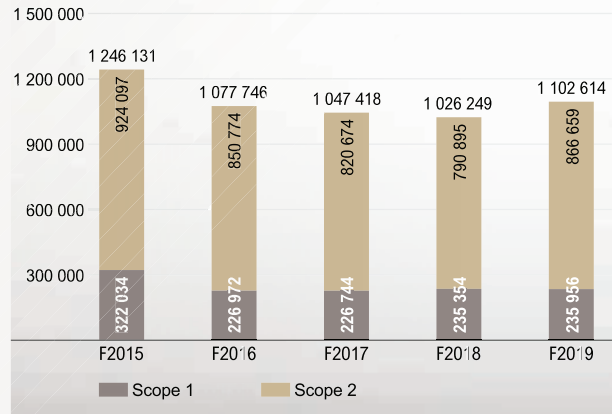
Working with operations to set long-term water and carbon targets.

SCOPE 1 AND 2 CARBON EMISSION CONTRIBUTION BY OPERATION (%)



Scope 1 and 2 emissions are stated on an attributable basis.

SCOPE 1 AND 2 CARBON EMISSIONS (tCO₂e)



CARBON EMISSIONS PER OPERATION

(Scope 1 and 2 attributable tonnes CO₂e)

- Platinum division operations
- Ferrous division operations
- Corporate office



MODIKWA MINE

121 683

TWO RIVERS MINE

131 271

BEESHOEK MINE

42 352

MACHADODORP WORKS

6 514

BLACK ROCK MINE

77 265

NKOMATI MINE

224 904

KHUMANI MINE

160 409

CATO RIDGE WORKS

337 490

ARM CORPORATE OFFICE

726

* ARM acquired Machadodorp Works effective from 28 February 2019.

2019 Continued reduction in carbon emissions. (continued)

Working with operations to set long-term water and carbon targets.

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. Sources of Scope 3 emissions are purchased goods and services, fuel and energy-related activities not included in Scope 1 or 2, upstream transportation and distribution, employee commuting, business travel, waste generated in our operations, downstream transportation and distribution, generated in operations, processing of sold products, and investments.

Scope 1 and 2 emission intensity

We calculate and track carbon emissions intensity ratios per full-time employee and per unit of production or processing to adjust for changes in production activity levels. Scope 1 and 2 carbon emissions per tonne of manganese alloy produced, increased by 2.4% to 1.5 tCO₂e/tonne in F2019 from 1.4 tCO₂e/tonne.

Scope 1 and 2 emissions per tonne of iron ore produced was 0.023 tCO₂e/tonne (F2018: 0.020 tCO₂e/tonne). Scope 1 and 2 emissions per tonne of manganese ore produced increased to 0.045 tCO₂e/tonne from 0.038 tCO₂e/tonne in F2017.

Carbon emissions per tonne of ore milled at our two primary platinum mines, Modikwa and Two Rivers mines, increased to 0.098 tCO₂e/tonne (F2018: 0.089 tCO₂e/tonne). Scope 1 and 2 emissions per full-time employee (FTE) increased by 16% to 197.1 tonnes CO₂e (F2018: 169.4 tCO₂e).

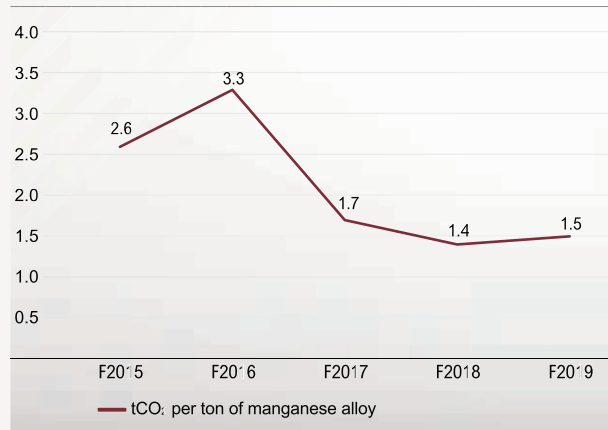
Scope 1 and 2 emissions per man-hour worked increased to 52 kg CO₂e (F2018: 43 kg CO₂e).

Direct emissions

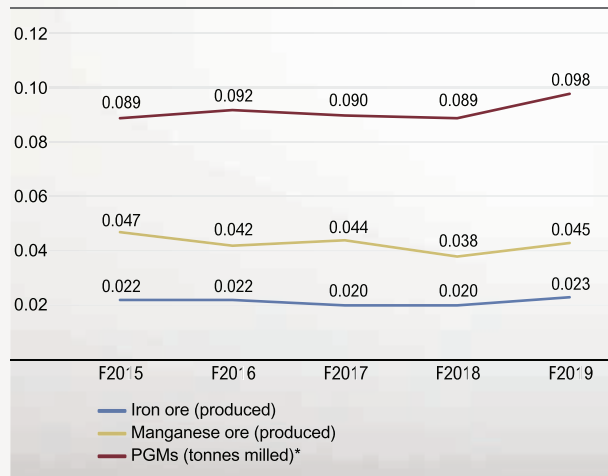
Direct emissions arise from the smelting process at Cato Ridge Works and include carbon dioxide, nitrous oxide, sulphurous oxide and particulates. ARM's F2019 and historical direct emissions are shown in the table on page 5 of this report. Cato Ridge Works has an approved Air Emission Licence, issued in terms of the National Environmental Management: Air Quality Act. An air

cleaning system is in place to manage emissions and the system's availability is continuously monitored and regularly reported to local and provincial authorities as required by their licence conditions.

SCOPE 1 AND 2 CARBON EMISSIONS PER TONNE PRODUCED – SMELTERS (tCO₂e)



SCOPE 1 AND 2 CARBON EMISSIONS PER TONNE PRODUCED – MINES (tCO₂e)



* Two Rivers and Modikwa Mines only.

Energy

Primary sources of energy consumed in our value chain are electricity and diesel. Electricity is used in mining activities to power ventilation fans, pumps for processing and dewatering, conveyor belt motors and the machines that crush and mill ore. The energy used for heating is one of the biggest cost inputs in the smelting process at Cato Ridge Works.

The increasing cost of electricity and diesel have a significant impact on production costs and future increases. The operations also have to budget for carbon tax as well as the potential for pass-through of carbon tax to consumers by Eskom.



The security of electricity supply in South Africa is a top ten risk in the Group Risk Dashboard, specifically the reliability and cost of power from Eskom. The uncertainty of 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 safety, particularly for workers at underground operations. Production at Cato Ridge Works was affected by load shedding at the start of 2019 and inconsistent electricity supply has a negative effect on furnace life. During F2019 electricity supply interruptions affected water supply to the ARM Ferrous operations in the Northern Cape.

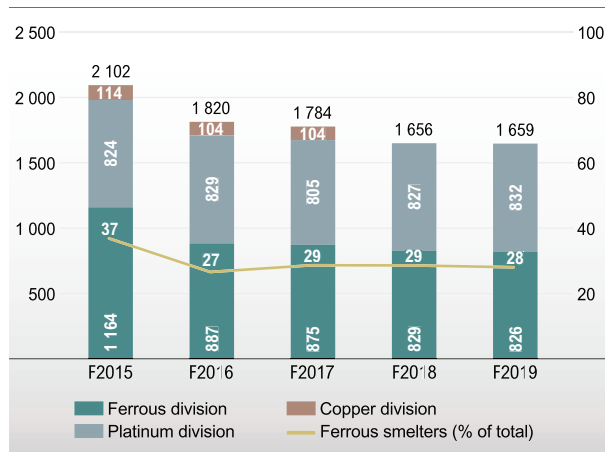
Increased use of the backup generators that support critical functions, such as ventilation fans, increase diesel consumption and emissions.

The condition of off-mine electrical infrastructure remains a concern and the long lead time for electrical infrastructure repairs and installation of new transmission lines (up to eight years) could affect potential expansion projects. Cato Ridge Works is engaging with Eskom and monitoring performance on maintenance schedules to assess the risk of electrical infrastructure failures.

ARM Platinum contributed 50% to total Group electricity consumption, the three ARM Ferrous mines 22%, Cato Works Ridge Works 27% and Machadodorp 1%.

ARM operations consumed 1 659 GWh (reported on a 100% basis), in line with F2018 (1 656 GWh). Electricity consumed by the Ferrous and Platinum divisions was largely unchanged year on year. Nkomati Mine accounted for 21% of total electricity consumption, Modikwa Mine 16%, Two Rivers Mine 13%, Khumani Mine 12% and Cato Ridge Works 27%.

ELECTRICITY CONSUMPTION (100% BASIS)
(GWh)



* Smelting operations at Cato Ridge Works accounted for 27% of the electricity consumption while metal recovery at Machadodorp Works consumed ±1%.

Energy efficiency initiatives

Improving energy efficiency is an important aspect of our focus on reducing carbon emissions and improving operational efficiencies in line with the strategic focus on cost competitiveness. This is particularly relevant in the context of proposed above-inflation increases in electricity tariffs and the contribution of energy consumption to the carbon footprint, and the associated carbon taxes.

ARM Ferrous has an Energy Efficiency Charter that includes targets for energy efficient practices. 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.

Various energy saving and carbon emission reduction initiatives were implemented in F2019, including:

- » Replacement of all lights in the plant and offices with LED lights at Beeshoek Mine;
- » Installation of solar lights at Black Rock Mine;
- » Reduction in tyre use at Khumani Mine;
- » Replacing engines with more fuel efficient engines in the Two Rivers fleet; and
- » Khumani Mine has installed a solar plant from which it harvested approximately 120 000 kWh during F2019.

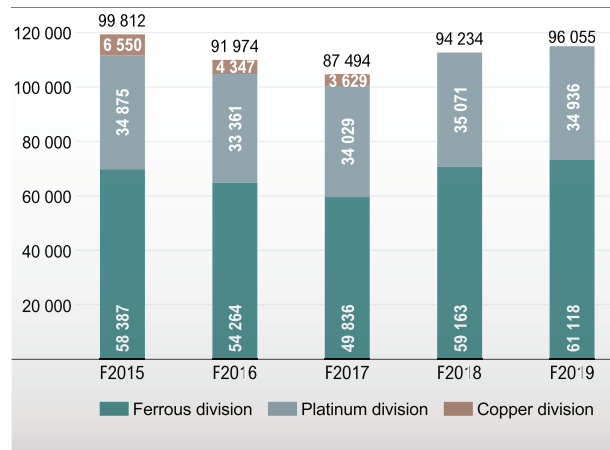
Fuel consumption

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 56% to total Scope 1 carbon emissions in F2019.

Total Group diesel consumption increased by 2% to 96.1 million litres in F2019 (F2018: 94.2 million litres).

Khumani (40% of total Group diesel use), Nkomati (27%) and Beeshoek (16%) are large open pit mines that use diesel mainly to haul run-of-mine material to the concentrator plants.

DIESEL CONSUMPTION BY DIVISION (100% BASIS)
(000 litres)



Land use management

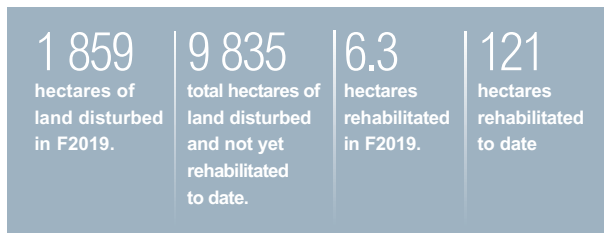
Mining and associated activities have significant direct and indirect impacts on the physical environment. These impacts can include disturbances of land, impacts on biodiversity and discharges into waterbodies or air. Mines often operate in remote and environmentally sensitive areas and are under increasing scrutiny regarding their environmental impacts.



ARM considers the impact of our operations on local landscapes at each stage from exploration to construction, operation and eventual decommissioning and closure. Safeguarding the biodiversity in the biomes around our operations is a priority and our waste management processes aim to minimise our impact on the natural environment and surrounding communities. We are committed to ensuring that disturbed land is rehabilitated to a stable and sustainable condition.

ARM's approach to biodiversity conservation aligns with the ICMM guidelines for mining and biodiversity. We are conscious of our responsibility to conserve biodiversity around our operations, particularly in the context of the declining estate of global biodiversity, and 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.

Biodiversity



Studies at the early stages of new and expansion projects establish biodiversity 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. Employees, contractors and communities are provided with biodiversity training to raise awareness of sensitive and endangered species around our operations.

All operations have Biodiversity Action Plans (BAPs) and biodiversity management programmes in place. 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). Impacted areas are monitored 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.

 More information regarding ARM's biodiversity impact and management is available in the online sustainability data tables available at www.arm.co.za

CATO RIDGE WORKS

Cato Ridge Works sponsors the Wildlands Trust to conserve grasslands in the Inanda Dam area through a memorandum of understanding with the eThekweni Municipality

KHUMANI MINE

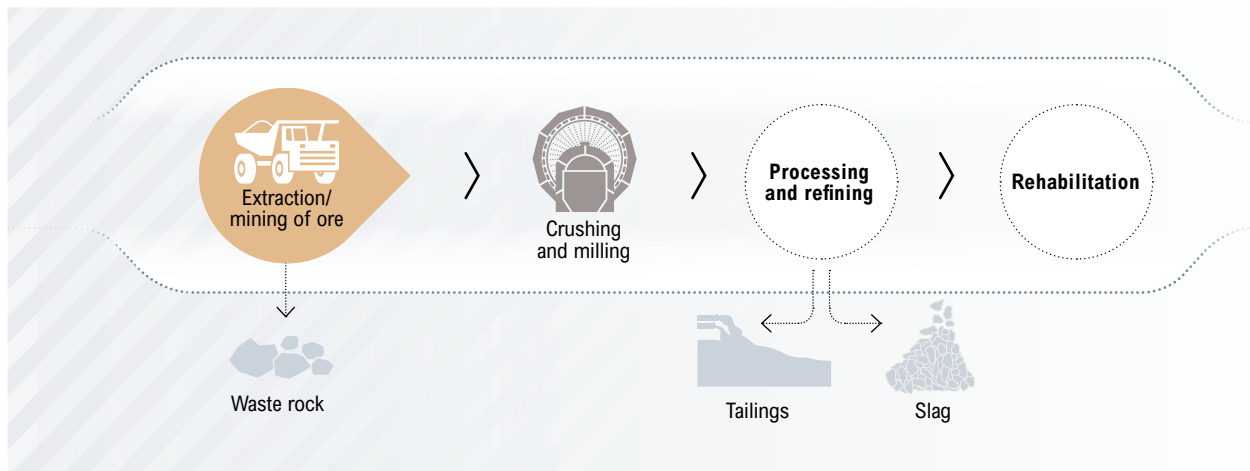
Khumani Mine has established a biodiversity offset area in collaboration with the DEFF and the Department of Nature Conservation in the Northern Cape that has been registered as a conservancy.

NKOMATI MINE

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.

Waste management

ARM's approach to waste management aligns with our strategic focus on 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.



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	F2019	F2018	F2017
Waste rock	Non-ore bearing rock removed in the ore extraction process.	Waste rock dumps or used to backfill and rehabilitate open pit workings.	82.3mt	88.8mt	78.5mt
Tailings	Finely milled waste material suspended in water produced during processing of metals and minerals.	Tailings storage facilities.	17.2mt	12.3mt	17.0mt
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.	18 900t disposed 136 000t recycled	180 500*t	90 700*t
Domestic waste	Produced by operational, administrative and support functions.	Licensed municipal landfill sites.	3 498t	2 000t	2 900t
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.	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	1.2 million litres of used oil and 723t of other hazardous waste

t – tonnes, mt – million tonnes.

* Slag recycled was not reported in prior periods.

RESPONSIBLE STEWARDSHIP OF ENVIRONMENTAL RESOURCES continued

Waste inventories are maintained at each operation that detail the source, volume and type of waste generated by each process, as well as the disposal method. Operations are registered on the National Waste Inventory Reporting (SAWIS) system and the volume and type of waste generated and disposed is reported on a monthly basis.

Waste controls

Water discharges at operations that are below the quality specified in their WULs are reported to the relevant authorities and clean-up and mitigation action undertaken. Incidents that occurred during F2019 are described in the table below.

Operation	Incident
Nkomati Mine	<p>A number of discharges of mixed water occurred from the Pit 2 water storage facility during January 2019. The mine has a positive water balance and further received a total of 421 mm rainfall during the three months from November 2018 to January 2019, resulting in a high volume of storm water and seepage collected within the Pit 2 storage facility. This high rainfall added to the normal daily volumes of water from dewatering of open cast mine working areas for safe continuation of mining activities, filled the available storage space in Pit 2 and caused it to overflow. The most significant incident involved discharge of 28 000 m³ to the Adit stream, which is a tributary of the Gladdespruit. These incidents were reported to the Inkomathi-Usuthu Catchment Management Agency (IUCMA).</p> <p>On 31 January 2019, following a forced plant shut down due to electricity interruptions, floatation cells in the processing plant had to be drained to avoid blockages during startup. During this process, the tailings line leaked into the storm water trench which is connected to the Slaaihoek stream. A temporary paddock was immediately created to stop tailings from reaching the stream, while the tailings pipeline was being blanked off. The area was cleaned up and the incident was reported to the IUCMA.</p> <p>On the same day, following a heavy rainstorm, storm water ingressed into a sewer manhole at the MMZ plant, causing an overflow of sewage into the clean storm water trench which is connected to the Slaaihoek stream. This occurred during a prolonged electricity interruption, which resulted in the sewage plant being unable to pump the effluent back into the plant process water system. The incident was reported to the IUCMA and samples were taken to determine the impact, which was not significant in the context of the high rainfall and associated dilution.</p>
Two Rivers Mine	<p>On 4 December 2018 and on 13 January 2019, the plant pollution control dam discharged approximately 500 m³ and 1 000 m³ respectively into the natural environment when severe thunderstorms caused power supply interruptions across the mine. It was not possible to pump process water from the pollution control dam back to the plant until backup measures were implemented.</p> <p>On 13 January 2019, electricity interruptions due to a severe thunderstorm event also resulted in the North decline pollution control dam discharging approximately 1 000 m³ into the Klein Dwars River.</p> <p>On 13 May 2019, a blockage in the main decline sewage plant caused an overflow of approximately 50 m³ of sewage to the natural environment. The area was cleaned up and the sludge was removed as hazardous waste.</p> <p>All incidents were reported to the authorities.</p>

No incidents of material hydrocarbon spillage of a scale reportable to the authorities occurred during F2019, but a number of minor (Level 1) hydrocarbon spillage incidents were recorded at Modikwa and Black Rock mines.

Contaminated land surveys have been completed for Machadodorp Works and Cato Ridge Works in line with the requirements of the amendments to the National Environmental Management: Waste Act regarding remediation of contaminated land. Surveys will be conducted at other operations if required. The information from these studies is included in closure and rehabilitation costs and related financial provisions.

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 management programmes. This includes removing mine infrastructure, filling open pits and shafts, rehabilitating mine residue deposits, disposing of waste and environmental remediation. Plans are in place at all ARM operations to ensure that rehabilitation and closure are

appropriately planned and budgeted for, and wherever possible, operations undertake rehabilitation activities concurrently with ongoing mining activities.

The estimated costs of closure and rehabilitation are reviewed annually by independent specialists 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.

At the end of June 2019, 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 R1.3 billion (F2018: R1.05 billion). The estimated balance of the Trust Funds was R446.2 million at June 2019 and guaranteed facilities are in place for a further R806.3 million, representing a total closure cost provision of R1.3 billion.

While there are shortfalls in provisions at certain operations, these represent a relatively small value compared to the assets at the operations and the annual cash flows they generate.

During F2019 a decision was taken to place Nkomati Mine on care and maintenance from 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. R206 million (on a 100% basis) in restricted cash and guarantees has been provided for rehabilitation obligations. Final costs for rehabilitation will be assessed and finalised on completion of a technical assessment in this regard.

The closure of Nkomati Mine will be managed in a responsible manner. The mine's environmental responsibilities will be executed in line with its environmental management programme, relevant statutory requirements as well as good practice guidance from the ICMM on responsible mine closure. Final costs for rehabilitation will be assessed and finalised after completing a technical assessment.

Mine	Estimated closure cost as at 30 June 2019 (Rm)	Contributions			Total provision including guarantees (Rm)	Anticipated shortfall excluding guarantees (Rm)	Anticipated excess/ (shortfall) including guarantees (Rm)
		Trust Fund		Guarantees (Rm)			
		2019 contribution (Rm)	Estimated fund balance as at 30 June 2019 (Rm)				
Beeshoek	144.4	7.2	95.0	51.4	146.4	49.4	2.0
Khumani	350.5	7.8	101.7	254.6	356.3	248.8	5.8
Gloria*	43.2	1.9	24.3	76.1	100.4	19.0	57.2
Nchwaning*	88.0	1.5	19.7	–	19.7	68.3	(68.3)
Black Rock*	86.9	3.0	39.7	81.9	121.6	47.2	34.7
Two Rivers	205.8	10.1	33.9	67.2	101.1	171.9	(104.7)
Nkomati	226.0	–	98.7	107.1	205.9	127.2	(20.1)
Modikwa	192.1	–	33.1	168.0	201.0	159.0	9.0
Total	1 336.9	31.5	446.2	806.3	1 252.5	890.8	(84.5)

* Part of Black Rock Mine.

Financial provisions for rehabilitation and closure

In May 2019, the DEFF published the second draft of amendments to regulations in terms of the National Environmental Management Act pertaining to financial provision for rehabilitation and closure. The new regulations will apply to ARM operations from October 2020 and provision is being made to ensure that the operations comply with the new requirements.

Responsible tailings management

Tailings arise from the processing of mined ore. The ore is finely ground and mixed with water and chemicals to separate minerals from waste during processing and beneficiation. 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.

Stakeholder engagement around tailings management

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.


RESPONSIBLE STEWARDSHIP OF ENVIRONMENTAL RESOURCES continued

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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 to ensure that international best practice standards are developed, implemented and maintained. The initiative is an investor-led engagement governed through a Steering Committee Chaired by the Church of England Pensions Board and the Swedish Council of Ethics of the AP Funds. In response, the ICMM is engaging with the United Nations Environment Programme (UNEP) and the Principles for Responsible Investment (PRI) to co-convene an inclusive global tailings review to establish an international standard for tailings storage facilities to standardise and improve tailings management.

In April 2019, the Investor Mining and Tailings Safety Initiative wrote to 683 extractive companies (including ARM) on behalf of 96 institutional investors representing more than \$10.3 trillion assets under management to request greater disclosure on the management of TSFs.

In collaboration with our joint venture partners, we responded to this request and the TSF disclosure is available on our website.

 ARM's comprehensive TSF disclosure is available on our website at www.arm.co.za.

TSF management at ARM operations

There are eleven TSFs at ARM operations, four at Nkomati Mine, three at Black Rock Mine, and one each at Beeshoek, Khumani, Two Rivers and Modikwa mines. TSFs are designed and constructed with physical barriers appropriate to the risk to prevent pollution of groundwater. Surface water runoff around waste rock dumps and TSFs is closely monitored to alert operations to negative impacts. Ground water modelling predicts the potential impact of tailings disposal on aquifers and allows for mitigation measures.

An internal competent person is appointed as the responsible manager at each operation in terms of the Mine Health and Safety Act to oversee the operation of each TSF. 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 required by the South African Department of Mineral Resources and Energy (DMRE). Internal and external reviews take place. Operating manuals and procedures have been developed and are aligned with the COPs. A professional civil/geotechnical engineer is appointed at each operation to conduct annual structural stability audits and quarterly surveillance monitoring of the TSFs. A specialist TSF operating company has been appointed at all mines (with the exception of Beeshoek Mine) to operate the TSF in close cooperation with the responsible manager, inspected and audited by the specialist external engineer on a quarterly basis. Routine daily, weekly and monthly inspections are performed both by the operating company and the operation.

A review of tailings management at each TSF is conducted annually by the risk engineer from the International Mining Industry Underwriters (IMIUI) during the annual risk survey. Detailed comments and recommendations relevant to TSFs are added to each operational risk profile and progress is tracked on a quarterly basis.

The most recent structural stability reports confirm the TSFs at ARM's managed operations as stable. In line with global best practice, independent external review of the TSFs is being implemented to enhance our TSF management systems. This review of the operations, management and structural stability of the TSFs will be completed during F2020. In addition, dam break analysis of our TSFs has been commissioned to ensure a comprehensive understanding of the potential impact on stakeholders including communities, the environment and infrastructure. This will inform enhanced emergency response planning.

During the annual internal SHE management forum in February 2019, priority was given to TSF, risk and emergency preparedness plans. During the first quarter of 2019, all operations commissioned revisions of legal compliance, risk assessment, zones of influence (in the event of failure at final capacity) and appropriate tailings-specific emergency response plans. The CEO and divisional Chief Executives hosted a tailings workshop in May 2019 to track progress on these revisions. The current focus is on:

- » completing the dam break analyses for each TSF;
- » revising emergency response planning and TSF-specific emergency response procedures, as well as detailed plans for stakeholder engagement processes as appropriate;
- » implementing a process of independent external review of ARM's TSFs; and
- » as a member of the ICMM supporting the "Mining with Principles" brand, ARM will also participate and implement all ICMM initiatives regarding TSFs.

Khumani Mine is located in an area at risk of sinkholes developing due to the dolomitic geological structures underlying the mine and dewatering activities related to mining in the area. This represents a potential risk to the safe operation of the mine's TSF. The Khumani Mine TSF is a paste disposal facility that minimises water use, as opposed to a conventional tailings disposal facility. The mine is implementing an action plan that includes drilling of additional core samples, refining of the geotechnical report as well as continuous satellite monitoring of the entire property, which provides both historic and current trends associated with subsidence. The continuous monitoring will enable timeous identification of areas where subsidence may occur prior to sink hole development.

The Minerals Council South Africa (MCSA) is engaging with the Department of Environment, Forestry and Fisheries (DEFF) and the Department of Water and Sanitation (DWS) to provide comment on the new regulations promulgated in terms of the National Environmental Management: Waste Act that affect tailings. The MCSA is also engaging the DEFF through the Presidential Regulatory Working Group to propose solutions to the concerns raised by the mining industry regarding the NEMA Waste Act and Financial Provision Regulations.

F2020 ENVIRONMENTAL FOCUS AREAS

- » 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.
- » Publication of an online supplementary report on climate change and water.
- » Continued engagement with stakeholders to understand and further improve environmental reporting.
- » Further refinement in terms of implementation of the Water Accounting Framework.
- » Rehabilitation and closure.
- » Responsible tailings management.





INDEPENDENT ASSURANCE STATEMENT

To the management and stakeholders of African Rainbow Minerals Limited (“ARM”)

INTRODUCTION

As a JSE-listed company and a member of the International Council on Mining & Metals (ICMM), 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 Assurance (Pty) Ltd (IBIS) was engaged to provide moderate assurance on selected subject matters included in ARM’s Sustainability Report (the Report) for the year ended 30 June 2019.

IBIS is an independent licensed provider of sustainability assurance services. The assurance team was led by Petrus Gildenhuis with support from Adam Sutton-Pryce and Jason Naidoo 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 fourth 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 the AA1000AS (2008) standard Type II moderate level requirements.

RESPECTIVE RESPONSIBILITIES AND IBIS’S INDEPENDENCE

ARM

ARM was responsible for preparing the Sustainability Report and for the collection and presentation of sustainability information within the report. ARM was also responsible for maintaining adequate records and internal controls that supported the reporting process during the reporting period.

IBIS

IBIS’ responsibility was to the management of ARM alone and in accordance with the scope of work and terms of reference agreed with ARM.

IBIS applies a stringent 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:

SUBJECT MATTERS IN THE ASSURANCE SCOPE

ICMM SUBJECT MATTER 1:

ARM's alignment with the 10 ICMM Sustainable Development (SD) Principles and associated mandatory requirements set out in the ICMM position statements

ICMM SUBJECT MATTER 2:

ARM's approach to identify, prioritize and respond to its material SD risks and opportunities based on the AA1000 Accountability Principles Standard (2008), which include the Principles of Inclusivity, Materiality and Responsiveness

ICMM SUBJECT MATTER 3:

The existence and status of ARM's implementation of systems and approaches used to manage its identified material SD risks and opportunities.

ICMM SUBJECT MATTER 4:

The following selected disclosures relating to ARM's material SD risks and opportunities

ICMM SUBJECT MATTER 5:

ARM's application of the GRI Standards in accordance "core" reporting requirements (inside front cover)

KING IV™ ALIGNMENT:

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) (<http://www.artm.co.za/>)

Fatality Frequency Rate (FFR)	Page 48
Lost Time Injury Frequency Rate (LTIFR)	Page 46
Total Recordable Injury Frequency Rate (TRIFR)	Page 47
Scope 1 and Scope 2 Greenhouse Gas (GHG) emissions	Page 80
Electricity consumption in GWh	Page 83
Total fuels consumed	Page 83
Total volume of water withdrawal from all sources	Page 73
Total volume of water discharged from sites	Page 86
Amount of CSI and LED spend	Page 37
Total number of new PTB cases (2018 calendar year)	Page 57
Total number of occupational diseases identified and submitted for compensation	Page 52
Total number of employees and contractors on ART	Page 55

ASSESSMENT CRITERIA

The following assessment criteria were used in undertaking the work:

ICMM SUBJECT MATTER 1

ICMM's 10 SD Principles and set of related position statements

ICMM SUBJECT MATTER 2

AA1000APS (2008) (AccountAbility Principles Standard) published criteria

ICMM SUBJECT MATTER 3

ARM's description of systems and approaches used to manage its material SD risks and opportunities and the implementation of these systems and approaches

ICMM SUBJECT MATTER 4

The completeness, accuracy and validity of reported sustainability data

ICMM SUBJECT MATTER 5

Global Reporting Initiative (GRI) guidelines and their Mining and Metals Sector Supplement (MMSS)

KING IV™

King Report on Governance for South Africa and the King Code of Governance Principles

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 (2008).

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.

SITE VISITS

Site visits to three select operations: Beeshoek, Black Rock and Modikwa mines, which involved testing, on a sample basis, the measurement, collection, aggregation and reporting processes in place

INTERVIEWS

Interviews with relevant functional managers at the ARM corporate office and operations 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

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 (2008).

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 as follows:

In relation to ICMM Subject Matter 1

Group level policies, management standards and procedures observed adequately demonstrate ARM's corporate commitment to the ICMM SD Principles and the related position statements.

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 was 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. ARM's material matters are determined at board, executive and operational level by considering financial and non-financial risks, opportunities and factors that impact ARM's strategy, performance, governance and value creation. Material matters for the reporting period were reviewed against board and executive committee deliberations, feedback from formal and informal engagements with stakeholders and are reflected in the reported sustainability themes and strategic objectives of the business.

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.

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 FY2018 remained relevant for the current reporting period, although some of the components and descriptions have been refined.

In relation to ICMM Subject Matter 4

It was observed that sufficient measures are in place to provide reliable source-data related to material issues for the selected disclosures assessed. 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.

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 interviews 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 Gildenhuis
Director

IBIS ESG Assurance (Pty) Ltd



AA1000
Licensed Assurance Provider
000-156

Johannesburg
11 October 2019

The assurance statement provides no assurance on the maintenance and integrity of sustainability information on the website, including controls used to maintain this. These matters are the responsibility of ARM.

KEY STAKEHOLDER CONCERNS AND ARM'S RESPONSES

Shareholders, potential shareholders, analysts and other investors

HOW WE ENGAGE	ISSUES RAISED	RESPONSE	REFERENCE
<ul style="list-style-type: none"> » Annual General Meeting. Decisions taken at shareholder meetings are disclosed on the Company's website following the meetings. » 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. 	<ul style="list-style-type: none"> » Growth » Unit cost performance » Capital allocation » Labour relations » Dividends » Share price performance » Environmental, social and governance (ESG) issues. 	<ul style="list-style-type: none"> » 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. 	<p>Financial review (IAR) (pages 32 to 49)</p> <p>This Sustainability Report</p>

Bankers, insurers and funders

HOW WE ENGAGE	ISSUES RAISED	RESPONSE	REFERENCE
<ul style="list-style-type: none"> » Ongoing maintenance of relationships through meetings and general discussions with bankers and insurance managers. » Annual ARM insurance market visit to international and local markets. 	<ul style="list-style-type: none"> » Liquidity » Solvency » Funding » Insurance management. 	<ul style="list-style-type: none"> » 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. 	<p>Financial review (IAR) (pages 32 to 49)</p>

Joint venture partners

HOW WE ENGAGE	ISSUES RAISED	RESPONSE	REFERENCE
<ul style="list-style-type: none"> » Ongoing management interaction during the ordinary course of business. » Monthly executive management and quarterly Board meetings. 	<ul style="list-style-type: none"> » Sustainable development » Financial performance » Operational performance » Equitable treatment » Operational strategy. 	<ul style="list-style-type: none"> » ARM holds itself to the highest ethical and governance standards in dealings with all stakeholders, including joint venture partners. 	<p>Financial review (IAR) (pages 32 to 49)</p> <p>Operational reviews (IAR) (pages 52 to 84)</p> <p>How we govern and manage sustainable value creation (pages 14 to 21)</p>

Employees and organised labour

HOW WE ENGAGE	ISSUES RAISED	RESPONSE	REFERENCE
<ul style="list-style-type: none"> » 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. 	<ul style="list-style-type: none"> » Remuneration » Training » Health and safety » Transformation. 	<ul style="list-style-type: none"> » 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. 	<p>Ensuring a safe, healthy and appropriately skilled workforce (pages 44 to 68)</p>

Key stakeholder concerns and ARM’s responses continued

Communities, civil society and non-governmental organisations

HOW WE ENGAGE	ISSUES RAISED	RESPONSE	REFERENCE
<ul style="list-style-type: none"> » 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. 	<ul style="list-style-type: none"> » Community needs, including socio-economic development, infrastructure development and employment » Status of social projects, operational changes and expansions » Environmental issues affecting communities » Employment from local communities » Service delivery challenges » Transformation. 	<ul style="list-style-type: none"> » 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. 	<p>Stakeholder engagement (pages 22 to 25)</p> <p>Our performance (pages 32 to 89)</p>

Government

HOW WE ENGAGE	ISSUES RAISED	RESPONSE	REFERENCE
<ul style="list-style-type: none"> » 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 Department of Mineral Resources and Energy (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. 	<ul style="list-style-type: none"> » Social investment » Health and safety » Environmental management » Transformation » Compliance with the dti Codes of Good Practice and Mining Charter » Regular progress reports and updates. 	<ul style="list-style-type: none"> » 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 DMRE by each mine. 	<p>Stakeholder engagement (pages 22 to 25)</p> <p>Our performance (pages 32 to 89)</p>

Key stakeholder concerns and ARM's responses continued

Industry associations*

HOW WE ENGAGE	ISSUES RAISED	RESPONSE	REFERENCE
<ul style="list-style-type: none"> » Regular scheduled association meetings. 	<ul style="list-style-type: none"> » Sustainable development » Labour issues » Financial sustainability » Implementation of best practice » Industry-specific issues » Changes in legislation. 	<ul style="list-style-type: none"> » Representation in various executive and other roles in industry associations to engage and give input on various industry issues and communicate with industry and government stakeholders. 	Stakeholder engagement (pages 22 to 25) Our performance (pages 32 to 89)

Customers

HOW WE ENGAGE	ISSUES RAISED	RESPONSE	REFERENCE
<ul style="list-style-type: none"> » Continual interactions in the ordinary course of business. » Annual contractual negotiations. » Regular service level agreement renewals. 	<ul style="list-style-type: none"> » Product quality » Timing of product delivery » Sustainability issues. 	<ul style="list-style-type: none"> » Processes are in place to ensure consistency of product quality. » ARM contracts with logistics and freight service providers, including Transnet. 	Stakeholder engagement (pages 22 to 25) Our performance (pages 32 to 89)

Suppliers and local business

HOW WE ENGAGE	ISSUES RAISED	RESPONSE	REFERENCE
<ul style="list-style-type: none"> » Continual interactions in the ordinary course of business. » Annual contractual negotiations. » Regular service level agreement renewals. » Scheduled meetings with local business. 	<ul style="list-style-type: none"> » Local economic development » Industry issues » Fair payment terms » Fair treatment » Valid BEE certification » Ethics » Sustainability issues. 	<ul style="list-style-type: none"> » Support for local enterprise development through our Corporate Social Responsibility (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. 	Communities (pages 36 and 37) Transformation (pages 38 to 43)

Media

HOW WE ENGAGE	ISSUES RAISED	RESPONSE	REFERENCE
<ul style="list-style-type: none"> » One-on-one interviews. » Press releases. » Stock Exchange News Service (SENS) announcements. » Media contact function on the Company website. » Publications on the ARM website. 	<ul style="list-style-type: none"> » Topical issues as they arise. 	<ul style="list-style-type: none"> » 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 UN GLOBAL COMPACT AND THE ICMM SUSTAINABLE DEVELOPMENT PRINCIPLES

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STRATEGIC INTEGRATION OF SUSTAINABILITY

- Material matters (pages 30 and 31)
- Executive Chairman's report (IAR) (pages 26 to 28)
- Social and Ethics Committee Chairman's review (pages 26 to 29)
- How we govern and manage sustainable value creation (pages 14 to 21)
- Report of the Social and Ethics Committee (IAR) (pages 126 and 127)

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STAKEHOLDER INCLUSIVITY

- Stakeholder engagement (page 22 to 25)
- Key stakeholder concerns and ARM responses (pages 93 to 95)

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RISK MANAGEMENT

- Material matters (pages 30 and 31)
- How we govern and manage sustainable value creation (pages 14 to 21)
- ARM's Corporate Governance Report available at www.arm.co.za

ICMM

- 1
- 2
- 3

UNGC 1
UNGC 2
UNGC 10

ETHICS AND HUMAN RIGHTS

- Report of the Social and Ethics Committee (IAR) (pages 126 and 127)
- How we govern and manage sustainable value creation (pages 14 to 21)
- Comment from the Sustainability Assurance Provider (page 19)
- ARM's Corporate Governance Report available at www.arm.co.za



United Nations Global Compact Principles 	
1.	Businesses should support and respect the protection of internationally proclaimed human rights.
2.	Businesses should make sure that they are not complicit in human rights abuses.
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.
5.	Businesses should uphold the effective abolition of child labour.


ICMM Sustainable Development Principles 	
	Implement and maintain ethical business practices and sound systems of corporate governance.
	Integrate sustainable development considerations within the corporate decision-making process.
	Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities.
	Implement risk management strategies based on valid data and sound science.
	Seek continual improvement of our health and safety performance.



ENVIRONMENTAL STEWARDSHIP

Responsible stewardship of environmental resources (pages 69 to 89)
 Value added by metals and minerals (pages 12 and 13)
 Biodiversity tables in sustainability data tables and the climate change and water supplementary report available on our website www.arm.co.za

ICMM



UNGC 7
 UNGC 8
 UNGC 9

SOCIAL RESPONSIBILITY

Value added by metals and minerals (pages 12 and 13)
 Transformation (pages 38 to 41)
 Committees (pages 33 to 37)
 Stakeholder engagement (pages 22 to 25)


ICMM



PRODUCT RESPONSIBILITY

Our value chain (pages 42 and 43)


ICMM



HEALTH AND SAFETY

Executive Chairman's report (IAR) (pages 26 to 28)
 Social and Ethics Committee Chairman's review (pages 26 to 29)
 Safety (pages 45 to 49)
 Occupational health and wellness (pages 50 to 57)

ICMM



FAIR LABOUR PRACTICES

Human resources management (pages 58 to 68)
 Human rights (page 19)
 Report of the Social and Ethics Committee (IAR) (pages 126 and 127)

UNGC 3 UNGC 5
 UNGC 4 UNGC 6

United Nations Global Compact Principles







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.
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.

ICMM Sustainable Development Principles











- | | |
|---|--|
|  | Seek continual improvement of our environmental performance. |
|  | Contribute to conservation of biodiversity and integrated approaches to land use planning. |
|  | Facilitate and encourage responsible product design, use, re-use, recycling and disposal of our products. |
|  | Contribute to the social, economic and institutional development of the communities in which we operate. |
|  | Implement effective and transparent engagement, communication and independently verified reporting arrangements with our stakeholders. |

THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDGs)

SDG	How ARM makes a difference	Reference
 <p>1 NO POVERTY</p>	<p>Payment of taxes and royalties, direct employment, sourcing goods and services locally, enterprise and supplier development, educational support for community schools and building capacity in communities. Our Corporate Social Investment (CSI) programmes focus on initiatives that provide support for the poor, sick and vulnerable in local communities. Local Economic Development (LED) infrastructure projects 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.</p>	<p>Value added by metals and minerals (pages 12 and 13) Human resources management (pages 58 to 68) Communities (pages 33 to 37) Transformation (pages 38 to 41)</p>
 <p>2 ZERO HUNGER</p>	<p>In traditionally agricultural areas, the impact of mining on water, land and biodiversity resources can be a concern to farmers and local communities and can become a potential source of social conflict. We manages our impacts on natural resources through a precautionary approach to environmental stewardship, engaging about water at the catchment level, consultative land management, including biodiversity conservation and rehabilitation and closure planning. ARM's CSI programmes support various projects that focus on initiatives that support the poor and vulnerable, including infants.</p>	<p>Responsible stewardship of environmental resources (pages 69 to 89)</p>
 <p>3 GOOD HEALTH AND WELL-BEING</p>	<p>Our employees' health, hygiene and safety are critical to ARM's long-term sustainability. Our wellness programme integrates safety, occupational hygiene and health, PTB, HIV & Aids and chronic disease management.</p> <p>ARM operations support awareness, testing campaigns and outreach initiatives to address PTB, HIV & Aids among employees and in communities.</p> <p>The three mines in the Ferrous division partner with the 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 and Modikwa mines are in the process of establishing similar MoUs in their areas of operation. Black Rock Mine also partners with the Northern Cape DoH to provide primary healthcare services to the Black Rock community.</p> <p>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.</p>	<p>Occupational health and wellness (pages 50 to 57) Communities (pages 33 to 37)</p>
 <p>4 QUALITY EDUCATION</p>	<p>ARM contributes to quality education by working with local government to increase local capacity and through technical, vocational and educational training programmes for the current and future workforce. We provide opportunities for unemployed youth through our learnership programmes and offer a graduate development programme. ARM operations offer adult education and training (AET) to employees and community members to improve literacy and numeracy. We invest in infrastructure to build/upgrade or furnish schools through the CSI and LED projects, as well as the ARM BBEE Trust. Investments in education through our CSI programme strengthens relationships with our communities.</p>	<p>Human resource development (pages 58 to 68) Communities (pages 33 to 37) Value added by metals and minerals (pages 12 and 13)</p>

SDG	How ARM makes a difference	Reference
	<p>Gender mainstreaming is an area of significant focus overseen by the ARM Corporate Gender Unit. Training programmes include a focus on women development. 41 women graduated from our Women in Leadership Development Programme and this year we added a Women Development Programme. 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.</p>	<p>Human resources management (pages 58 to 68) Communities (pages 33 to 37)</p>
	<p>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. It is therefore essential to consider availability and quality of water in our project planning, operational and closure considerations and to 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.</p> <p>Our CSR programme and the ARM Trust have contributed to providing water infrastructure to schools and communities.</p>	<p>Responsible stewardship of environmental resources (pages 69 to 89) Additional water reporting templates are available on our website www.arm.co.za</p>
	<p>As a major energy user, we reduce carbon emissions through accelerating energy efficiency measures and investigating renewable technologies where appropriate.</p> <p>The metals ARM produces are used in clean energy solutions.</p>	<p>Responsible stewardship of environmental resources (pages 69 to 89) Value added by metals and minerals (pages 12 and 13)</p>
	<p>Direct and indirect employment, promoting entrepreneurship and the growth of small, medium and micro-enterprises (SMMEs) through enterprise and supplier development programmes, and local procurement create large economic multipliers. ARM's skills development initiatives include opportunities for unemployed youth and graduates. Our human resources management programmes include internal benchmarking to ensure 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. ARM's diversity programme includes a focus on raising awareness regarding people with disability (PWD) and increasing the representation of PWDs in the workforce wherever practical.</p> <p>For growth to be fully inclusive, we require government to effectively manage revenues from mining and encourage linkages to the broader economy.</p>	<p>Value added by metals and minerals (pages 12 and 13) Human resources management (pages 58 to 68) Communities (pages 33 to 37) Transformation (pages 38 to 41)</p>
	<p>Mining requires significant infrastructure investments in order to develop, operate and mine products in remote areas. We make significant investments in community infrastructure that supports economic development and human well-being through our LED projects. 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.</p> <p>ARM conducts research and development to identify innovative applications in mining technology.</p>	<p>Communities (pages 33 to 37) Transformation (pages 38 to 41)</p>

THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS continued

SDG	How ARM makes a difference	Reference
 <p>10 REDUCED INEQUALITIES</p>	<p>ARM's approach to human resources management promotes equality and the inclusion of previously disadvantaged groups, including women, as well as people with disability. Our Code of Conduct emphasises our resolute stance against unfair discrimination. We embrace an inclusive approach to community consultation and participation in decision-making.</p>	<p>Human resources management (pages 58 to 68) Stakeholder engagement (pages 22 to 25) Communities (pages 33 to 37) Transformation (pages 38 to 41)</p>
 <p>11 SUSTAINABLE CITIES AND COMMUNITIES</p>	<p>The products of our mining and smelting operations such as steel play a vital role in construction of cities. Our LED infrastructure projects in local communities support the provision of basic services including access to water, sewage services, schools and roads.</p>	<p>Value added by metals and minerals (pages 12 and 13) Communities (pages 33 to 37)</p>
 <p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<p>ARM's commitment to sustainable practices and environmental responsibility promote sustainable management and efficient use of natural resources. Our approach to waste management aims to reduce waste production, promote recycling wherever possible and ensure safe disposal at appropriate facilities. Air cleaning equipment is in place to manage emissions at Cato Ridge Works in line with the terms of its Air Emission Licence. Water discharges that are below the quality specified in their WULs are reported to the relevant authorities and clean-up and mitigation action undertaken. The information in the Integrated Annual Report and this Sustainability Report demonstrate ARM's integrated approach to sustainability reporting.</p>	<p>Value added by metals and minerals (pages 12 and 13) Responsible stewardship of environmental resources (pages 69 to 89)</p>
 <p>13 CLIMATE ACTION</p>	<p>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. From F2019, carbon emission reduction targets have been included in executive incentives. We report publicly our carbon emissions in this Sustainability Report and in additional disclosures available on our website.</p>	<p>Responsible stewardship of environmental resources (pages 69 to 89) Additional carbon emission templates are available on our website www.arm.co.za</p>
 <p>14 LIFE BELOW WATER</p>	<p>While 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.</p>	<p>Our value chain (pages 42 and 43) Responsible stewardship of environmental resources (pages 69 to 89)</p>
 <p>15 LIFE ON LAND</p>	<p>ARM's commitment to sustainable practices and environmental responsibility includes a commitment to responsibly manage the impact of our operations on freshwater ecosystems. ARM's approach to biodiversity conservation aligns with the ICMM guidelines for mining and biodiversity. We are conscious of our responsibility to conserve biodiversity around our operations, particularly in the context of the declining estate of global biodiversity. We are committed to net positive biodiversity impact, or to compensation for negative impact, as appropriate.</p>	<p>Responsible stewardship of environmental resources (pages 69 to 89)</p>
 <p>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p>	<p>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. 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.</p>	<p>Stakeholder engagement (pages 22 to 25) Report of the Social and Ethics Committee (IAR) (pages 126 and 127) How we govern and manage sustainable value creation (pages 14 to 21) Ethics (page 18) Human rights (page 19)</p>
 <p>17 PARTNERSHIPS FOR THE GOALS</p>	<p>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.</p>	<p>Stakeholder engagement (pages 22 to 25) How we govern and manage sustainable value creation (pages 14 to 21)</p>



GRI CONTENT INDEX

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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 table that follows references the GRI's General Disclosures, Management Approach Disclosures and topic-specific disclosures for the relevant material topics reported in ARM's F2019 reporting suite, which includes the Integrated Annual Report and Corporate Governance Report (available on our website at www.arm.co.za).

The contents of the report were defined using the GRI Reporting Principles, which are:

<p>Stakeholder inclusiveness – Engagements with our key stakeholders provide the context for the way we do business, shape our strategy and inform the information we report. Key engagements during the year are discussed on page 22 of this report and a table of ARM's key stakeholders, engagement channels, key concerns and how we address these is available on page 93 of this report.</p>		
<p>Sustainability context – The introduction to each section of this Sustainability Report provides an overview of the sustainability context for the matters reported in that section.</p>	<p>Materiality – Material matters are discussed on pages 30 to 31. These inform our strategy, governance structures, risk management, operational management and reporting.</p>	<p>Completeness – We believe that this report covers all matters material to ARM during F2019 in appropriate detail.</p>

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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Structure (page 6) Business model (pages 10 and 11) Value added by metals and minerals (pages 12 to 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	<p>Markets served, including:</p> <ul style="list-style-type: none"> i. geographic locations where products and services are offered; ii. sectors served; iii. types of customers and beneficiaries. 	<ul style="list-style-type: none"> Where we operate (pages 8 and 9) Value added by metals and minerals (pages 12 and 13)

Disclosure number	Disclosure title	Description	Reference
102-7	Scale of the organisation	Scale of the organisation, including: <ul style="list-style-type: none"> 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 5) Where we operate (pages 8 and 9) Financial Review (IAR) (pages 32 to 49) Operational reviews (IAR) (pages 52 to 77)
102-8	Information on employees and other workers	<ul style="list-style-type: none"> 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. 	<p>Human resources management (pages 58 to 68)</p> <p>18% of our workforce is female and women in mining represent 14% of the workforce.</p> <p>Most employees are full-time or contractors</p> <p>More information on ARM's workforce breakdown is available in the 2019 Sustainability Data Tables on the ARM website www.arm.co.za</p> <p>There is no significant seasonal variation in employment numbers</p> <p>Workforce data is compiled through the operational HR processes and systems, and discloses the total workforce as at 30 June 2019.</p> <p><i>Note that occupational health and safety statistics use average annual employees and contractor numbers as discussed on page 1</i></p>
102-9	Supply chain	<ul style="list-style-type: none"> 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 added by metals and minerals (pages 12 and 13) Our value chain (pages 42 and 43)
102-10	Significant changes to the organisation and its supply chain	Significant changes to the organisation's size, structure, ownership, or supply chain, including: <ul style="list-style-type: none"> 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) ARM acquired 100% of Machadodorp Works with effect from 28 February 2019. Apart from this, there were no significant changes during the reporting period in ARM's size, structure, ownership or supply chain Where we operate (pages 8 and 9)

GRI CONTENT INDEX continued

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 51) Responsible stewardship of environmental resources (page 70)
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.	How we report sustainable value creation (pages 2 and 3) UNGC and ICMM (pages 96 and 97) UN Sustainable Development Goals (pages 98 to 100)
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 27) Social and Ethics Committee Chairman's review (page 26) Stakeholder engagement (pages 22 to 25) Our value chain (pages 42 and 43) Value added by metals and minerals (pages 12 and 13) How we report sustainable value creation (pages 2 and 3) Responsible stewardship of environmental resources (pages 69 to 89)
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 26 to 28) Social and Ethics Committee Chairman's review (pages 26 to 29)
102-15	Key impacts, risks, and opportunities	a. A description of key impacts, risks, and opportunities.	Material matters (pages 30 to 31) How we govern and manage sustainable value creation (pages 19 and 20) 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.	Structure and value (page 6) Social and Ethics Committee Chairman's review (pages 26 to 29) How we govern and manage sustainable value creation (pages 18 and 19)

Disclosure number	Disclosure title	Description	Reference
102-17	Mechanisms for advice and concerns about ethics	A description of internal and external mechanisms for: <ul style="list-style-type: none"> 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 18 and 19)
102-18	Governance structure	<ul style="list-style-type: none"> 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. 	<p>How we govern and manage sustainable value creation (pages 14 to 21)</p> <p>Summarised Corporate Governance Report (IAR) (pages 92 to 127)</p> <p>Corporate Governance Report available at www.arm.co.za</p>
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.	<p>How we govern and manage sustainable value creation (pages 14 to 21)</p> <p>Summarised Corporate Governance Report (IAR) (pages 92 to 127)</p> <p>Corporate Governance Report available at www.arm.co.za</p>
102-20	Executive-level responsibility for economic, environmental, and social topics	<ul style="list-style-type: none"> 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. 	<p>How we govern and manage sustainable value creation (page 14 to 21)</p> <p>Summarised Corporate Governance Report (IAR) (pages 92 to 127)</p> <p>Corporate Governance Report available at www.arm.co.za</p>
102-21	Consulting stakeholders on economic, environmental, and social topics	<ul style="list-style-type: none"> 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. 	<p>Stakeholder engagement (pages 22 to 25)</p> <p>Key stakeholder concerns and ARM's responses (pages 93 to 95)</p>

Disclosure number	Disclosure title	Description	Reference
102-22	Composition of the highest governance body and its committees	<p>Composition of the highest governance body and its committees by:</p> <ul style="list-style-type: none"> 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. 	<p>Summarised Corporate Governance Report (IAR) (pages 92 to 127)</p> <p>Corporate Governance Report available at www.arm.co.za</p>
102-23	Chair of the highest governance body	<ul style="list-style-type: none"> 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. 	<p>Summarised Corporate Governance Report (IAR) (pages 92 to 127)</p> <p>Corporate Governance Report available at www.arm.co.za</p>
102-24	Nominating and selecting the highest governance body	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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. 	<p>Summarised Corporate Governance Report (IAR) (pages 92 to 127)</p> <p>Corporate Governance Report available at www.arm.co.za</p>
102-25	Conflicts of interest	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> i. Cross-board membership; ii. Cross-shareholding with suppliers and other stakeholders; iii. Existence of controlling shareholder; iv. Related party disclosures. 	<p>Ethics (page 18)</p> <p>Summarised Corporate Governance Report (IAR) (page 102)</p> <p>Corporate Governance Report available at www.arm.co.za</p>
102-26	Role of highest governance body in setting purpose, values, and strategy	<p>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.</p>	<p>Summarised Corporate Governance Report (IAR) (pages 92 to 127)</p> <p>Corporate Governance Report available at www.arm.co.za</p>
102-27	Collective knowledge of highest governance body	<p>Measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental, and social topics.</p>	<p>Summarised Corporate Governance Report (IAR) (pages 92 to 127)</p> <p>Corporate Governance Report available at www.arm.co.za</p>

Disclosure number	Disclosure title	Description	Reference
102-28	Evaluating the highest governance body's performance	<p>a. Processes for evaluating the highest governance body's performance with respect to governance of economic, environmental, and social topics.</p> <p>b. Whether such evaluation is independent or not, and its frequency.</p> <p>c. Whether such evaluation is a self-assessment.</p> <p>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.</p>	<p>Summarised Corporate Governance Report (IAR) (page 97)</p> <p>Corporate Governance Report available at www.arm.co.za</p>
102-29	Identifying and managing economic, environmental, and social impacts	<p>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.</p> <p>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.</p>	<p>How we govern and manage sustainable value creation (pages 14 to 21)</p> <p>Material matters (pages 30 to 31)</p> <p>Stakeholder engagement (pages 22 to 25)</p> <p>Risk report of the Corporate Governance Report available at www.arm.co.za)</p>
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.	<p>How we govern and manage sustainable value creation (pages 19 and 20)</p> <p>Risk report of the Corporate Governance Report available at www.arm.co.za)</p>
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.	<p>How we govern and manage sustainable value creation (pages 14 to 21)</p> <p>Report of the Social and Ethics Committee (IAR) (pages 126 and 127)</p>
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.	<p>The ARM Board has overall responsibility. Responsibility for overseeing the reporting process is delegated to the ARM Social and Ethics Committee</p> <p>How we govern and manage sustainable value creation (pages 14 to 21)</p>
102-33	Communicating critical concerns	Process for communicating critical concerns to the highest governance body.	<p>How we govern and manage sustainable value creation (page 19)</p> <p>Communities (page 33)</p> <p>Summarised Corporate Governance Report (IAR) (page 102)</p> <p>Corporate Governance Report available at www.arm.co.za</p>

Disclosure number	Disclosure title	Description	Reference
102-35	Remuneration policies	<p>a. Remuneration policies for the highest governance body and senior executives for the following types of remuneration:</p> <ul style="list-style-type: none"> 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. <p>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.</p>	<p>How we govern and manage sustainable value creation (pages 20 and 21)</p> <p>Summarised Remuneration Report (IAR) (pages 104 to 125)</p> <p>The full Remuneration Report is available in the Corporate Governance Report at www.arm.co.za</p>
102-36	Process for determining remuneration	<ul style="list-style-type: none"> 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. 	<p>Summarised Remuneration Report (IAR) (pages 104 to 125)</p> <p>The full Remuneration Report is available in the Corporate Governance Report at www.arm.co.za</p>
102-37	Stakeholders' involvement in remuneration	<ul style="list-style-type: none"> a. How stakeholders' views are sought and taken into account regarding remuneration. b. If applicable, the results of votes on remuneration policies and proposals. 	<p>Summarised Remuneration Report (IAR) (pages 104 to 125)</p> <p>The full Remuneration Report is available in the Corporate Governance Report at www.arm.co.za</p>
102-40	List of stakeholder groups	<ul style="list-style-type: none"> a. A list of stakeholder groups engaged by the organisation. 	<p>Key stakeholder concerns and ARM response (pages 93 to 95)</p>
102-41	Collective bargaining agreements	<ul style="list-style-type: none"> a. Percentage of total employees covered by collective bargaining agreements. 	<p>Labour relations (page 67)</p>
102-42	Identifying and selecting stakeholders	<ul style="list-style-type: none"> a. The basis for identifying and selecting stakeholders with whom to engage. 	<p>Stakeholder engagement (pages 22 to 25)</p>
102-43	Approach to stakeholder engagement	<ul style="list-style-type: none"> 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. 	<p>Stakeholder engagement (pages 22 to 25)</p> <p>There was no stakeholder engagement undertaken specifically as part of the report preparation process</p>

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: <ol style="list-style-type: none"> 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 22 to 25) Key stakeholder concerns and ARM response (pages 93 to 95)
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) with the exception of Machadodorp Works which ARM acquired effective from February 2019. This report covers those JVs over which we have direct or joint management control. 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 104) Material matters (pages 30 and 31) How we govern and manage sustainable value creation (pages 14 to 21)
102-47	List of material topics	a. A list of the material topics identified in the process for defining report content.	Material matters (pages 30 and 31)
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 30)
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 2018 and covered the 12-month period ending 30 June 2018.
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 104)

GRI CONTENT INDEX *continued*

Disclosure number	Disclosure title	Description	Reference
102-55	GRI content index	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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 104 to 132)
102-56	External assurance	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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 90 to 92)

GRI 200: Economic

Disclosure number	Disclosure title	Description	Reference
201	Economic performance Management approach disclosures	<ul style="list-style-type: none"> 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 104 to 125) Financial Review (IAR) (pages 32 to 49)

Disclosure number	Disclosure title	Description	Reference
201-1	Direct economic value generated and distributed	<p>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:</p> <ul style="list-style-type: none"> 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'. <p>b. Where significant, report EVG&D separately at country, regional, or market levels, and the criteria used for defining significance.</p>	Value added by metals and minerals (pages 12 and 13)
201-2	Financial implications and other risks and opportunities due to climate change	<p>a. Risks and opportunities posed by climate change that have the potential to generate substantive changes in operations, revenue, or expenditure, including:</p> <ul style="list-style-type: none"> 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. 	<p>Responsible stewardship of environmental resources (page 78)</p> <p>Value added by metals and minerals (pages 12 and 13)</p> <p>Additional carbon emission reporting available in the Climate Change and Water Supplementary Report on our website www.arm.co.za</p>
201-4	Financial assistance received from government	<p>a. Total monetary value of financial assistance received by the organisation from any government during the reporting period, including:</p> <ul style="list-style-type: none"> 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. <p>b. The information in 201-4-a by country.</p> <p>c. Whether, and the extent to which, any government is present in the shareholding structure.</p>	ARM did not receive financial assistance from government during F2019 in any of its countries of operation.

GRI CONTENT INDEX *continued*

Disclosure number	Disclosure title	Description	Reference
201-4	Financial assistance received from government <i>continued</i>	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 annual land use payment. 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 added by metals and minerals (pages 12 and 13) Human resources management (pages 58 to 68)
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: 53% 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 33 to 37)
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 33 to 37) 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 33.
204	Procurement practices 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	Transformation (pages 38 to 41)

Disclosure number	Disclosure title	Description	Reference
204-1	Proportion of spending on local suppliers	<ul style="list-style-type: none"> a. Percentage of the procurement budget used for significant locations of operation that is spent on suppliers local to that operation (such as percentage of products and services purchased locally). b. The organisation's geographical definition of 'local'. c. The definition used for 'significant locations of operation'. 	<p>Value added by metals and minerals (pages 12 and 13)</p> <p>Communities (page 36)</p> <p>Transformation (pages 38 to 41)</p> <p>Our value chain (page 42)</p> <p>ARM's preferential procurement and enterprise development initiatives benefit Historically Disadvantaged South Africans in line with the applicable legislation. At operational level, ARM includes suppliers and businesses from the communities around our operations in these programmes wherever possible.</p>
205	Anti-corruption Management approach disclosures	<p>103-1 Explanation of the material topic and its Boundary</p> <p>103-2 The management approach and its components</p> <p>103-3 Evaluation of the management approach</p>	<p>How we report sustainable value creation (pages 2 and 3)</p> <p>How we govern and manage sustainability (page 18)</p> <p>Report of the Social and Ethics Committee (IAR) (pages 126 and 127)</p>
205-1	Operations assessed for risks related to corruption	<ul style="list-style-type: none"> a. Total number and percentage of operations assessed for risks related to corruption. b. Significant risks related to corruption identified through the risk assessment. 	<p>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.</p>

GRI CONTENT INDEX continued

Disclosure number	Disclosure title	Description	Reference
205-2	Communication and training about anti-corruption policies and procedures	<ul style="list-style-type: none"> 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 of Conduct. Online training of existing employees on the Code of Conduct has been carried out at the ARM corporate office and the operations. The Code was most recently amended with effect 10 June 2019.
205-3	Confirmed incidents of corruption and actions taken	<ul style="list-style-type: none"> 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 F2019.

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	Responsible stewardship of environmental resources (pages 82 and 83)
302-1	Energy consumption within the organisation	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> i. electricity consumption ii. heating consumption iii. cooling consumption iv. steam consumption d. In joules, watt-hours or multiples, the total: <ul style="list-style-type: none"> 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. 	<p>Fuels consumed in our operations include diesel, petrol, aviation fuel, paraffin, acetylene, natural gas and LPG.</p> <p>Diesel is the most used fuel and accounts for 56% of the Scope 1 carbon emissions.</p> <p>Diesel use in F2019 totalled 96 million litres, which equates to 3.5 million gigajoules (F2018: 3.4 million GJ).</p> <p>Khumani Mine has a solar PV plant that harvested approximately 120 000 kWh during F2019.</p> <p>Total electricity consumption in F2019 of 1.7 million megawatt hours equates to 6.0 million gigajoules (F2018: 6.0 million GJ).</p> <p>No electricity or other forms of energy were sold during F2019.</p> <p>Total energy consumed (including electricity and diesel) in F2019 was 9.5 million gigajoules (F2018: 9.4 million GJ).</p> <p>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.</p>

Disclosure number	Disclosure title	Description	Reference
302-3	Energy intensity	<ul style="list-style-type: none"> 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 837 GJ/FTE in F2019 (F2018: 841). This calculation includes diesel and electricity consumed within the organisation.
303	Water Management approach disclosures	<ul style="list-style-type: none"> 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 	Responsible stewardship of environmental resources (pages 69 to 89) Climate Change and Water Supplementary Report available on our website www.arm.co.za
303-1	Water withdrawal by source	<ul style="list-style-type: none"> a. Total volume of water withdrawn, with a breakdown by the following sources: <ul style="list-style-type: none"> 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. 	Responsible stewardship of environmental resources (pages 69 to 89) Surface water: 7.1 million m ³ Ground water: 14.7 million m ³ Total water withdrawn: 21.8 million m ³ , of which 8.8 million m ³ was sourced from water supply/utility services. Water withdrawal is measured directly in litres through flow meters installed in the water system. Climate Change and Water Supplementary Report available on our website www.arm.co.za
304	Biodiversity Management approach disclosures	<ul style="list-style-type: none"> 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 	Responsible stewardship of environmental resources (pages 70, 71 and 84)

Disclosure number	Disclosure title	Description	Reference
304-2	Significant impacts of activities, products, and services on biodiversity	<p>a. Nature of significant direct and indirect impacts on biodiversity with reference to one or more of the following:</p> <ul style="list-style-type: none"> 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). <p>b. Significant direct and indirect positive and negative impacts with reference to the following:</p> <ul style="list-style-type: none"> i. Species affected; ii. Extent of areas impacted; iii. Duration of impacts; iv. Reversibility or irreversibility of the impacts. 	<p>Responsible stewardship of environmental resources (page 84)</p> <p>Online biodiversity table available on the ARM website www.arm.co.za</p>
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	<p>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:</p> <ul style="list-style-type: none"> i. Critically endangered ii. Endangered iii. Vulnerable iv. Near threatened v. Least concern 	<p>Responsible stewardship of environmental resources (page 84)</p> <p>Online biodiversity table available on the ARM website www.arm.co.za</p>
		<p>MMSD: Include impacts identified as a consequence of any resettlement and closure activities reported under indicators MM9 and MM10 respectively.</p>	<p>There were no resettlements in F2019.</p> <p>Online biodiversity table available on the ARM website www.arm.co.za</p>
305	Emissions Management approach disclosures	<p>103-1 Explanation of the material topic and its Boundary</p> <p>103-2 The management approach and its components</p> <p>103-3 Evaluation of the management approach</p>	<p>Responsible stewardship of environmental resources (pages 70, 71 and 79 to 82)</p> <p>Climate Change and Water Supplementary Report available on our website www.arm.co.za</p>

GRI CONTENT INDEX continued

Disclosure number	Disclosure title	Description	Reference
305-1	Direct (Scope 1) GHG emissions	<ul style="list-style-type: none"> a. Gross direct (Scope 1) GHG emissions in metric tons of CO₂ equivalent. b. Gases included in the calculation; whether CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, NF₃, or all. c. Biogenic CO₂ emissions in metric tons of CO₂ equivalent. d. Base year for the calculation, if applicable, including: <ul style="list-style-type: none"> 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. 	<p>Responsible stewardship of environmental resources (pages 79 to 82)</p> <p>Additional information regarding ARM's GHG emissions is available in the Climate Change and Water Supplementary Report available on our website www.arm.co.za</p>
305-2	Energy indirect (Scope 2) GHG emissions	<ul style="list-style-type: none"> a. Gross location-based energy indirect (Scope 2) GHG emissions in metric tons of CO₂ equivalent. b. If applicable, gross market-based energy indirect (Scope 2) GHG emissions in metric tons of CO₂ equivalent. c. If available, the gases included in the calculation; whether CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, NF₃, or all. d. Base year for the calculation, if applicable, including: <ul style="list-style-type: none"> 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. 	<p>Responsible stewardship of environmental resources (pages 79 to 82)</p> <p>Additional information regarding ARM's GHG emissions is available in the Climate Change and Water Supplementary Report available on our website www.arm.co.za</p>

Disclosure number	Disclosure title	Description	Reference
305-3	Other indirect (Scope 3) GHG emissions	<ul style="list-style-type: none"> a. Gross other indirect (Scope 3) GHG emissions in metric tons of CO₂ equivalent. b. If available, the gases included in the calculation; whether CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, NF₃, or all. c. Biogenic CO₂ emissions in metric tons of CO₂ equivalent. d. Other indirect (Scope 3) GHG emissions categories and activities included in the calculation. e. Base year for the calculation, if applicable, including: <ul style="list-style-type: none"> 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. 	<p>Responsible stewardship of environmental resources (pages 79 to 82)</p> <p>Additional information regarding ARM's GHG emissions is available in the Climate Change and Water Supplementary Report available on our website www.arm.co.za</p>
305-4	GHG emissions intensity	<ul style="list-style-type: none"> 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 CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, NF₃, or all. 	<p>Responsible stewardship of environmental resources (pages 79 to 82)</p>
305-6	Emissions of ozone-depleting substances (ODS)	<ul style="list-style-type: none"> 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. 	<p>We do not have ozone-depleting substances at our operations, no Persistent Organic Pollutants (POPs) and no volatile organics.</p>
305-7	Nitrogen oxides (NO _x), sulphur oxides (SO _x), and other significant air emissions	<ul style="list-style-type: none"> a. Significant air emissions in kilograms or multiples, for each of the following: <ul style="list-style-type: none"> i. NO_x ii. SO_x 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. 	<p>Sustainability performance year-on-year (page 5)</p> <p>We do not have ozone-depleting substances at our operations, no Persistent Organic Pollutants (POPs) and no volatile organics.</p>

Disclosure number	Disclosure title	Description	Reference
		<p>MMSD: Include emissions from both major mobile sources and on-site stationary sources.</p>	<p>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.</p> <p>Cato Ridge Works is a stationary source of emissions through combustion of reductants for smelting processes</p> <p>Sustainability performance year-on-year (page 5)</p> <p>Responsible stewardship of environmental resources (pages 79 to 82)</p> <p>Additional information regarding ARM's GHG emissions is available in the Climate Change and Water Supplementary Report available on our website www.arm.co.za</p>
306	<p>Effluents and waste Management approach disclosures</p>	<p>103-1 Explanation of the material topic and its Boundary</p> <p>103-2 The management approach and its components</p> <p>103-3 Evaluation of the management approach</p>	<p>Responsible stewardship of environmental resources (pages 70 to 71 and 84 to 86)</p>
306-1	<p>Water discharge by quality and destination</p>	<p>The reporting organisation shall report the following information:</p> <p>a. Total volume of planned and unplanned water discharges by:</p> <ul style="list-style-type: none"> i. destination; ii. quality of the water, including treatment method; iii. whether the water was reused by another organisation. <p>b. Standards, methodologies, and assumptions used.</p>	<p>Responsible stewardship of environmental resources (pages 84 to 86)</p> <p>Additional information regarding ARM's water management during F2019 is available in the Climate Change and Water Supplementary Report available on our website www.arm.co.za</p>

Disclosure number	Disclosure title	Description	Reference
306-2	Waste by type and disposal method	<p>a. Total weight of hazardous waste, with a breakdown by the following disposal methods where applicable:</p> <ul style="list-style-type: none"> 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) <p>b. Total weight of non-hazardous waste, with a breakdown by the following disposal methods where applicable:</p> <ul style="list-style-type: none"> 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) <p>c. How the waste disposal method has been determined:</p> <ul style="list-style-type: none"> 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 	Responsible stewardship of environmental resources (pages 84 to 86)
306-3	Significant spills	<p>a. Total number and total volume of recorded significant spills.</p> <p>b. The following additional information for each spill that was reported in the organisation's financial statements:</p> <ul style="list-style-type: none"> 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). <p>c. Impacts of significant spills.</p>	<p>Responsible stewardship of environmental resources (pages 84 to 86)</p> <p>Additional information regarding ARM's water management during F2019 is available in the Climate Change and Water Supplementary Report available on our website www.arm.co.za</p>
		MMSD: Include spillage of tailings, slimes or other significant process materials.	Responsible stewardship of environmental resources (pages 84 to 86)

Disclosure number	Disclosure title	Description	Reference
306-4	Transport of hazardous waste	a. Total weight for each of the following: <ul style="list-style-type: none"> 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 21) Responsible stewardship of environmental resources (pages 70 and 71)
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: <ul style="list-style-type: none"> 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 F2019. Black Rock Mine received a Compliance Notice in terms of NEMA during November 2018 and corrective actions were immediately implemented (page71).

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 58 to 68)
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 61) Sustainability performance year-on-year (page 5) More information on new employee hires and turnover is available in the Sustainability Data Tables available on the ARM website www.arm.co.za

Disclosure number	Disclosure title	Description	Reference
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	<p>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:</p> <ul style="list-style-type: none"> i. life insurance; ii. health care; iii. disability and invalidity coverage; iv. parental leave; v. retirement provision; vi. stock ownership; vii. others. <p>b. The definition used for 'significant locations of operation'.</p>	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.
401-3	Parental leave	<p>The reporting organisation shall report the following information:</p> <ul style="list-style-type: none"> 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. 	<p>All full time employees are entitled to three days of family responsibility leave per year and all female full time employees (2 265) are entitled to four months of maternity leave in terms of the Basic Conditions of Employment Act. The Labour Laws Amendment Bill, which proposed the introduction of parental leave, was signed into law in November 2018 but the commencement date has yet to be announced. We continue to monitor developments to ensure that our practices align with any changes to legal requirements when those are gazetted.</p> <p>In F2019, 162 female employees took maternity leave, 88 (54%) of these had returned to work in the reporting period after maternity leave ended and 62 (38%) were still employed at year end.</p>
402	<p>Labour/management relations</p> <p>Management approach disclosures</p>	<p>103-1 Explanation of the material topic and its Boundary</p> <p>103-2 The management approach and its components</p> <p>103-3 Evaluation of the management approach</p>	Labour relations (page 67)

Disclosure number	Disclosure title	Description	Reference
402-1	Minimum notice periods regarding operational changes	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 45 to 49) Occupational health and wellness (pages 50 to 57)
403-1	Workers representation in formal joint management-worker health and safety committees	<ul style="list-style-type: none"> 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 50 to 57) Health and safety agreements are concluded at every operation and are agreements between employees (including organised labour) and the employer.
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> i. region; ii. gender. c. The system of rules applied in recording and reporting accident statistics. 	Safety (pages 45 to 49) Occupational health and wellness (pages 50 to 57) 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 26 and 27) Safety (page 46)
403-3	Workers with high incidence or high risk of diseases related to their occupation	<ul style="list-style-type: none"> 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 50 to 57)

Disclosure number	Disclosure title	Description	Reference
403-4	Health and safety topics covered in formal agreements with trade unions	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 58 to 68)
404-1	Average hours of training per year per employee	<ul style="list-style-type: none"> a. Average hours of training that the organisation's employees have undertaken during the reporting period, by: <ul style="list-style-type: none"> i. gender; ii. employee category. 	<p>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.</p> <p>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 54.1 in F2019.</p> <p>More information on training hours is available in the Sustainability Data Tables available on the ARM website www.arm.co.za</p>
404-2	Programs for upgrading employee skills and transition assistance programs	<ul style="list-style-type: none"> 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 58 to 68)
404-3	Percentage of employees receiving regular performance and career development reviews	<ul style="list-style-type: none"> 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.

GRI CONTENT INDEX continued

Disclosure number	Disclosure title	Description	Reference
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 58 to 68) Transformation (pages 38 to 41) Summarised Corporate Governance Report (IAR) (pages 94 to 96)
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 58 to 68) Transformation (pages 38 to 41) Summarised Corporate Governance Report (IAR) (pages 94 to 96) 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 58 to 68) Transformation (pages 38 to 41) Human rights (pages 18 and 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 18 and 19) No material non-compliance incidents relating to discrimination were reported during F2019
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 67) Human rights (page 19)

Disclosure number	Disclosure title	Description	Reference
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	<p>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:</p> <ul style="list-style-type: none"> i. type of operation (such as manufacturing plant) and supplier; ii. countries or geographic areas with operations and suppliers considered at risk. <p>b. Measures taken by the organisation in the reporting period intended to support rights to exercise freedom of association and collective bargaining.</p>	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.
408	Child labour Management approach disclosures	<p>103-1 Explanation of the material topic and its Boundary</p> <p>103-2 The management approach and its components</p> <p>103-3 Evaluation of the management approach</p>	Human rights (pages 18 and 19)
408-1	Operations and suppliers at significant risk for incidents of child labour	<p>a. Operations and suppliers considered to have significant risk for incidents of:</p> <ul style="list-style-type: none"> i. child labour; ii. young workers exposed to hazardous work. <p>b. Operations and suppliers considered to have significant risk for incidents of child labour either in terms of:</p> <ul style="list-style-type: none"> i. type of operation (such as manufacturing plant) and supplier; ii. countries or geographic areas with operations and suppliers considered at risk. <p>c. Measures taken by the organisation in the reporting period intended to contribute to the effective abolition of child labour.</p>	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	<p>103-1 Explanation of the material topic and its Boundary</p> <p>103-2 The management approach and its components</p> <p>103-3 Evaluation of the management approach</p>	Human rights (pages 18 and 19)
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labour	<p>a. Operations and suppliers considered to have significant risk for incidents of forced or compulsory labour either in terms of:</p> <ul style="list-style-type: none"> i. type of operation (such as manufacturing plant) and supplier; ii. countries or geographic areas with operations and suppliers considered at risk. <p>b. Measures taken by the organisation in the reporting period intended to contribute to the elimination of all forms of forced or compulsory labour.</p>	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	Security practices Management approach disclosures	<p>103-1 Explanation of the material topic and its Boundary</p> <p>103-2 The management approach and its components</p> <p>103-3 Evaluation of the management approach</p>	Human rights (pages 18 and 19)

Disclosure number	Disclosure title	Description	Reference
410-1	Security personnel trained in human rights policies or procedures	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 (pages 18 and 19)
411-1	Incidents of violations involving rights of indigenous peoples	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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 18 and 19) 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	<ul style="list-style-type: none"> 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 33 to 37)
413-1	Operations with local community engagement, impact assessments, and development programs	<ul style="list-style-type: none"> a. Percentage of operations with implemented local community engagement, impact assessments, and/or development programs, including the use of: <ul style="list-style-type: none"> 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 33 to 37)

Disclosure number	Disclosure title	Description	Reference
413-2	Operations with significant actual and potential negative impacts on local communities	<p>a. Operations with significant actual and potential negative impacts on local communities , including:</p> <p>i. the location of the operations;</p> <p>ii. the significant actual and potential negative impacts of operations.</p>	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	<p>103-1 Explanation of the material topic and its Boundary</p> <p>103-2 The management approach and its components</p> <p>103-3 Evaluation of the management approach</p>	<p>Report of the Social and Ethics Committee (IAR) (pages 126 to 127)</p> <p>Responsible stewardship of environmental resources (page 71)</p>
419-1	Non-compliance with laws and regulations in the social and economic area	<p>a. Significant fines and non-monetary sanctions for non-compliance with laws and/or regulations in the social and economic area in terms of:</p> <p>i. total monetary value of significant fines;</p> <p>ii. total number of non-monetary sanctions;</p> <p>iii. cases brought through dispute resolution mechanisms.</p> <p>b. If the organisation has not identified any non-compliance with laws and/or regulations, a brief statement of this fact is sufficient.</p> <p>c. The context against which significant fines and non-monetary sanctions were incurred.</p>	<p>Refer to the Section 54 Notices discussed on page 48 of the Safety section.</p> <p>Apart from the Section 54 Notices, there were no significant fines or non-monetary sanctions for non-compliance with laws and regulations in F2019</p>
		<p>MMSD: Report a summary of judgements made against the organisation in the areas related to health and safety and labour laws.</p>	No judgements were made against ARM in terms of health and safety, and labour laws in F2019.

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.	<p>Land use management (pages 84 to 87)</p> <p>Online biodiversity table available on the ARM website www.arm.co.za</p>
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.	<p>Biodiversity (page 84)</p> <p>Online biodiversity table available on the ARM website www.arm.co.za</p>

GRI CONTENT INDEX continued

Disclosure Number	Description	Reference
MM3	Total amounts of overburden, rock, tailings, and sludges presenting potential hazards.	Material waste streams, while not necessarily presenting hazards, are discussed on pages 84 to 86 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
MM4	Number of strikes and lockouts exceeding one week's duration, by country.	Human resources management (page 67)
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, Modikwa Mine and Lubambe 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.	Illegal chrome mining activity at Modikwa Mine and illegal sand mining on the premises of Cato Ridge Works.
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 F2019.
MM10	Number and percentage of operations with closure plans.	Responsible stewardship of environmental resources (pages 86 and 87) 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.

GLOSSARY

AA1000APS	Accountability Principles Standard 2008
ABC	Anti-Fraud Bribery and Corruption
AET	Adult Education and Training
AFS	Annual Financial Statements
Aids	Acquired Immune Deficiency Syndrome
AMCU	Association of Mineworkers and Construction Union
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
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
COSO	Committee of Sponsoring Organisations of the Treadway Commission
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
DoL	Department of Employment and Labour
dTi	Department of Trade and Industry
DWS	Department of Water and Sanitation (previously DWA: Department of Water Affairs)
EAC	Education Advisory Committee of the MCSA
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
ESG	Environmental, Social and Governance
ERM	Enterprise Risk Management
EVG&D	Economic Value Generated & Distributed
EVP	Employee Value Proposition
Fe	Iron ore
FFR	Fatality Frequency Rate
FTE	Full-Time Employees
GGV	Goedgevonden
GJ	Gigajoules
GJ/FTE	Gigajoules of energy per full-time employee
GHG	Greenhouse Gas
GHS	Globally Harmonised System

GLOSSARY continued

GRI	Global Reporting Initiative
GWP	Global Warming Potential
HAP	Hazardous Air Pollutants
HCT	HIV Counselling & Testing
HDSAs	Historically Disadvantaged South Africans
HDP	Historically Disadvantaged Persons
HIV	Human Immunodeficiency Virus
HR	Human Resources
IAR	Integrated Annual Report
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
IOM	Institute of Medicine
IPCC	Intergovernmental Panel on Climate Change
IPT	Isoniazid Preventative Therapy
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
METF	Minerals Education Trust Fund
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
NIHL	Noise-Induced Hearing Loss
NOx	Nitrogen Oxides
NSP	National Strategic Plan (for South Africa)
NUM	National Union of Mineworkers
NUMSA	National Union of Metalworkers of South Africa
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
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
ROI	Return on Investment
PWD	People with Disabilities
QSEs	Qualifying Small Enterprises
RIFR	Reportable Injury Frequency Rate
RO	Reverse Osmosis
ROI	Return on Investment
RWI	Restricted Work Injury
SABPP	South African Board for People Practices
SABS	South African Bureau of Standards
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
SDG	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
STEM	Science, Technology, Engineering and Maths
STI	Sexually Transmitted Infections
STS	Standard Threshold Shift
TB	Tuberculosis
TCFD	Task Force on Climate-related Financial Disclosures
TJ	Terajoule
TPI	Transition Pathways Initiative
TRI	Total Recordable Injuries
TRIFR	Total Recordable Injury Frequency Rate
TSF	Tailing Storage Facility
UASA	United Association of South Africa
UN	United Nations
UNEP	United Nations Environment Programme
UNGC	United Nations Global Compact
URTI	Upper Respiratory Tract Infections
VGGWSS	Vaal Gamagara Water Supply Scheme
VOC	Volatile Organic Compounds
WAF	Water Accounting Framework
WASH	Water, Sanitation and Hygiene
WMA	Water management Area
WUL	Water Use Licence
XDR PTB	Extensively Drug Resistant Pulmonary Tuberculosis

STAKEHOLDER FEEDBACK FORM

ARM F2019 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Design and layout	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

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WM Gule*
AK Maditsi*
HL Mkatshana
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** 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 but are not limited to statements that are predictions of 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 the actual results, performance or achievements of the Company to be materially different from the future results, performance or achievements expressed or implied by such forward-looking statements. Such risks, uncertainties and other important factors include among others: 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 HIV & Aids epidemic in South Africa. These forward-looking statements speak 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 the occurrence of unanticipated events.



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