



# SUSTAINABILITY REPORT 2017



We do it better

# CONTENTS

## OVERVIEW

About this report	1
Our roadmap to sustainable development reporting	2
Our performance in F2017	4
Our sustainability performance year-on-year	5
Where we operate	6
Our structure	8
Our values and strategy	9
Our business model	10
Our most material matters	12
Our key stakeholders	16
Our contribution to society	22

## OUR MANAGEMENT

Chief Executive Officer's Report	26
----------------------------------	----

## OUR APPROACH TO SUSTAINABILITY

## REPORT OF THE SOCIAL AND ETHICS COMMITTEE

## MANAGING OUR MATERIAL MATTERS

Ensuring a safe, healthy and appropriately skilled workforce	34
– Safety	36
– Occupational health and wellness	42
– Human resources management	52
Maintaining our social licence to operate	58
– Corporate social responsibility	60
– Transformation	66
– Ethics	69
– Human rights	70
Ensuring responsible stewardship of our natural resources	72

## SUPPLEMENTARY INFORMATION

Independent Assurance Statement	88
The United Nations Global Compact (UNGC) and the ICMM Sustainable Development Principles	90
The United Nations Sustainable Development Goals (SDG's)	92
The Black Economic Empowerment Verification Certificate	94
GRI content index	96

## GLOSSARY

## OUR SUITE OF REPORTS

and additional material are available at [www.arm.co.za](http://www.arm.co.za)

### Integrated Annual Report



The Integrated Annual Report presents a holistic view of ARM and discusses the Company's operational, financial and sustainability performance as well as its governance structures and operating context. The report focuses on the Company's material matters and strategy.

### Corporate Governance Report



This report summarises our commitment to the highest standards of corporate governance and how our governance structures and systems support our values and the way in which we conduct our business.

### Annual Financial Statements



The Annual Financial Statements present the audited financial statements which have been prepared in accordance with the International Financial Reporting Standards (IFRS).

### Mineral Resources and Mineral Reserves Report



The Mineral Resources and Mineral Reserves Report is prepared in accordance with the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (SAMREC 2016).

### Sustainability Report



The Sustainability Report provides detailed information about our sustainable development performance and how economic, social and environmental impacts are managed. The report addresses those sustainability issues that are material to ARM and its stakeholders.

### King IV Application Register



The King IV application register summarises the King IV principles implemented and the progress made towards achieving the practices and, ultimately, the governance outcomes envisaged.

## REFERENCES



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

# ABOUT THIS REPORT

This 2017 Sustainability Report provides stakeholders with information regarding the environmental, social and governance practices, and sustainable development performance at African Rainbow Minerals Limited (ARM or the Company). The report covers the activities of the Company over the 12-month period from 1 July 2016 to 30 June 2017 (F2017).

This report forms part of ARM's F2017 reporting suite and complements the information available in the 2017 Integrated Annual Report, the comprehensive and detailed Annual Financial Statements, the Mineral Resources and Mineral Reserves Report, and the Corporate Governance Report. Additional detail on various sustainability indicators is available in the sustainability data tables. The tables and reports listed above, are available on ARM's website at [www.arm.co.za](http://www.arm.co.za).

Our Sustainability Report is structured around the matters that most materially impact the strategy, governance, performance and prospects of the Company and its stakeholders.



These matters and the process used to determine them are discussed on pages 12 to 15 of this report.

## REPORTING GUIDELINES

ARM's sustainability reporting and approach to sustainable development align with the requirements of various guidelines, regulations, industry initiatives and frameworks, which are described on pages 2 and 3 as well as pages 29 and 30 of this report. The information disclosed in this report is mainly guided by the member requirements of the International Council on Mining and Metals (ICMM), the Global Reporting Initiative (GRI) Standards and the GRI Mining and Metals Sector Disclosures. This report has been prepared in accordance with the GRI Standards: Core option.

## INDEPENDENT ASSURANCE

This report has been independently assured by Ibis ESG Assurance (Pty) Ltd in accordance with the AccountAbility AA1000AS guidelines (assurance Type II, moderate). The assurance engagement reviewed the reporting process and assessed the report against AccountAbility's guiding principles of inclusivity, materiality and responsiveness. Certain sustainability information was also assured and data verification was performed at three operations: Beeshoek, Black Rock and Modikwa Mines.

The assurance process included 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 88 and 89 of this report.

## REPORT BOUNDARY, BASIS FOR INCLUSION AND RESTATEMENTS

Consistent with prior periods, this report only includes information for those operations over which we have direct joint management control, namely the operations that form part of the ARM Ferrous, ARM Platinum and ARM Copper divisions. The report does not include 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.

Information in the report covers ARM's activities for the year to 30 June 2017. However, pulmonary tuberculosis (TB) infection and cure rates, and information sourced from the Mining Charter Scorecard reports are disclosed for the calendar year ending 31 December 2016, in line with the legislation regulating these disclosures.

While most sustainability information is disclosed on a 100% basis, carbon emissions are disclosed on an attributable basis (in the proportion of ARM's shareholding in the operation), which aligns with the reporting of emissions data in our CDP submission.

We do not report Scope 3 carbon emissions in the Sustainability Report due to the considerable expansion in disclosure categories. This information is available in the ARM CDP Report, which is publicly available at [www.cdp.net](http://www.cdp.net).

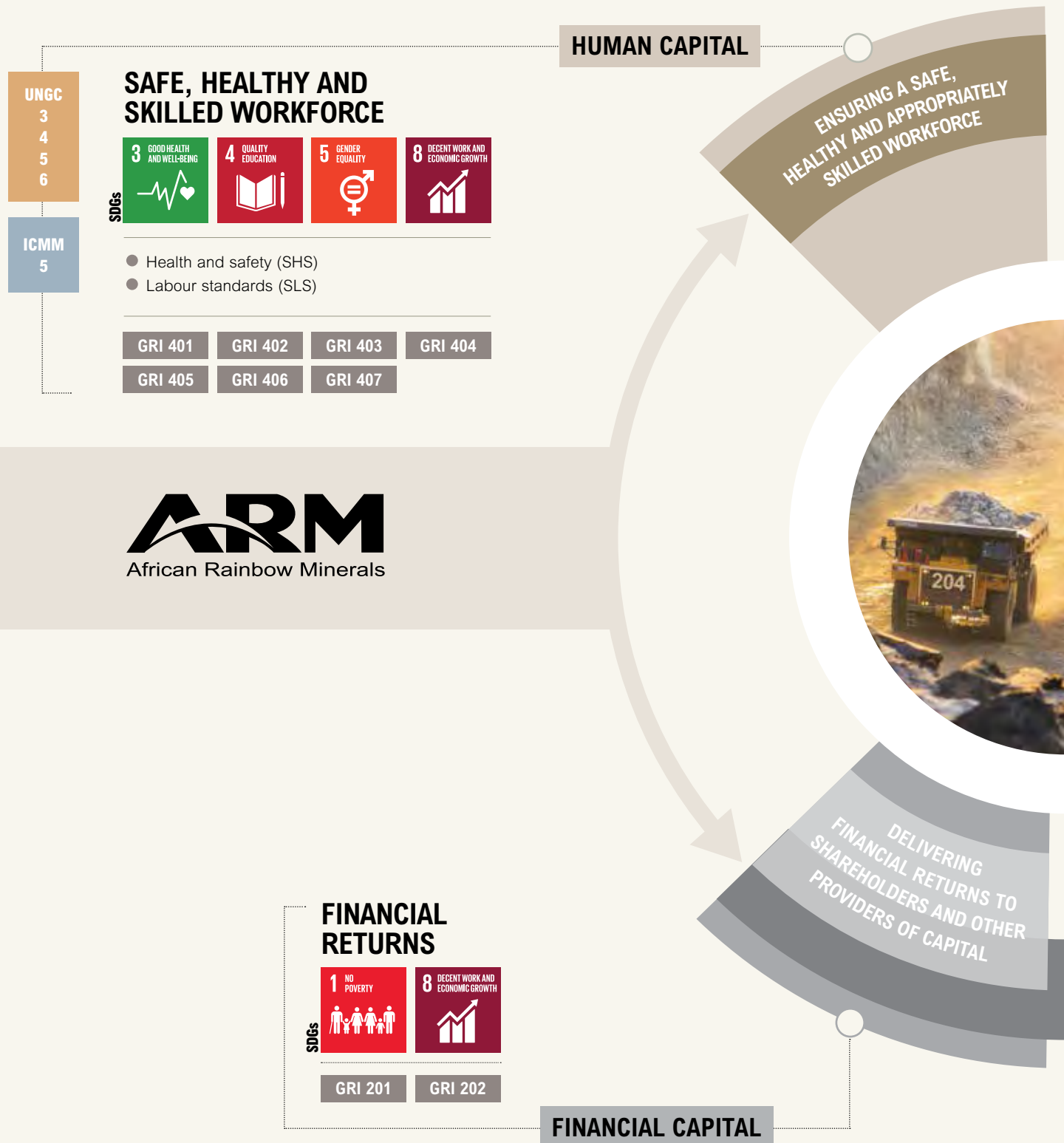
The total workforce figure used for occupational health and safety statistics is the average of 19 719 employees and contractors eligible for induction and/or medical surveillance and contributing to the safety statistics. The total labour figure reported in the Human Resources Development section and the Integrated Annual Report of 24 106 is the headcount recorded as at 30 June 2017.

Dwarsrivier Mine was disposed of in July 2016 and is excluded from sustainability information disclosed in this year's report.

# OUR ROADMAP TO SUSTAINABLE DEVELOPMENT REPORTING

The diagram shows how our report aims to integrate our most material matters (at the core of our report, as contained in the circle) with various reporting frameworks, including:

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



## SOCIAL AND RELATIONSHIP CAPITAL

### SOCIAL LICENCE TO OPERATE



SDGs

UNGC

1  
2  
10

ICMM

1  
3  
9  
10

- Human rights and community (SHR)
- Anti-corruption (GAC)
- Corporate governance (GCG)

GRI 408	GRI 412	GRI 416	GRI 203
GRI 409	GRI 413	GRI 417	GRI 204
GRI 410	GRI 414	GRI 418	GRI 205
GRI 411	GRI 415	GRI 419	GRI 206

## NATURAL CAPITAL

### ENVIRONMENTAL STEWARDSHIP



SDGs

UNGC

7  
8  
9

ICMM

6  
7

- Biodiversity (EBD)
- Climate change (ECC)
- Pollution resources (EPR)
- Water use (EWT)

GRI 301	GRI 302	GRI 303	GRI 304
GRI 305	GRI 306	GRI 307	GRI 308

## MANUFACTURED CAPITAL

### OPERATIONAL PERFORMANCE



SDGs

ICMM  
2  
4  
8

- Risk management

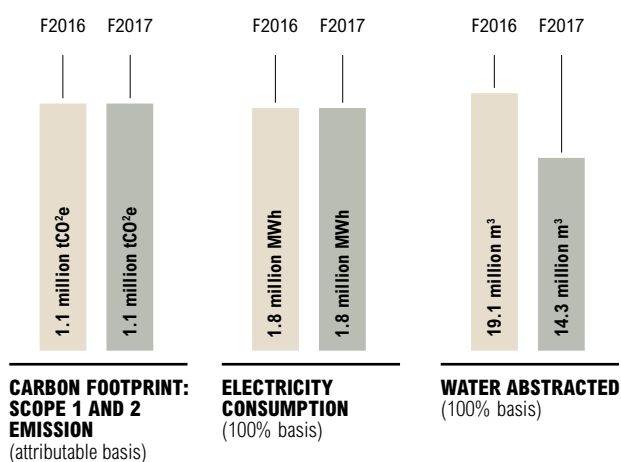
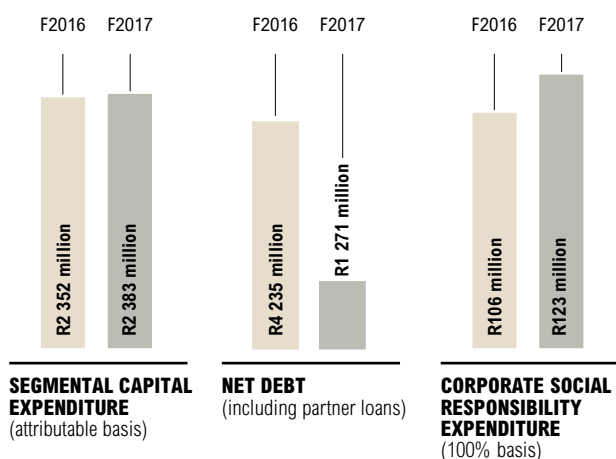
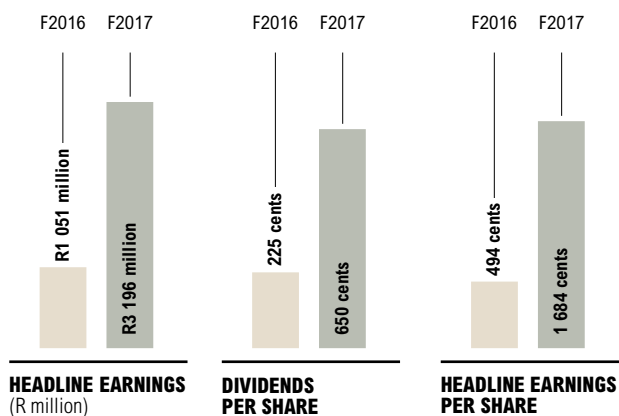
MAINTAINING  
OUR SOCIAL LICENCE  
TO OPERATE

ENSURING RESPONSIBLE  
STEWARDSHIP OF OUR  
NATURAL RESOURCES

CONTINUOUSLY IMPROVE OPERATIONAL PERFORMANCE

## INTELLECTUAL CAPITAL

# OUR PERFORMANCE IN F2017



## OTHER SALIENT FEATURES

Headline earnings increased by 204% to R3 196 million (F2016: R1 051 million). Headline earnings per share were 1 684 cents compared to 494 cents in the previous corresponding financial year.

Higher US Dollar prices were realised for all the commodities in ARM's portfolio. Realised Rand prices were higher for all commodities except platinum.

Cost containment initiatives yielded good results. The iron ore, manganese ore, manganese alloy, nickel, copper and Participating Coal Business (PCB) operations achieved unit production cost increases below inflation. Unit production cost increases at Modikwa and Two Rivers mines were in line with inflation.

ARM and Vale announced the disposal of their 80% interest in Lubambe Mine for a purchase consideration of US\$97 million. Completion of the disposal is subject to the fulfilment of conditions precedent.

ARM's interest in Two Rivers Mine to increase to 54% on execution of Two Rivers' amended mining right which is imminent.

The Lost Time Injury Frequency Rate (LTIFR) improved by 14% from 0.32 per 200 000 man-hours in F2016 to 0.28 in F2017, the lowest in ARM's history. The ARM Ferrous, Platinum and Copper divisions also achieved their respective lowest ever LTIFRs.

# OUR SUSTAINABILITY PERFORMANCE

## YEAR-ON-YEAR

Performance indicator	F2017**	F2016**	F2015**	F2014**	F2013**
<b>Economic and related core baseline indicators</b>					
Sales (Rm)	21 898	19 072	19 824	23 785	19 800
Taxes (Rm)	858	478	860	1 893	1 145
Headline earnings (Rm)	3 196	1 051	1 744	4 108	3 737
EBITDA (Rm)	6 244	3 964	4 994	8 459	7 227
Net cost of products and services (Rm)	10 816	10 891	10 808	11 093	9 100
Wealth created (Rm)	8 622	6 276	7 217	11 797	8 318
Number of environmental administrative penalties/fines	–	–	–	3	1
<b>Employee indicators (100% basis) – as at 30 June 2017*</b>					
Total number of permanent employees and contractors	24 106	23 128	27 276	27 236	26 751
– Employees (permanent)	13 218	13 793	15 080	15 250	14 653
– Contractors	10 871	9 319	12 141	11 953	12 064
– Expatriates	17	16	55	33	34
New jobs created (direct employment only)	–	–	–	335	1 358
Employee turnover (excluding contractors) (%)	1.1	15.0	11.5	1.6	1.7
Investment in employee training and development					
– Total expenditure (Rm)	180	184	232	196	180
– % of payroll	6.0	6.9	8.3	8.7	10.1
Employment equity (% representation of previously disadvantaged groups among permanent employees)					
– Top management	42	38	38	38	50
– Senior management	49	49	44	40	42
– Professionally qualified	60	57	54	51	49
– Technically qualified	71	68	67	65	64
LTIFR*	0.28	0.32	0.35	0.37	0.48
Reportable/serious accidents	47	60	78	66	79
Number of lost man days due to industrial action	–	3 024	–	172 221	–
<b>Environmental indicators (100% basis)</b>					
Total water withdrawn (m <sup>3</sup> ) (municipal, surface and groundwater)	14 295 993	19 066 300	18 334 106	19 408 464	20 551 374
Energy usage					
– Electricity (MWh)	1 784 491	1 820 802	2 102 451	2 144 894	2 045 499
– Diesel (000 litres)	87 494	91 974	99 812	92 013	108 788
<b>Emissions (Attributable<sup>^</sup>)</b>					
Carbon emissions (equivalent tonnes CO <sub>2</sub> )					
– Scope 1 and 2	1 047 418	1 077 746	1 246 131	1 228 656	1 244 181
– Scope 1	226 744	226 972	322 034	307 332	327 757
– Scope 2	820 674	850 774	924 097	921 325	916 424
Direct emissions: (Cato Ridge Works) <sup>#</sup>					
– CO <sub>2</sub> e emissions – direct (tonnes)	311 497	292 120	431 708	476 327	237 392
– NO <sub>x</sub> (tonnes)	437	405	601	838	637
– SO <sub>x</sub> (tonnes)	346	316	386	605	506
Particulate matter (tonnes)	242	216	237	182	122
<b>Corporate Social Responsibility (CSR)</b>					
Total CSR (Rm)	122.8	105.9	169.3	282.5	168.5
– CSI (Rm)	22.1	18.0	54.0	134.6	62.0
– LED (Rm)	92.5	80.5	103.6	141.9	99.6
– ARM BBEE Trust Projects (Rm)	8.2	7.4	11.7	5.9	6.8

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

\* Total number of ARM employees, contractors and expatriates as at 30 June 2017.

\*\* Financial data is based on segmental reporting.

• 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. No smelting operations were conducted at Machadodorp Works during F2017.

# WHERE WE OPERATE

## PARTICIPATING COAL BUSINESS (PCB)

### Thermal coal

- ☐ Open pit and underground mechanised

**16.6 Mt saleable thermal coal**

**LOM** 22 years

**EMPL** Not reported by ARM

**LTIFR** Not reported by ARM

- ☐ 30<sup>th</sup> percentile



Refer to pages 54 to 59 of the Integrated Annual Report for more information

## GOEDGEVONDEN (GGV) COAL MINE

### Thermal coal

- ☐ Open pit

**6.5 Mt saleable thermal coal**

**LOM** 23 years

**EMPL** Not reported by ARM

**LTIFR** Not reported by ARM

- ☐ 35<sup>th</sup> percentile



Refer to pages 54 to 59 of the Integrated Annual Report for more information

## MODIKWA PLATINUM MINE

### 6E PGM metals

- ☐ Underground

**301 228 6E PGM oz**

**LOM** More than 30 years

**EMPL** 4 949 employees

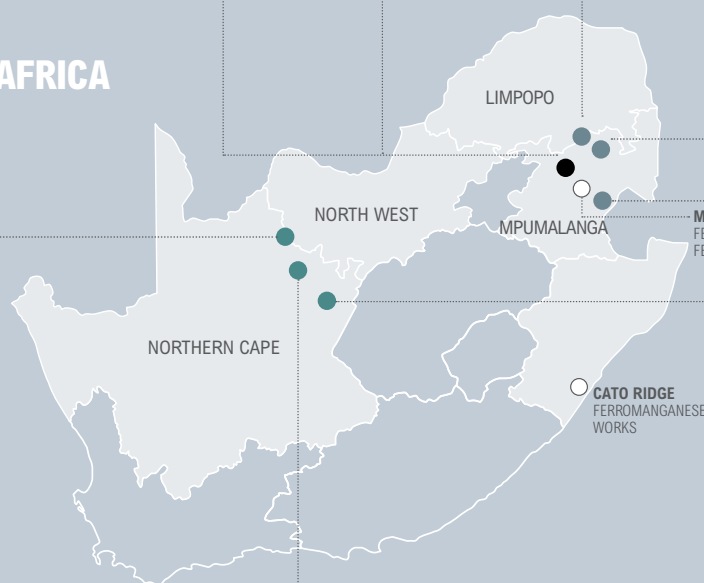
**LTIFR** 0.58

- ☐ 70<sup>th</sup> percentile



Refer to pages 30 to 41 of the Integrated Annual Report for more information

## SOUTH AFRICA



**MACHADODORP\***  
FERROMANGANESE AND  
FERROCHROME WORKS

\* Machadodorp Works is currently recovering ferrochrome from the historical slag dump through the metal recovery plant.

**CATO RIDGE**  
FERROMANGANESE  
WORKS

## NCHWANING AND GLORIA MANGANESE ORE MINES (COLLECTIVELY BLACK ROCK MINE)

### Manganese ore

- ☐ Underground mechanised

**2.9 Mt manganese ore**

**LOM** More than 30 years

**EMPL** 5 016 employees

**LTIFR** 0.24

- ☐ 40<sup>th</sup> percentile



Refer to pages 42 to 53 of the Integrated Annual Report for more information

## KHUMANI MINE IRON ORE MINE

### Iron ore

- ☐ Open pit

**14.5 Mt iron ore**

**LOM** 23 years

**EMPL** 5 162 employees

**LTIFR** 0.10

- ☐ 58<sup>th</sup> percentile



Refer to pages 42 to 53 of the Integrated Annual Report for more information

## BEE SHOEK IRON ORE MINE

### Iron ore

- ☐ Open pit

**3.2 Mt iron ore**

**LOM** 10 years

**EMPL** 1 076 employees

**LTIFR** 0.15

- ☐ 65<sup>th</sup> percentile



Refer to pages 42 to 53 of the Integrated Annual Report for more information



### TWO RIVERS PLATINUM MINE

#### 6E PGM metals

- ☐ Underground mechanised

**390 214 6E PGM oz**

**LOM** More than 30 years

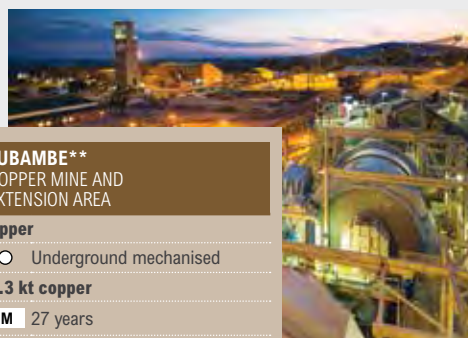
**EMPL** 3 219 employees

**LTIFR** 0.31

- ☐ 20<sup>th</sup> percentile



Refer to pages 30 to 41  
of the Integrated Annual  
Report for more  
information



### LUBAMBE\*\* COPPER MINE AND EXTENSION AREA

#### Copper

- ☐ Underground mechanised

**18.3 kt copper**

**LOM** 27 years

**EMPL** 1 647 employees

**LTIFR** 0.14

- ☐ 95<sup>th</sup> percentile



Refer to pages 60 to 66  
of the Integrated Annual  
Report for more  
information

## ZAMBIA



\*\* ARM announced on 15 August 2017 that an agreement had been concluded for the disposal of its 40% effective interest in Lubambe and Lubambe Extension Area. Completion of the disposal is subject to the fulfilment of conditions precedent.

## MALAYSIA



### NKOMATI NICKEL MINE

#### Nickel, PGMs, chrome, copper, cobalt

- ☐ Open pit

**15.9 kt nickel, 124 koz PGM, 241 kt chrome, 8 kt copper, 1 kt cobalt**

**LOM** 11 years

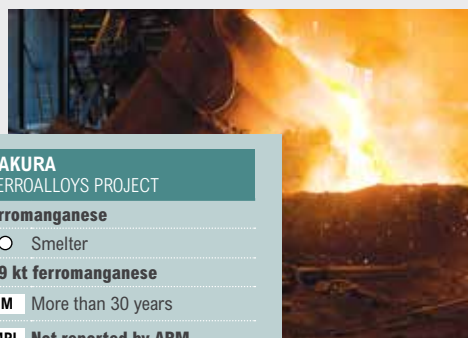
**EMPL** 2 172 employees

**LTIFR** 0.00

- ☐ 62<sup>nd</sup> percentile



Refer to pages 30 to 41  
of the Integrated Annual  
Report for more information



### SAKURA FERROALLOYS PROJECT

#### Ferromanganese

- ☐ Smelter

**129 kt ferromanganese**

**LOM** More than 30 years

**EMPL** Not reported by ARM

**LTIFR** Not reported by ARM

- ☐ 27<sup>th</sup> percentile (in F2021)

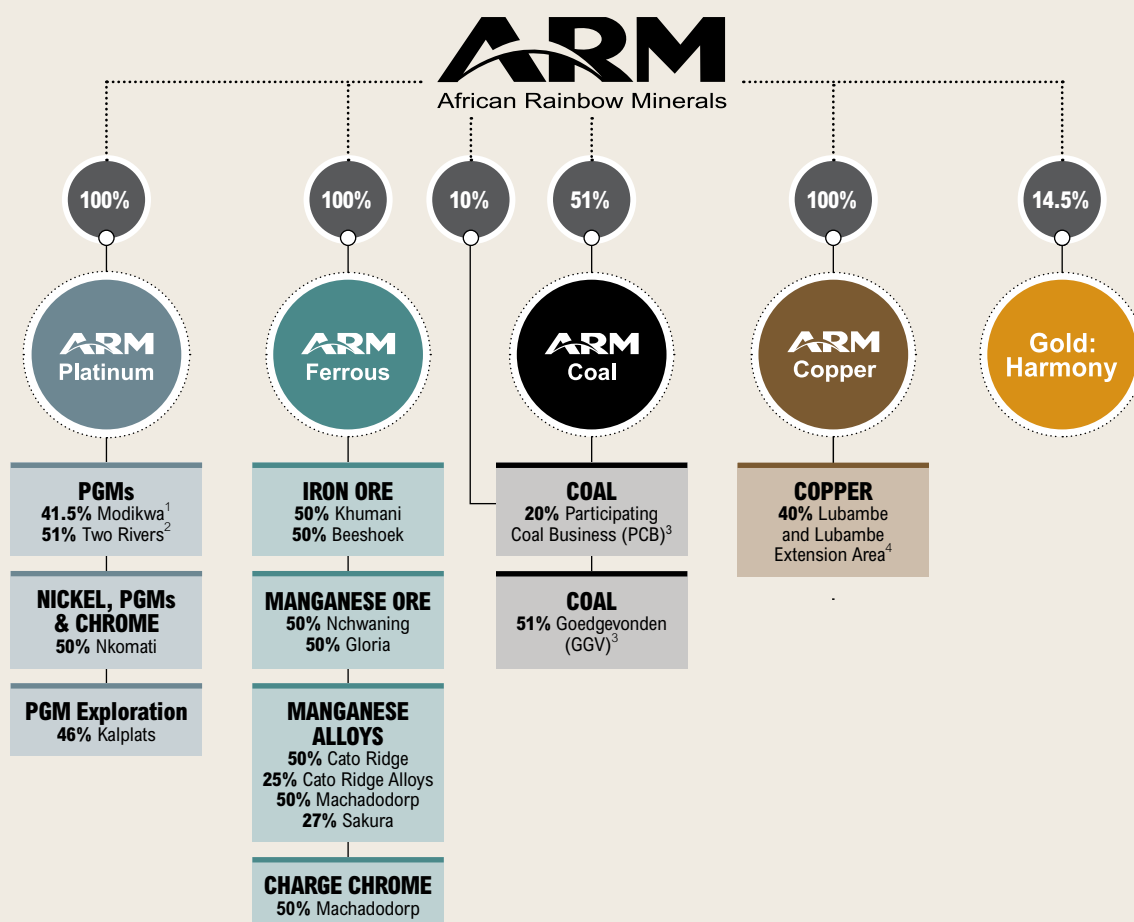


Refer to pages 42 to 53 of  
the Integrated Annual  
Report for more information

# OUR STRUCTURE

**AFRICAN RAINBOW MINERALS (ARM) IS A LEADING SOUTH AFRICAN DIVERSIFIED MINING AND MINERALS COMPANY WITH LONG-LIFE, LOW UNIT COST OPERATIONS.**

ARM MINES AND BENEFICIATES IRON ORE, MANGANESE ORE, PLATINUM GROUP METALS (PGMs), COPPER, NICKEL AND COAL. ARM ALSO PRODUCES MANGANESE AND CHROME ALLOYS AND HAS AN INVESTMENT IN GOLD THROUGH ITS SHAREHOLDING IN HARMONY.



1. ARM's effective interest in Modikwa Mine is 41.5%, local communities hold 8.5%.

2. Two Rivers Mine received consent during August 2017 i) to transfer the Tamboti rights to it, and ii) to have its mining right amended accordingly. The amended mining right will be issued to Two Rivers imminently, at which point ARM's interest in Two Rivers will increase to 54%.

3. ARM's effective interest in GGV Mine is 26% and 20.2% in PCB.

4. ARM announced on 15 August 2017 that an agreement had been concluded for the disposal of its 40% effective interest in Lubambe Mine and Lubambe Extension Area. Completion of the disposal is subject to the fulfilment of conditions precedent.

# OUR VALUES

Our **“We do it better”** management style is supported by values that guide the way we conduct our business.

## AIM FOR OPERATIONAL EXCELLENCE

through continuous improvement and by employing a leading practice sustainable development framework.

## PROVIDE A SAFE AND HEALTHY WORK ENVIRONMENT FOR ALL OUR EMPLOYEES

and remain an employer of choice by continually investing in our people.

## MAINTAIN A NON-DISCRIMINATORY WORKPLACE

based on fairness and employment equity, fair labour practices and freedom of association, which empowers our employees to contribute to the best of their ability, offers them rewarding career opportunities and supports transformation in the South African mining industry.

## IMPROVE THE LIVES OF THOSE LIVING IN THE COMMUNITIES IN WHICH WE OPERATE

by creating jobs, investing in projects that directly benefit them, providing skills training that equip them for employment and supporting enterprise development in our host communities.

## WORK RESPONSIBLY

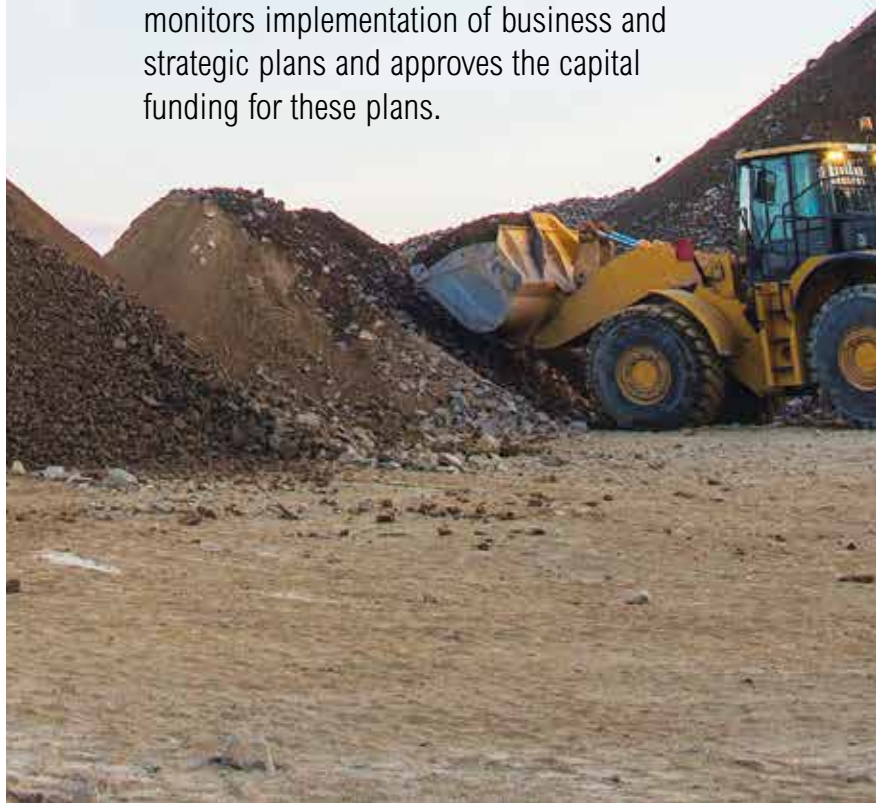
to achieve the balance between the economic, social and environmental aspects of our business, all of which are essential to the sustainability of our Company.

## MAINTAIN THE HIGHEST STANDARD OF CORPORATE GOVERNANCE.



# OUR STRATEGY

ARM's strategy focuses on quality growth in our existing portfolio of commodities, operational efficiencies, acquisitions and partnerships and exploration. The ARM Board provides strategic direction and leadership, monitors implementation of business and strategic plans and approves the capital funding for these plans.



# OUR BUSINESS MODEL

## AND HOW WE CREATE VALUE

### INPUTS

#### FINANCIAL CAPITAL

Financial capital refers to our assets (including cash balances), cash flow from operations and funding from shareholders and other providers of capital. Allocation of this capital to re-investment into the business, growth and dividends is a crucial component of creating long-term sustainable value.



Refer to the Financial Review on pages 102 to 124 of the Integrated Annual Report for further information on Financial capital.

#### PEOPLE

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



Refer to the section on Ensuring a safe, healthy and appropriately skilled workforce on pages 34 to 57 of this report for further information.

#### RELATIONSHIPS

Relationships with all our stakeholders are key to the sustainability of our business. In particular, the relationships we have with our employees, host communities, regional and national governments, and regulators allow us our social licence to operate. We continue to engage and partner with these and other stakeholders consistent with our strategy.



Refer to the section on Maintaining our social licence to operate on pages 58 to 70 of this report for further information.

#### NATURAL CAPITAL

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



Refer to the section on Ensuring responsible stewardship of our natural resources on pages 72 to 87 of this report for further information.

#### INNOVATION

Access to and investment in innovation and technology allow ARM to continuously improve our 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, research and development, the Strategic Services and Exploration division, as well as our brand and reputation.

#### MANUFACTURED ASSETS

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

### BUSINESS PROCESS

OPERATING ENVIRONMENT

EXPLORE

ARM  
Platinum

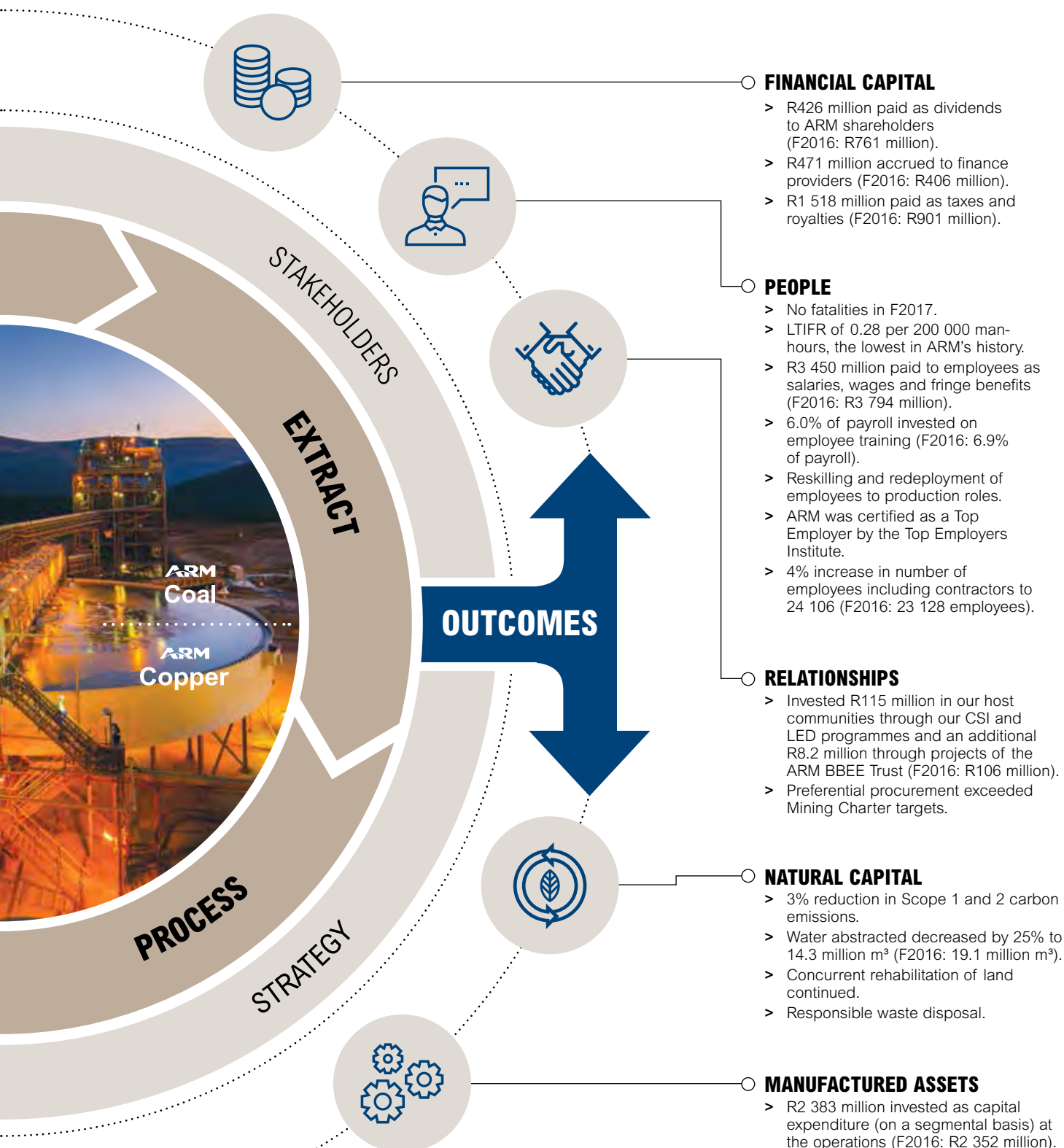
ARM  
Ferrous

SELL

GOVERNANCE



Refer to the Operational reviews on pages 29 to 66 of the Integrated Annual Report for the detailed processes for each mineral that we produce.



# OUR MOST MATERIAL MATTERS

The contents and emphasis of this report are determined by the risks, opportunities and other factors we consider most likely to have an impact on ARM's strategy, performance, prospects and/or governance. These are the factors that have the highest potential to affect the Company's ability to create long-term sustainable value.



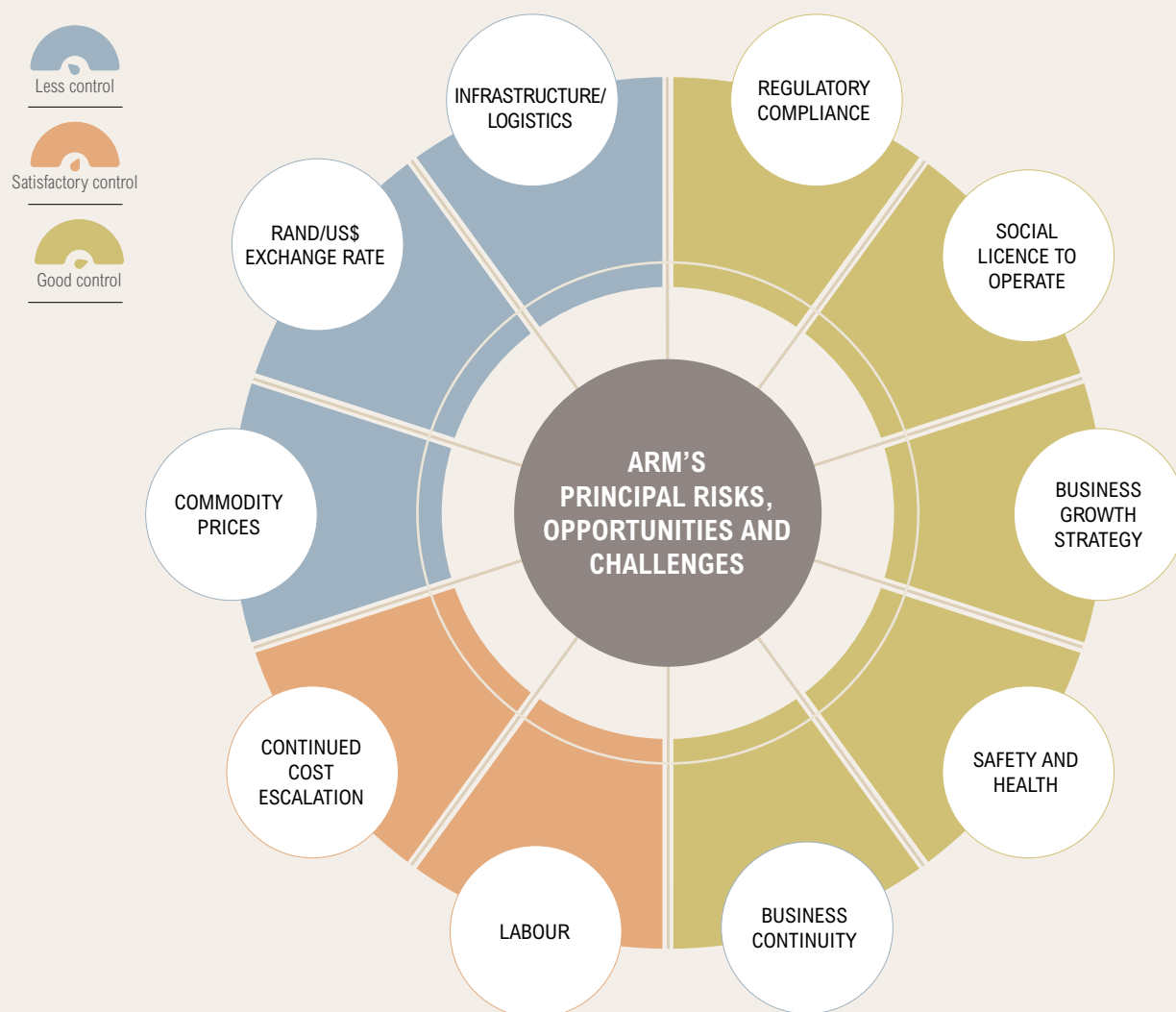
In order to make informed decisions and take appropriate action, ARM, with input from its stakeholders, identifies the matters material to the sustainability of our business. ARM determines these at Board, executive and operational level by considering the financial and non-financial matters driving the Company's sustainability and their possible impact on ARM and its stakeholders.

We identify our most material matters through assessment of a range of internal and external influences as well as through engagement with our stakeholders. A key process in the determination of these material matters is the comprehensive Enterprise Risk Management (ERM) Process, which includes

detailed identification of risks ranging from process level risk assessments at individual operations to strategic, tactical and major operational (STMO) risks at operational, divisional and Group level.

Quarterly reviews of STMO risks include:

- > Specific focus on the efficacy of controls (and mitigating strategies) relating to the identified risks;
- > Actions that may be required to improve the control effectiveness recording of any change to risk profiles; and
- > Recognising new and emerging risks and any increased risk velocity (risks that require immediate management focus).



The principal risks, opportunities and challenges identified in the ERM process are presented above. The graphical representation also provides ARM's view of the control effectiveness.

In determining our most material matters, the above detailed ERM Process is supplemented by:

- > Board, Board Committees and Executive Committee discussions;
- > Interviews with the Executive Chairman and Chief Executive Officer;
- > Interviews with the divisional chief executives;
- > The legitimate and reasonable needs, interests and expectations of our stakeholders through our commitment to stakeholder inclusivity;
- > Peer reporting;
- > Guidelines and frameworks;
- > Legislation;
- > Industry initiatives; and
- > Media monitoring.

ARM's performance is assessed against these material matters using relevant Key Performance Indicators (KPIs) which are regularly reported to the Executive Committee, Board sub-committees and the Board, and are closely monitored through the risk management and integrated assurance processes.

Material matters are prioritised according to the significance of their potential impact on the Company and key stakeholders. They are integrated into the strategy, governance frameworks, risk management system and operational management processes.

These material matters impact our operations in varying degrees and span the six capitals as defined in the <IR> Framework including financial capital, social and relationship capital, human capital, natural capital, manufactured capital and intellectual capital. They are interlinked and all critically affect our ability to generate a sustainable financial return. Managing these matters is therefore necessary to avoid interruptions to business continuity that could affect ARM's ability to create long-term sustainable value.

## OUR MOST MATERIAL MATTERS continued

The tables that follow group ARM's most material matters into five themes, as follows:

## DELIVERING FINANCIAL RETURNS TO SHAREHOLDERS AND OTHER PROVIDERS OF CAPITAL



### Components of the material matter:

- > Commodity price and exchange rate fluctuations;
- > Continued cost escalation;
- > Long-term business strategy;
- > Capital allocation; and
- > Political and fiscal risks.



Refer to the Executive Chairman, CEO and Financial Review reports on pages 6 to 12 of the Integrated Annual Report for further information.

### ARM STRATEGIC PILLAR

- > World-class management team
- > Partner of choice
- > Entrepreneurial management
- > Profit focused

## F2017 KPI performance

### HEADLINE EARNINGS PER SHARE

**1 684 cents**  
per share

### DIVIDENDS PER SHARE

**R6.50 cents**  
per share

**DIVIDENDS** are considered in the capital allocation process taking into account re-investment into the operations and growth.

## CONTINUOUSLY IMPROVING OPERATIONAL PERFORMANCE



### Components of the material matter:

- > Operational efficiencies;
- > Labour and equipment productivity;
- > Technological advancements;
- > Efficient use of natural resource;
- > Access to infrastructure and logistics; and
- > Legal compliance and effective governance.



Refer to the Operational reviews on pages 29 to 66 of the Integrated Annual Report for detailed discussions on each operation.

### ARM STRATEGIC PILLAR

- > World-class management team
- > Partner of choice
- > Employer of choice

## F2017 KPI performance

### LTIFR

0.28 per 200 000 man-hours

### SAFETY-RELATED STOPPAGES

21

### CHANGES IN UNIT COSTS

All operations achieved unit production cost increases below or in line with inflation, except GGV Mine.

## F2018 objectives

### LTIFR

Continued reduction in LTIFR towards zero harm.

### SAFETY-RELATED STOPPAGES

nil

### CHANGES IN UNIT COSTS

Achieve below inflation unit production cost increases at all operations.

## MAINTAINING OUR SOCIAL LICENCE TO OPERATE



### Components of the material matter:

- > Stakeholder engagement and relationships;
- > Transformation and the Mining Charter;
- > Corporate social responsibility, socio-political instability, ethical business conduct; and
- > Upholding human rights.



Refer to the Maintaining our social licence to operate on pages 58 to 70 of this report.

### ARM STRATEGIC PILLAR

- > Partnering with communities, workers and other stakeholders

## F2017 KPI performance

**CSR EXPENDITURE**  
**R115 million**

## F2018 objectives

### CSR EXPENDITURE

Continue to invest in our host communities.

## ENSURING A SAFE, HEALTHY AND APPROPRIATELY SKILLED WORKFORCE



### Components of the material matter:

- > Commitment to zero harm;
- > Attracting and retaining key skills;
- > Investing in the development and skills of the workforce;
- > Fostering diversity in the workplace; and
- > Maintaining good relationships with our employees and organised labour.



Refer to the Ensuring a safe, healthy and appropriately skilled workforce section on pages 34 to 57 of this report.

### ARM STRATEGIC PILLAR

- > Employer of choice
- > Partnering with communities, workers and other stakeholders

### F2017 KPI performance

**NUMBER OF FATALITIES**  
fatality free

**LTIFR**  
0.28 per 200 000 man-hours

**HDSA IN MANAGEMENT**  
55%

**NUMBER OF WOMEN IN THE WORKFORCE**  
12%

**TRAINING EXPENDITURE**  
R180 million (6.0% of payroll)

### F2018 objectives

**NUMBER OF FATALITIES**  
nil

**LTIFR**  
Continue reduction in LTIFR towards zero harm.

**HDSA IN MANAGEMENT**  
Continue to monitor and evaluate progress to uphold and improve the HDSA in management.

**NUMBER OF WOMEN IN THE WORKFORCE**  
Continue to monitor and evaluate progress to uphold and improve the number of women in the workforce.

**TRAINING EXPENDITURE**  
Continue to monitor and evaluate progress to uphold and improve the current level.

## ENSURING RESPONSIBLE STEWARDSHIP OF OUR NATURAL RESOURCES



### Components of the material matter:

- > Climate change, energy, water and waste; and
- > Biodiversity, closure and rehabilitation.



Refer to the Ensuring responsible stewardship of our natural resources section on pages 72 to 87 of this report.

### ARM STRATEGIC PILLAR

- > Employer of choice
- > Partner of choice
- > World class management team
- > Partnering with communities, workers and other stakeholders

### F2017 KPI performance

**SCOPE 1 AND 2 CARBON FOOTPRINT**  
1.05 million tCO<sub>2</sub>e

**ELECTRICITY CONSUMPTION**  
1 785 GWh

**WATER ABSTRACTED**  
14.3 million m<sup>3</sup>

### F2018 objectives

**SCOPE 1 AND 2 CARBON FOOTPRINT**  
5% absolute reduction relative to the F2014 baseline.

**ELECTRICITY CONSUMPTION**  
Increase efficiencies.

**WATER ABSTRACTION**  
Further improve efficient use of water.  
Strengthen stakeholder engagement at the catchment level.



# OUR KEY STAKEHOLDERS

## STAKEHOLDER ENGAGEMENT

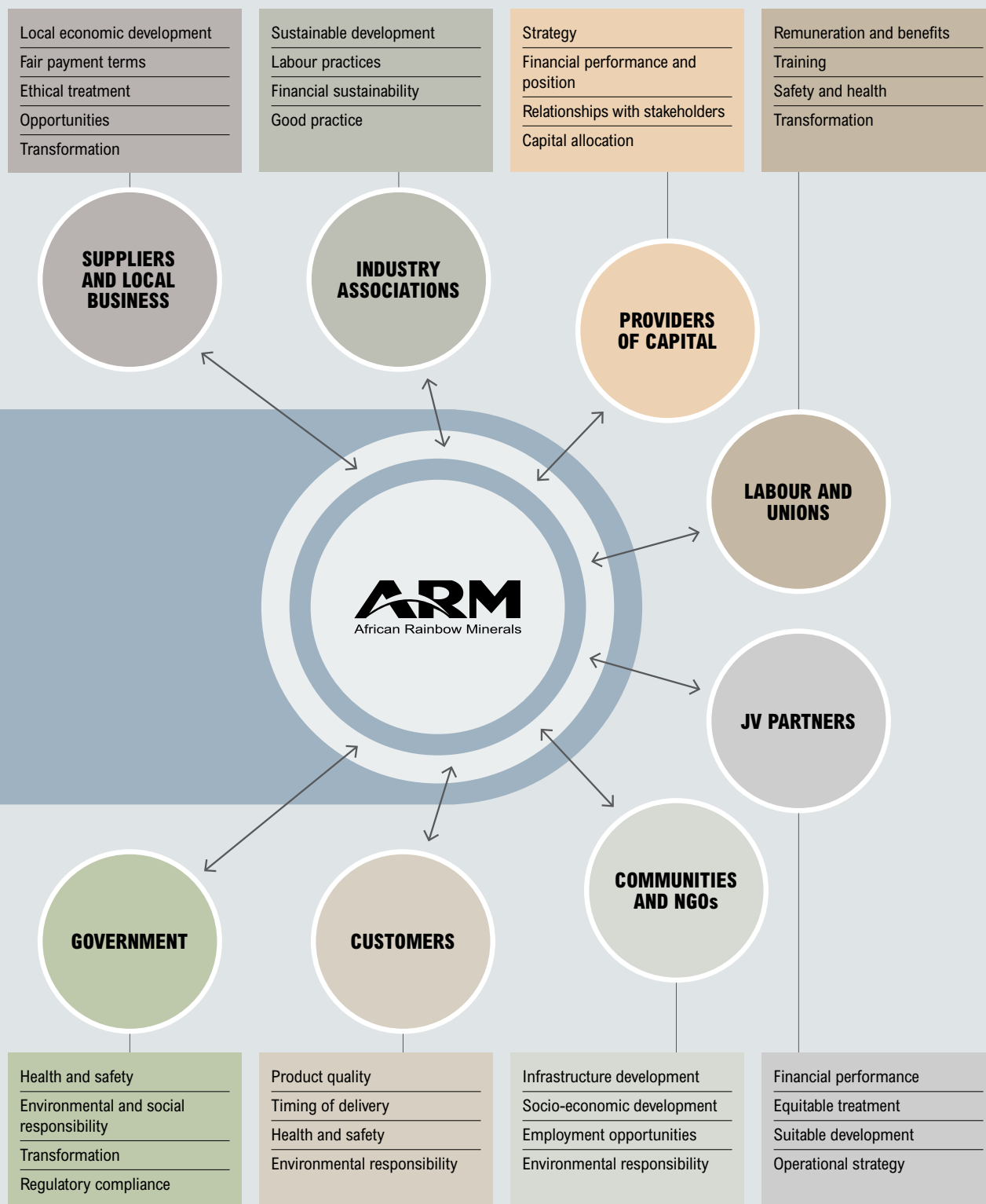
We recognise the benefits of strong long-term relationships with our stakeholders. We treat the legitimate and reasonable interests and expectations of our stakeholders as important inputs into how we conduct our business. Stakeholder interactions provide a broader context, inform our most material matters, and help us to refine our strategy and shape the long-term direction of the Company.

We define our stakeholders as individuals or groups that have a material interest in, or are affected by ARM. We engage with stakeholders through both formal and informal interactions, at corporate, divisional and operational level as appropriate to the stakeholder.

The Company's Stakeholder Communication Policy, contained in the ARM Code of Conduct, includes measurable outcomes for all engagements. Operational engagement reports and minutes ensure learnings are documented and shared effectively, and stakeholder and community engagement is part of the agenda of operational, divisional and Board meetings.

Senior executives responsible for stakeholder engagement include the Executive: Business Development, the Executive: Corporate Affairs, the Head of Investor Relations, the Executive: Compliance and Stakeholder Relations and divisional senior management.

The adjacent diagram shows ARM's key stakeholders and their matters raised.



There were a number of formal engagement activities with local communities during F2017, including the quarterly Future Forum meetings held at all operations where issues of social importance are discussed. These issues include water, environmental management and job opportunities. Skills databases at operations record details of community members that have completed learnership or mining cadet programmes to support local hiring.

General manager breakfast meetings were held between the general managers of Modikwa and Nkomati mines and local communities to improve communication and strengthen engagement.

## OUR KEY STAKEHOLDERS continued

**EXAMPLES OF STAKEHOLDER ENGAGEMENT IN 2017:**

1

**WATER AND LOCAL COMMUNITIES**

At the core of ARM's commitment to water stewardship, is engagement with various stakeholders to find solutions appropriate to all water users' needs. Access to sufficient potable water is a basic important human right and community concern. Engagement with local communities and other stakeholders helps us to understand and mitigate their concerns, identify how ARM can contribute to community water security and increase transparency regarding our operations.

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

- > The Gladdespruit Forum;
- > The Tubatse Environmental Forum;
- > The Lebalelo Water Use 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).

We engage with a broad range of stakeholders including 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 to ensure the sustainability of water resources for all stakeholders.

Community water concerns can have a direct impact on mines and surrounding communities. In 2015, the Lebalelo pipeline, which supplies ARM's Modikwa and Two Rivers mines, was damaged by communities that are remote from these mining operations. The communities were protesting against poor municipal service delivery and demanding access to services based on social funding expectations generally beyond the prescripts of mining social and labour programs. Various mines in the area are investigating ways to contribute to a fund to meet certain social requirements for these communities, including community halls and water supply infrastructure.

ARM and its joint venture partners, through its operations have invested in local water infrastructure that supports communities and increases their resilience. In addition, through the ARM BBEE Trust, water provision projects included the sinking and equipping of boreholes for various schools and communities around South Africa. Significant potential remains for synergies through coordinating collective mining industry socio-economic development efforts.

## 2

## THE NORTHERN CAPE TRIPARTITE CONTRACTOR MANAGEMENT GUIDELINE

In 2014 the Department of Mineral Resources identified contractor management as a critical focus area to address one of the major root causes of the significant number of fatalities in the Northern Cape at that time.



A contractor management workstream was established between the mines in the Northern Cape and was led by Khumani Mine from an early stage of the process. The workstream developed a Contractor Management Guideline and supporting documents that aim to standardise contractor management in the Northern Cape. The Guideline ensures that all on-mine contractors and service providers are taken on board and mobilised in accordance with recognised standards and are managed in line with company-specific policies, the Mine Health and Safety Act and other applicable legislation.

The Northern Cape Tripartite Contractor Management Guideline was approved by the Northern Cape Department of Mineral Resources and the Mine Health and Safety Council. The Guideline was signed in May 2017 at the quarterly tripartite meeting between the mining industry, government and labour unions.

## 3

## PARTNERING WITH THE DEPARTMENT OF LABOUR FOR COMMUNITY AND EMPLOYEE HEALTH IN THE NORTHERN CAPE



Beeshoek, Black Rock and Khumani mines in the Northern Cape have partnered with the Northern Cape Department of Health (DoH) to improve health services among employees and local communities. The partnership strengthens the implementation of the provincial tuberculosis (TB), HIV & Aids, STIs and chronic diseases strategies. By building capacity of local clinic staff and engaging communities and other stakeholders, the partnership aims to decrease the morbidity and mortality associated with TB, HIV/Aids and chronic diseases in the province.

The Northern Cape mines will adhere to DoH disease guidelines, refer patients to Northern Cape DoH clinics where necessary, provide audiology services to certain patients in surrounding areas, participate in community Wellness Days and submit reports, compile infection control programmes and complete TB audit tools in line with the requirements of the Northern Cape DoH.

The Northern Cape DoH will provide Assmang operations with TB, HIV & Aids, STI and chronic disease medication, provide extra diagnostic services, offer training, provide relevant data management tools, conduct disease programme reviews and monitor progress.

A similar initiative is being piloted at Two Rivers Mine, which has signed a Memorandum of Understanding with the Limpopo Department of Health to supply medication for primary health care services through the mine's clinic.

## OUR KEY STAKEHOLDERS continued

**ENGAGEMENT WITH KEY STAKEHOLDERS, AND MATTERS RAISED****SHAREHOLDERS, POTENTIAL SHAREHOLDERS, ANALYSTS AND OTHER INVESTORS****How we engage**

- > 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.

**Matters raised:**

- > Strategy growth
- > Unit cost reductions
- > Capital allocation
- > Labour relations
- > Skills attraction, retention and development
- > Dividends
- > Share price performance
- > Mining licences
- > Environmental, social and governance (ESG) issues

**BANKERS, INSURERS AND FUNDERS****How we engage**

- > Ongoing maintenance of relationships through meetings and general discussions with bankers and insurance managers.

**Matters raised:**

- > Liquidity
- > Solvency
- > Funding
- > Insurance management

**JOINT VENTURE PARTNERS****How we engage**

- > Ongoing management interaction during the ordinary course of business.
- > Monthly executive management meetings.

**Matters raised:**

- > Sustainable development
- > Financial performance
- > Operational performance
- > Equitable treatment
- > Operational strategy

**EMPLOYEES AND ORGANISED LABOUR****How we engage**

- > Annual performance reviews.
- > Annual internal results presentation.
- > Regular internal roadshows.
- > Annual employee surveys.
- > Company intranet and website.
- > Monthly shop steward meetings.
- > Wage negotiations.
- > Other meetings with unions when required.

**Matters raised:**

- > Remuneration
- > Training and development
- > Health and safety
- > Transformation

**COMMUNITIES, CIVIL SOCIETY AND NON-GOVERNMENTAL ORGANISATIONS****How we engage**

- > 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 LED and CSI projects.
- > Future Forums.
- > Attendance registers and minutes of these meetings are kept.
- > The ARM BBEE Trust.
- > Changes or expansions to our current operations require engagement with interested and affected parties through stakeholder consultation processes as prescribed by the Regulations of the National Environmental Management Act (NEMA) and other relevant legislation.
- > Community open days support information sharing and relationship building.

**Matters raised:**

- > 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

## GOVERNMENT

### How we engage

- > 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 DMR 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.

### Matters raised:

- > Social investment
- > Health and safety
- > Environmental management
- > Transformation
- > Compliance with the dti's Codes of Good Practice and Mining Charter
- > Regular progress reports and updates

## INDUSTRY ASSOCIATIONS\*

### How we engage

- > Regular scheduled association meetings.

### Matters raised:

- > Sustainable development
- > Labour issues
- > Financial sustainability
- > Implementation of good practice
- > Industry-specific issues
- > Changes in legislation

## CUSTOMERS

### How we engage

- > Continual interactions in the ordinary course of business.
- > Annual contractual negotiations.
- > Regular service level agreement renewals.

### Matters raised:

- > Product quality, timing of product delivery
- > Sustainability issues

## SUPPLIERS AND LOCAL BUSINESS

### How we engage

- > Continual interactions in the ordinary course of business.
- > Annual contractual negotiations.
- > Regular service level agreement renewals.
- > Scheduled meetings with local business.
- > ARM requires valid BEE certificates to support transformation in its supply chain.

### Matters raised:

- > Local economic development
- > Industry issues
- > Fair payment terms
- > Fair treatment
- > Valid BEE certification
- > Ethics
- > Sustainability issues

## MEDIA

### How we engage

- > One-on-one interviews.
- > Press releases.
- > Stock Exchange News Services (SENS) announcements.
- > Media contact function on the Company website.
- > Publications on the ARM website.

### Matters raised:

- > Topical issues as they arise

\* Includes the Chamber of Mines, the International Council on Mining and Metals, Ferro Alloy Producers' Association, Association of Mine Managers of South Africa, Association of Resident Engineers, Business Unity of South Africa, Water User Associations and the Energy Intensive Users Group.



## OUR CONTRIBUTION TO SOCIETY

ARM supports growth and development in society through the positive contribution our products make to essential infrastructure, power generation, industry and the reduction of harmful emissions. More directly, by ensuring that the value we create is allocated to address key socio-economic needs, we contribute to addressing many of the key socio-economic challenges in the communities around us and in the country.

### METALS AND MINERALS IN MODERN SOCIETY

Metals and minerals play key roles in the infrastructure and technologies that support modern society, including high-rise buildings, smartphones, computers, cars, appliances, wind turbines, solar panels, aircraft and spaceships. The unique characteristics of metals make them particularly well-suited to these applications and include their strength, durability and the relative ease with which they can be shaped. Their efficient conduction of heat and electricity makes them an integral part of modern cooling and heating systems, power transmission and electric motors.

The need for more metals will be driven by the continuing trends of increasing population, urbanisation, industrialisation, economic development and new technology.

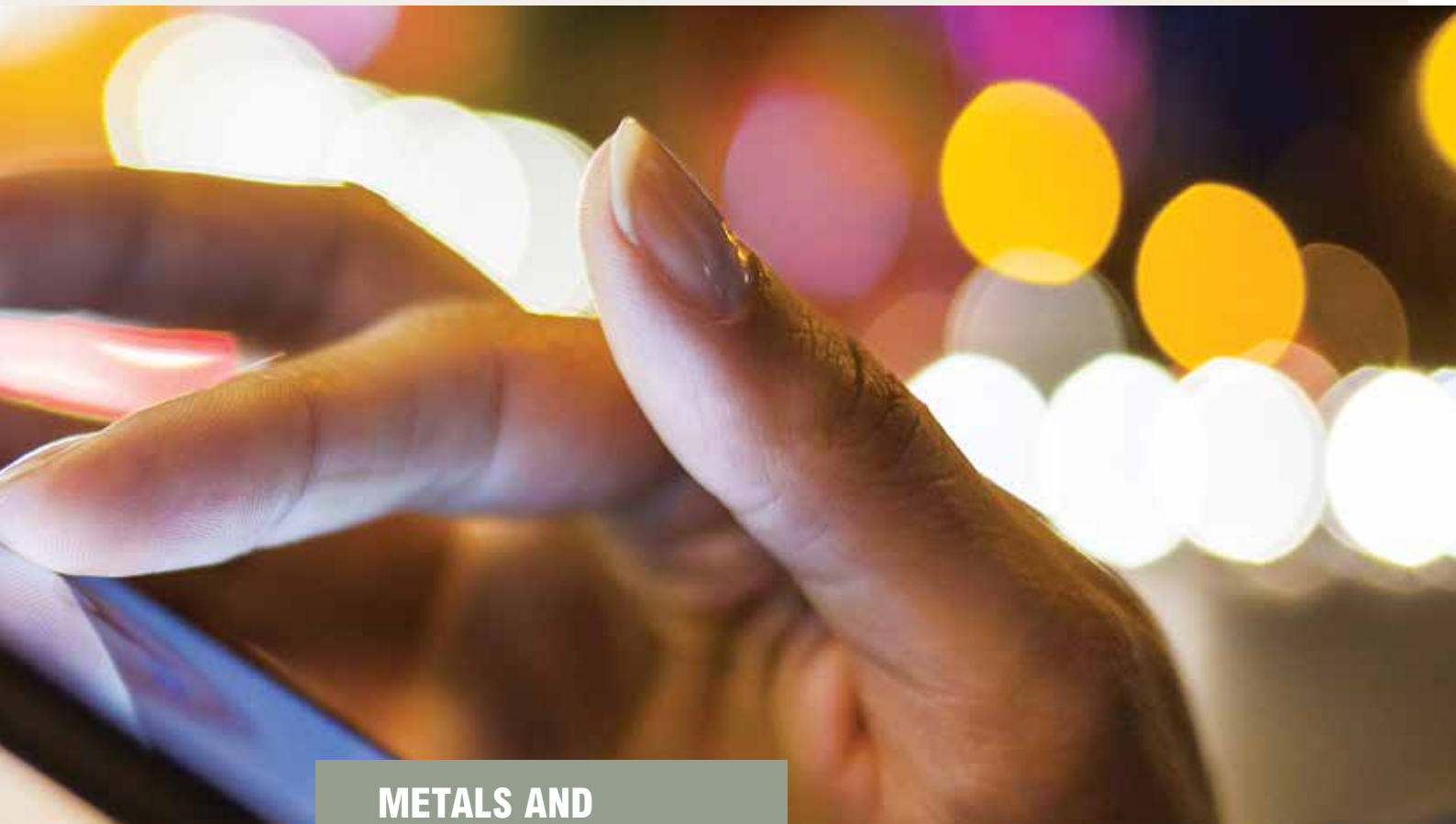
Metals can be recycled almost indefinitely without losing their essential properties and performance, and play an important role in a circular economy. Recycled metal can be produced more efficiently, saving water and energy, produces less waste and fewer greenhouse gas emissions than metal from newly mined ore.



### COAL AND ENERGY PRODUCTION

While coal-driven power stations produce far more carbon emissions than renewable energy sources, coal is still a common energy source in many markets due to its abundance, low cost and broad availability. Particularly in developing economies, coal is likely to remain an important source of energy until alternative technologies can produce energy in sufficient quantities and at competitive prices.

**Thermal Coal** > Energy generation



## METALS AND MODERN SOCIETY

The iron ore (Fe), manganese (Mn) and nickel (Ni) mined and processed by ARM's Ferrous Division are used, amongst other things, in the manufacture of steel. Modern steel is stronger, lighter and produced more efficiently than ever before. Steel's high recyclability means that it is also a more environmentally responsible option over the full life cycle than alternative structural compounds that cannot be recycled efficiently or that are disposed at landfill sites.

Higher quality ore produce lower greenhouse gas and local air pollutant emissions, and demand for these ores is increasing, particularly in Asia. The ore from ARM's iron and manganese mines produce a range of products that afford clients the ability to optimise production and reduce emissions by offering greater blending options. Lumpy iron ore, for example, reduces Scope 1 emissions associated with the sintering process.

Certain types of lithium-ion batteries are produced using manganese. These and other energy storage technologies offer a solution to support the growth in renewable energy and electromobility.

Copper (Cu) is primarily used in construction and plumbing applications, but is also an important component in various energy efficiency applications, including motor efficiency, transformer efficiency, cable efficiency, solar thermal technologies, wind power and Information and Communication Technologies.

> Stainless steel

Mn  
Fe Cr  
Ni

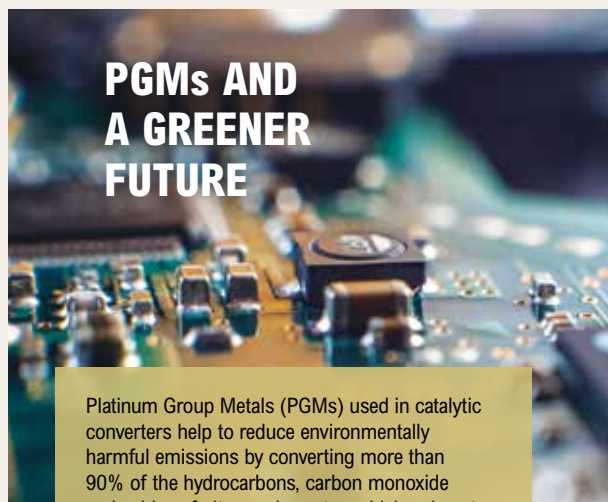
> Energy storage

Mn

> Energy efficiency  
> Construction  
> Plumbing

Cu

## PGMs AND A GREENER FUTURE



Platinum Group Metals (PGMs) used in catalytic converters help to reduce environmentally harmful emissions by converting more than 90% of the hydrocarbons, carbon monoxide and oxides of nitrogen in motor vehicle exhaust fumes into less harmful carbon dioxide, nitrogen and water vapour.

Platinum is used in hydrogen fuel cells to generate energy from hydrogen and oxygen, with water being the only emission. This technology offers a clean, efficient and scalable alternative to conventional combustion engines and stationary power systems.

PGMs are also widely used in electronics, electro-chemical processes, and dental and medical applications, including their use in artificial pacemakers to stabilise patients' heartbeats.

### PGMs include:

- > Platinum
- > Palladium
- > Rhodium
- > Ruthenium
- > Iridium
- > Osmium

### PGM roles:

- > Catalytic converters
- > Fuel cells
- > Electronics
- > Medical applications

## OUR CONTRIBUTION TO SOCIETY continued



## ARM'S DIRECT CONTRIBUTION TO THE ECONOMY

ARM created R8.6 billion in value during F2017 (F2016: R6.3 billion). Over the last five years, ARM has created a total of R42.2 billion in value. Of this total, R8.2 billion has been contributed to the fiscus of our host countries in the form of taxes and royalties paid to government.

	F2017	F2013 – F2017
Total value created	R8.6 billion	R42.2 billion

Distributed to:	F2017	F2013 – F2017
Employees	R3.4 billion	R17 billion
Government	R1.5 billion	R8 billion
Shareholders	R0.4 billion	R5 billion
Funders	R0.5 billion	R2 billion
Retained	R2.6 billion	R10 billion

### Contributions to employees

Over the last five years, ARM has distributed R17.1 billion in value to employees as salaries, wages and benefits. In addition, ARM operations have invested a total of R972 million (on a 100% basis) in training initiatives to improve the skills of employees (F2017: R180 million) and 1 034 employees received Adult Education Training (AET) provided by the Company.

### Contribution to communities

ARM's operations are located in some of the poorest and most remote parts of South Africa. Our investments in infrastructure and social projects provide important socio-economic development in these areas and support the resilience and ongoing sustainability of local communities. The beneficiaries of these projects include our employees, most of whom live in these

communities, but also our current and future suppliers, partners and customers.

ARM's investments in communities through its CSR programmes have totalled R849 million over the last five years through local economic development projects, corporate social investment initiatives and through the activities of the ARM BBEE Trust. 1 739 community members have received AET at ARM facilities over the same period, increasing their confidence and employability.

### Contribution to transformation and enterprise development

By supporting economic growth among Historically Disadvantaged South Africans (HDSAs) and in local communities, ARM's preferential procurement and enterprise development programmes increase job creation, widen the scope of market access for South African capital goods and services and increase economic activity in the areas around our operations.

Since 2012, ARM has spent R53 billion procuring goods and services for our operations (F2017: R10.8 billion). ARM's commitment to transformation has over the same period resulted in purchases by our South African operations allocated to HDSA suppliers of services averaging around 70% of services procurement, HDSA suppliers of capital equipment increasing from 42% to 80% (to December 2016) of capital procurement and HDSA consumable procurement increasing from 40% to 90% (to December 2016). The allocation of group spend through our preferential procurement programmes has created meaningful opportunities for HDSA suppliers.

ARM's HR policies aim to improve HDSA representation at all levels of management and over the last five years HDSA representation in management has increased from 46% to 55%.

## PRODUCT STEWARDSHIP

ARM acknowledges the lifecycle impacts our products may have on the environment and the people who use them. We encourage responsible use, re-use, recycling and disposal of our products to minimise these impacts.

Our customers are industrial companies with whom we engage contractually. The concentrates produced by the ARM Platinum division are toll-treated according to specific toll-treatment contracts. ARM is not directly involved in the sale and marketing of our products as this function is performed by our joint venture partners.

The most material concerns regarding the immediate downstream use of our products are product quality, the health and safety of the people handling these products during transportation and secondary management processes, and potential environmental impacts relating to transportation and spillage into the natural environment.

ISO 9001 quality management systems are in place at most operations to support product quality and customer complaints are addressed comprehensively at operational level.

Material Safety Data Sheets have been developed for all our products to provide regulators, downstream users and other stakeholders with information regarding the potential health, safety and environmental impacts of our products and operations. These are prepared according to the requirements of the Globally Harmonised System (GHS) of hazard classification and incorporate information from ongoing research sponsored by both the Group and industry associations.

ARM participates in industry forums, including the ICMM and the Chamber of Mines, and is a member of the ICMM's Product Stewardship Programme Committee, which help us to stay abreast of insights and developments regarding the properties of metals and minerals and their life-cycle effects on human health and the environment.

Ore & Metal, the marketing company for Assore, our joint venture partner in the ARM Ferrous division (the joint venture trading as Assmang), plays an active role in several industry associations that promote the use and sustainability of commodities produced by the division. Representation in these organisations improves cooperation between peer companies to address issues of common concern. Ore & Metal monitors changes in national and international legislation that could influence the mining, beneficiation, sale or transportation of its products and proactively responds as necessary.

The progressive modification of the International Maritime Organisation's codes could potentially change the categorisation of Assmang's products, which could require more stringent management and monitoring during shipment. The development and implementation of "REACH type" initiatives in key markets such as China, Japan, South Korea, India and Brazil may also require registration of our products.

The industry associations in which Assmang, through its representation by Ore & Metal, plays a role include:

- > The International Manganese Institute (IMnI): A representative of Ore & Metal currently serves on the International Occupational Health, Environment & Sustainability Committee of the IMnI.

Ore & Metal also chairs the IMnI Regulatory Affairs Committee, which monitors manganese-related national and international legislation and lobbies on regulatory issues of importance to the sector.

- > The International Chrome Development Association (ICDA): Ore & Metal is also represented on the South African Committee of the ICDA, which facilitates the sharing of learning experiences between peer companies, particularly with regard to safety and occupational health performance.
- > The Ferro Alloy Producers' Association (FAPA): In South Africa, Assmang continues to hold the deputy chairmanship of FAPA and representatives from both smelting operations participate in the FAPA Environmental, Technical and Logistics Committee.



# CHIEF EXECUTIVE OFFICER'S REPORT

**MIKE SCHMIDT**  
CHIEF EXECUTIVE OFFICER



ARM's earnings increased significantly in F2017 as the US Dollar prices of the commodities we produce improved. Our focus remained firmly on the operational issues that are within management's control and our results were strongly supported by the effectiveness of our cost containment and efficiency improvement initiatives.

Safety, occupational health and hygiene, environmental and social initiatives remain high priorities. Managing these factors effectively and strengthening our relationships with employees, communities and other key stakeholders have a direct influence on our ability to create long-term sustainable economic value and social benefit for all stakeholders.

We approach sustainable development led by ARM's core values, informed by legislation and collaboration with regulators and

stakeholders. Good practice guidelines and industry initiatives offer invaluable guidance, particularly our participation in the International Council on Mining and Metals (ICMM). Demonstrating a strong environmental, social and governance performance is a critical part of our 'We do it better' management style and delivering on our strategic focus on operational efficiencies.

## IMPROVING OPERATIONAL PERFORMANCE

Earnings from the ARM Ferrous division benefited from improved realised prices, but also from disciplined unit production cost containment and increased volumes. The high quality of the iron ore and manganese ore produced by the division was a key differentiating factor. The planned expansion in production through the Black Rock Project aims to meet the increasing demand for high quality manganese ore.

While production volumes at Two Rivers and Nkomati mines were negatively impacted by various operational challenges, volumes at Modikwa Mine rose as an increase in head grade and concentrator recoveries negated the lower milled tonnes.

The ARM Copper headline loss improved as recovering realised copper prices offset lower planned sales volumes. Cato Ridge Works continued to focus on improving furnace efficiencies and operational flexibility.

The various cost containment initiatives across the Group yielded good results with the iron ore, manganese ore, manganese alloy, nickel and copper operations achieving unit production cost increases below inflation. Unit production cost increases at Modikwa and Two Rivers mines were in line with inflation.

## DELIVERING FINANCIAL RETURNS

Wealth created for ARM's stakeholders increased by 37% to R8.6 billion (F2016: R6.3 billion) and cash generated from operations increased to R1.6 billion (F2016: R1.2 billion). Employees received R3.4 billion of value created as remuneration, R1.5 billion was distributed to the State as taxes and R426 million to providers of capital as dividends.

New projects are reviewed rigorously to ensure that funds are allocated only to projects expected to provide returns above ARM's risk adjusted hurdle rate. Capital expenditure decreased marginally to R2.3 billion (F2016: R2.4 billion) on a segmental basis.

The Group's financial position remains robust, with cash and cash equivalents at year-end amounting to R1.5 billion (F2016: R1.3 billion), with a further attributable R3.2 billion (F2016: R2.4 billion) held at ARM Ferrous (50% of Assmang).

## A SAFE, HEALTHY AND SKILLED WORKFORCE

We are extremely pleased with the results yielded by our continuing efforts to improve our safety performance and ARM operations achieved a number of commendable safety milestones during F2017. The ARM Group, as well as its Ferrous, Platinum and Copper divisions respectively achieved their lowest LTIFR to date. In addition to the safety highlights discussed on page 37, ARM operations also won five awards at the Mine Safe 2017 Conference and Khumani Mine took a leadership role in driving the finalisation of the Northern Cape Contractor Management Guideline, which drives improved contractor health and safety in the region.

Our focus and commitment to safety remains resolute.

We continue to refine and expand our occupational health and wellness initiatives to support the main health challenges affecting our employees, which include noise-induced hearing loss, pulmonary tuberculosis, HIV & Aids and various chronic primary health conditions.

## MAINTAINING OUR SOCIAL LICENCE TO OPERATE

ARM's broad contribution to society is described in more detail on pages 22 and 23. Our preferential procurement and enterprise development programmes focus on increasing job creation in local communities, widening the scope of market access for South African capital goods and services and increasing economic activity in the areas around our operations. In F2017, R14 million was allocated to enterprise development and the majority of the R15 billion spent on procurement at an

operational level continues to be spent with companies owned by historically disadvantaged South Africans (HDSAs).

Operational skills development and contractor development initiatives improve HDSA access to opportunities in the mining supply chain by prioritising opportunities for black-owned and black female-owned suppliers. Where appropriate, opportunities are ring-fenced for suppliers that meet these requirements.

ARM makes substantial direct investments into local communities, with R92.5 million allocated to local economic development projects in terms of our social and labour plans in F2017 and a further R22 million invested in corporate social investment initiatives.

Our Code of Conduct emphasises ARM's respect for human rights, our commitment to ethical business conduct and our intolerance of unfair discrimination, corruption and bribery. Our sustainable approach to doing business aligns with, amongst others, the principles of the United Nations Global Compact, the Sustainable Development Goals and the ICMM Sustainable Development Framework.

## ENVIRONMENTAL STEWARDSHIP

Our values commit us to environmental stewardship, supported by our commitment to zero harm and our focus on operational efficiencies. This promotes responsible use of water, minimises waste generation and drives energy efficiency initiatives that reduce carbon emissions.

Climate change is recognised in our Enterprise Risk Management system as one of our principal risks with associated opportunities, and is a key input into our sustainable business strategy.

Access to sufficient potable water is an important human rights issue and increasing community water concern. ARM operations continue to invest in local water infrastructure that supports communities and increases their resilience.

## OUTLOOK

While earnings were supported by higher average realised commodity prices in F2017 we have positioned the Company to reduce the potential impact of anticipated commodity price and exchange rate volatility. Cost containment is a priority and we continue to restructure the loss-making operations and those requiring shareholder funding.

Our "We do it better" management style means that we stay focused on building a more efficient and resilient business that creates long-term value and benefits all our stakeholders. This would not be possible without the hard work and commitment of our employees and I thank each and every one of them for their contribution. I wish to extend my heartfelt gratitude to our stakeholders and joint venture partners for their continued support and to the Board and the Executive Chairman for their guidance and support.

**Mike Schmidt**

Chief Executive Officer

10 October 2017

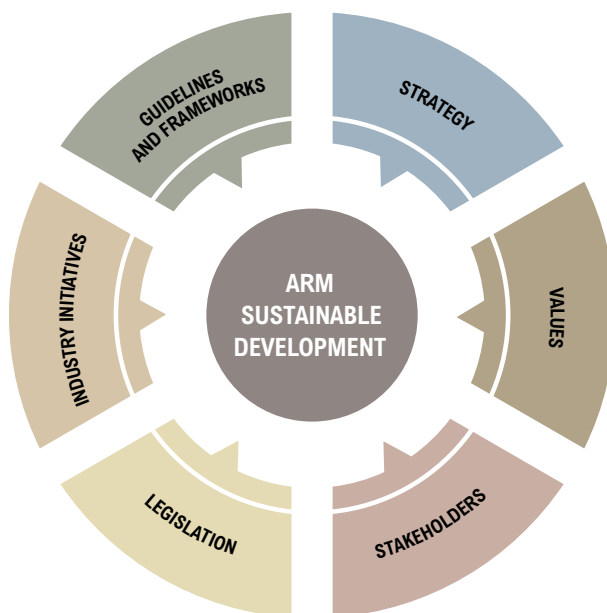
# OUR APPROACH TO SUSTAINABILITY

Sustainability is an integral part of ARM's business strategy through our values-driven focus on operational efficiencies, commitment to world-class management and our goal to be a partner of choice in the mining industry. Our commitment to sustainability is also embodied in the "We do it better" management style that guides our day-to-day actions.

ARM's values explicitly include the broader concepts of sustainability and our commitment to zero harm – to our employees, our host communities and the environment. ARM's Code of Conduct specifies respect for human rights, ethical business conduct and allows no tolerance for discrimination, corruption and bribery. We believe that a responsible, sustainable approach to mining and beneficiation minimises potentially negative impacts and increases the positive contribution the industry makes to communities and the country.

Our strategy also commits us to partnering with our key stakeholders, particularly employees and communities, to ensure that we understand their needs, interest and expectations. These are critical inputs into how we conduct our business through their influence on our strategy and the long-term direction of the Group.

Globally competitive performance depends not only on optimising operational and financial metrics, but on ensuring that environmental and social issues are also addressed appropriately. Driving excellence across all of these areas supports operational efficiency, long-term sustainability, financial returns for shareholders and broad social benefit.



## INPUTS INTO OUR APPROACH TO SUSTAINABLE DEVELOPMENT

Our approach to sustainable development is guided by the relevant sustainability guidelines, frameworks and other initiatives, including those shown in the table on the right.

ARM continually reviews and participates in developments in the range of legislation and regulations, industry good practice, reporting requirements and other guidelines that apply to sustainable development at our operations.

Regulatory compliance is the minimum requirement. ARM's regulatory social and environmental responsibilities are largely defined in our mining licences, the environmental authorisations that apply to our operations and the associated industry guidelines. We are committed to transformation and pay particular attention to the Mining Charter and Codes of Good Practice (CoGP) issued by the Department of Trade and Industry (dti).

ARM participates in a number of international and local mining industry initiatives that create opportunities for constructive engagement with broader stakeholders and industry peers to share good practices and drive a coordinated industry approach to sustainable development. ARM's participation in the International Council on Mining and Metals (ICMM) is discussed below. The MOSH initiative, driven by the Chamber of Mines, is an important safety-related initiative that promotes the widespread adoption of leading practices to help the industry meet the Tripartite health and safety targets and milestones.

ARM's sustainability performance has been recognised by inclusion in the FTSE/JSE Responsible Investment Top 30 Index and also the FTSE 4 Good Emerging Index following the June 2017 review.

## THE INTERNATIONAL COUNCIL ON MINING AND METALS (ICMM)

ARM is a member and active participant at Council, Executive and Programme Committee levels in the ICMM. We share the Council's vision of a respected mining and metals industry widely recognised as essential for society and a key contributor to sustainable development.

The ICMM's goal is to improve the social and environmental performance of the mining and metals industry through a collaborative approach that supports positive engagement with host communities, builds trust in the mining and metals industry and catalyses social and economic development.

The ICMM's strategy and action plan: 2016–2018 has three priority areas:

- > environmental stewardship, with a current focus on water;
- > the role of mining and metals in society, including investor engagement; and
- > human wellbeing through a focus on health and safety, and strengthening operational capacity to engage with communities.

Our sustainable development initiatives align with the ICMM's position statements, the Sustainable Development Framework and its ten Sustainable Development Principles.

As a member of the ICMM, ARM also subscribes to the Extractive Industries Transparency Initiative (EITI). The EITI is a global standard to promote the open and accountable management of natural resources to address the key governance issues facing the oil, gas and mining sectors.

## THE MINING CHARTER

The Broad-Based Socio-Economic Empowerment Charter for the South African Mining Industry (the Mining Charter) was developed through a consultative process between government, labour and mining companies in 2002 with the purpose to achieve the goals of the Mineral and Petroleum Resources Development Act (MPRDA). The MPRDA was enacted to facilitate meaningful participation of Historically Disadvantaged South Africans (HDSAs) in the mining and minerals industry.

Achieving the transformation goals set by the Mining Charter is an important consideration in retaining the Company's legal licence to operate in terms of its mining licence, as well as strengthening its social licence to operate. The latest revision of the Mining Charter was gazetted in June 2017, but is the subject of legal dispute. ARM continues to monitor developments in this regard to ensure that it can meet the legitimate goals of the MPRDA and demonstrate its commitment to transformation.



More information regarding the Mining Charter and ARM's performance against its goals is available in the Transformation section on pages 66 to 69.

## RELEVANT SUSTAINABLE DEVELOPMENT LEGISLATION

- > The Mining Charter
- > The dti CoGP
- > The National Environmental Management Act and Regulations
- > The Mine Health and Safety Act
- > The Occupational Health and Safety Act

## INDUSTRY INITIATIVES

- > The ICMM Sustainable Development Framework
- > The Culture Transformation Framework
- > The Mining Industry Occupational Safety and Health (MOSH) initiative

## 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 Global Reporting Initiative (GRI)
- > The CDP and CDP Water South Africa's National Development Plan (NDP)
- > The United Nations Global Compact (UNGC)
- > The United Nations Sustainable Development Goals (SDGs)



FTSE4Good  
Emerging Index  
constituent



## OUR APPROACH TO SUSTAINABILITY continued

**THE UNITED NATIONS GLOBAL COMPACT**

The UN Global Compact (UNGC) is a strategic policy initiative for businesses that are committed to aligning their operations and strategies with principles in the areas of human rights, labour, environment and anti-corruption. The Social and Ethics Committees of South African companies are required by the Companies Act to monitor the application of the ten principles. ARM recognises the importance of the ten principles of the UNGC and is committed to upholding them as they apply to its business.



The table on page 90 provides references to the ten UNGC principles and how these are discussed further in this report.

**THE dti CODES OF GOOD PRACTICE**

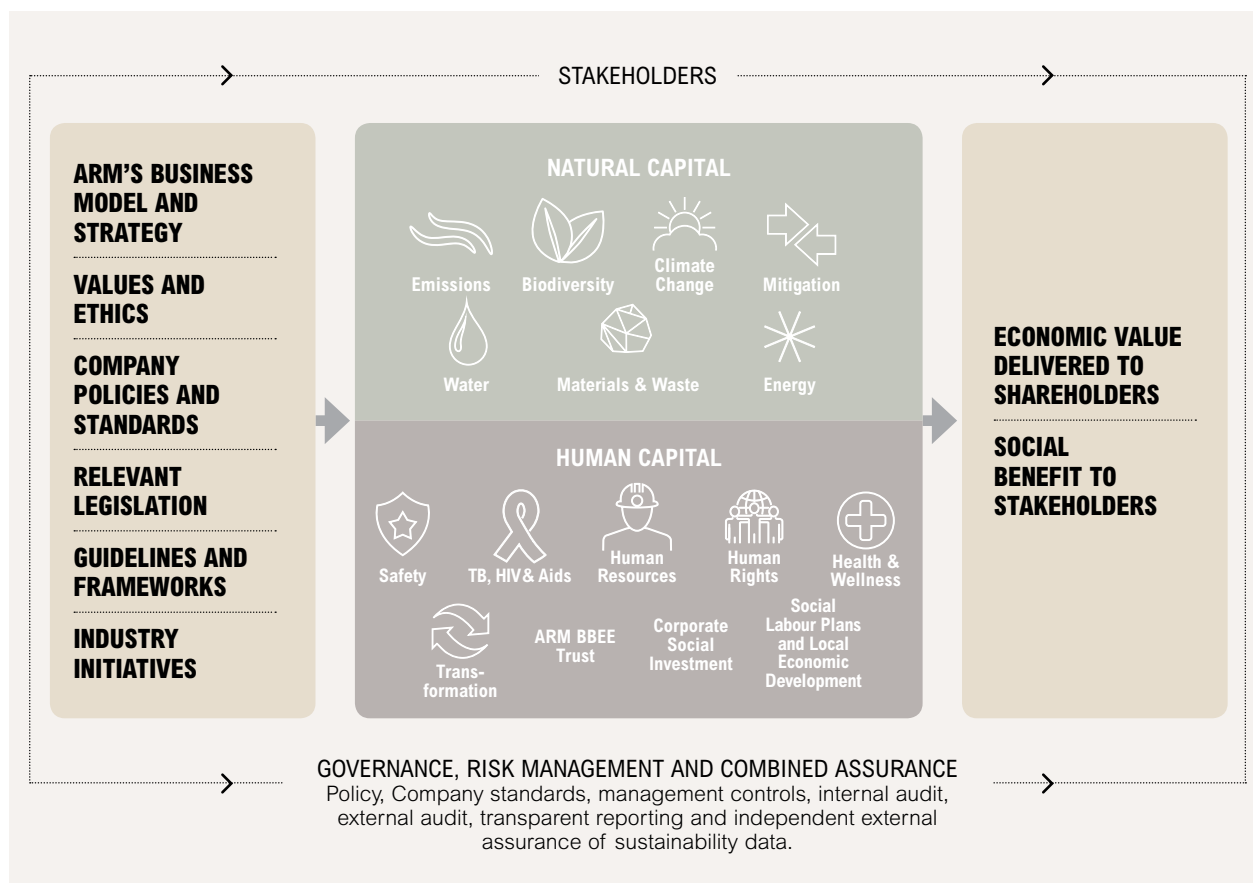
The goal of the Broad-Based Black Economic Empowerment (B-BBEE) Act, No. 53 of 2003 is to advance economic transformation and enhance the economic participation of black people in the South African economy. The dti CoGP serve as an implementation framework for B-BBEE policy and legislation and performance against the dti CoGP is monitored as evidence of a company's commitment to transformation by various stakeholders including analysts, investors, customers and government.



ARM's performance against the dti CoGP is discussed in the Transformation section on pages 66 to 69.

**ARM'S SUSTAINABLE DEVELOPMENT MODEL**

ARM's sustainable development model, as displayed below, is a graphic representation that reflects the combination of economic, environmental and social considerations the Company navigates in generating economic value for shareholders and broad social benefit for all stakeholders.



## GOVERNANCE OF SUSTAINABILITY



The ARM Board is ultimately responsible for sustainable development in the Company and delegates certain aspects of its responsibility to the Social and Ethics Committee and the Audit and Risk Committee.

The Social and Ethics Committee monitors the effective management of sustainable development. It is a sub-committee of the ARM Board and meets at least quarterly. The Committee's activities include reviewing policies, ensuring their implementation and monitoring the Company's Local Economic Development initiatives.



\* The Combined Assurance Forum provides input on assurance in terms of the Combined Assurance Model to the Management Risk and Compliance Committee.

The Management Risk and Compliance Committee is a sub-committee of the Audit and Risk Committee that coordinates and monitors the Company's Enterprise Risk Management (ERM) process. It oversees risk management in the Company and reviews the major strategic, tactical and operational risks facing the Company, which include sustainability risks.

  The Corporate Governance Report available at: [www.arm.co.za](http://www.arm.co.za) provides more information on the Board Committees and Management Committees on pages 13 to 18.

## HOW WE MANAGE SUSTAINABILITY IN OUR BUSINESS

The strategic approach to sustainable development and the relevant policies and standards are set at corporate level. Each operation then adapts its approach for the specific sustainability matters that are most material to their specific circumstances.

ARM's sustainability performance is measured against various KPIs and benchmarks which are regularly reviewed at operational and corporate level meetings.

The Executive: Sustainable Development is responsible for reviewing sustainability policies, strategies and targets and ensuring these align with the Board's commitment to zero tolerance to harm. Along with the Chief Executives of each division, the Executive: Sustainable Development carries responsibility for the implementation of sustainable development policies and procedures. The Executive: Sustainable Development operates with oversight from the Social and Ethics Committee, and provides input to the Management Risk and Compliance Committee on matters related to sustainable development as a standard agenda item.

The Group Risk Manager and Executive: Sustainable Development attend Social and Ethics Committee meetings and are members of the Management Risk and Compliance Committee and the Steering Committee. They also attend Board meetings to respond to any risk and sustainability related matters raised by the Board.

## SUSTAINABILITY AND RISK MANAGEMENT

The Management Risk and Compliance Committee implements the ERM process, guided by Internal Control and the ERM Policy and following the annual Risk Management Plan.

ARM's ERM process identifies risks, challenges and opportunities, ensures efficient and effective controls, benchmarks control performance, and monitors and encourages improvement in control strategies.

Operational management, including Safety, Health, Environmental and Quality (SHEQ) managers, meet once a quarter to review and update risk registers, with input from operational production and engineering functions. Performance against guidelines at both operational and corporate level is regularly reviewed, which forms an important part of the combined assurance process as well as providing operations with a tool to manage and mitigate associated risks to an acceptable level.



The section on page 17 of the Corporate Governance Report provides further information on the composition and activities of the Management Risk and Compliance Committees.



The Report of the Social and Ethics Committee is available on pages 32 and 33 of this report.

## COMBINED ASSURANCE

ARM believes that the focused approach to the integration of risk and assurance, coupled with its ongoing Enterprise Risk Management activities, ensures that a comprehensive integrated combined assurance base is established upon which relevant and appropriate analysis of the overall control environment can be assessed and reported.

Our Combined Assurance Model enhances the integration and alignment of management assurance and provides further input into establishing a control environment that is appropriately related to ARM's risk appetite.

ARM continues to refine its combined assurance approach and reporting with the aim of ensuring that the approach is practical, cost-efficient, and effectively integrated with ARM's ERM and management assurance processes in order to provide a comprehensive risk-based and robust assurance process.

The Combined Assurance Model defines what constitutes management assurance relative to various lines of defence and assurance. It provides a co-ordinated and integrated approach to obviate duplication and gaps in assurance to enable a cost-effective, comprehensive risk-based and robust assurance process.



The Combined Assurance Model is discussed in detail in the Risk Report on page 28 of the Corporate Governance Report available at: [www.arm.co.za](http://www.arm.co.za)

Ibis ESG Assurance (Pty) Ltd was contracted to provide moderate independent third party assurance over selected non-financial disclosures in the 2017 Sustainability Report.



The Independent Assurance Statement by Ibis is included on pages 88 and 89 of this report and includes comments on data collection in ARM.

# REPORT OF THE SOCIAL AND ETHICS COMMITTEE

We believe that a responsible, sustainable approach to our business minimises potentially negative impacts and increases the positive contribution the industry makes to communities and the country.

## ABOUT THIS REPORT

This report is provided by the Social and Ethics Committee (the Committee) in terms of Regulation 43(5)(c) of the Companies Regulations promulgated in terms of the Companies Act 71 of 2008, as amended (the Companies Act).

## COMPOSITION AND TERMS OF REFERENCE

The Committee members are all Independent Non-executive Directors.



Information on the composition of the Social and Ethics Committee, its Terms of Reference and its procedures is set out more fully in the Corporate Governance Report available at: [www.arm.co.za](http://www.arm.co.za)

## PURPOSE AND FUNCTIONS

The Committee is responsible for monitoring the Company's activities, having regard to any relevant legislation, other legal requirements and prevailing codes of good practice in the areas set out in the Companies Act. In respect of legal and regulatory requirements, during the year under review, the Committee, *inter alia*:

- > discharged those regulatory obligations of a social and ethics committee as prescribed by Regulation 43(5) of the Companies Regulations;
- > monitored complaints received via ARM's whistleblowers' hotline, including complaints or concerns regarding sustainable development matters;
- > considered reports provided by management regarding compliance with legal requirements in terms of the Company's Legal Compliance Policy;
- > received reports regarding the ongoing Competition Act compliance online training programme and annual compliance certification;
- > participated in training provided by independent parties in respect of the amendments to the B-BBEE Codes of Good Practice;
- > received reports regarding compliance with the National Environmental Management Act, the National Water Act and other safety, health and environmental legislation;
- > monitored risk areas affecting the sustainability of the business, together with the Audit and Risk Committee, and received a report about the findings of the annual Corporate Risk Workshop;
- > monitored compliance with the Mining Charter and the Department of Trade and Industry targets as well as the Company's status in respect of standards of best practice, including International Council on Mining and Metals Guidelines and membership requirements; and
- > received training on the proposed amendments to the Mining Charter.

The Committee supports the Board in ensuring that the Company protects, enhances and contributes to the wellbeing of society and during the year the Committee considered our material matters as follows:



## OPERATIONAL PERFORMANCE

### Ethics and risk management

The Company is committed to high moral, ethical and legal standards in dealing with all of its stakeholders. All the Directors and employees are required to ensure that the Company's business is conducted honestly, fairly, legally and in a reasonable manner, in good faith and in the best interests of ARM. These principles are set out in the Code of Conduct and the Committee received and considered reports regarding the Code.

The Committee has oversight of the Company's sustainability risks identified by the enterprise risk management programme and during the year also monitored the Company's initiatives to counteract risks of fraud, bribery and corruption.



## FINANCIAL RETURNS AND



## SOCIAL LICENCE TO OPERATE

ARM seeks to make a significant contribution towards addressing challenges confronting South Africa, including poverty alleviation, job creation, education, welfare and healthcare. The Committee monitored and reviewed the implementation of policies regarding adding value and giving to the communities in which ARM operates, including:

- > Corporate Social Responsibility;
- > Local Economic Development, including infrastructure, enterprise development, and community development projects committed to under the Social and Labour Plans; and
- > the ARM Broad-Based Economic Empowerment Trust projects.

The Committee specifically focused on commitments in the priority areas identified by the Committee, *i.e.*: health, education, sporting events, community capacity building, arts and culture, job creation; and infrastructure.



## SAFE, HEALTHY AND SKILLED WORKFORCE

### Human Resources

ARM is committed to fair labour practices and freedom of association. The Company's policies are aimed at eliminating unfair discrimination and promoting equality in line with, *inter alia*, the South African Constitution, the Labour Relations Act, the Employment Equity Act and the Broad-Based Black Economic Empowerment Act, and all other applicable legislation and the industry charter that governs employment relationships taking cognisance of the Universal Declaration on Human Rights, United Nations Global Compact, the Fundamental Human Rights Conventions of the International Labour Organisation and the International Labour Organisation Protocol on decent work and working conditions.

The Committee monitored and reviewed the implementation of labour policies, including:

- > attraction, retention and development of skills to support the Company's growth plan;
- > transformation and diversity;
- > employment equity;

- > employee turnover;
- > learnerships and bursaries;
- > educational training and development of its employees; and
- > literacy.

## Safe and Healthy Workforce

ARM is committed to providing its employees with a safe and healthy work environment. The Committee monitored and reviewed the implementation of safety, health and wellness policies, including:

- > safety performance;
- > occupational health and wellness; and
- > tuberculosis and HIV and Aids.



## ENVIRONMENTAL STEWARDSHIP

The most significant environmental issues confronting ARM are climate change and the management of natural resources.

The Committee monitored and reviewed the management of environmental impacts, including:

- > environmental management;
- > tailings storage facilities;
- > water use management;
- > land use management (rehabilitation and biodiversity management);
- > climate change effects; and
- > the status of ARM's participation in the Carbon Disclosure Project and the Water Disclosure Project.

## ASSURANCE

In terms of the Committee's Terms of Reference, the Committee (on behalf of the Audit and Risk Committee), had oversight of the Company's appointment of an independent external sustainability assurance provider to provide assurance in respect of material elements of the 2017 Sustainability Report and of the sustainability sections of the 2017 Integrated Annual Report and the Corporate Governance Report, and reported to ARM's Audit and Risk Committee that the appointment was made.

Based on the foregoing, we are of the opinion that the Social and Ethics Committee has executed its duties and responsibilities during the financial year in accordance with the Companies Regulations and its Terms of Reference.

On behalf of the Social and Ethics Committee.

**Dr R V Simelane**

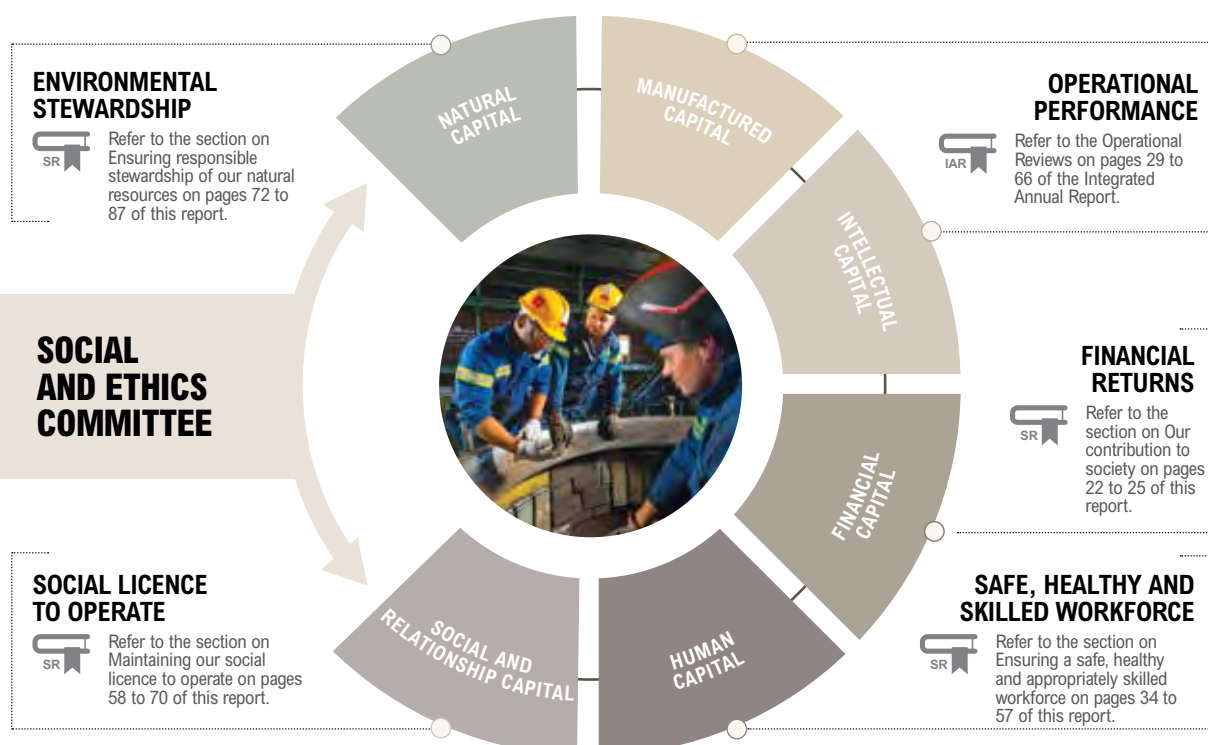
Chairman of the Social and Ethics Committee

10 October 2017

At the Annual General Meeting, the Committee Chairman will report to shareholders on the Company's performance with respect to relevant legislation and codes of good practice, social and economic development, labour, and safety, health and the environment.



Additional information is available in the Our approach to sustainability section on pages 28 to 31 of this report, as well as the Operational Reviews on pages 29 to 66 of the Integrated Annual Report.



# MANAGING OUR MATERIAL MATTERS



ARM's ability to execute on its strategy and create value for its stakeholders is critically dependent on its human capital, being our employees and contractors. Through their activities in the mining and beneficiation processes, the natural capital of mineral and ore reserves is transformed into financial capital.

Our values and commitment to zero harm drive the implementation of effective controls to support safety in challenging working conditions and manage occupational health and hygiene. This commitment also extends to ensuring that we implement good labour practices and demonstrate respect for human rights, transformation and the rights of our employees.

Investing in skills development and ensuring that we retain talent in the organisation supports continued improvements in productivity and efficiency that align with our strategy of low cost production.

## SAFETY, OCCUPATIONAL HEALTH AND WELLNESS

Ensuring the health, hygiene and safety of our workforce is critical to ARM's long-term sustainability. Our most significant safety concerns include operational risks such as falls of ground, working at heights, fatigue and moving machinery. Occupational and primary health concerns include noise-induced hearing loss, HIV & Aids, pulmonary tuberculosis, chronic diseases and employee wellness.

### HOW WE MANAGE SAFETY AND OCCUPATIONAL HEALTH

The ARM Board and executive management team are ultimately responsible for ensuring that appropriate resources are available to implement the systems required to enable the Company's commitment to zero harm. The Social and Ethics Committee monitors and reviews policies, processes and performance related to safety, health and wellness in the Company.

Risks to the safety and health of our workforce are identified and analysed with input from regulators, specialists, our employees and labour representatives to establish appropriate controls and procedures to support the safety and wellbeing of our workforce. Operational safety policies and strategies are aligned with the Group's policies and performance is reviewed at quarterly operational, divisional and corporate SHEQ and related meetings.

ARM's wellness programme encompasses safety, occupational hygiene and health, pulmonary tuberculosis (TB), HIV & Aids and chronic disease management. It integrates information from a wide range of sources, including the SHEQ departments, employee wellness forums, medical surveillance and the Human Resources function to ensure a holistic and informed approach to recruitment, job safety, wellness management, and ill health and incapacity management.

The operations' safety and health policies and management systems align with OHSAS 18001, the international health and safety management system. All operations except for Lubambe and Black Rock mines are certified in terms of OHSAS 18001.

Compliance with legislation and Company policies and standards is assured through external legal compliance audits conducted annually at all operations, which include safety, health and employee wellness. Every second year, as a directive from the Board, each operation is audited by external legal and process experts to ensure compliance. The most recent of these audit cycles concluded during the 2017 financial year.

All employees and contractors receive health and safety training as part of induction training provided when they start employment. They also undergo medical fitness surveillance prior to commencing work and regularly thereafter, based on the occupational risks they are exposed to. Health and safety refresher courses and job-specific risk-based training are provided on an ongoing basis.

The occupational health and safety statistics use an average of 19 719 employees and contractors for the "total workforce", being those eligible for induction and/or medical surveillance and contributing to the safety statistics. This figure differs from the total labour figure of 24 106 reported by the Human Resources Department, which is the figure recorded as at 30 June 2017.

### GRI MATERIAL TOPICS

GRI 403

#### BOUNDARY

ARM mines and operations over which we have direct joint management control. TB, HIV & Aids reporting excludes Lubambe Mine. Malaria prevalence is only relevant to and reported for Lubambe Mine.

#### STAKEHOLDERS

Employees, contractors, unions, government

#### MAIN REGULATIONS AND FRAMEWORKS

- > Mine Health and Safety Act (MHSA)
- > Occupational Health and Safety Act (OHSA)
- > Mining Charter

## SAFETY

### HIGHLIGHTS

- > Zero fatalities
- > Lowest-ever ARM LTIFR of 0.28
- > Black Rock Mine recognised as the safest underground mine in the Northern Cape

ARM and its joint venture partners share the commitment to zero harm. Risk assessments are conducted and continuously reviewed to inform safety management systems, controls and training. Operational safety systems and controls are refined on an ongoing basis and employees and contractors receive regular safety training. Performance incentives for operational, divisional and corporate staff are linked to leading and lagging safety indicators.

Safety performance and operational performance are directly related as safety affects productivity, efficiency and financial capital. Production lost to Section 54 Notices during F2017 is estimated to have reduced revenue by approximately R335 million, based on average daily sales for the South African mining operations.

### How we manage safety

Safety is the responsibility of every individual employee in the Company. The divisional Chief Executives and appointed managers are tasked with ensuring the safety and health of all our employees and that our contractors are appropriately managed. We treat contractors as employees, providing them with the same training as employees and including them in our safety reporting.

Safety policies and strategies are appropriate to the specific safety challenges at each operation identified through operational risk assessments. Employees and contractors receive training and re-training to entrench safe working practices and regular

safety and health awareness campaigns reinforce the zero harm philosophy. Internal safety competitions raise awareness and create constructive internal benchmarking between operations, and we benchmark our safety performance against industry peers.

SHEQ officers conduct regular inspections and planned task observations, and review operating procedures to monitor compliance to safety procedures. Line supervisors are responsible for compliance to safety standards and systems and senior management regularly visits the workplace to observe and coach the workforce as part of each operation's visible leadership programme.

Annual internal and external audits of operating procedures and safety practices are conducted to monitor compliance and identify areas for improvement. These are supplemented by external legal compliance audits, certification audits (OHSAS 18001) and external Safety, Health and Environmental (SHE) audits facilitated every second year by the ARM Corporate Office.

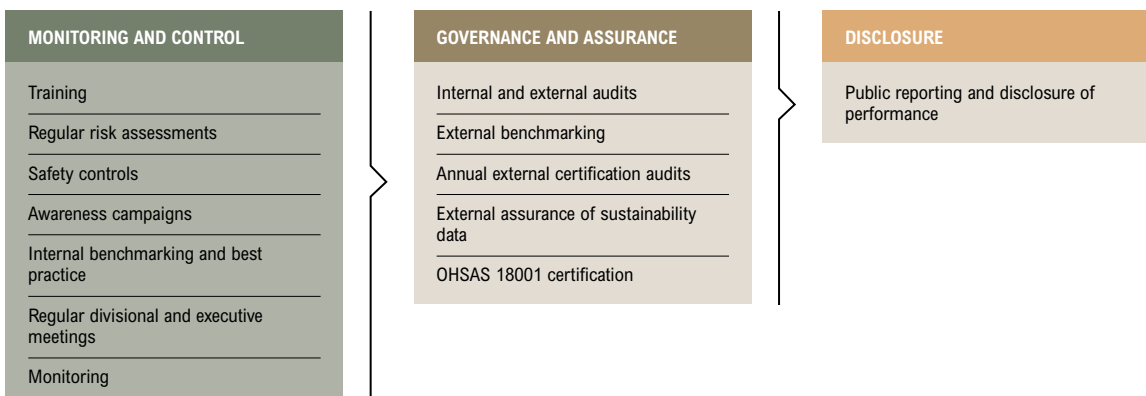
The DMR conducted Presidential Safety audits at Black Rock, Beeshoek and Khumani mines with no Section 54 Notices issued. The DMR also conducted its third comprehensive health and safety inspection at Black Rock Mine with no instances of non-compliance identified. In September 2016, ARM Ferrous presented its safety strategy to the DMR in Kimberley.

A comprehensive safety audit was undertaken by the Zambian Mine Safety Department that identified no major findings or violations.

Khumani Mine was instrumental in the development of the Northern Cape Tripartite Contractor Management Guideline, which was signed in May 2017. The Guideline aims to standardise contractor management in the province and includes a strong focus on contractor safety.

 Refer to the writeup on the Contractor Management Guideline on page 19 of this report.

### SAFETY MANAGEMENT: LEVELS OF CONTROL



## FOCUS FOR F2017

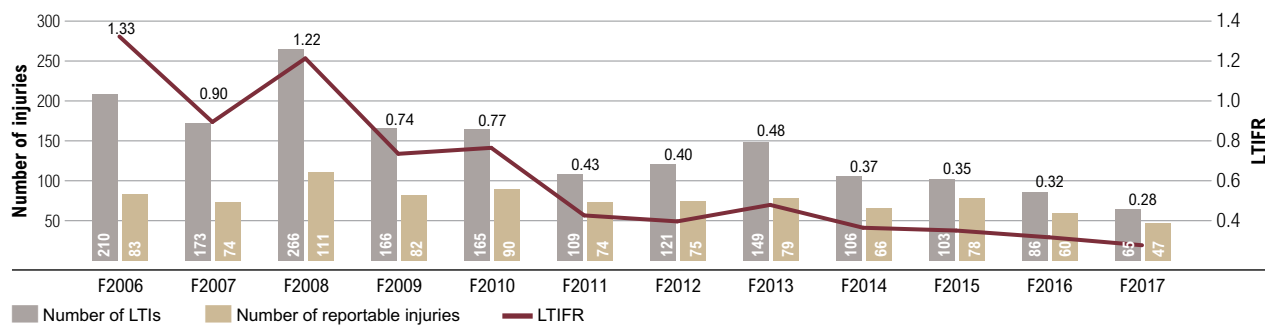
### 1. ZERO HARM TO OUR EMPLOYEES

There were no fatalities at ARM's operations during F2017. There were 65 Lost Time Injuries (LTIs) in F2017 (F2016: 86) and 47 Reportable Injuries (F2016: 60). The ARM Group Lost Time Injury Frequency Rate (LTIFR) improved to 0.28 per 200 000 man hours in F2017 (F2016: 0.32), the best performance reported to date.



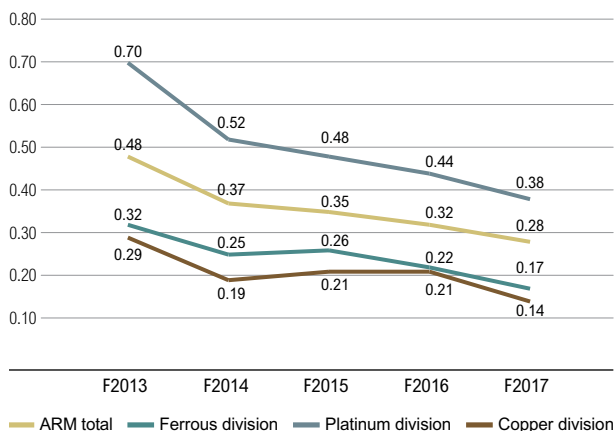
Safety definitions are available on page 41 of this report. Additional safety statistics are available in the sustainability data tables available at [www.arm.co.za](http://www.arm.co.za)

#### LOST TIME AND REPORTABLE INJURY STATISTICS



All three divisions recorded their lowest ever LTIFR during F2017, with the ARM Ferrous division improving to 0.17 (F2016: 0.22), the ARM Platinum division to 0.38 (F2016: 0.44) and the ARM Copper division to 0.14 (F2016: 0.21).

#### DIVISIONAL LOST TIME INJURY FREQUENCY RATE TRENDS (LTIFR)



All operations showed an improvement in LTIFR year-on-year, apart from Beeshoek Mine where LTIFR increased from 0.07 in F2016 to 0.15 in F2017 and Cato Ridge Works with a marginal increase in LTIFR from 0.17 to 0.19.

An increase in contractor LTIs was noted in the Ferrous division during the year. A special drive was initiated to improve awareness, commitment and enforcement of safety policies, procedures and practices in the workplace which supported the overall improvement in the division's LTIFR to year end.

Individual operations achieved a number of safety milestones during the year. Black Rock Mine received an award from the DMR as the safest underground mine in the Northern Cape.

ARM operations also won five awards at the Mine Safe 2017 Conference:

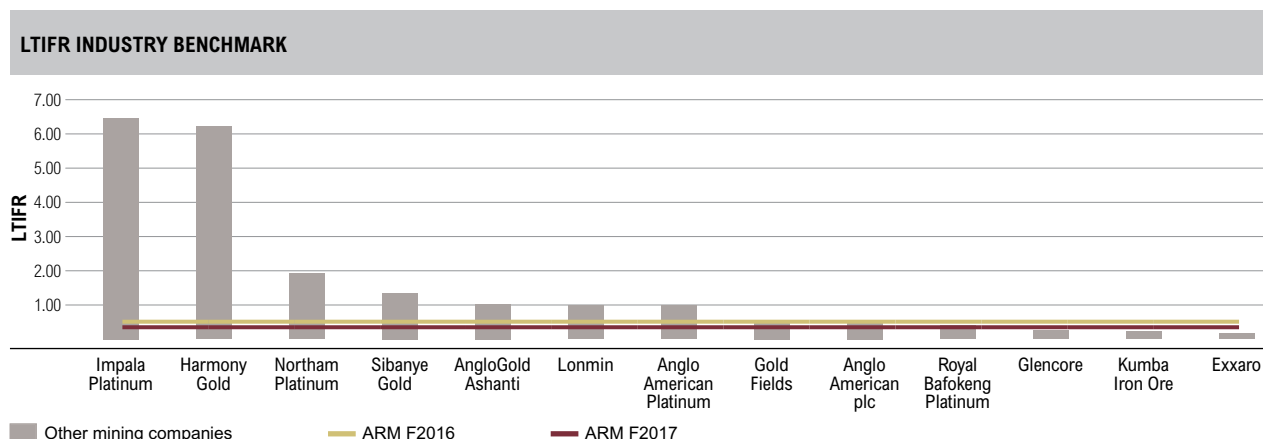
- > Black Rock Mine was awarded the JT Ryan Trophy for the best safety performance at an underground mine and won second place for environmental performance;
- > Beeshoek Mine was first in the category "best in class safety performance at a base metal mine" and second place for year-on-year safety improvement;
- > Two Rivers Mine was third in the category "best in class safety performance at a platinum mine"; and
- > Khumani Mine won the award in the health and wellness category for the paper it produced: "Wellness Peer Educators Create Positive Health Behaviour Impact in the Workplace".

Despite these achievements, our focus remains on ensuring continued safety excellence and zero harm.

## SAFETY continued

Operation	Total fatality-free shifts worked as at end June 2017	Date of last fatality
Beeshoek Mine	<b>3 503 758</b>	March 2003
Black Rock Mine	<b>5 579 010</b>	April 2009
Khumani Mine	<b>1 456 515</b>	April 2015
Cato Ridge Works	<b>2 169 396</b>	February 2008
Machadodorp Works	<b>1 020 169</b>	February 2011
Lubambe Copper Mine	<b>3 793 713</b>	July 2010
Modikwa Mine	<b>3 985 316</b>	June 2014
Two Rivers Platinum Mine	<b>3 907 495</b>	January 2012
Nkomati Mine	<b>5 768 196</b>	September 2008

Reviewing our safety performance against industry peers helps us to benchmark our safety performance. While the risks inherent in different mining and extraction processes, equipment and levels of complexity make safety performance difficult to directly compare across mining companies, the review provides valuable context. The graph below shows the ARM LTIFR relative to the LTIFRs of other mining companies, obtained from the independent review of public information by IRAS, published in May 2017.



Source: IRAS sustainability benchmarks database, 18 May 2017.

The table below breaks down the divisional and overall performance across the main lagging safety performance indicators we use to monitor our safety performance.

	F2017				F2016			
	ARM Ferrous	ARM Platinum	ARM Copper	ARM total	ARM Ferrous	ARM Platinum	ARM Copper	ARM total
Lost Time Injuries	<b>15</b>	<b>47</b>	<b>3</b>	<b>65</b>	25	56	5	86
LTIFR <sup>1</sup>	<b>0.17</b>	<b>0.38</b>	<b>0.14</b>	<b>0.28</b>	0.22	0.44	0.21	0.32
Reportable Injuries	<b>11</b>	<b>36</b>	<b>0</b>	<b>47</b>	21	36	3	60
RIFR <sup>2</sup>	<b>0.13</b>	<b>0.29</b>	—	<b>0.20</b>	0.18	0.28	0.13	0.23
FFR <sup>3</sup>	—	—	—	—	—	—	—	—

<sup>1</sup> LTIFR: Lost Time Injury Frequency Rate.

<sup>2</sup> RIFR: Reportable Injury Frequency Rate.

<sup>3</sup> FFR: Fatality Frequency Rate.

## FOCUS FOR F2017

### 2. REDUCE STOPPAGES DUE TO SECTION 54 NOTICES

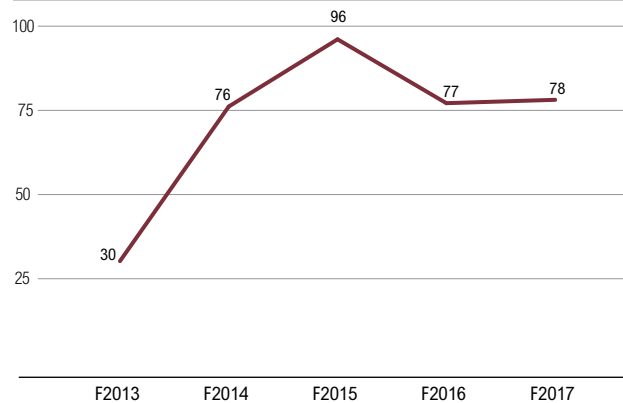
An Inspector of Mines of the DMR, can issue a Notice in terms of Section 54 of the MHSA and stop operations at a mine, should a potentially dangerous occurrence, practice or condition be identified that requires immediate remedy.

A total of 21 Section 54 Notices were issued at ARM mines in F2017 (F2016: 33): 20 in the ARM Platinum division and 1 in the ARM Ferrous division. Shifts lost to stoppages from Section 54 Notices remained relatively unchanged at 78 (F2016: 77), with 53 lost at Modikwa Mine, 13 at Nkomati Mine and 12 at Two Rivers Mine. Modikwa Mine is the only conventional/stope mining operation in the Group, which increases the inherent risk in its operations. Stoppages may apply to a particular activity within an area or to a specific area only, while production continues in the rest of the operation and therefore the actual shifts lost to Section 54 stoppages are difficult to quantify accurately. The figures disclosed here as shifts lost to Section 54 Notices are intended to be an indication of impact.

Production lost to Section 54 stoppages in F2017 equated to R335 million in estimated lost revenue (F2016: R503 million estimated).

Modikwa Mine modified its safety processes during the year to strengthen internal inspection processes and increase the focus on oversight audits, which led to an improved safety performance. Nkomati Mine increased its focus on reducing fatigue-related machinery accidents to compensate for the lengthy commutes undertaken by employees. The mine revised its trackless mobile machinery and fatigue management Codes of Practice in February 2017 and changed the shift cycle for mining operations from two twelve-hour shifts to three eight-hour shifts in March 2017. Since these changes were made, machine-related accidents have declined. We continue to share information and good practice across divisions and operations in an effort to continuously learn and improve.

**SHIFTS LOST TO SECTION 54 NOTICES (%)**



A Section 55 Notice may be issued in terms of the MHSA to rectify what an Inspector believes to be an instance of regulatory non-compliance, usually giving a time period in which it must be rectified and not resulting in a stoppage. One Section 55 Notice was issued at Nkomati Mine during the year (F2016: three across the Group) and no shifts were lost as a result.

Similar provisions in the OHSA, which regulates our smelting operations, can result in a Compliance Notice (for non-compliance) or a Prohibition Notice. No Compliance or Prohibition Notices were served on our smelters during F2017.



Further detail of safety statistics, including Section 54 and Section 55 Notices by operation is available in the sustainability data tables on the ARM website [www.arm.co.za](http://www.arm.co.za)

	F2017			F2016		
	ARM Ferrous	ARM Platinum	ARM total	ARM Ferrous	ARM Platinum	ARM total
Section 54 Notices	1	20	21	6	27	33
Shifts lost to Section 54 Notices	0	78	78	11	66	77
Section 55 Notices	0	1	1	1	2	3

## SAFETY continued


**FOCUS  
FOR F2017**
**3. CONTINUED FOCUS ON MONITORING AND IMPLEMENTATION OF EXISTING LEADING PRACTICES AND ACTIVE PARTICIPATION IN NEW INITIATIVES AND LEADING PRACTICES**

ARM participates in industry forums and initiatives that address health and safety to help us to improve our health and safety performance by adopting good practice. These initiatives include:

- > The Mining Industry Occupational Safety and Health (MOSH) initiatives driven by the Chamber of Mines (COM), which facilitates the adoption of leading practices across the mining industry to help meet the Tripartite Health and Safety Targets and Milestones. The Executive: Sustainable Development and the Group Occupational Health and Wellness Superintendent participate in the MOSH Task Force of the COM and the Occupational Health and Safety Policy Committee of the COM.
- > The Culture Transformation Framework (CTF), which aims to eliminate discrimination and create a safe, healthy and productive mining industry in South Africa, with risks controlled at source. The CTF arose from a tripartite process between government, labour and industry with the goal of fostering collaboration between these stakeholders. ARM's culture, systems and programmes align with the goals of the CTF.
- > ARM is a member and active participant in the International Council on Mining and Metals (ICMM), which provides a network for learning from peers and implementing good practice.


**FOCUS  
FOR F2017**
**4. CONTINUED ALIGNMENT WITH THE 2014 OCCUPATIONAL HEALTH AND SAFETY MILESTONES OF THE MHSC**

The Health and Safety Targets agreed to at the Tripartite Summit of the MHSC in 2014, commit government, employers and employees to action plans to achieve targets set for 2024 in the areas of occupational health and safety; TB, HIV & Aids; and culture transformation. The Mining Charter sets targets for health and safety through the implementation of the biennial Tripartite Summit Health and Safety Milestones as convened by the Mine Health and Safety Council (MHSC). Progress towards compliance with these targets, is monitored through annual reporting in terms of the Mining Charter to the DMR and the Chamber of Mines.

Internal monitoring and reporting in terms of the Milestones, takes place at quarterly operational sustainable development committee/compliance review meetings.


**FOCUS  
FOR F2018**


---

**SAFETY**


---

- > Zero harm to our employees.
- > Reduce 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 2014 occupational safety milestones.

## SAFETY DEFINITIONS

### Employees

ARM considers contractors as employees from a health and safety point of view and statistics include contractor hours worked, as well as injuries sustained, in line with legislation and industry standards.

### Lost Time Injuries (LTIs)

Any work-related injury that results in a worker being unable to perform their normal duty or similar work on the calendar day following the day of the injury is reported as a Lost Time Injury (LTI). If a suitably qualified medical professional advises that the injured person is unable to perform their normal duties or similar work on the next calendar day after the injury, regardless of the injured person's next rostered shift, a Lost Time Injury is deemed to have occurred.

### Restricted Work Injuries (RWIs)

An RWI is defined as a work-related injury which results in the worker being able to work, but unable to perform one or more of their routine functions for a full working day, from the day after the injury occurred as certified by advice from a suitably qualified healthcare provider. Although RWIs are reported separately in some industry forums in which ARM participates, all RWIs are classified as LTIs and included in our reporting of LTIs.

### Reportable accident (Mine Health and Safety Act)

For the mining operations to which the Mine Health and Safety Act applies; in terms of Chapter 23, reportable accidents refer to any accident that results in:

- a) the death of an employee;
- b) an injury to any employee, likely to be fatal;
- c) unconsciousness, incapacitation from heatstroke or heat exhaustion, oxygen deficiency, the inhalation of fumes or poisonous gas, or electric shock or electric burn accidents of or by any employee and which is not reportable in terms of paragraph (d);
- d) an injury which either incapacitates the injured employee for performing that employee's normal or similar occupation for a period totalling 14 days or more, or which causes the injured employee to suffer the loss of a joint, or part of a joint, or sustain a permanent disability;
- e) an injury, other than injuries referred to in paragraph (d), which incapacitates the injured employee from performing that employee's normal or similar occupation on the next calendar day.

### Reportable accident (Occupational Health and Safety Act)

For the smelters to which the Occupational Health and Safety Act 85 of 1993 applies, reportable accidents are defined in Sections 24 and 25 of the Act, as follows:

Each incident occurring at work or arising out of or in connection with the activities of persons at work, or in connection with the use of plant or machinery, in which, or in consequence of which:

- a) any person dies, becomes unconscious, suffers the loss of a limb or part of a limb or is otherwise injured or becomes ill to such a degree that he/she is likely either to die or to suffer a permanent physical defect or likely to be unable for a period of at least 14 days either to work or to continue with the activity for which he/she was employed or is usually employed;
- b) a major incident occurred; or
- c) the health or safety of any person was endangered and where:
  - i. a dangerous substance was spilled;
  - ii. the uncontrolled release of any substance under pressure took place;
  - iii. machinery or any part thereof fractured or failed resulting in flying, falling or uncontrolled moving objects; or
  - iv. machinery ran out of control.

### Section 54 of the Mine Health and Safety Act

Provides for an Inspector of Mines, who has reason to believe that any occurrence, practice or condition at a mine endangers or may endanger the health or safety of any person at the mine, to give any instruction necessary to protect the health or safety of persons at the mine, including an instruction that operations at the mine or a part of the mine be halted.

### Section 55 of the Mine Health and Safety Act

Allows for an Inspector of Mines, who has reason to believe that an employer has failed to comply with any provision of the Mine Health and Safety Act, to instruct that employer in writing to take any steps that the Inspector considers necessary to comply with the provision.

**Please note:** Reportable Injuries are also reflected as Lost Time Injuries where appropriate.

## OCCUPATIONAL HEALTH AND WELLNESS

ARM's occupational hygiene and health surveillance and management programmes focus on identifying and addressing the specific health risks relevant to each workplace and occupation, aligned with guidance from regulators and applicable legislation. The main occupational health and wellness issues are summarised in the table below and discussed in detail in the sections that follow.



### OCCUPATIONAL HEALTH

Hearing conservation page 44	Dust page 45	Hazardous substances page 45
---------------------------------	-----------------	---------------------------------

### PRIMARY HEALTH

Chronic/lifestyle diseases page 46	Malaria page 47	Pulmonary TB pages 47 – 51	HIV & Aids pages 47 – 50
---------------------------------------	--------------------	-------------------------------	-----------------------------

## How we manage occupational health and wellness

### HIGHLIGHTS

- > Beeshoek, Black Rock and Khumani mines achieved SANS 16001 certification
- > External sustainability assurance extended to certain occupational health and wellness indicators

ARM's approach to occupational health and wellness integrates occupational hygiene monitoring with comprehensive risk-based occupational medical surveillance programmes. These programmes align with SANS 16001 (the South African National Standard on disease and wellness management). Black Rock Mine achieved SANS 16001 certification during the year and all three mines in the Ferrous Division are now certified under the standard.

Occupational health and wellness at the South African operations is managed as part of the SHEQ process. Operational Wellness Committees comprising representatives from the employer, employees and unions meet regularly to promote engagement in a partnership approach to managing wellness.

Services are provided to employees and contractors from site clinics at the operations in the Ferrous and Platinum divisions. Qualified occupational health personnel conduct medical surveillance, including biological monitoring. A total of 34 123 medical surveillance examinations were conducted during F2017. This includes medical surveillance at pre-employment stage; at sign-on or in the case of contractors at the start of the contract; regular medical surveillance (at least annually); and medical surveillance when an employee leaves the employment of the operation or contractors when their contract work is concluded.

Lubambe Mine uses the local community clinic, which was constructed by the mine and donated to local government. Occupational medical surveillance in Zambia is performed by the Zambian authorities in accordance with Zambian legislation. Statistics are not made available and therefore, statistics in this section exclude Lubambe Mine.

Employees are encouraged to take responsibility to manage their own health and wellness through regular awareness campaigns and wellness days where free health assessments help our employees to stay informed about their health status. Induction training includes occupational health and hygiene training and ongoing training is provided by Wellness Officers and Peer Educators.

Reporting of occupational health and wellness is aligned with the requirements of the Department of Labour (DoL), Department of Mineral Resources (DMR), and the Mine Health and Safety Council (MHSC). Reporting includes the DMR requirements regarding reporting of all accidents, occupational diseases and life-threatening situations (Section 11 incidents) and shifts in the Percentage Loss of Hearing (PLH) greater than 5%.

Regular internal and external audits are conducted at the Ferrous and Platinum divisions' occupational health facilities to monitor compliance with legislation and Group policies, and to benchmark the occupational health and wellness programmes across the Company. These include:

- > Quarterly reviews by an external occupational health expert;
- > Annual internal audits against ARM's internal standards and SANS 16001;
- > External SHE audits every second year as part of our combined assurance and governance model;
- > Certification audits in terms of the South African National Standard (SANS 16001:2013) on disease and wellness management programmes at Khumani, Black Rock and Beeshoek mines; and
- > External assurance of sustainability information was extended to include occupational health indicators in the 2017 assurance cycle.

ARM is part of the Occupational Lung Disease Working Group, an industry organisation that aims to support the Compensation Commissioner to unlock capacity to examine occupational lung diseases and assist with compensation claims. The Working Group is also investigating the feasibility of establishing a legacy fund to pay additional compensation to eligible past employees. ARM is also participating through the Group in the tripartite process of integrating the two main industry compensation systems

under the Occupational Diseases in Mines and Works Act and the Compensation for Occupational Injuries and Diseases Act.



More detail regarding the activities of the Working Group and ARM's response are available on page 106 of the Integrated Annual Report.

An occupational health gap analysis audit was conducted at the Northern Cape mining operations to assess the level of compliance with recent changes in reporting requirements, in particular regarding the reporting of pulmonary TB, by the Northern Cape DMR. The areas for improvement identified in the audits include the need to strengthen peer educator training and programmes, and to improve documenting of TB contact tracing. A corporate standard detailing the reporting procedures to various regulatory and statutory bodies was drafted and is in the process of being implemented by operations.

Operational Codes of Practice were updated and implemented during the year to align with the mandatory Codes of Practice relating to occupational hygiene and medical surveillance, management of medical incapacity due to ill health and injury, and fitness to perform work on a mine. Processes were implemented at all operations to align with the new system of online occupational medicine and hygiene reports to the Chamber of Mines.

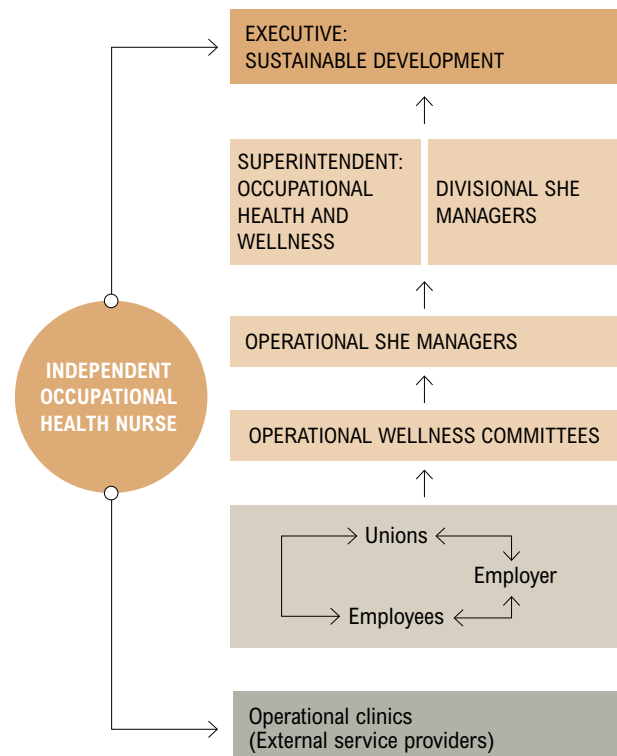
ARM is represented at the Occupational Health and Safety Policy Committee and Health Policy Committee of the South African Chamber of Mines that are reviewing draft regulations such as Emergency Response to Emergencies in Mines under the DMR and Emergency Services Regulations under the DoH.

As described on page 19, the three mines in the Northern Cape have partnered with the Northern Cape DoH to strengthen the implementation of the provincial TB, HIV & Aids, STIs and chronic disease management strategies. Black Rock Mine also partners with the Northern Cape DoH to provide primary healthcare services to the Black Rock community.

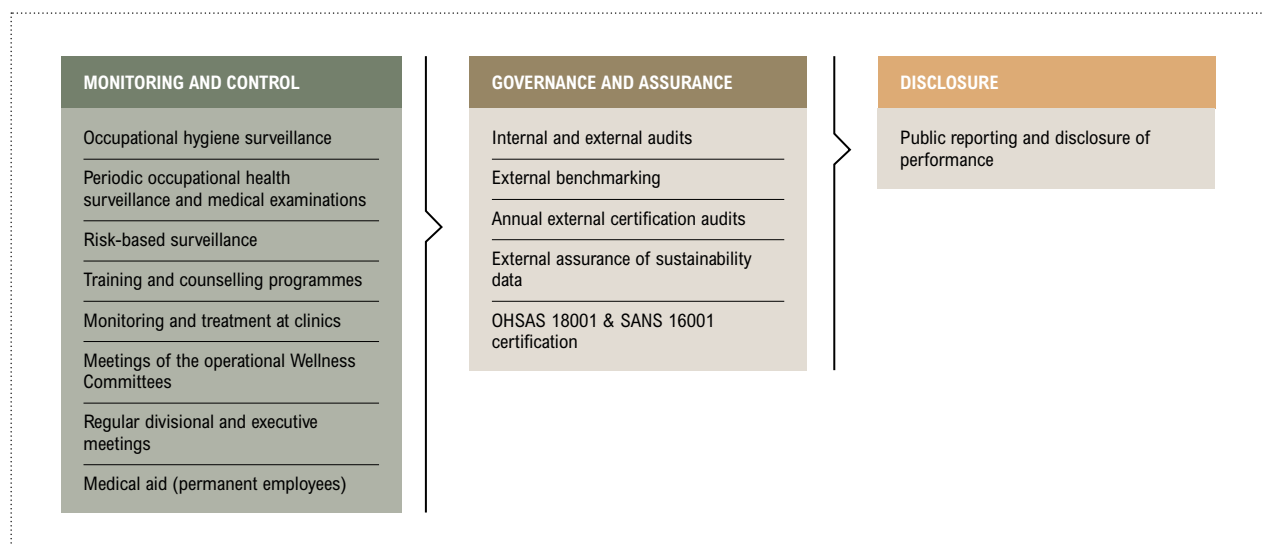
Two Rivers Mine is piloting a similar initiative with the Limpopo DoH to provide primary healthcare services to both employees and contractor employees on behalf of the Department of Health, including treatment for chronic diseases and TB.

DMR inspections were undertaken at the site clinics at Khumani, Black Rock, Modikwa and Two Rivers mines during the year with no major findings raised.

The occupational health and wellness statistics reported in this section, apart from malaria, exclude Lubambe Mine's statistics. Occupational health and wellness at Lubambe Mine (including TB, HIV & Aids), are managed according to the relevant Zambian legislation, which does not include access to the statistics reported under South African legislation.



## OCCUPATIONAL HEALTH AND WELLNESS: LEVELS OF CONTROL



## OCCUPATIONAL HEALTH AND WELLNESS continued

## Hearing conservation and noise-induced hearing loss (NIHL)

## FOCUS FOR F2017

### 1. CONTINUED FOCUS ON REACHING THE 2014 OCCUPATIONAL HEALTH AND SAFETY MILESTONES, WHICH INCLUDE ELIMINATION OF OCCUPATIONAL LUNG DISEASE AND NOISE-INDUCED HEARING LOSS

Hearing conservation is a primary focus of our occupational health and wellness programme. Our approach to managing NIHL aims to achieve the milestones set at the Mine Health and Safety Council 2014 Occupational Health and Safety Summit. These include limiting noise emissions by any equipment to 107db(A) (by December 2024) and ensuring that the Standard Threshold Shift (STS) in hearing does not exceed 25 dB from an employee's baseline when averaged at 2 000, 3 000 and 4 000 Hertz in one or both ears (January 2018).

ARM's buy-quiet policy applies stringent noise emission standards for new equipment purchased. Noise emission levels of equipment in the workplace are monitored and measured and engineering controls reduce noise emissions above the DMR threshold of 107 dB(A). Employees are trained in the use of hearing protection devices and hearing safety awareness campaigns are implemented in high noise areas. Ongoing programmes are in place to improve compliance with the MOSH leading practice on noise.

The software to monitor STS has been implemented at all our mining operations and progress was reported to the DMR during the year.

### Monitoring NIHL

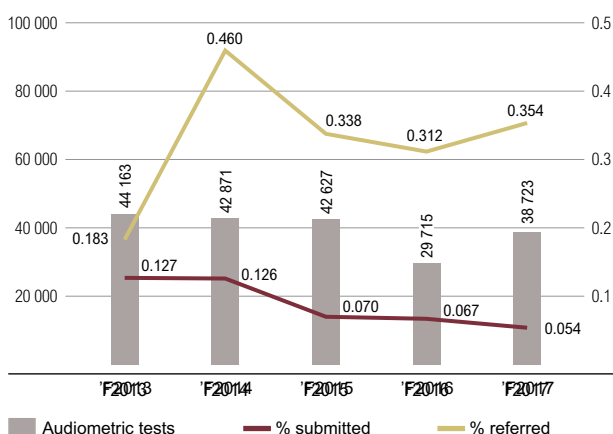
Baseline hearing tests are conducted for all employees and contractors prior to employment and for individuals transferring between work environments. Periodic testing identifies Percentage Loss of Hearing (PLH) Shifts from the hearing baseline. Deterioration in hearing is followed up with counselling, training by clinic personnel and monitoring of the individual's exposure to noise both within and outside the workplace. Where possible, employees with NIHL are re-deployed to work in areas with low noise levels.

Hearing loss can arise from a range of factors other than excessive noise, including age, illness and personal care. Where hearing loss suggests NIHL, an employee with a PLH shift of greater than 10% is referred to an Audiologist and Ear, Nose and Throat Specialist for diagnostic audiograms to establish the cause of the hearing loss. Where these confirm NIHL due to exposure in the workplace, a claim for compensation is submitted to either Rand Mutual Assurance (for employees employed at our mines) or the Compensation Commissioner (for employees at our two smelters).

PLH shifts of 5% or more are reported to the DMR and investigated in terms of Section 11.5 of the MHSA.

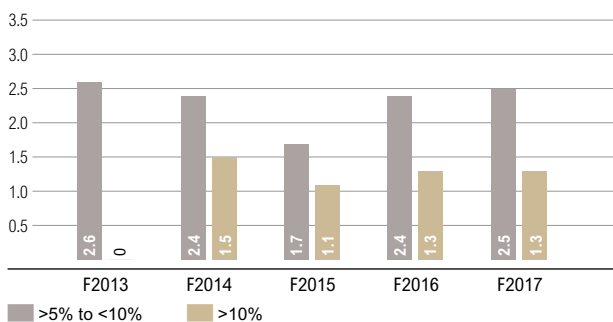
### AUDIOMETRIC TESTS

(% referred for specialist opinion and submitted for compensation)



A total of 38 723 audiometric tests were conducted in the Ferrous and Platinum divisions in F2017 (F2016: 29 715). 137 cases were referred for specialist diagnostic audiograms (F2016: 93), with the increase mainly attributable to Two Rivers Mine where further investigation resulted in more cases being reported. 21 cases were submitted for compensation (F2016: 20), although none of these had been processed by the Medical Bureau for Occupational Diseases (MBOD) by year end (F2016: 15 compensated).

### SHIFTS IN PERCENTAGE LOSS OF HEARING (%)



PLH shifts of between 5% and 10% were reported for 2.5% of employees (F2016: 2.4%) and employees experiencing PLH >10% remained at 1.3%.



## Dust and hazardous substances

Prolonged exposure to high levels of dust can cause respiratory complications and pulmonary tuberculosis (TB) infection rates are approximately three times greater in people exposed to silica. We monitor silica content in the ore bodies of ARM's base metals and platinum mines and silica levels are consistently below analytical detection limits. Therefore there is a minimal risk of exposure to silica at our operations. Dust suppression nevertheless remains a core occupational hygiene focus.

### HAZARDOUS SUBSTANCES AT OUR OPERATIONS INCLUDE:

- > Dust particulates
- > Manganese
- > Chromium
- > Coal, tar, pitch and volatiles (CTPV) at the Cato Ridge Works
- > Asbestos

Water sprays and surfactants are used to manage airborne dust levels and extractor fans minimise employees' exposure to dust in the workplace where necessary.

Exposure to hazardous substances is managed through occupational hygiene and personal monitoring, awareness campaigns, personal protective equipment and formalised safe operating procedures to limit exposure. We take a precautionary approach and limit exposure to hazardous substances at source as far as practical. Control measures are in place to prevent exposure to dust and fumes.

Operational mandatory medical surveillance programmes include lung function tests. Baseline lung capacity tests are conducted before employees and contractors start working in risk areas. Cases in which respiratory function decreases below a specified limit, are reported to the DMR. Where it is determined that this has resulted from occupational exposure, cases are submitted for compensation. There were nine cases of occupational respiratory disease during F2017 (F2016: one), all relating to silicosis that arose from exposure before commencing employment with ARM.

One case of asbestosis was reported to the Medical Bureau of Occupational Disease (MBOD) that related to exposure to asbestos prior to employment with ARM as well as one case of pleural asbestosis which, during investigation, was found to be not related to occupational exposure.

Manganese is processed at Cato Ridge Works and Machadodorp Works, and a medical surveillance and biological monitoring programme developed by leading occupational health specialists is in place at these operations.

The findings of the inquiry convened by the Department of Labour into the alleged cases of manganism at the Cato Ridge Works, which inquiry was completed during 2008 and which matter has been reported on in previous reporting periods, have still not been made available to the Company. Thus, the final outcome in this matter is still awaited. ARM remains committed to fulfilling all its obligations in regard to preventing exposure, as prescribed in the Occupational Health and Safety Act and the Hazardous Chemical Substances Regulations.

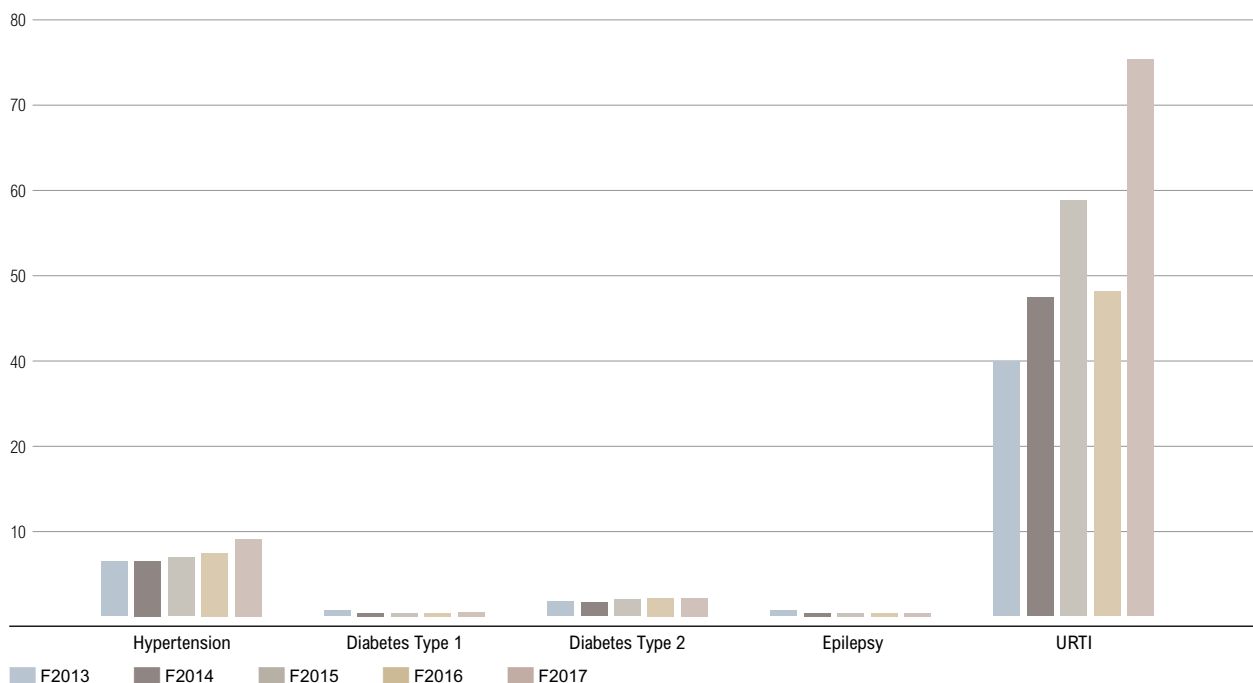
Asbestos fibres are present in the ore body at Nkomati Mine. Extensive dust suppression and exposure mitigation measures as well as surveillance procedures have been implemented in consultation with leading experts from the Institute of Medicine (IOM) in Scotland.

## OCCUPATIONAL HEALTH AND WELLNESS continued

**PRIMARY HEALTH****Chronic and/or lifestyle diseases****FOCUS  
FOR F2017****2. CONTINUED RISK-BASED MONITORING AND TREATMENT OF CHRONIC CONDITIONS****COMMON CHRONIC AND/OR LIFESTYLE DISEASES  
AT OUR OPERATIONS INCLUDE:**

- > Hypertension
- > Upper respiratory tract infection
- > Back/muscular/skeletal ache
- > Diabetes
- > Epilepsy

Operational health risk and wellness management programmes include the monitoring of chronic diseases and maintenance of chronic disease registers. Employees and contractors access primary healthcare services at the site clinics. Where the management of chronic conditions presents a risk to the individual, especially taking into consideration risks in the areas where they work, employees' access to some areas is restricted until the condition is satisfactorily controlled.

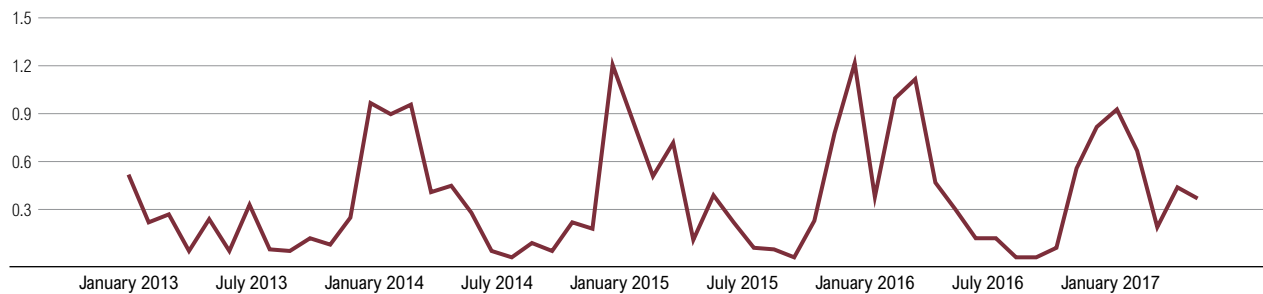
**CHRONIC DISEASES**  
(% of the workforce affected)

Hypertension affects 10% of our employees and Type 1 and Type 2 Diabetes Mellitus combined, affect just over 2%. Upper respiratory tract infections (URTI) are common, especially in the colder months of the year and 14 664 cases were diagnosed and treated during F2017, including repeat cases (F2016: 9 297). Diagnosis of URTIs is based on a medical screening questionnaire rather than on a full diagnostic process and the increasing number of cases reflects mostly primary health conditions, as well as an increase in access to primary healthcare.

## Malaria

Malaria is endemic in the Zambian Copper Belt where Lubambe Mine is located and prevalence rates in the areas surrounding the mine exceed 25%. Malaria prevalence at Lubambe Mine averages less than 0.5% of the workforce throughout the year but doubles during the rainy season in the first quarter of the calendar year.

**MALARIA PREVALENCE AT LUBAMBE MINE**  
(% of employees)



The mine's ongoing malaria prevention programme includes awareness activities, residual indoor spraying of houses in nearby villages and buildings on site, treatment of stagnant water ponds surrounding the mine, regular education and awareness campaigns regarding malaria prevention.

## TB, HIV & Aids

Pulmonary tuberculosis (TB), HIV & Aids have a significant impact on those infected, their families and the communities in which they live. Estimates put the number of HIV positive people in South Africa at 7 million and TB remains the single largest cause of mortality in the country<sup>1</sup>. Yet anti-retroviral treatment (ART) and TB medication are effective in managing these diseases, particularly where infection is identified early. Early identification and management of these diseases is therefore an important goal of our occupational health and wellness programme.

ARM participated in the launch of the DoH's National Strategic Plan on HIV, TB and STIs 2017 – 2022 (NSP) by the Deputy President in March 2017. The NSP maps out South Africa's strategy for addressing these three public health problems and classifies miners and peri-mining communities as key populations for TB. It also identifies mine workers as vulnerable populations for HIV and Sexually Transmitted Infections (STIs). The TB, HIV & Aids reporting template is being reviewed to align with the Chamber of Mine's reporting requirements.

Occupational health and wellness at Lubambe Mine (including TB, HIV & Aids) are managed according to the relevant Zambian legislation and held by the Zambian authorities. The statistics reported in this section therefore exclude Lubambe Mine.

## How we manage TB, HIV & Aids

ARM's occupational health and wellness programme integrates management of TB, HIV & Aids and STIs as required by the NSP and the Mining Charter. The programme aims to support infected employees and limit the spread of TB, HIV & Aids in our workforce and in labour sending areas. Counselling and testing for TB and HIV is available through the primary healthcare services offered by the clinics at our operations.

Our HIV & Aids policy formalises ARM's commitment to addressing the challenges posed by the disease and entrenches employees' rights to confidentiality and non-discrimination.

The mining operations report to the DMR monthly in terms of screening, diagnosis and treatment, as well as compliance with the DMR Guidelines for TB, HIV & Aids Management.



<sup>1</sup> The South African National Strategic Plan for HIV, TB and STIs 2017 – 2022.

## OCCUPATIONAL HEALTH AND WELLNESS continued

## FOCUS FOR F2017

### 3. ALIGNMENT WITH AND IMPLEMENTATION OF THE NATIONAL STRATEGIC PLAN (NSP 2017 – 2022): TO ENSURE REDUCTION AND PREVENTION OF TB, HIV & Aids INFECTIONS; OFFERING ALL EMPLOYEES COUNSELLING AND VOLUNTARY TESTING (CVT); AND LINKING ALL ELIGIBLE EMPLOYEES TO AN ANTI-RETROVIRAL (ART) TREATMENT PROGRAMME

#### INPUTS INTO HOW WE MANAGE TB, HIV & Aids AT OUR OPERATIONS INCLUDE:

- > Our values;
- > The Mine Health and Safety Act;
- > The Occupational Health and Safety Act;
- > The National Strategic Plan (NSP) of 2017 – 2022;
- > The Mining Charter;
- > The Department of Labour Requirements;
- > The HIV/Aids National Guidelines;
- > The DMR TB Guidance Note;
- > The National TB Control Centre;
- > The South African Business Coalition on Health and Aids (SABCOHA); and
- > The ICMC Principles on Sustainable Development.

ARM's Integrated Wellness Management Standard ensures a common approach across Group operations and supports the implementation of comprehensive programmes to manage TB, HIV & Aids, STIs and chronic diseases. Operational programmes are supervised by trained occupational health and wellness coordinators. The wellness coordinators at Two Rivers, Khumani, Beeshoek and Black Rock mines have completed training on the implementation of the South African National Standard on wellness and disease management (SANS 16001), which includes HIV & Aids management.

Employees are encouraged to know their status and to take responsibility for managing their wellness. All employees who visit the site clinics are offered HIV counselling, while testing remains voluntary, an approach known as Counselling and Voluntary Testing (CVT). Employees are offered CVT at initial, periodical and exit medicals, and upon request of employees.

Awareness and education about TB, HIV & Aids and STIs is included in induction training for all employees and contractors

and various awareness campaigns throughout the year reinforce awareness. These include wellness days with voluntary testing and the observation of World Aids Day on 1 December. Awareness and testing campaigns are conducted in communities around our mines and operations. Where possible, we also engage with local Aids councils to ensure that community projects address the most pressing wellness and health needs.

Peer Educators are active at the operations and receive training and provide formal feedback to the Wellness Committees.

Six of our operations have wellness centres where employees can receive treatment and counselling, while Nkomati Mine has a full-time Primary Health Care (PHC) nurse to provide daily PHC services. All permanent employees belong to medical aid schemes that provide disease management programme benefits, including HIV & Aids treatment.

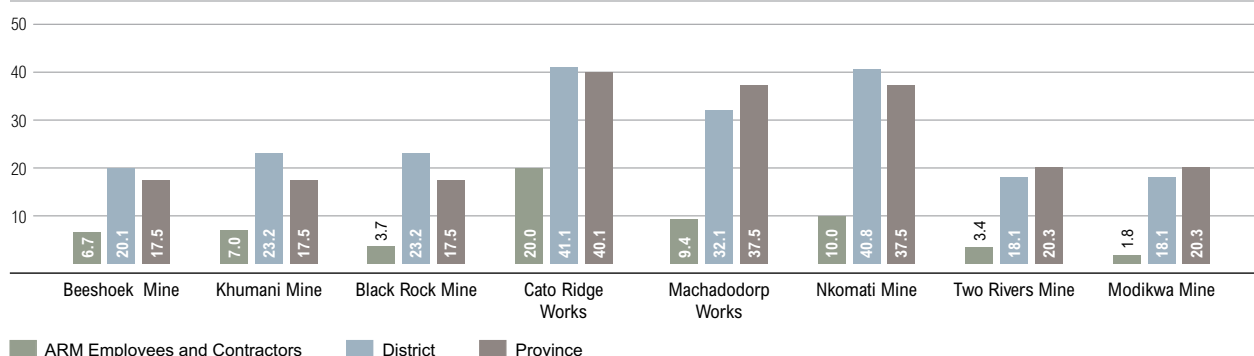
As discussed in more detail on page 19, the mines in the Northern Cape (Khumani, Beeshoek and Black Rock mines) partnered with the Department of Health in the Northern Cape to improve access to treatment for HIV, TB and STIs. Two Rivers Mine is establishing a similar partnership with the Limpopo Department of Health. Beeshoek Mine's wellness centre has been approved to dispense HIV & Aids, STI and TB treatment.

#### HIV & Aids

HIV prevalence in the districts in which our operations are located varies from 18% for Two Rivers and Modikwa mines to over 40% for Nkomati Mine and Cato Ridge Works. Our surveys estimate that prevalence rates at our operations are significantly lower than the district and provincial prevalence. The average estimated HIV prevalence for the Group is 5.4% (F2016: 7.5%).

ARM's HIV management programme standardises HIV & Aids management programmes across our operations. We conduct regular audits to identify areas for improvement, measure year-

#### HIV PREVALENCE (%)



## FOCUS FOR F2017

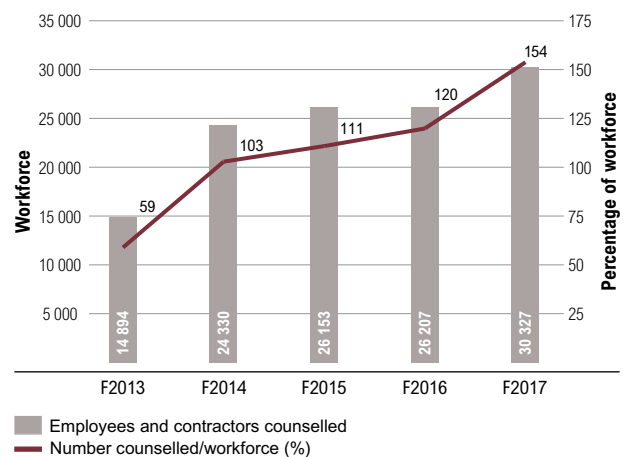
### 4. CONTINUE PASSIVE TB SCREENING AND OFFERING HIV COUNSELLING AND VOLUNTARY TESTING TO ALL EMPLOYEES AND CONTRACTORS VISITING OUR CLINICS

on-year progress and benchmark performance between operations. The average audit score in terms of our internal Integrated Wellness Management Standard increased slightly to 85% in F2017 (F2016: 84%), exceeding our internal standard target of 81%.

In total, 30 327 employees and contractors received HIV & Aids counselling in F2017 (F2016: 26 207) while 7 324 employees and contractors were tested (F2016: 9 235). Total CVT contacts exceeds the total workforce because CVT is performed every time an employee visits the clinic, which includes repeat visits for regular check-ups.

Group awareness discussions were implemented at Modikwa Mine during the year to educate and raise awareness among employees while waiting to undergo their annual medical surveillance examinations. This led to an increase in the number of employees who elected to be tested after HIV counselling at Modikwa Mine, to 100%.

**HIV & Aids COUNSELLING SESSIONS**



#### TB, HIV & Aids

Employees and contractors

	F2017			F2016		
	ARM Ferrous	ARM Platinum	ARM Total	ARM Ferrous	ARM Platinum	ARM total
– Counsellor	13 725	16 602	30 327	9 860	16 347	26 207
– Tested	2 250	5 074	7 324	1 662	7 573	9 235
– Enrolled in disease management programmes	1 431	1 009	2 440	2 010	815	2 825
– Receiving Anti-Retroviral (ARV) treatment	2 451	5 981	8 432	1 940	1 644	3 584



## OCCUPATIONAL HEALTH AND WELLNESS continued

## FOCUS FOR F2017

### 5. REINFORCE OUR TB-RELATED COMMUNITY OUTREACH PROJECTS TO FOCUS ON EARLY DETECTION AND TREATMENT OF TB FOR COMMUNITIES AROUND OUR OPERATIONS

ARM's operations are involved in various community awareness and outreach initiatives to address TB, HIV & Aids among employees and in communities.

- > Black Rock Mine supports the Tshela Bophelo community wellness centre in Maruping Village (JTG district). The mine also supports and assists local community home-based care groups to render quality services to the village and the surrounding areas.
- > Two Rivers Mine supports the Masha Gosebo community home-based care group in Kalkfontein with monthly stipends and training to provide home care to 46 patients in the village.
- > Nkomati Mine supports the Emngwenya community home-based care group in Waterval Boven to provide home care services and to identify and support orphans and vulnerable children in the local communities.

## Pulmonary Tuberculosis (TB)

TB is an opportunistic infection and the risk of contracting the disease increases significantly when combined with an immune system compromised by HIV infection. Various socio-economic characteristics such as crowded living conditions are also linked to an increased risk of TB and HIV infection.

Passive TB screening is conducted during all visits to our occupational health clinics through the Department of Health's (DoH) cough questionnaire. Employees with TB are monitored according to the Group's TB management protocol and reporting standard. Where new cases of TB are detected, screening is conducted of all contacts at the workplace and local community clinics are informed to conduct contact screenings in the community, as required by the DMR and the NSP.

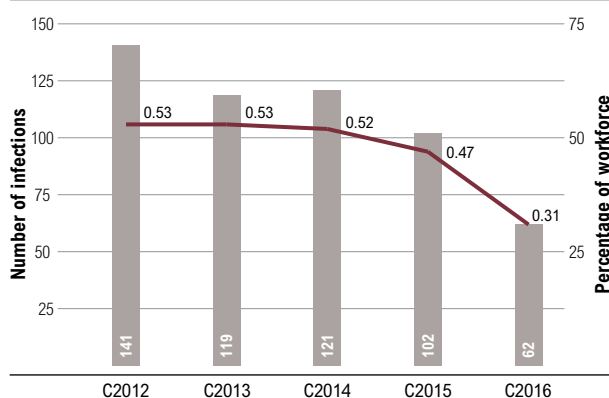
Interventions are reported according to a standard TB reporting guideline developed by the DMR and align with the updated requirements of the DMR, the Department of Health and the NSP. The guideline applies the broader requirements for the monitoring of TB; multi-drug resistant TB (MDR TB); and extensively drug resistant TB (XDR TB).

TB-related statistics are reported according to the revised monitoring guideline developed by the Mine Health and Safety Council (MHSC) to improve reporting accuracy. In compliance with the requirements of the MHSC and the DMR, the mining operations also perform annual TB reviews and submitted reports to the Chamber of Mines in December 2016.

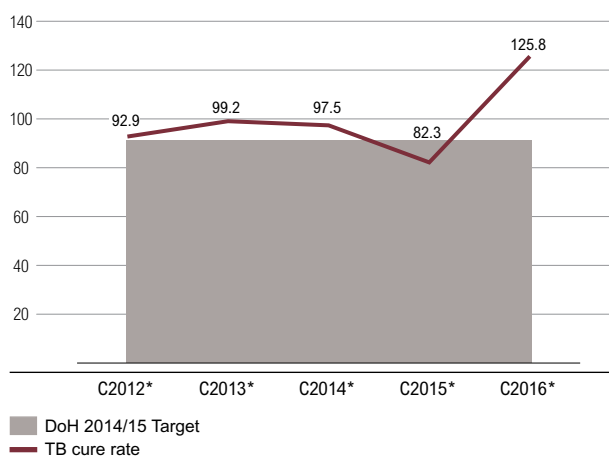
TB information is collected and reported to the Department of Health on a calendar year and is therefore reported in this section for the 12 months ending 31 December 2016 (C2016).

In C2016, 47 155 TB screening tests were performed on employees and contractors (C2015: 45 243) and 62 new cases were detected (C2015: 102). 78 cases of TB were cured, which equates to a cure rate of 125.8%, which is above the Department of Health's 2014/2015 target of 90%. The cure rate is greater than the total new infections because the cure rate includes some cases identified in prior years that were cured in the current year.

### NEW TB INFECTIONS DETECTED AND AS A % OF WORKFORCE



### TB CURE RATE (%)



Four cases of MDR TB were detected during the year (C2015: 5). Health investigations were conducted in terms of Section 11(2) of the Mine Health and Safety Act and the results were submitted to the DMR. The patients were admitted to special

MDR hospitals for further management as required by the Department of Health. Our site clinics continue to monitor their progress during treatment.

## PULMONARY TB

	Jan to Dec 2016			Jan to Dec 2015		
	ARM Ferrous	ARM Platinum	ARM total	ARM Ferrous	ARM Platinum	ARM total
Employees and contractors						
– Screened**	27 213	19 942	47 155	23 957	21 286	45 243
– New cases	18	44	62	39	63	102
– Cured	29	49	78	35	49	84
– MDR/XDR*	1	3	4	3	2	5

\* Multi-drug resistant/Extensively drug resistant TB.

\*\* Passive TB screening is conducted during all visits (including induction and regular follow-up visits for chronic disease management) and the number of people screened is therefore higher than the total number of employees.

## FOCUS FOR F2018

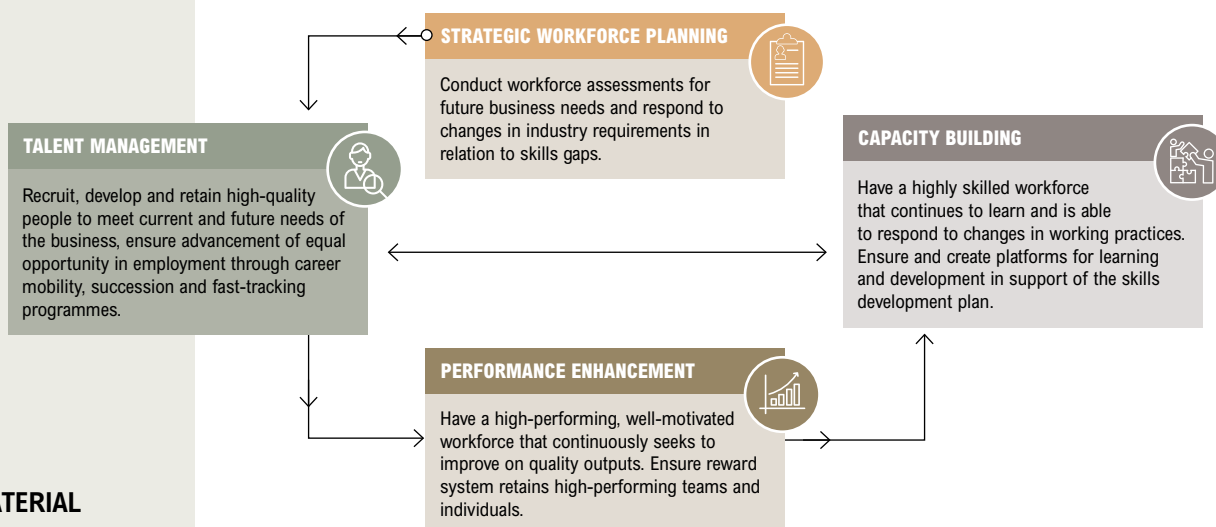
### OCCUPATIONAL HEALTH AND WELLNESS

- > Continued focus on reaching the 2014 occupational health and safety milestones, which include elimination of occupational lung disease and noise-induced hearing loss.
- > Continued risk-based monitoring and treatment of chronic conditions.
- > Alignment with and implementation of the National Strategic Plan (NSP 2017 – 2022) to ensure reduction and prevention of TB, HIV & Aids infections; offer all employees counselling and voluntary testing (CVT); and link all eligible employees to an anti-retroviral (ART) treatment programme.
- > Continue passive TB screening and offering HIV counselling and voluntary testing to all employees visiting our clinics.
- > Reinforce our TB-related community outreach projects to focus on early detection and treatment of TB for communities around our operations.



## HUMAN RESOURCES MANAGEMENT

### THE HR STRATEGIC PILLARS



### GRI MATERIAL TOPICS

GRI 401, 402, 404, 405, 407

### BOUNDARY

ARM mines and operations

### STAKEHOLDERS

Employees, contractors, unions, government

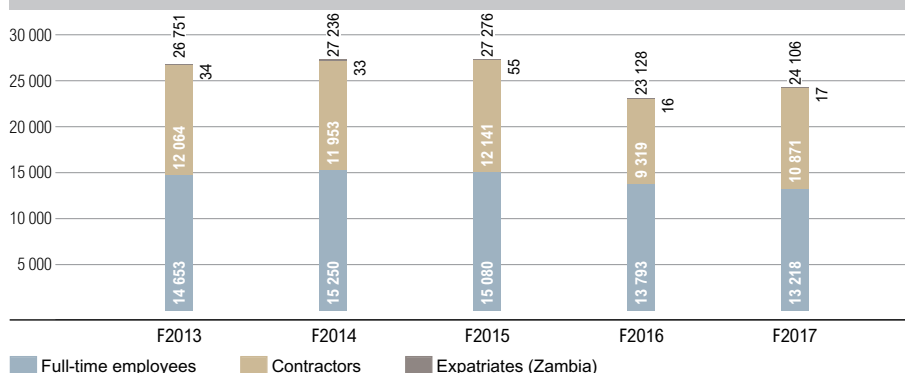
### MAIN REGULATIONS AND FRAMEWORKS

- > ICMM Sustainable Development Framework
- > Mineral and Petroleum Resources Development Act
- > Mining Charter
- > Department of Trade and Industry Revised Codes of Good Practice (dti CoGP)
- > Labour Relations Act
- > Employment Equity Act
- > Basic Conditions of Employment Act
- > Skills Development Act

Our approach to managing human capital is driven by ARM's core values and supports the Company's strategy by helping to increase efficiency, fostering an entrepreneurial culture, developing leadership and maximising our employee value proposition to entrench the Company as an employer of choice.

ARM had 13 218 full-time employees at 30 June 2017 (F2016: 13 793) and 10 871 contractors (F2016: 9 319) and the total workforce was 24 106 (F2016: 23 128) including 17 expatriates at Lubambe Mine in Zambia.

**TOTAL LABOUR AS AT 30 JUNE 2017**



## HOW WE MANAGE OUR HUMAN CAPITAL

### HUMAN CAPITAL HIGHLIGHTS

- > Investment in skills development was R180 million
- > Employee turnover reduced to 1.1%
- > HDSA representation in management increased to 55%
- > Women in mining increased to 12%

The Group Executive: Human Resources (HR) is the senior executive responsible for the implementation of the four human resources strategic pillars. The Employment Equity and Skills Development Committee manages and monitors progress on transformation in the workforce, skills attraction, development and retention, and reports to the Social and Ethics Committee. The HR Strategy cascades down to divisional and operational HR representatives, who facilitate implementation.

Annual reviews and regular updates of human capital policies, procedures and practices ensure compliance and alignment with the latest developments in legislation. Quarterly compliance roadshows are held at all operations by the Group Executive: Compliance and Stakeholder Relations and the Group Executive: Human Resources to monitor and evaluate compliance, performance and implementation across the operations.

The four pillars of the HR strategy, which are described in the diagram on the previous page, aim to expand the human capital available to the Company and drive execution of ARM's strategy. A strategic HR dashboard application integrates the HR strategy to ensure alignment to our transformational goals and implements the four pillars through the diversity management software.

ARM Human Resources benchmarks its HR practices against international best practices through participation and contribution to a number of professional bodies, including the South African Board for People Practices (SABPP) and the Global Top Employer Certification Programme. The Top Employer Programme assesses areas such as HR strategy, policy implementation, monitoring and communication of employee conditions and development. ARM was again awarded Top Employer certification in 2017.

ARM maintains a non-discriminatory workplace based on fairness and employment equity, fair labour practice 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.

ARM's business culture encourages sound human relations interactions with all stakeholders. We strive to uphold the values of respect, integrity and ethical conduct.

## TALENT MANAGEMENT AND CAPACITY BUILDING

Many of the skills required to successfully implement our strategy are in short supply and we therefore invest in the development of our workforce by implementing various talent management programs to address this deficiency. These include ARM's Bursar Ambassadors, Internship, Graduate Development, Young Professionals, Rising Stars, Future Leadership Development and Women in Leadership programmes. These programmes aim to ensure that ARM's human capital includes the specific technical skills required for mining and beneficiation, which include geologists, scientists, engineers, financial specialists, managers, artisans and skilled operators.

ARM's talent management system integrates the database of future (workforce planning) and current employees (talent management) with all attributes required for planning and reporting purposes. It combines with the talent portal and the employment equity system to ensure alignment between talent, succession plans, career development plans and transformation to monitor and track talent across the Company.

We uphold a compelling Employee Value Proposition (EVP) to create an environment that is innovative and encourages an entrepreneurial culture. ARM's Talent Management Strategy aims to attract, develop and retain human capital by providing competitive remuneration, study assistance, performance management and career development opportunities.

### MATERIAL ISSUES

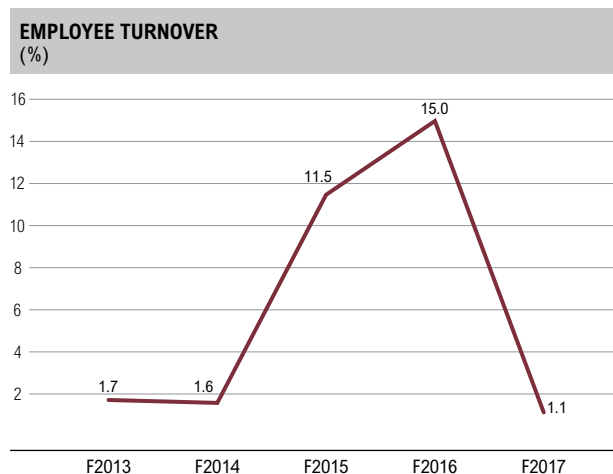
- > Attracting and retaining key skills
- > Investing in the development and skills of our workforce

### GRI MATERIAL TOPICS

GRI 401, 404

## HUMAN RESOURCES MANAGEMENT continued

We continuously conduct industry benchmarking to ensure alignment to national industry standards and legislative requirements with regard to minimum wages.



Employee turnover is defined as the number of permanent employees who leave our organisation during the year, including resignations, dismissals, retirements and those that left voluntarily. Employee turnover increased in F2015 due to the restructuring in that year and increased further in F2016 due to a Section 189a process (in terms of the Labour Act) and voluntary severance packages. In F2017, turnover declined to 1.1% which is a positive reflection of our retention strategy.

We also monitor the percentage of job offers made that are accepted as an indication of ARM's status as an Employer of Choice and 99% of job offers made were accepted during F2017 (F2016: 97.7%).

### Human resource development

The capacity building pillar of the HR strategy aims to develop human and intellectual capital in the organisation to support continuous improvement in productivity and safety performance. ARM's workforce planning initiatives identify future skills needs and flag potential gaps. Training and development is planned and budgeted at an operational level and is an important consideration in measuring ARM's performance in terms of transformation.

Employees receive performance and development reviews at least twice a year and feedback from these reviews informs our training initiatives and skills focus. Accredited training centres at each operation provide technical skills training and all ARM mining operations have full SETA accreditation with either the Mining Qualifications Authority (MQA) or the Manufacturing, Engineering and Related Services Sector Education and Training Authority (MERSETA).

Skills development initiatives in the Company focus mainly on the development of core and critical skills for the business in support of the Skills Development Act, with an emphasis on the development of HDSAs.

ARM is committed to supporting the development of basic skills and offers nationally aligned Adult Education and Training (AET) programmes through the training centres at its operations. These are extended to community members around our operations to improve career prospects and future employability. 120 ARM

employees and 375 community members attended these AET courses during F2017. Functional literacy in the Company was 87% in F2017 (F2016: 92%).

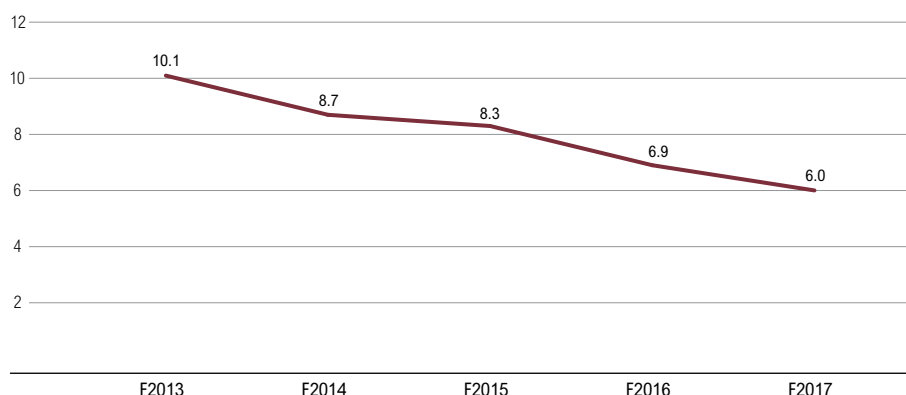
### Building future industry skills

ARM participates in a range of initiatives that support youth development, increase the pool of future industry skills and ensure meaningful transformation through inclusion of previously disadvantaged and minority groups. These initiatives include:

- > **Community cadetship** training to develop skills and increase employability in local communities.
- > **In-school youth** support through sponsorship of a web-based maths and science programme for local school leavers, learners and the broader community. The programme aims to improve performance in these subjects and thereby increase opportunities to obtain learnerships, bursaries and further career development.
- > **Science, Technology, Engineering and Maths (STEM)** to uplift rural communities by providing students with an opportunity to acquire formal qualifications as a way to transform our communities in the areas of scarce and critical skills.
- > **Learnerships** offer people outside the academic streams an opportunity to be trained and upskilled to improve their employability. There were 177 learnerships focusing on skills development across various disciplines applicable to mining during the year (F2016: 219) of which the majority was HDSAs.
- > **Bursaries** are offered to promising students in relevant fields of study with preference given to deserving candidates from our local communities. There were 225 students on bursaries in F2017, 96% of whom are HDSA students (F2016: 85%) of which 51% are female HDSA students. ARM also partnered with the Department of Mineral Resources on Girl Learner Bursary Scheme initiatives.
- > **ARM's Graduate Development Programme** offers work exposure to different operations in the Group to unemployed youth who have completed degrees or diplomas in the scarce skills disciplines identified in the MQA Sector Skills Plan. At June 2017, there were 49 graduates across the group on the programme, all of whom are HDSAs.
- > **The Young Entrepreneurs Incubation Programme** and **Business Skills Development Programme** support the development of locally-owned businesses. This training aims to accelerate local SMME development, improve access to information and business opportunities, and assist in job creation.
- > ARM supports the development of industry-relevant skills through its participation in the **Minerals Education Trust Fund (METF)**. The METF seeks to attract, retain and develop teaching staff in tertiary education across the disciplines of mining, metallurgy/chemical engineering and geology.

ARM's investment in skills development decreased 2.5% to R180 million in F2017 (F2016: R184 million), as a result of the 4.2% decrease in the number of full time employees which is partly attributable to the sale of Dwarsrivier Mine. Training spend represents 6% of payroll and exceeds the current Mining Charter target of 5%. This translates into training spend per person of R7 454, including contractors (F2016: R7 972 restated).

### TRAINING SPEND AS A PERCENTAGE OF PAYROLL (%)



## LABOUR RELATIONS

ARM respects the rights of its employees to bargain collectively and ensure engagement on labour-related matters. We recognise organised labour as one of the Company's key stakeholders. ARM's relationship with organised labour is mature and cordial, and this promotes and maintains good relationships with our employees.

At the corporate level, ARM provides policies and guidelines for managing employee relations to operations. Union negotiations and employee relations matters impacting workforce consultation processes are the primary responsibility of the human resources managers at each operation. Wages and conditions of employment are negotiated at operational level in accordance with the collective agreements in place. The Company engages with unions through consultative forums and other structures as required.

ARM has recognition agreements in place with five unions across our operations, which vary from operation to operation in respect of negotiated thresholds. Union representation in the workforce decreased marginally to 89% in F2017 (F2016: 90%), with 11% of the workforce not affiliated with any of the five unions.

The unions recognised are the National Union of Mineworkers (NUM), the National Union of Metal Workers of South Africa (NUMSA), the United Association of South Africa (UASA), Solidarity and the Association of Mineworkers and Construction Union (AMCU).

During F2017, there was a strike by contractor employees at Nkomati Mine. This strike did not impact on the mine, as full-time employees continued with production for the duration of the strike. In F2016, 3 024 man days were lost to strikes at ARM's operations.



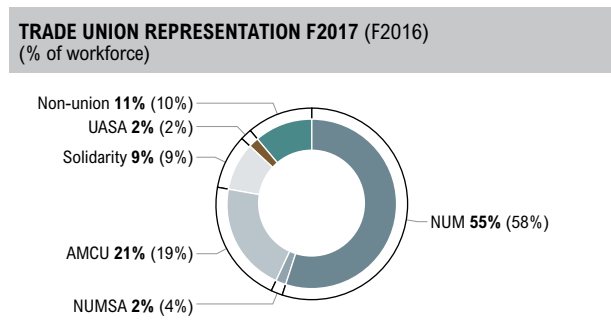
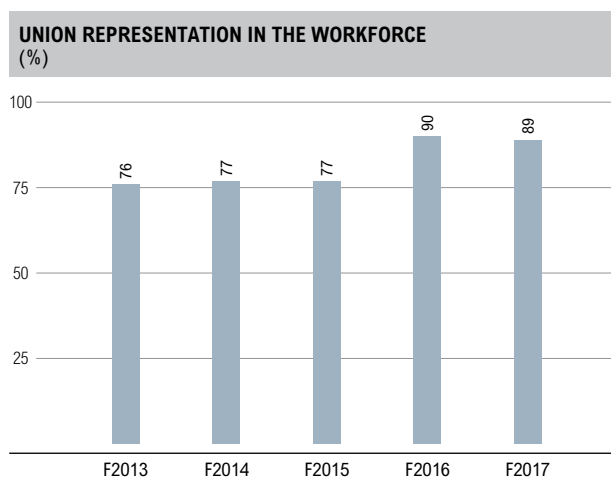
### MATERIAL ISSUE

- > Maintaining good relationships with our employees and organised labour

### GRI MATERIAL TOPICS

GRI 402, 407

## HUMAN RESOURCES MANAGEMENT continued

**DIVERSITY AND INCLUSION**

ARM's diversity management policy ensures that we keep our organisation relevant to our environment and commit to creating opportunities and employment for all people regardless of their race, religion, gender, age, sexual orientation, nationality or disability. Our effective transformation initiatives and fair labour practices provide opportunities for people from disadvantaged backgrounds through training, employment and upskilling within our local communities.

ARM's Talent Management Strategy includes talent pool identification and management, and career path programmes that identify and support the rapid development of HDSAs to senior levels in the workforce in line with our commitment to transformation.

The Group Executive: Human Resources is the legally appointed Employment Equity Senior Manager in terms of the Employment Equity (EE) Act (No. 55 of 1998) Section 24, for the Group. ARM's Employment Equity Committee reviews recruitment processes, follows up on deviations in EE performance and monitors the technical skills required to meet our transformation objectives.

Progress on ARM's Corporate EE plan is evaluated against the requirements of the Mining Charter, the Department of Labour and the Department of Trade and Industry (dti) Codes of Good Practice (CoGP). Quarterly formal internal reporting on EE matters facilitates discussions, promotes focused decision-making and encourages diversity business cases in relation to racial demographics, gender and people living with disabilities.

ARM recently participated in research conducted by the Commission for Gender Equality barometer comparative studies, which highlighted areas of improvement in relation to women representation. A number of initiatives to address these areas are already in place, including policies supporting gender mainstreaming in the workplace.

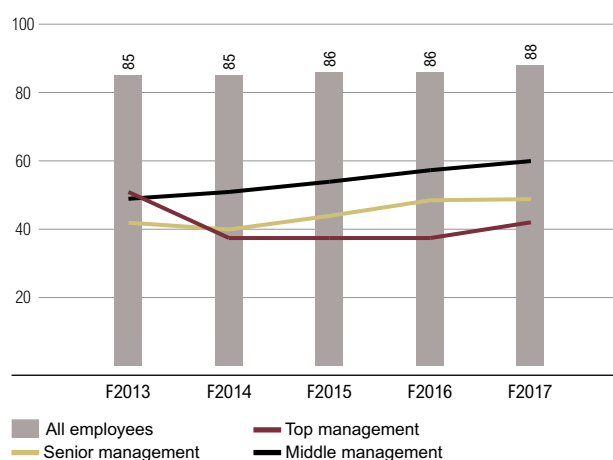
More robust EE plans and targets are being implemented to refine recruitment, attraction and skills development efforts directed at core business to address representivity in critical and core skills. An analysis of our talent pool shows that a focus is required to increase female representation and other HDSA categories in this area.

HDSA representation at top management level increased from 38% to 42%, at middle management from 57% to 60% and at junior management level from 68% to 71%, which reflects the expanding pool of potential future leaders in the Company. Senior management representation remained broadly in line with last year at 49%. Overall, EE in management increased to 55% (F2016: 53%).

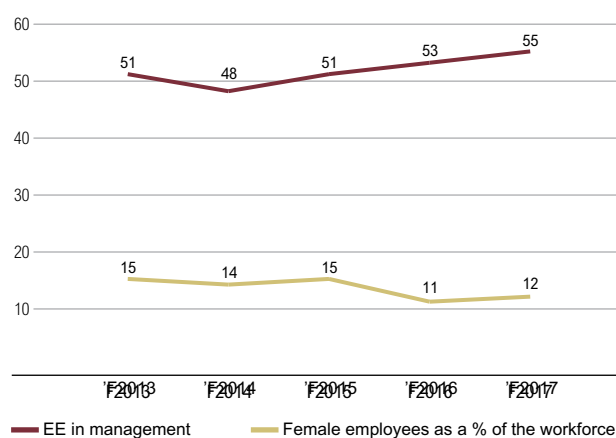
The representation of female employees or women in core mining positions, as well as women with critical and scarce skills, was negatively affected in F2016 by the Section 189a process. In F2017, female representation (women in mining) increased across all categories and the overall representation of women in the workforce increased to 12%, compared to the Mining Charter target of 10%. Women in core mining, critical and scarce skills decreased to 8% (F2016: 11%).

ARM's diversity programme aims to increase awareness of sourcing, attracting, developing and retaining talented people including people living with disabilities across our operations. This year, ARM had 75 people living with disabilities (F2016: 78), 26 of whom are women (F2016: 25).

### HDSA REPRESENTATION (%)



### REPRESENTATION (%)



Mining Charter Employment Equity scores	HDSA (%)				Women in Mining (%)			
	F2017	F2016	F2015	Mining Charter Target	F2017	F2016	F2015	Mining Charter Target
Top management	42.1%	37.5%	37.5%	40%	15.8%	13.5%	13.0%	10%
Senior management	48.9%	48.6%	44.1%	40%	12.2%	10.5%	11.0%	10%
Middle management	60.0%	57.4%	54.4%	40%	14.0%	8.7%	8.0%	10%
Junior management	71.4%	68.5%	67.1%	40%	8.9%	6.2%	6.0%	10%

## HOUSING

ARM's housing strategy aligns with the requirements of the Mining Charter, the Housing and Living Conditions Standards for the Minerals Industry and other municipal and spatial planning legislation. It aims to promote ownership of affordable housing to employees at our operations to ensure that every employee has decent accommodation. Housing strategies that identify and prioritise sustainable towns of choice in support of the life of mine have been compiled at some operations.

The Northern Cape mines in the Ferrous Division signed a housing memorandum in April 2017 of understanding with the representative mine to investigate an appropriate housing scheme for workers.

Most of our employees live in communities surrounding our operations. ARM's local community infrastructure development programmes through Social and Labour Plans (SLPs) and Local Economic Development (LED) projects therefore support improved living conditions of employees and the communities.

### FOCUS FOR F2018

#### HUMAN CAPITAL

- > Diversity management.
- > All ARM operations are under Department of Labour Director General Review and have submitted their Employment Equity Plans. The Group Executive Stakeholder Relations and Compliance and the Group Executive Human Resources will conduct quarterly roadshows to monitor and evaluate progress in terms of Section 43 of the Employment Equity Act, 55 of 1998, as amended.
- > ARM gender mainstream issues.
- > All operations to launch Gender Units, to address gender mainstreaming issues as identified by the Commission for Gender Equality.
- > Operations to develop policies and strategic plans to guide the promotion of gender mainstreaming.
- > Integration of the four pillars of the ARM HR strategy and system reporting.
- > ARM to continue with its drive to integrate the four pillars of the HR strategy through the use of HR analytical and diagnostic tools, to mitigate risk associated with potential talent retention for business continuity.



## MAINTAINING OUR SOCIAL LICENCE TO OPERATE

### In this section

#### CORPORATE SOCIAL RESPONSIBILITY

#### TRANSFORMATION

#### ETHICS

#### HUMAN RIGHTS

### Material issues

- > Stakeholder engagement and community relationships
- > Corporate social responsibility
- > Transformation performance against the Mining Charter and dti CoGP
- > Ethical business conduct
- > Upholding human rights

ARM's social and relationship capital depends on the trust built with key stakeholders through demonstrating our ethical values such as responsibility, accountability, fairness and respect for human rights. Establishing and maintaining a respectful and trusting relationship with our stakeholders is essential to ensure continued access to natural resources, financial capital, labour from local communities and to retain our licence to operate.

Mining operations are long-life assets and from exploration to final closure of a mine they can stretch over several generations of community members and employees. The reputation of a company has a direct influence on the quality of its interactions with employees, communities, regulators, shareholders, providers of financial capital and other stakeholders.

Stakeholder engagement is recognised as one of the top risks facing the Company in ARM's risk register. This reflects the potential financial impact of disruptions to operations from community unrest, regulatory stoppages and strikes. Stakeholder relationships also offer significant opportunities and the potential for greater inclusive value creation for all stakeholders. Our approach to stakeholder engagement and some of the key engagements during F2017 are discussed on pages 16 to 21 and the full stakeholder engagement table is presented on pages 20 and 21.

Our values, governance structures and ethical leadership guide our actions to conduct our business activities with integrity and respect for the societal context in which we operate. ARM's Code of Conduct stipulates the legal and ethical standards applicable to directors, management, employees, contractors, suppliers and other parties when conducting business across ARM and its joint ventures. The Code was most recently updated in July 2017.

## Community relations

Regular engagements with interested and affected parties are held at all operations to address issues of social and environmental importance and each mine conducts regular formal stakeholder engagement activities. An assessment of potential socio-economic and environmental impacts and the requisite mitigating actions is performed as part of the Environmental Impact Assessment (EIA) process required prior to new projects and changes/expansions to operations. EIAs include structured engagements with interested and affected parties to communicate concerns, issues or conflicts arising from our activities. Common concerns include access to water, dust mitigation, blasting and employment opportunities.

Community concerns or disputes are reported in quarterly sustainability reports, which are discussed at operational, divisional and Board-level Social and Ethics Committees.

An independent service provider operates ARM's anonymous whistleblowers' hotline (0800 006792) which is available for employees, contractors, suppliers, communities, and other stakeholders to report unethical behaviour. Information about the whistleblowers' facility is included in the Code of Conduct, which is available in the Corporate Governance section of our website at **[www.arm.co.za](http://www.arm.co.za)**. The hotline number is posted in each of the Company's offices and at the operations.

Each whistleblowing report is formally investigated and, if applicable, policies and procedures are revised. Feedback reports are provided to the operators of the whistleblowers' facility.

During F2017, ARM's whistleblowers' system was reviewed and accredited by the Ethics Institute of South Africa. No material non-compliance incidents were reported during the year under review.

Unrest in the communities around our operations continues to be a challenge. Most of the demonstrations relate to service delivery protests, but our operations also receive demands for increased local procurement opportunities, local jobs and opportunities for youth. The socio-economic environment around the Steelpoort/Burgersfort community, close to Two Rivers and Modikwa mines, remains sensitive. A working group has been established in the area by the CEOs of local mining companies with the Chamber of Mines to identify solutions.

Mine management meet with traditional leaders and formally recognised community structures to facilitate a broader consultative approach to addressing local community concerns and establish a long-term stakeholder engagement structure for the region. Demands from informal community structures continue to be a challenge and Two Rivers Mine lost three production days during F2017 due to community unrest.

Illegal chrome mining activity escalated around Modikwa Mine causing uncontrolled access to land and road infrastructure. The mine secured an interdict to halt the illegal mining activity after which busses transporting employees to the mine were targeted affecting startup of production after the Christmas break, during January 2017.

Community unrest at Black Rock Mine prevented employees from accessing the workplace, negatively impacting the loading of trains for export sales of manganese ore.

## CORPORATE SOCIAL RESPONSIBILITY

ARM is committed to improving the lives of those living in the communities where we operate. This includes creating jobs, investing in projects that directly benefit these communities, providing skills training to community members that equip them for employment and supporting enterprise development.

Our investments in Corporate Social Investment (CSI) and Local Economic Development (LED) projects focus on building capacity in communities and prioritise women, people affected by or vulnerable due to HIV & Aids, the advancement of people living with disabilities, youth and the socially destitute.

### How we manage corporate social responsibility (CSR)

LED projects are implemented at our operations as part of ARM's Social and Labour Plans (SLPs) established in terms of the Mineral and Petroleum Resources Development Act (MPRDA). SLPs are agreed and regularly revised in close consultation with communities, local government and the Integrated Development Plans. In addition, CSI initiatives are run by the operations to support projects outside the SLPs that address specific community needs. Potential projects are carefully assessed to ensure alignment with ARM's CSR strategy, to ensure that they effectively address community needs and are meaningful and sustainable.

CSR initiatives at the ARM corporate level include ARM's Chairman's Fund, the Educational Trust and the ARM BBEE Trust (upliftment Trusts).

### CSR HIGHLIGHTS

- > R115 million invested in CSI and LED projects in F2017, creating 634 jobs
- > R8.2 million distributed by the ARM BBEE Trust to rural upliftment projects

Implementation of the Group's CSR strategy is monitored by the Social and Ethics Committee. The Group Executive: Stakeholder Engagement and Compliance is responsible for policy and strategy and guiding operations in terms of implementation of initiatives. She reports on implementation to the various divisional structures and the ARM Social and Ethics Committee.

Employees volunteer their time or make donations through initiatives such as Mandela Day and the Motsepe Foundation Christmas Drive, which delivers toys and necessities to orphanages and childcare facilities across the country.

During F2017, ARM Ferrous initiated the formation of a working committee with the other manganese producers and the Chamber of Mines to develop sustainable solutions to the various CSR challenges in the Northern Cape.

Implementation of CSR projects presents a number of challenges including finding the right projects to create sustainable jobs and effectively alleviate poverty, quantifying the positive social impact that arise from these projects, and finding the right skills to implement them. Identifying the right community representatives is crucial as is ensuring that they continue to actively engage the community they represent. Securing agreement between all community representatives and effectively coordinating the efforts of the stakeholders involved in implementation of community projects can be difficult and community unrest can delay implementation.

### CSR FOCUS FOR F2017

#### 1. CONTINUE ENTERPRISE DEVELOPMENT IN PARTNERSHIP WITH GOVERNMENT, DEVELOPMENT AGENCIES AND COMMUNITIES

Engagement with government and non-governmental organisations as key stakeholders around local communities, is focused on developing partnerships and ensuring alignment of strategies. This aims to improve the regional integration of community health, education, local business development and infrastructure development programmes.

## CSR FOCUS FOR F2017

### 2. SUPPLIER DEVELOPMENT INITIATIVES TO INCORPORATE SMMEs INTO PREFERENTIAL PROCUREMENT PROGRAMMES

Various initiatives are undertaken by our operations to support enterprise and supplier development, and to develop small, medium and micro enterprises (SMMEs) locally. Support measures include early payment terms to assist with cash flow management and provision of equipment. Skills development and contractor development initiatives aim to provide access to opportunities in the supply chain. The operations prioritise opportunities for black-owned and black female-owned suppliers, and where appropriate, ring-fence opportunities for suppliers that meet these requirements.

These initiatives aim to foster entrepreneurship, create jobs and build sustainable businesses in mining communities, thereby supporting socio-economic transformation on a community, regional and national level.

Nkomati Mine supports a local butchery through a monthly allowance, employee transport and financial management training. The mine also ring-fenced three ore transport contracts for local community companies. Black Rock Mine is supporting 15 SMMEs through a development programme with a local business incubator and contributes to a trust fund established to develop suppliers in the Northern Cape.

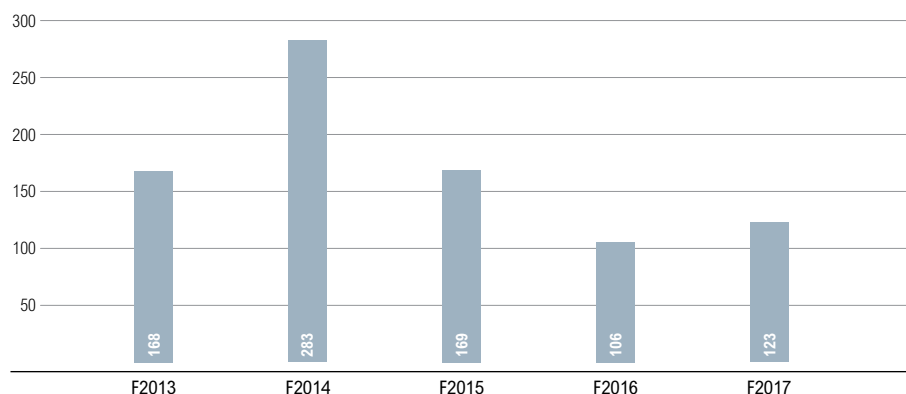
Beeshoek Mine supported 11 SMMEs from Tsantsabane through its enterprise and supplier development programme, to support entrepreneurs in the mining value chain. Enterprises included a canteen, general dealer and a car wash.

Khumani Mine delivered a B-BBEE Workshop to 35 companies and 41 beneficiaries to increase understanding of B-BBEE requirements and promote transformation. Modikwa Mine supports six SMMEs through the local business hub and the companies they support created or sustained 109 jobs.

### CSR initiatives

Total CSR spend for F2017 increased 16% to R123 million, on a 100% basis (F2016: R106 million). Jobs created through CSR initiatives decreased to 634 (F2016: 1 443) as several long-term projects are underway. Most jobs relating to these projects were created at the start of the project and have already been reported in prior periods.

**CORPORATE SOCIAL RESPONSIBILITY EXPENDITURE**  
(R million)



### GRI MATERIAL TOPICS

GRI 201, 203, 413

### BOUNDARY

ARM mines and operations

### STAKEHOLDERS

Communities, government, non-governmental organisations

### MAIN REGULATIONS AND FRAMEWORKS

- > ICMM Sustainable Development Framework
- > Mineral and Petroleum Resources Development Act
- > Mining Charter
- > Department of Trade and Industry Revised Codes of Good Practice (dti CoGP)

## CORPORATE SOCIAL RESPONSIBILITY continued

CSR expenditure	F2017 (R million)	F2016 (R million)
<b>CSI</b>		
Health	0.9	1.1
HIV & Aids	1.0	0.3
Education	6.6	6.9
Capacity building	5.1	2.3
Sporting events	0.7	0.9
Arts and culture	0.6	0.2
Other	7.2	6.4
Total CSI	22.1	18.0
<b>LED</b>		
Infrastructure	75.4	53.7
Enterprise development	14.1	17.2
Community	2.9	7.5
Other	0.1	2.2
Total LED	92.5	80.5
<b>Total CSI and LED investment</b>	<b>114.6</b>	<b>98.8</b>
BBEE Trust projects	8.2	7.4
<b>Total CSR investment</b>	<b>122.8</b>	<b>105.9</b>

Spending on education projects comprised 30% of total CSI spend of R22 million in F2017 (F2016: R18 million) and expenditure on capacity building 23%.

CSI spending in the "Other" category includes:

- > A feasibility study for Gamagara local municipality funded by Khumani Mine.
- > Nkomati Mine's investment in community security services and repairs to the drainage system in the Badplaas community.
- > A contribution by Modikwa Mine to support the local community social profile and a donation to a royal funeral.

LED expenditure increased 15% to R92 million in F2017, with 82% allocated to infrastructure development and 15% to enterprise development initiatives.



**CSR  
FOCUS  
FOR F2017**

### 3. PROJECTS THAT FOCUS ON COMMUNITY HEALTH AND WELLNESS IN PARTNERSHIP WITH THE DEPARTMENT OF HEALTH

Cato Ridge Works built a health facility and donated it to the community of Ward 1 in KwaXimba. The Bhoshonono Health post is fully electrified and has five consulting rooms, a large waiting area, disability-friendly ablutions facilities and a water backup system. It offers basic health services to the community, including immunisation, baby weighing, nutritional assessments, TB and HIV screening, and centralised chronic medication distribution.

CSR expenditure	F2017					F2016				
	ARM Ferrous (R million)	ARM Platinum (R million)	ARM Copper (R million)	ARM Corporate (R million)	ARM total (R million)	ARM Ferrous (R million)	ARM Platinum (R million)	ARM Copper (R million)	ARM Corporate (R million)	ARM total (R million)
CSI	6.2	11.0	2.4	2.4	22.1	9.4	4.8	1.3	2.6	18.0
LED	63.2	29.3	0	0	92.5	63.6	16.9	0	0	80.5
The ARM BBEE Trust	N/A	N/A	N/A	8.2	8.2	N/A	N/A	N/A	7.4	7.4
Total CSR Spending	69.5	40.3	2.4	10.6	122.8	73.0	21.7	1.3	9.9	105.9

# LED PROJECTS SUPPORTED IN F2017

## NKOMATI MINE

Contributed to the Badplaas community security services and the repair of drainage systems.

## MODIKWA MINE

The mine invested in road improvement projects in the villages of Matimatjati, Mooihoek, Mamphahlane and Sehlaku, creating 34 temporary jobs. The mine also installed overhead lights at Hwashi and Mamphahlane villages, creating four temporary jobs.

## LUBAMBE COPPER MINE

Constructed the Konkola Health Post, which serves as a clinic for the mine as well as for more than 10 083 patients from the Konkola community. A total of 320 children receive vaccination from this clinic. Lubambe also donated materials to construct storm water drainage, farm inputs to 50 farmers and two schools, and contributed to a utility vehicle that can be used by the community to take patients to hospital.

## TWO RIVERS MINE

Constructed a new administration block at Maremele Primary School in Kutullo village, upgraded roads in Ngwaabe village and Sekhukhune Road, and renovated the Mashishing Community Hall. These projects created 32 jobs.



## KHUMANI MINE

Constructed a second reservoir to expand water storage for the benefit of the 14 751 members of the Olifantshoek community, creating 67 part-time and 24 full-time jobs. 1.7 kilometres of internal gravel road was upgraded to a paved road in the Deben community. The mine also constructed 658 toilets at Magojaneng and Seeding Villages in Kuruman, contributed to a feasibility study for the Gamagara local municipality and donated a modified wheelchair to a child with disabilities.

## BLACK ROCK MINE

Completed the refurbishment of the Ncweng Community Hall in the Ga-Segonyana Local Municipality. Six temporary jobs were created during the project and the hall is used by 279 households in the community. The mine also created 20 temporary jobs through a project that resealed internal roads infrastructure used by 3 188 households in Kuruman and Wrenchville. Construction of a 2.5 kilometre tarred access road in Maruping village was funded, creating 20 temporary and local jobs and involving two companies from the mine's enterprise and supplier development programme. There are 6 233 households in Maruping that will benefit from the road, and the neighbouring villages of Vergenoeg and Batlharos will also benefit.

## BEESHOEK MINE

Completed the construction of a 2 500 kl elevated steel tank to improve access to potable water for the 4 118 residents of the Postdene community. The mine also initiated an SMME incubation programme focusing on alternative building methods, decorative concrete, gemazine and paintless dent repair for 20 local SMMEs.

## CORPORATE SOCIAL RESPONSIBILITY continued

**The ARM BBEE Trust**

The ARM Broad-Based Economic Empowerment Trust (BBEE Trust) supports Rural Upliftment Trusts in each of the provinces through 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 supports the Trust with resources to build administrative and project management capacity to manage the development initiatives.

The ARM BBEE Trust distributed R8.2 million to beneficiaries for development projects in F2017 (F2016: R7 million).

	F2017 (R million)	F2016 (R million)	F2015 (R million)	F2014 (R million)	F2013 (R million)
Development projects	8.2	7	12	6	7

\* Dividends will be disclosed during November 2017.

**Highlights of the ARM BBEE Trust projects**

Province	District and name of project	Project description and beneficiaries	Funding (Rands)
<b>Kwa-Zulu Natal</b>	<b>Kosi Bay</b> Godokhuwayo Primary School	Construction and furnishing of two classrooms. Renovation of the school hall benefitting 880 students.	424 043
	<b>Nongoma</b> Bhekuzulu High School	Construction of new ablution block. Equipping new computer centre directly benefitting 1 300 learners.	681 900
	<b>Utrecht</b> Waaihoek Primary school	Construction of two classrooms benefitting 680 learners.	310 000
<b>Eastern Cape</b>	<b>Adelaide</b> Vulindlela Primary School	Construction of two classrooms benefitting 673 learners.	610 950
	<b>Port St. Johns</b> Abasuki Cooperative	Needlework training centre benefitting 25 local women and the immediate community.	300 000
	<b>Mqanduli</b> Zanci Childcare Centre	New centre constructed benefitting 952 children.	724 600
<b>Limpopo</b>	<b>Sekhukhune</b> Hlabye Primary School	Construction of an administration block benefitting 1 227 learners and teachers.	996 000
	<b>Sekhukhune</b> Marishane Village, Manchi Creche	Construction of a pre-school benefitting 95 children.	450 000
	<b>Capricorn</b> Mafefe Disabled Organisation	Donation of sewing machines and 16 fabricated steel containers benefitting a group of 37 people living with disabilities (12 females and 25 males).	328 000
	<b>Capricorn,</b> School Mobile Science Kits and interactive boards	Supply and training of school mobile science kits and interactive boards for 10 high schools benefitting 997 matric students in the Seshego area.	620 000
<b>North West/Free State</b>	<b>Mabeskraal</b> Moetlo Primary School	Erection of fencing around school premises benefitting 1 342 learners.	200 000
	<b>Mathlako (Pella)</b> Rekopanwe Home-Based Care/Orphanage	Structural refurbishment of the home-based care and orphanage centre, benefitting 47 children and 237 elderly community members.	597 000

Province	District and name of project	Project description and beneficiaries	Funding (Rands)
<b>Mpumalanga/ Northern Cape</b>	<b>Hazyview/Bushbuckridge</b> Boreholes	Provision of boreholes at Xilongane and Authol Primary Schools, Madolofi Crèche, Sanford, Hlangalezwe, Utha Trust and Alexandria villages, benefitting over 12 000 households. In the Northern Cape, Camden Clinic was also provided with a borehole for the benefit of 9 500 community members.	493 000
	<b>Mamethlake</b> Mabothe Secondary School	Construction of an ablution block (6 female toilets, 3 male toilets and 2 urinals). The project has since benefited 600 students.	200 000
	<b>Piet Retief</b> Computer project	Provision of 33 computers to three schools, benefitting 700 matric students from three adjacent villages.	210 000
	<b>Kwa-Mhlanga</b> Mpumalanga Leather and Bead Factory	Structural completion of a building and installation of eight sewing machines, office furniture and start-up materials for the benefit of 10 adults and the entire community of Kwa-Mhlanga.	700 000

## FOCUS FOR F2018

### CORPORATE SOCIAL RESPONSIBILITY

- > Continue enterprise development in partnership with government, development agencies and communities.
- > Supplier development initiatives to incorporate SMMEs into preferential procurement programmes.
- > Projects that focus on community health and wellness in partnerships with the department of health.
- > Embark on a robust strategy throughout the Group for SMME participation in preferential procurement, particularly in developing black as well as women- owned suppliers.

**GRI MATERIAL TOPICS**

GRI 203, 204, 405, 413, 414

**BOUNDARY**

ARM's South African mines (Mining Charter)  
ARM's South African smelters and ARM Corporate (dti CoGP)

**STAKEHOLDERS**

Government,  
communities,  
shareholders

**MAIN REGULATIONS AND FRAMEWORKS**

- > ICMM Sustainable Development Framework
- > Mining Charter
- > Labour Relations Act
- > Department of Trade and Industry Revised Codes of Good Practice
- > Mineral and Petroleum Resources Development Act
- > Employment Equity Act

**TRANSFORMATION**

ARM has a zero-tolerance approach to all forms of unfair discrimination. We support the principle of transformation as an effective way to redress historical inequality, facilitate broader social development and give all South Africans a stake in the country's mineral wealth. Transformation is entrenched in our values, strategy and business processes and directs how we engage and develop our workforce, focus our procurement spend and distribute the value we create.

Demonstrating this commitment to transformation is directly linked to our ability to increase financial capital as retaining our mining licences depends on meeting the goals of the Mining Charter. Poor transformation performance could also affect ARM's reputation and decrease the social and relationship capital built up with government, communities, investors, customers and suppliers.

**How we manage transformation**

ARM's approach to transformation is monitored and its performance reviewed by the Social and Ethics Committee. The Employment Equity and Skills Development Committee is responsible for driving transformation in the workplace. Performance is measured against the Broad-Based Socio-Economic Charter of the Department of Trade and Industry (dti) and the Mining Charter.

Transformation principles are integrated into our business processes and compliance is managed as part of the relevant business function.

**TRANSFORMATION HIGHLIGHTS**

- > Quarterly roadshows were conducted to guide operations on BBEE improvement initiatives and these have resulted in improvements, particularly on preferential procurement
- > The future leadership development programme has been successfully launched with WITS business school and a women-in-leadership programme with Henley business school
- > Strategic partnerships created through engagement with the Department of Labour, the Department of Mineral Resources, the Commission for Gender Equity, the Mineral Education Trust Funds, the Chamber of Mines and the Mining Qualifications Authority.

ARM participates in the government-led Mining Operation Phakisa that was announced in 2015 to galvanise growth, transformation, investment and employment creation along the mining value chain, in relevant input sectors and in mining-related communities. To date there has been limited output from this initiative.

*Note: The dti CoGP and Mining Charter do not apply to ARM's non-South African operations and Lubambe Mine is therefore not included in this section.*

**Transformation performance against the Mining Charter scorecard**

**TRANS-  
FORMATION  
FOCUS FOR  
F2017**

**1. ALIGNING OUR COMPLIANCE EFFORTS WITH THE REQUIREMENTS OF THE REVISED MINING CHARTER WHEN FINALISED AND GAZETTED**

Mining licences are issued in terms of the Mineral and Petroleum Resources Development Act (MPRDA), which was enacted to facilitate meaningful participation of Historically Disadvantaged South Africans (HDSAs) in the mining and minerals industry. The Broad-Based Socio-Economic Empowerment Charter for the South African Mining Industry (the Mining Charter) sets transformation goals for the mining industry across various categories.

The Mining Charter applies to ARM's six South African mines and their continued ability to achieve these goals affects the Company's legal licence to operate in terms of its mining licence, as well as strengthening its social licence to operate.

The Reviewed Mining Charter (Mining Charter III) was published by the Department of Mineral Resources (DMR) on 15 June 2017 and contains revised categories and targets that will have a significant impact on the mining industry's transformation performance.

The Reviewed Mining Charter has been suspended due to a legal dispute between the Chamber of Mines, which represents the mining industry, and the DMR. ARM continues to monitor developments in this regard so that appropriate measures can be taken to achieve the targets set in the Revised Charter once it is implemented.

Until the legal dispute process is completed, the targets set in Mining Charter II, which relate to the year ending 31 December 2014, remain in place and ARM operations continue to use the 2014 targets to measure and report on their transformation performance.

## TRANS- FORMATION FOCUS FOR F2017

### 2. EDUCATING RELEVANT STAFF AND DEVELOPING INTERNAL PROCESSES TO MONITOR AND REPORT IN TERMS OF THE TARGETS OF THE REVIEWED MINING CHARTER SCORECARD

The table summarises the combined performance of ARM's mines against nine categories of the Mining Charter for the 2015 and 2016 calendar years. Reporting for the 2015 calendar year includes Dwarsrivier, which was sold in July 2016.

	Mining Charter II (2014) target	Performance (calendar year)	
		2016	2015
<b>1. Reporting</b>		Submitted	Submitted
<b>2. HDSA Ownership</b> ARM has an effective 50.96% HDSA ownership base through African Rainbow Minerals & Exploration Investments (42.69%), Botho-Botho Commercial Enterprises (0.54%) and the ARM Broad-Based Economic Empowerment (BBEE) Trust (7.72%) (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 (seven in 2015) and uses the flow through principle, which attributes the HDSA ownership of a holding company to a subsidiary in proportion to the percentage held by the holding company.	26%	33.1%	35.0%
<b>3. Housing and living conditions</b> 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 57.		Achieved	Achieved
<b>4. Preferential procurement</b> – Capital – Services – Consumables Enterprise development	40% 70% 50% Levy withheld from multinational suppliers allocated to social development	79.6% 65.4%* 90.3% **	61.7% 83.4% 72.4% **

\* ARM narrowly missed the Services procurement target in C2016, but has generally exceed the Mining Charter's target for the past eight years and exceeded the target in the first six months of the 2017 calendar year.

\*\* Modikwa Mine is engaging with multinational suppliers of capital goods on implementing the requirements. Beeshoek, Black Rock, Khumani, Two Rivers and Nkomati mines are collecting levies from multinational suppliers of capital goods.

## TRANSFORMATION continued

	Mining Charter II (2014) target	Performance (calendar year)	
		2016	2015
<b>5. Employment equity (HDSA representation)</b>			
– Top management	40%	47.8%	41.7%
– Senior management	40%	57.3%	56.3%
– Middle management	40%	58.1%	55.2%
– Junior management	40%	71.9%	68.7%
– Core skills	40%	86.5%	95.4%
ARM's activities to ensure a diverse and representative workforce are discussed on pages 56 and 57.			
<b>6. Human resources development (% of payroll invested)</b>	5%	5.23%	5.91%
ARM's skills development initiatives are discussed on pages 54 and 55.			
<b>7. Mine community development (% of net profit after tax)</b>	1%	4.4% <sup>†</sup>	3%
ARM's socio-economic development initiatives in local communities are discussed on pages 60 to 62.			
<sup>†</sup> Percentage excludes Modikwa Mine, which is an unincorporated joint venture and therefore does not report a standalone net profit after tax figure.			
<b>8. Sustainable development and growth</b>		97%	95%
Health and safety performance (discussed on pages 36 to 51)			
<b>9. Facilitate local beneficiation</b>		Note 1	Note 1
Note 1: The Chamber of Mines is engaging with the DMR on behalf of its members to better understand the reporting requirements in light of the Mineral Beneficiation Strategy.			

## Transformation performance against the Revised Codes of Good Practice (dti CoGP)

ARM's smelters at Cato Ridge and Machadodorp, as well as the overall Group performance, are measured against the dti CoGP.

The revisions to the dti CoGP that came into effect in May 2015 raised the targets within each category and added further requirements, sub-minimum scores, various exclusions and capping provisions that significantly impacted the level of most companies reporting against the dti CoGP.

A delay in finalising the F2015 B-BBEE certificate led to the certificate being valid over the F2016 year, so the same score shows in the table below for both F2015 and F2016. The table shows ARM's performance against the categories of the dti CoGP and includes a link to the pages where the initiatives around each of the categories are discussed in this report.

ARM's B-BBEE score and level improved to 70.99 (Level 7) in F2017.

Category	Reference	Target	F2017	F2016	F2015
Ownership	p 67	25	<b>21.54</b>	22.14	22.14
Management control	p 56	19	<b>10.52</b>	10.17	10.17
Skills development	p 54	20	<b>11.50</b>	12.70	12.70
Enterprise and supplier development	p 61	40	<b>22.43</b>	18.81	18.81
Socio-economic development	p 61	5	<b>5.00</b>	5.00	5.00
<b>Overall score</b>			<b>70.99</b>	68.82	68.82
<b>Contributor level</b>			<b>7*</b>	8	8

\* Overall score: level 6, discounted to level 7.

All ARM operations are currently under review by the Department of Labour Director General and have submitted their Employment Equity Plans. The Group Executive Compliance and Stakeholder Relations and the Group Executive Human Resources will conduct quarterly roadshows to monitor and evaluate progress in terms of Section 43 of the Employment Equity Act, 55 of 1998, as amended.



The Black Economic Empowerment Verification Certificate is available on pages 94 and 95 of this report.

## TRANS- FORMATION FOCUS FOR F2017

### 3. CONTINUE ALIGNING OUR COMPLIANCE EFFORTS WITH THE NEW DTI COGP THROUGH ALREADY ESTABLISHED ACTION PLANS

Various initiatives are being undertaken to identify ways of improving ARM's B-BBEE performance, particularly in the lowest scoring areas of enterprise and supplier development and skills development. These include refining internal processes to improve the accuracy of information and availability of evidence for verification, as well as opportunities for collaboration within the Group and with industry. A further initiative supports operations to actively track and flag suppliers' BEE certificates prior to expiry to proactively engage with suppliers to ensure their BEE status remains valid. Workshops were held to prepare operations for the independent verifications that will take place early in the new financial year.

## FOCUS FOR F2018

- > To launch and implement the Gender Unit for all ARM operations as a sub-unit of the ARM Employment Equity Committee

## TRANSFORMATION

## ETHICS

ARM is committed to ensuring that it conducts its business with high moral, ethical and legal standards. ARM's Code of Conduct (the Code) applies to directors, management, employees, suppliers, contractors and joint ventures to maintain high ethical standards so that the Company's business is conducted honestly, fairly and legally and in a reasonable manner, in good faith and in the best interests of the Company.

A compulsory online training programme is used across the Group to train employees on the Code. The Code was most recently amended with effect 1 July 2017 and training is in progress.

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, it appears that 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 88 and 89 of this report.

## Conflicts of interest

The Code prohibits real or perceived conflicts of interest, but recognises that in certain circumstances such conflicts may arise, in which case they should be disclosed and dealt with in terms of the applicable laws. Gift registers are used at the corporate office and the operations to ensure that gifts, hospitality and favours are declared and authorised within limits. The acceptance of any gift is subject to the approval of a member of the executive.

## Disclosure

There is a policy regarding communications included in the Code that encourages complete, accurate and timely communications with the public. Compliance with disclosure requirements, including those in the JSE Listings Requirements, is overseen by the Chief Executive Officer, the Financial Director, the Head of Investor Relations and the Company Secretary.

## TRANSFORMATION continued

**Bribery and corruption**

ARM has no tolerance for any form of bribery and corruption and this stance is included in the training programme on the Code. The training is introduced by the Chief Executive Officer and communicates top management's commitment to ARM's anti-bribery and anti-corruption policies.

Bribery and corruption is explicitly addressed in ARM's codes and policies, including the policies and procedures relating to giving and receiving of gifts, sponsorship, entertainment, hospitality and favours.

ARM has an anti-fraud, bribery and corruption (ABC) prevention strategy in place that is monitored and overseen by the Audit and Risk Committee.

**Dealings in securities and insider trading policy**

Closed periods are applied that preclude Directors, officers and designated persons from dealing in ARM securities during these times, in compliance with the relevant legislation. All Directors and employees are provided with the relevant extracts from applicable legislation and the Company's procedures in this regard. Directors and employees are reminded of their obligations in terms of insider trading and the penalties for contravening the law and regulations.

**Donations to political parties**

ARM has a policy regarding donations to political parties and contributes to political parties to support South Africa's democratic processes. Donations are made to political parties in accordance with the policy and the donations budget approved by the Board.

**HUMAN RIGHTS**

ARM's Code of Conduct and policies clearly state the Group's strong position against any form of unfair discrimination. While ARM's policies do not directly use the term human rights, it is implied and articulated in the Code, our Grievance Procedure Policy, Protected Disclosure Policy and our Sexual Harassment Policy.

ARM's business policies and management systems include human rights considerations to ensure that these are appropriately managed and addressed. The Company's human rights practices align with South Africa's human rights legislation, including the Constitution and the Bill of Rights, which safeguard the basic human rights of employees in South Africa. ARM is further committed to the ten principles of the United Nations Global Compact (UNGC).

The Code of Conduct and human capital policies aim to promote equality and eliminate 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. The Human Resources Performance Management System and Safety, Health, Environment and Quality systems monitor compliance and performance.

We conduct human rights assessments aligned with the United Nations' Protect, Respect and Remedy Framework and grievance mechanisms are in place should an employee feel that their human rights have been violated. These include reporting the matter to supervisors or managers, the Human Resources Department or anonymously to the whistleblowers' line.

ARM does not use forced, compulsory or child labour and expects its suppliers and contractors to take a similar ethical approach to respecting human rights. Fair and competitive remuneration is an ongoing discussion point and all non-management employees are afforded freedom of association.

Human rights training is provided to all security personnel, including contractors, and refresher training is provided every second week. Operational community relations strategies uphold and promote human rights and respect cultural considerations and heritage.





Our values commit us to responsible stewardship and responsible environmental practices are integral to our strategic pillar of operational efficiencies. The processes of mining and beneficiation are, at their core, the conversion of natural capital into financial capital.

ARM's approach to managing environmental impacts aligns with the ICMM Sustainable Development Framework. We take a precautionary approach across business processes, from planning and exploration to construction, operation and the rehabilitation and closure stages.

Our most material environmental matters are:

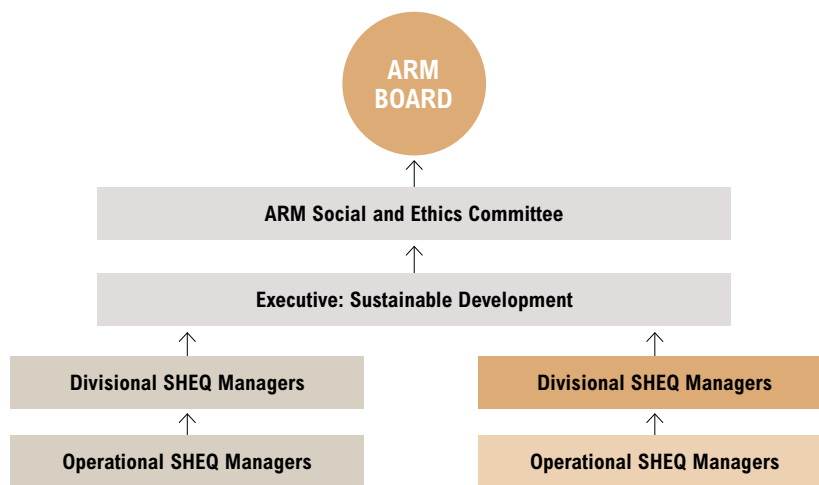
- > Climate change;
- > Resource management, particularly energy use and water availability;
- > Land management, including biodiversity conservation, rehabilitation and closure planning;
- > Managing and minimising our waste streams; and
- > Environmental compliance – ensuring that our operations remain legally compliant with current and new legislation and keeping abreast of legislative changes. We engage regulators through industry forums such as the Chamber of Mines and BUSA to constructively provide input and voice our concerns where appropriate.

## HOW WE MANAGE NATURAL RESOURCES

The Board holds ultimate responsibility for sustainable development, including environmental matters and has delegated the monitoring of this area to the Social and Ethics Committee. The Executive: Sustainable Development operates with oversight from the Social and Ethics Committee.

Material environmental matters and risks such as climate change, carbon emissions and water are identified at operational level during quarterly risk workshops and are consolidated at the corporate level for the Group. Risks identified through risk workshops and processes, are included in operational and corporate risk registers through the Enterprise Risk Management System and reported to the Management Risk and Compliance Committee as well as the Audit and Risk Committee.

Group environmental strategy is implemented through SHEQ managers at divisional and operational level, who ensure that operational environmental policies and strategies address the specific environmental challenges and opportunities in their areas.



### ENVIRONMENTAL HIGHLIGHTS

- > Scope 1 and 2 carbon emissions decreased by 3% (increased 0.2% if Dwarsrivier Mine is excluded from F2016)
- > 25% decrease in water consumption (23.2% if Dwarsrivier Mine is excluded from F2016)
- > Modikwa Mine achieved ISO 14001 certification
- > Submitted 2016 CDP and CDP Water Reports with B performance scores

Environmental training is included in induction training for employees and contractors, as well as in regular refresher courses and job-specific training, which cover appropriate policies, standards and procedures.

Corporate standards regarding environmental management are regularly reviewed and updated, and include environmental monitoring, rehabilitation, waste management, biodiversity and the reporting of environmental incidents.

Before new projects or changes to existing operations are initiated, Environmental Impact Assessments (EIAs) are conducted and Environmental Management Programmes (EMPs) established as required by the National Environmental Management Act and Regulations.

Operational environmental management systems (EMS) align with the international standard on EMS, ISO 14001 and most operations are certified in terms of this Standard, except for Lubambe and Two Rivers mines. Environmental managements systems are based on the plan-do-check principle to identify potential environmental impacts and guide the implementation of our environmental management plans and performance monitoring to mitigate environmental impact.

### GRI MATERIAL TOPICS

GRI 301, 302, 303, 304, 305, 306, 307, 308

### BOUNDARY

ARM mines and operations

### STAKEHOLDERS

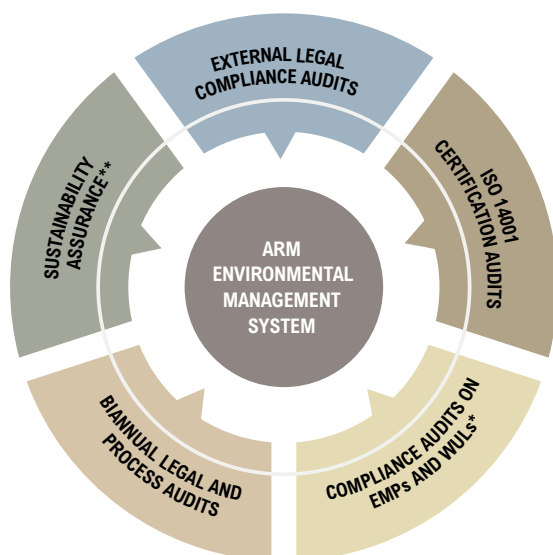
Government, communities, civil society, NGOs, industry associations, joint venture partners

### MAIN REGULATIONS AND FRAMEWORKS

- > 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
- > National Climate Change Response Policy
- > National Greenhouse Gas Reporting Regulations

## ENVIRONMENTAL COMPLIANCE

As part of our combined assurance process, the environmental management systems are regularly externally assured through a range of audits, including those shown in the diagram below.



\* Water Use Licences.

\*\* External assurance of certain sustainability indicators and policies for sustainability and CDP reporting.

The environmental regulatory framework continues to evolve rapidly and many of the proposed developments have significant potential reputational and financial implications of non-compliance.

Environmental regulatory compliance is monitored internally and by external parties at operations on an ongoing basis. Operational compliance monitoring includes compliance with conditions of environmental authorisations such as Environmental Management Programme Reports (EMPRs), Water Use Licences (WULs) and Environmental Impact Assessments (EIAs). No environmental fines or penalties were received during F2017.

From a corporate compliance perspective, external environmental compliance audits are conducted every second year as part of the Social and Ethics Committee's instruction to monitor compliance in areas of safety, occupational health and environmental management. Legal compliance is discussed in more detail in the Corporate Governance report available at [www.arm.co.za](http://www.arm.co.za).

## ENGAGEMENT WITH REGULATORS AND PARTICIPATION IN INDUSTRY FORUMS

ARM participates in several industry organisations to benchmark and share good environmental practice and to collectively engage with regulators. These include the Chamber of Mines Environmental Policy Committee, the Ferro Alloy Producers' Association (FAPA) and the ICMM. Our joint venture partnership in the ARM Ferrous Division with Assore, includes participation in valuable initiatives such as 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.

### FOCUS FOR F2017

#### 1. ENGAGING PROACTIVELY IN THE PROCESS OF IMPLEMENTING VARIOUS POLICY MEASURES AND ENVIRONMENTAL INSTRUMENTS SUCH AS CARBON BUDGETS AND CARBON TAX

We are supportive of the trend towards a low carbon economy but it is important that these initiatives do not compromise local industry resilience and international competitiveness. We are also concerned about the significant direct and indirect costs of ensuring compliance with these new initiatives.

ARM is committed to constructive engagement with government on various aspects of the proposed measures that could have a material impact on our operations through meetings with government officials, attendance at stakeholder engagement events and direct comments on documents. Engagements with regulators also take place through the Chamber of Mines, Business Unity South Africa (BUSA) and the National Business

Initiative (NBI) in order to understand the potential impacts on business activities and to prepare for the potential impacts.

We continue to enhance our reporting systems to ensure that we can report according to the requirements once the regulations have been passed into law.

All ARM operations are registered on the National Atmospheric Emissions Information System (NAEIS) as required by the National Environmental Management: Air Quality Act and submit annual online atmospheric emission reports that include dust.

## CLIMATE CHANGE

Climate change is recorded in our Enterprise Risk Management system as one of our principal risks with associated opportunities and is a key input into our sustainable business strategy.



Our focus in F2017 was on preparing for climate change and energy regulations, monitoring and implementation of efficiency targets for energy consumption, finalising the Group climate change strategy through consultation with the various divisions, finalising performance objectives and longer-term emissions targets at all our operations and rolling out our climate change strategy in consultation with our joint venture partners.

### PRIMARY CLIMATE CHANGE RISKS

- > Increased energy prices;
- > Increased compliance costs;
- > Changes to water quality and availability;
- > Weather-related production disruptions;
- > Weather-related impacts on our value chain; and
- > Climate change impacts on communities and the requirement to accelerate adaptation programmes.

### OPPORTUNITIES ARISING FROM CLIMATE CHANGE

- > ARM's ability to produce higher-quality products that are favoured in terms of their lower impact on the environment, e.g. high quality manganese ore;
- > Reputational benefits of an environmentally responsible approach;
- > New production technologies to reduce electrical energy consumption and carbon emissions; and
- > Financial energy and climate change incentives, including tax incentives, research and development incentives and government grants.

We assess the most significant medium- to long-term impacts of climate change risks and opportunities at our operations to include:

- > Water availability, which is a particular concern for our operations in water-stressed regions such as the Northern Cape.
- > Increased regulation that will increase compliance costs and energy costs in those areas that rely on fossil fuels.
- > The financial implications of carbon tax, both in the form of direct tax and pass-throughs from electricity producers after 2020.
- > Extreme weather, such as storms, flooding and higher temperatures, could cause shutdowns and lost production at our operations. Storms and floods could affect delivery of our products to customers and raw materials to our smelters as these are transported over long distances by rail and road.
- > Changed weather patterns could reduce food security and alter distribution of diseases such as malaria, leading to negative health implications, increasing costs and negatively affecting our workforce and the communities around us.
- > Failure to demonstrate responsible environmental stewardship would damage ARM's reputation and impact our relationships with customers, investors, business partners, regulators and the broader society.

Climate change has reinforced our long-term strategy to grow and diversify. Carbon emissions and carbon tax played a role in the strategic decision to build the Sakura smelter in Sarawak, Malaysia. The project produces alloy at significantly reduced CO<sub>2</sub>e emissions per tonne due to the use of hydroelectric power, new cleaner smelting technologies, increased automation and a reduced vehicle fleet size. We are developing new breakthrough technology to produce ferromanganese and pig iron through direct reduction by replacing electrical energy with coal fines as fuel.

## CARBON EMISSIONS

ARM's carbon footprint is determined through annual greenhouse gas (GHG) emissions calculations<sup>1</sup>. We disclose our carbon footprint on an attributable basis, which weights operational carbon footprints according to our shareholding in the joint venture operations. The consumption of electricity produced by coal-fired power stations is a significant contributor to ARM's carbon footprint. Other contributors include diesel used in mining operations and materials movement, and carbon-based reductants in the smelters, such as coke and coal.

Greenhouse gas (GHG) emissions are measured and reported to the CDP in terms of Scope 1, Scope 2 and Scope 3 emissions, as defined in the table on the next page. Emissions data is reported internally every quarter, discussed at the individual operational sustainability meetings and assessed in terms of the risk it poses to the business as part of quarterly risk management workshops.

ARM has initiated a project to comply with new climate change regulations and reporting requirements related to climate change and water reporting. This is part of our continuous development process to improve our monitoring and reporting systems and building capacity to meet the current and evolving requirements.

Within this context, the project objectives are:

- > To comply with the regulatory requirements to submit a Climate Change Pollution Prevention Plan and greenhouse gas emissions to the Department of Environmental Affairs (DEA); and
- > To identify gaps in climate change and water management and reporting to inform a practical and realistic strategy for filling gaps and to support ongoing reporting needs.

This work builds on earlier work focused on identifying gaps in water management and reporting and will ensure that systems for reporting are integrated to be robust and efficient.

<sup>1</sup> 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 G4 guidelines, and is verified externally on an annual basis.

Category	Classification
Scope 1	Direct GHG emissions from sources owned or controlled by the Company.
Scope 2	Indirect GHG emissions related to purchased energy.
Scope 3	All indirect emissions not included in Scope 2 that occur in the upstream and downstream value chain.

Cato Ridge Works contributes 34% of the Group's total Scope 1 and 2 emissions due to the high energy requirements of the smelting process. Other significant contributors include Khumani Mine (14%) and Nkomati Mine (19%).

## SOUTH AFRICAN CLIMATE CHANGE REGULATIONS

### CARBON TAX

The implementation of carbon tax in South Africa was deferred from January 2017 and is now likely to apply from the start of 2018. While the first phase of the tax (to 2020) will have no impact on the price of electricity, the direct tax will significantly increase costs. The final policy should consider partial ring-fencing and other options to support targeted mitigation actions, and needs to align with other mechanisms such as the Sectoral Emission Targets, Measures and the company-level carbon budgets that will become legislated from 2021.

### THE NATIONAL CLIMATE CHANGE ACT AND RESPONSE POLICY

The National Climate Change Response Policy is in place while the National Climate Change Act is being drafted by the Department of Environmental Affairs (DEA). It includes requirements for mandatory reporting and the establishment of Sectoral Emission Targets that will apply to our South African operations. ARM's carbon budget has been allocated under the policy and we are monitoring and reporting on our compliance with the budget.

### POLLUTION PREVENTION PLANS

Draft regulations on Pollution Prevention Plans were published by The Department of Environmental Affairs (DEA) in 2016. The regulations apply to entities conducting production processes listed under the National Environmental Management: Air Quality Act that involve direct emission of greenhouse gases (GHG) in excess of 0.1 megatons CO<sub>2</sub>e annually. These entities are required to compile and submit a pollution prevention plan to the DEA describing mitigation interventions to reduce GHG emissions over the next five years and projected emissions reductions that will be achieved during this period. These requirements will be incorporated into ARM's ongoing carbon emissions monitoring and management programme.



## REDUCING OUR CARBON EMISSIONS

### FOCUS FOR F2017

#### 2. CONTINUE TO IMPLEMENT CARBON EMISSION REDUCTION INITIATIVES AND MONITOR OUR PERFORMANCE AGAINST OUR EMISSION TARGETS

ARM's energy and climate change strategy aims to identify and develop long-term achievable emission reduction activities through initiatives such as alternative energy projects, investigating new technology and diversification into less energy-intensive products. 78% of ARM's estimated carbon footprint arises from indirect emissions related to purchased energy (Scope 2 emissions) and operational projects to reduce GHG emissions therefore mainly focus on improving energy efficiency.

Site-specific assessments of GHG emission reduction opportunities are built into longer term bottom-up targets and operational cost reduction projects emphasise the importance of reducing emissions and energy consumption.

Operational and capital budgets are allocated at operations for energy efficiency projects as appropriate, but the current economic conditions present challenges in this respect. Energy targets are set at operations and engineers are incentivised on energy efficiency per tonne of ore milled, time of energy use and the use of alternative energy sources. Employee bonus calculations for appropriate positions and production teams at the smelters include KPIs linked to climate change emissions reduction initiatives.

We have set a quantitative emission reduction target of reducing 5% of absolute emissions based on the F2014 figure by 2018. We plan to revise this in line with our journey towards setting science-based targets.

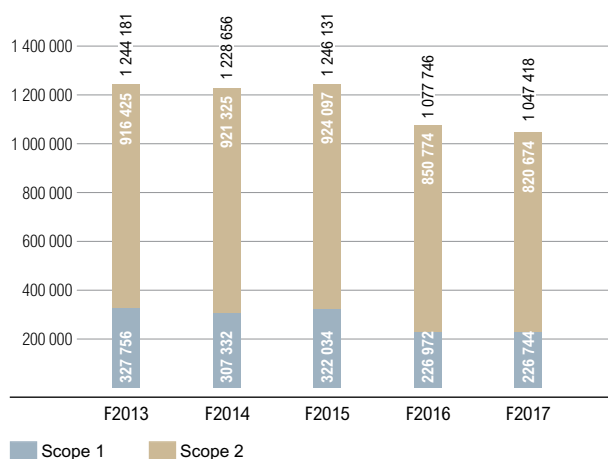
ARM's F2017 estimated carbon footprint (Scope 1 and 2 attributable emissions) decreased 3% to 1.05 mtCO<sub>2</sub>e (F2016: 1.08 mtCO<sub>2</sub>e). This decrease is partly attributable to the exclusion of emissions from Dwarsrivier Mine, which was sold at the end of F2016 and therefore not included in the F2017 calculation.

ARM's 2016 CDP Report was submitted in June 2017, based on F2016 energy consumption and GHG emission figures, which were reviewed and externally verified. We continue to consider Scope 3 activities, upstream and downstream of our operations, which enables us to assess and mitigate greenhouse gas related risks in our value chain. We measure and report on all material Scope 3 categories (10 of the 15 categories) in our CDP Report. Our most material source of emissions is associated with our investments and we work closely with our joint venture partners to ensure risks are mitigated. In 2017/18 we are undertaking a review of material Scope 3 categories and will revise our systems based on the outcomes. This process will also inform more targeted climate change-related engagement with partners in our value chain.

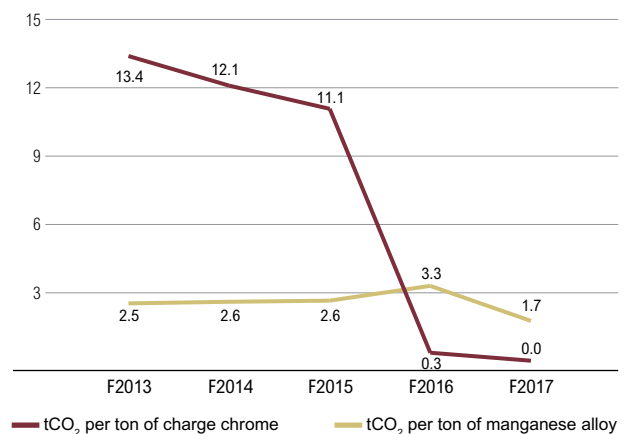


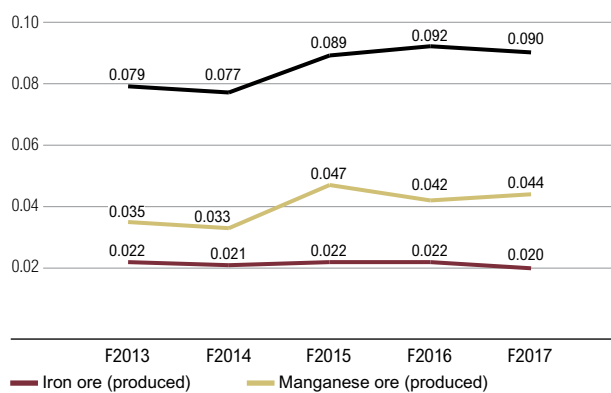
Further detailed information is available in ARM's CDP Report which is available at [www.cdp.net](http://www.cdp.net).

**CARBON FOOTPRINT (Scope 1 and 2 – attributable basis)**  
(tCO<sub>2</sub>e)



**SCOPE 1 AND 2 CARBON EMISSIONS PER TONNE PRODUCED – SMELTERS** (tCO<sub>2</sub>e)



**SCOPE 1 AND 2 CARBON EMISSIONS PER TONNE PRODUCED – MINE (tCO<sub>2</sub>e)**

\* Two Rivers and Modikwa Mines only.

We calculate efficiency ratios of carbon emissions per full-time employee and per tonne produced or processed to measure our progress in reducing emissions adjusted for changes in production activity. Scope 1 and 2 carbon emissions per tonne of manganese alloy produced, decreased to 1.7 tCO<sub>2</sub>e/tonne (F2016: 3.3 tCO<sub>2</sub>e/tonne) as Cato Ridge Works limited operations to its three most efficient furnaces. Production of charge chrome ceased in F2017.

Per tonne of iron produced, Scope 1 and 2 emissions decreased marginally to 0.020 tCO<sub>2</sub>e/tonne (F2016: 0.022 tCO<sub>2</sub>e/tonne) and per tonne of manganese ore produced, Scope 1 and 2 emissions increased marginally to 0.044 tCO<sub>2</sub>e/tonne (F2016: 0.042 tCO<sub>2</sub>e/tonne).

Carbon emissions per tonne of ore milled at our two primary platinum mines, Modikwa and Two Rivers mines, decreased marginally to 0.090 tCO<sub>2</sub>e/tonne (F2016: 0.092 tCO<sub>2</sub>e/tonne).

Scope 1 and 2 emissions per full-time employee (FTE) increased 1% to 160.4 tonnes CO<sub>2</sub>e (F2016: 158.2 tCO<sub>2</sub>e). Scope 1 and 2 emissions per man-hour increased to 45 kg CO<sub>2</sub>e (F2016: 41 kg CO<sub>2</sub>e).

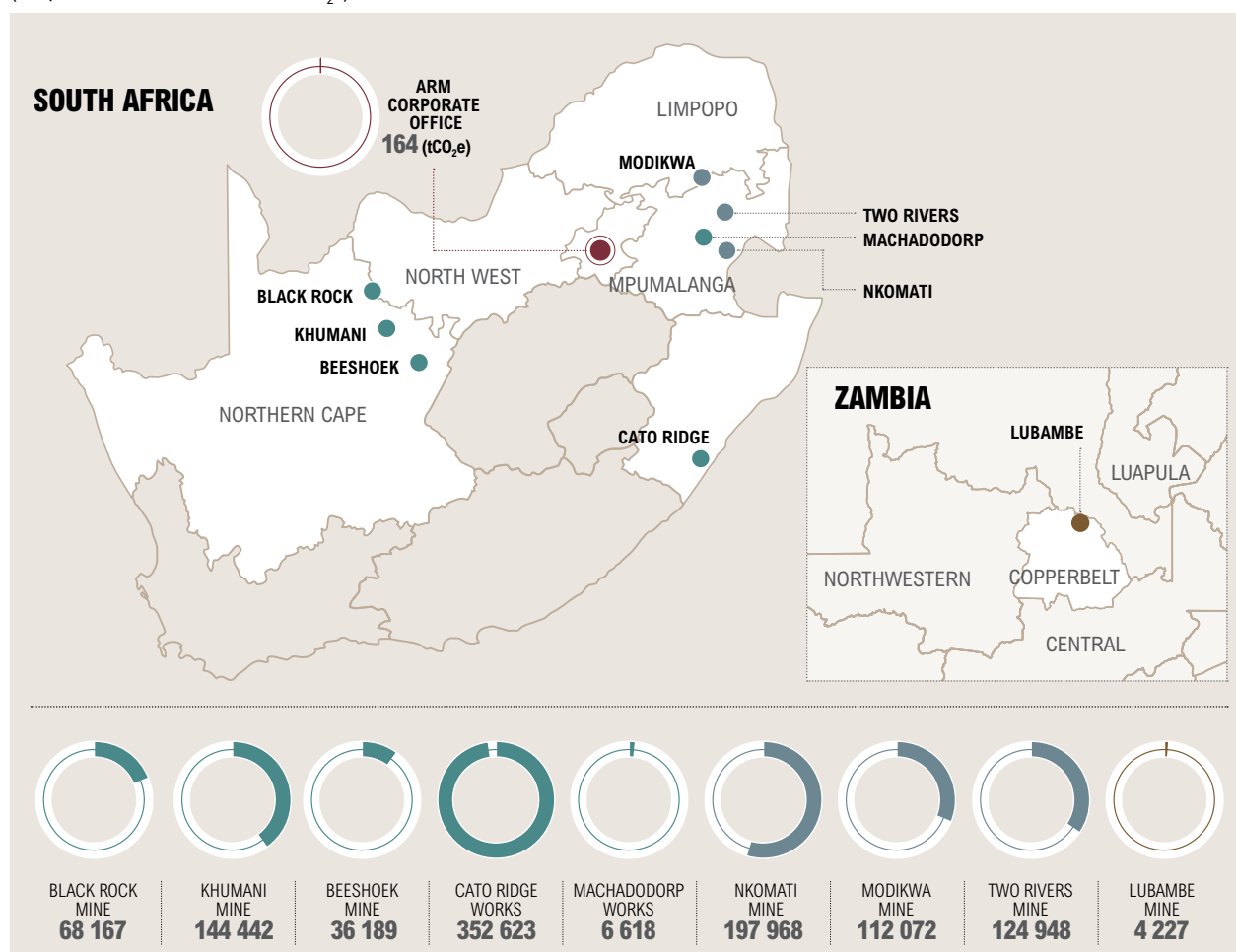
The diagram below shows F2017 Scope 1 and Scope 2 emissions on an attributable basis for each operation expressed in equivalent tonnes of CO<sub>2</sub> (tCO<sub>2</sub>e).

**Direct emissions**

The smelter at Cato Ridge Works produces direct emissions, which are regulated by an approved Air Emission Licence, issued in terms of the National Environmental Management: Air Quality Act. Emissions include carbon dioxide, nitrous oxide, sulphurous oxide and particulates. Air cleaning equipment 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.

**F2017: RELATIVE EMISSIONS PER OPERATION**

(Scope 1 and 2 attributable tonnes CO<sub>2</sub>e)





## ENERGY

Mining relies on electricity in most aspects of the production process – to power the crushers and mills that process ore, to run ventilation fans and pumps for dewatering; and the motors that drive conveyor belts. Smelting processes require significant energy for heating and nearly one-third of the Group's electricity consumption occurs at Cato Ridge Works in the ARM Ferrous division.

### 7 AFFORDABLE AND CLEAN ENERGY



The cost of electricity is a significant portion of our production cost and increasing tariffs and the potential for pass-through of carbon tax to consumers by Eskom can affect our ability to keep South African operations cost competitive in the global arena. The ongoing drought in Zambia has affected the availability of hydroelectric power supply and the electricity supply agreements to meet Lubambe Mine's energy needs came at a significantly higher cost that negatively impacted profitability.

Electricity supply interruptions have a significant impact on our operations as they affect workplace safety, production efficiencies and diesel consumption with resulting emissions when generators are used to supply electricity to critical functions such as ventilation. While electricity supply has stabilised over the last two years, the condition of off-mine electrical infrastructure is a concern. This is listed as a top 10 risk at Two Rivers Mine where the sub-station supplying the mines in the area is running at 50% above capacity with no spare transformer installed. Indications from Eskom are that this situation will not be resolved within the next five years. The long lead time for installation of new transmission lines (up to eight years) has implications for planned mine expansions.

We focus on improving energy efficiency as part of improving operational efficiencies through our strategic focus on cost competitiveness. Managing energy consumption also reduces GHG emissions and the likely cost of carbon taxes.

The Ferrous division, which includes the smelters, accounted for 49% of Group electricity consumption in F2017, the Platinum division 45% and the remainder was attributable to ARM Copper.

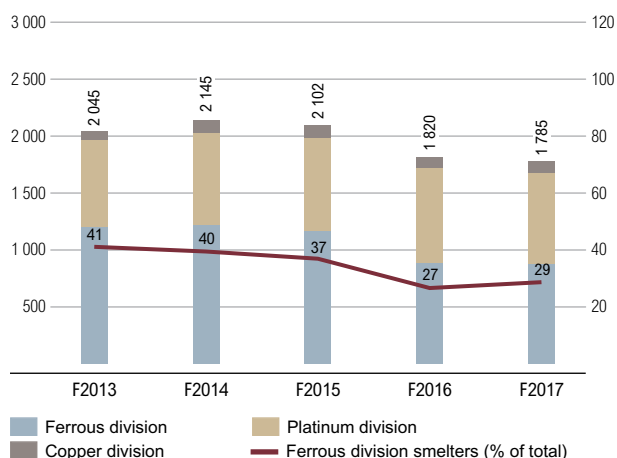
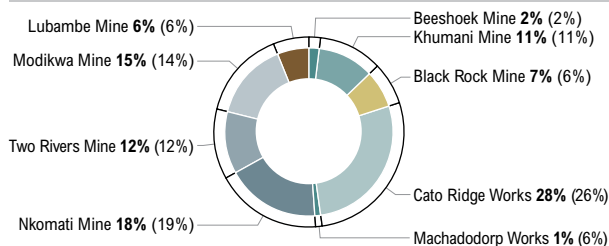
*Note: The emissions conversion factor for calculating emissions from electricity produced by coal-fired power stations, in kWh is 990 gCO<sub>2</sub>e/kWh. The published conversion factor for Zambian electricity generation is 3 gCO<sub>2</sub>/kWh due to the high contribution of hydro-electricity to their national electricity grid, hence the relatively low Scope 2 emissions generated by Lubambe Mine.*

## Energy efficiency initiatives

Various energy saving and carbon emission reduction initiatives were implemented by operations during F2017, including those listed in the table below.

Energy efficiency initiatives	Mines
> Improving compressor efficiency, including only starting on demand and repairing leaks	Two Rivers and Modikwa mines
> Improving energy efficiency of fans through controlling use and guide vane controls	Modikwa Mine
> Water conservation initiatives led to reduced pumping and switching off evaporator sprays	Modikwa Mine
> Installing of energy efficient LED lighting	Two Rivers, Beeshoek and Modikwa mines
> Power factor correction	Two Rivers Mine
> Improving ventilation efficiency by replacing underground fans, repairing leaks and removing redundant kit	Two Rivers and Modikwa mines
> Installing variable speed drives on cooling towers	Modikwa Mine

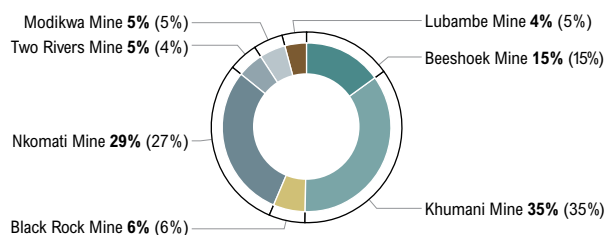
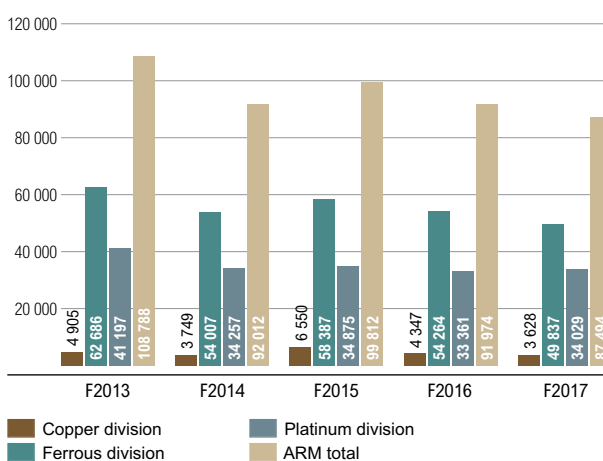
ARM Ferrous, trading as Assmang (Pty) Ltd (a joint venture with Assore Limited), is part of the Energy Intensive Users' Association and has an Energy Efficiency Charter, which includes targets for energy efficient practices. Energy reduction plans are also in place at the operations in the Platinum division.

**ELECTRICITY CONSUMPTION (100% BASIS)**  
(GWh)**ELECTRICITY CONSUMPTION BY OPERATION FOR F2017 (F2016)**  
(%)

Operations consumed 1 785 GWh (reported on a 100% basis), which represents a 2.0% decrease on F2016 (1 820 GWh). On a like-for-like basis (adjusting for Dwarsrivier Mine which was sold in July 2016), electricity consumption increased by 1.2%. The Ferrous division's electricity consumption increased by 5.6% on a like-for-like basis to 875 GWh (F2016: 887 GWh including Dwarsrivier Mine) and the Platinum division's electricity consumption decreased by 3% to 805 GWh (F2016: 829 GWh).

**Fuel consumption**

Diesel consumption is reported under Scope 1 emissions and includes both mobile and non-mobile consumption processes. Mobile diesel consumption activities include trackless machines and vehicles used for mining, loading, hauling and logistics while stationary combustion of diesel refers to electricity generation by means of generators.

**DIESEL CONSUMPTION BY OPERATION FOR F2017 (F2016)**  
(%)**DIESEL CONSUMPTION BY DIVISION (100% BASIS)**  
(000 litres)

Khumani (35%), Nkomati (29%) and Beeshoek (15%) mines represent the majority of diesel consumption in the Group. These mines are large open pit mines and diesel is mostly consumed during hauling of run-of-mine material to the concentrator plants.

On a like-for-like basis (excluding Dwarsrivier Mine in F2016), total Group diesel consumption decreased by 3% to 87.5 million litres in F2017 (F2016: 92 million litres including Dwarsrivier Mine).



## WATER MANAGEMENT

Water is a shared and finite resource, with high social, cultural, environmental and economic value. It is a basic human right and fundamental ecosystem requirement. Water is also an essential component of mining and metals operations. Global water resources are under increasing pressure and it is widely recognised that a holistic approach to water management is required to achieve resource sustainability and secure future access for all water users. Water is used for milling, beneficiation, cooling and for dust suppression during blasting, on haul roads and at ore transfer points. We need access to sufficient potable water for our employees for drinking and WASH services. Therefore, water is a material consideration from an operational and strategic perspective. Water is included in both the individual operational risk registers as well as the corporate risk register.



Water is also a critical resource for agriculture, other industries and the communities around our operations, and water stewardship is fundamental to achieving our strategic objectives. A holistic approach to water includes developing an understanding of the catchments in which we operate and we are engaging in collective action with other water users to find solutions to challenges around water availability. Water availability, consumption and pollution are regarded as key risks to the Group. The evolving impact of climate change can have a detrimental impact through changing patterns of water availability.

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. There is also more interest in collective action to reduce water usage/leaks, restore ecosystem health, identify and manage water risks through stakeholder engagement.

In some areas, operations face significant catchment-level water risks due to the standard of existing water infrastructure, the 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. Local government has to be engaged and the challenge for operations is finding the balance between taking action outside mine boundaries to mitigate water risks and partnering with government structures both locally and regionally where appropriate. Where Catchment Management Forums (CMFs) are functional, catchment level water risks are considered through engagement with stakeholders in these Forums.

In January 2017, the ICMM published a position statement on water stewardship. ICMM members are required to implement the commitments in the position statement by November 2018. While our operations already comply with the majority of these commitments, a formal gap analysis process was undertaken to identify gaps in water management and reporting. Workshops

were conducted across operations to inform a practical and realistic strategy to meet the reporting and performance requirements of various guidance and reporting frameworks, including the ICMM water position statement. During this process, we collectively explored potential water efficiency targets at individual operations and identified metrics and potential targets that would be relevant and appropriate at the facility level. These targets will be considered in informing a company-level target for ARM. Goals were also set and objectives include engaging with suppliers along the supply chain to understand and collectively manage water risks.

ARM's annual Board strategic sessions include a consideration of material issues such as water in both the regional and commodity context. The five-year business plans at each operation include a consideration of water and strategic reviews, and assess the availability and use of appropriate technology to address water requirements or manage impacts. Our ability to continue and expand our operations sustainably, is critically dependent on water quality and availability.

ARM's focus on operational efficiencies includes a recognition of the value of water and the need to use it efficiently. At operations where water is material, relevant KPIs are in place to incentivise increased water efficiency.

Water availability is considered as part of each operation's 5-year business plan, while specific operational water-related challenges are listed in the table on the next page. There remains a need to better understand catchment level risks and to better coordinate efforts to manage water at the catchment level. ARM has increased its focus on cleaning of process water through technologies such as reverse osmosis where appropriate and is investigating wetland formation, particularly relevant for mine closure plans and objectives.

Operation	Key water challenges
Machadodorp Works	Reduced production decreases the amount of water used in the production process, increasing the risk of process water discharges particularly in high rainfall periods.
Beeshoek Mine	Limited water resources, deteriorating water quality and declining regional water infrastructure. However, excess rainfall in January and February 2017 led to plant stoppages.
Black Rock Mine	Limited water resources, deteriorating water quality and declining regional water infrastructure.
Khumani Mine	Limited water resources, deteriorating water quality and declining water infrastructure. However, excessive rain in January 2017 led to seven days of lost production due to unsafe haul road conditions.
Modikwa Mine	Excess underground water. More than five megalitres of water are pumped out of the underground mining area every day.
Nkomati Mine	Excess water requires de-watering of the area around the open pit mine to keep it safe. Our priority is to minimise abstraction from other sources by recycling water and using groundwater from the de-watering process.
Lubambe Mine	Water intersection from a flooded mine in the Democratic Republic of Congo has slowed access development. This challenge is compounded by ongoing electricity supply interruptions that disrupt pumping of water out of the affected areas.

Water scarcity, the reliability of current water infrastructure and the long lead time in rolling out new infrastructure pose potential constraints on current production and future expansion, particularly for our operations in the water-stressed Northern Cape. Current limitations in the water supply from the Vaal/Gamagara/Sedibeng scheme to the Central Cape is a strategic concern for Khumani Mine. Black Rock Mine is located at the end of this supply line and constraints are a risk to the ongoing expansion at the mine. Khumani Mine has completed a detailed ground water study and boreholes have been sunk in key areas to assess the feasibility of supplementing water supply.

Since August 2016, ARM has taken a strategic role in the Vaal Gamagara Water Supply Scheme (VGGWSS) project to develop a collaborative response to the requirement for a 25-year take or pay water supply agreement. The R18 billion VGGWSS project will upgrade and increase the supply of water from the Vaal River to mines and municipalities in the Northern Cape, and to Botswana. In accordance with the National Water Act, the mines are expected to fund 60% of the project. Due to the high cost potential and long-term duration of this project, a collaborative 'Mines Leadership Forum' was established with the Chamber of Mines and various Northern Cape mines to respond to Sedibeng's development of the VGGWSS.

ARM engages regularly with interested parties and other relevant 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. We also participate in forums that discuss issues relating to sustainable water supply in the region, including climate change and the potential influence changing climate and potential regulation could have on the supply and cost of water.

Our operations engage with the Department of Water and Sanitation, local communities, local, provincial and national authorities, irrigation boards, catchment management agencies and other industry users to ensure the sustainability of water resources for all stakeholders. ARM invests in local water infrastructure through its SLPs to improve community access to sufficient potable water and increase community resilience. Community concerns about water availability are likely to increase as climate change effects on water increase and demand continues to grow.

We also invest in sinking and equipping boreholes for local community use through the ARM BBEE Trust projects, reported on page 64 and 65 of this report. Two Rivers Mine installed three boreholes at Buffelshoek after a request from the local community. Nkomati Mine refurbished the Water Treatment Works in Machadodorp/Entokozweni to ensure clean drinkable water to a community of 6 000 people. Black Rock Mine provides water to the mine villages.

## Managing water use

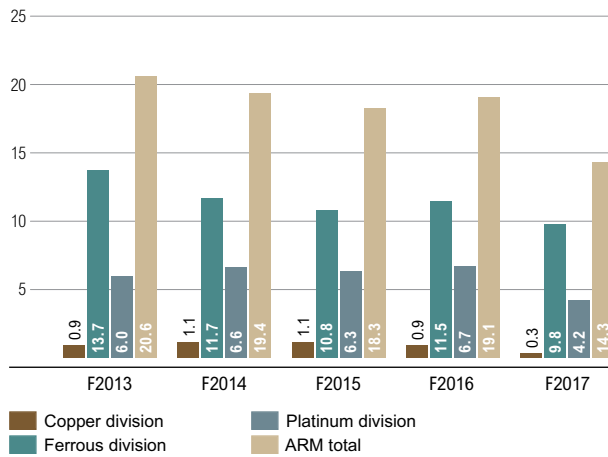
Water balances are in place at operations to manage and optimise water use. To the extent possible, we run closed circuit water systems to maximise recycling and minimise discharge into the environment. Operations separate dirty and clean water, and implement a hierarchy of water use to ensure that "dirty" or process water is recycled for re-use before clean water is abstracted from the natural environment. Our target is to recycle 100% of water and to have no discharges.

We undertake ongoing water quality monitoring to assess our impact on the receiving environment. This alerts us when mitigation is required and measures compliance with licence conditions. Water quality monitoring includes both surface and groundwater. Biomonitoring of aquatic/riverine environments is also performed as appropriate and as stipulated in each operations' Water Use Licence (WUL) conditions.



Further details of ARM's engagements around water during F2017 are available in the stakeholder engagement section on page 18, which includes a list of the water-related forums in which we participate.

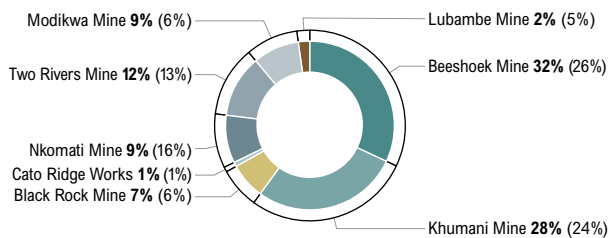
**WATER ABSTRACTION BY DIVISION (100% BASIS)**  
(m<sup>3</sup> million)



Operations abstract water from a range of sources including rivers, boreholes and municipal supplies according to the terms of the integrated water use licence at each operation.

In total, 14.3 million m<sup>3</sup> of water were abstracted by operations in F2017 (F2016: 19.1 million m<sup>3</sup>), a 25% decrease. On a like-for-like basis (adjusting for Dwarsrivier Mine, which was sold at the beginning of F2017) water use decreased by 23.2%. A large proportion of the decline is due to the decrease in water abstracted at Nkomati Mine. Due to the high rainfall during F2017, dewatering activities increased, leading to a significant decrease in surface water abstracted at the mine.

**WATER ABSTRACTION BY OPERATION FOR F2017 (F2016)**  
(%)



Beeshoek Mine accounted for 32% of the total volume of water abstracted, Khumani Mine 28% and Two Rivers Mine 12%. Most of the water Black Rock Mine abstracts is supplied to local communities and the mine's employee village. Black Rock Mine decreased its water consumption by discontinuing watering of the golf course and provision of water to the game farm.

Water abstracted by the Ferrous division decreased 14.8% to 9.8 million m<sup>3</sup> (F2016: 11.5 million m<sup>3</sup>) and 11.3% adjusting for Dwarsrivier Mine. Abstraction decreased 37.9% in the Platinum division to 4.2 million m<sup>3</sup> (F2016: 6.7 million m<sup>3</sup>).

There were four incidents at Nkomati Mine where process water (below the quality specified for discharge in their Water Use Licence) discharged into the Gladdespruit River. These incidents were due to excessive rainfall and were reported to the Inkomati-Usuthu Catchment Management Agency (IUCMA), the DWS and the Department of Environmental Affairs (DEA).





## LAND USE MANAGEMENT: REHABILITATION

The impact of our operations on local landscapes is considered at each stage from exploration to construction, operation and eventual decommissioning and closure. Wherever possible, operations undertake rehabilitation activities concurrently with ongoing mining activities.



In 2016, the Department of Environmental Affairs (DEA) published regulations in terms of the National Environmental Management Act pertaining to financial provision for rehabilitation and closure that apply to prospecting, exploration, mining or production operations. These regulations have significant financial implications for the mining industry as they require mines to provide for ongoing expenses after mine closure and effectively freeze the existing provisions for rehabilitation and closure, requiring further provisions to be made from operating expenses. The Chamber of Mines has engaged with the DMR and the DEA around the implications of the regulations and certain of the concerns have been addressed. The date for compliance with the NEMA Financial Regulations has been extended to February 2019.

Every year independent specialists update the estimated cost of rehabilitation and closure for each operation based on the requirements of relevant legislation, EMPR closure commitments and applicable good practice. These are assessed against the

Conservation Trust Fund for each operation and financial provision is made to ensure liabilities are adequately funded.

The total estimated closure cost across the Ferrous and Platinum divisions on a 100% basis (as if ARM owned 100% of the joint ventures) at the end of June 2017, was R1.01 billion (F2016: R1.05 billion). This estimated cost represents the investment required to close the mines and restore the sites to an agreed land end use or state as per the conditions in the environmental management programmes.

The operational Trust Funds total was R371 million at June 2017 and guaranteed facilities are in place for a further R756 million, representing a total closure cost provision of R1.13 billion.

While there are shortfalls at certain operations, these represent a relatively small value compared to the assets at the operations and the annual cash flows they generate. Closure costs tend to be highest in the early stages of a mine or during expansion phases when most of the disturbance occurs.

Operation	Contributions				Total provision including guarantees (Rm)	Anticipated shortfall, excluding guarantees (Rm)	Anticipated shortfall including guarantees (Rm)
	Estimated closure cost as at 30 June 2017 (Rm)	Trust fund		Guarantees (Rm)			
		2017 contribution (Rm)	Estimated fund balance as at 30 June 2017 (Rm)				
Beeshoek	128.5	5.8	81.3	51.4	132.6	47.2	4.2
Khumani	308.3	5.5	76.9	254.6	331.5	231.4	23.2
Gloria*	41.4	1.5	20.7	76.1	96.8	20.7	55.4
Nchwaning*	80.2	3.4	16.8	–	16.8	63.4	(63.4)
Black Rock*	86.1	2.4	33.8	81.9	115.8	52.3	29.7
Dwarsrivier	–	–	9.8	39.4	49.2	–	49.2
Two Rivers	63.1	2.6	18.5	42.5	61.0	44.6	(2.1)
Nkomati	182.8	–	85.2	83.2	168.3	97.7	(14.5)
Modikwa	122.6	1.9	28.4	127.0	155.4	94.3	32.7
Total	1 013.1	23.9	371.4	756.0	1 127.4	651.5	114.3

\* Part of Black Rock Mine.

## Waste management

Waste management processes aim to ensure compliance with the relevant waste legislation and to minimise our impact on the natural environment and surrounding communities. Our focus on operational efficiencies includes reducing waste production and recycling wherever possible.

Operational waste inventories describe 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.

We have expanded our reporting procedure to include more sub-categories of hazardous waste and this is reflected in the table on page 86. Our objective is to effectively sort and minimise waste and to recycle as far as practically possible. Where disposal is necessary, waste has to be safely disposed at appropriate waste facilities and safe disposal certificates obtained.

Domestic waste is disposed of in licenced municipal landfill sites and therefore we have no associated volatile organic compound (VOC) emissions. Hazardous waste includes a number of categories, including oil-contaminated material and used filters as well as medical waste, that is sent to appropriate registered waste-disposal facilities and safe disposal certificates are obtained for each hazardous waste stream. Used oil, another hazardous waste stream, is recycled through specialist service providers.

Slag is included in waste inventories at the smelters. Mine residue, including tailings and waste rock, is included in waste inventories at the mines in line with the new regulations in terms of the National Environmental Management: Waste Act.

## Waste controls

There was one hydrocarbon spill during the year at Black Rock Mine involving 449 litres of diesel due to failure of the batching system. The spill was contained in the bunded area. There was leakage of hydrocarbons from trackless machinery at Two Rivers Mine totalling an estimated 0.2m<sup>3</sup> over the course of the year. The area was cleaned with environmentally friendly bacteriological products and the incident was not reported as it occurred in minute quantity. There were some small spills of oil and diesel at Lubambe Mine due to poor handling at workshops and leaking machines.

There was a spillage of polluted silt materials from the processing plants at Nkomati Mine when a booster pump failed during dredging of the pollution control dam. The spill area was rehabilitated and the incident reported to the IUCMA.

A spill of sewage effluent occurred at Black Rock Mine due to a power failure at the sewage treatment plant while the pumps from the residential area continued to pump. The soil was neutralised with lime and the incident was reported to the Department of Water and Sanitation. It was not possible to determine the amount of sewage spilled.

Recent amendments to the National Environmental Management: Waste Act relate to the remediation of contaminated land. Contaminated land surveys have been completed for Machadodorp Works and Cato Ridge Works and the other operations will conduct surveys as appropriate. The assessment of closure and

rehabilitation costs and related financial provisions include the outcomes from these completed studies.

## Slag

The smelting process generates slag as the main industrial waste product. The volume of slag produced is minimised through management plans at each smelter that prioritise recycling and recovery of residual metal. Designated, licensed slag disposal sites within the boundaries of the smelters are fully lined to prevent soil and water pollution. Water management and drainage control around slag disposal areas is monitored through internal and external environmental programmes.

ARM's smelters produced 90 748 tonnes of slag during F2017 (F2016: 93 953 tonnes).

## Waste rock and tailings

Waste rock and tailings are by-products of mining and beneficiation activities. Tailings dams are lined to prevent pollution and surface water runoff, and ground water around waste rock dumps and tailings disposal facilities is closely monitored to alert operations to any negative impacts. Ground water modelling predicts the potential impact of tailings disposal on aquifers.

Waste stream	Definition	Disposal
Waste rock	Non-ore bearing rock removed in the mining process.	Waste rock dumps or used to backfill and rehabilitate open pit workings.
Tailings	Finely milled waste material suspended in water.	Lined tailings dams.

Tailings are classified as hazardous waste under the National Environmental Management: Waste Act. This imposes more stringent liner requirements on new stockpiles and tailings facilities which increase the cost of waste management significantly. The Chamber of Mines has engaged extensively with the DEA and DWS to provide comment on the new regulations promulgated and their implications for the mining industry. The Chamber of Mines is also engaging the DEA 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.

The ICMM published a review of tailings management guidelines and recommendations for improvement as well as a position statement on preventing catastrophic failure of tailings storage facilities in December 2016. Members are required to comply with the position statement by November 2018.

ARM conducts an annual internal review of tailings storage facilities led by an internal multi-disciplinary team. The outcomes from the review are submitted to the Audit and Risk Committee for review and assessment. The review this year focused on the controls, management systems and relevant regulations to align with the reviews done by the International Mining Industry Underwriters. It also included a gap analysis against the ICMM position statement as well as recommendations from the ICMM tailings management guidelines to use as a benchmark for further improvement.

ARM's mines produced 16.9 million tonnes of tailings in F2017 (F2016: 13.7 million tonnes) and 78.5 million tonnes of waste rock was mined during F2017, a 6% increase on F2016.

Waste produced	F2017	F2016	F2015
Slag (tonnes)	<b>90 748</b>	93 953	152 800
Waste rock (million tonnes)	<b>78.5</b>	73.8 <sup>#</sup>	75.3
Tailings (million tonnes)	<b>17.0</b>	15.4 <sup>#</sup>	16.8
Domestic waste (tonnes)	<b>2.9</b>	12.3 <sup>**</sup>	14.0
Hazardous waste: used oil (million litres)	<b>1.2</b>	1.2	1.2
Hazardous waste: other (tonnes)*	<b>723</b>	12	NR

NR Not reported.

\* In line with our improved reporting system, categories of "other" hazardous waste have been expanded.

\*\* Included 10.3 tonnes of building rubble.

# Restated.

## Biodiversity

Biodiversity encompasses the wide variety and variability of Life on Earth. It is the basis for the provision of clean water, the recycling of nutrients and pollination – sustaining human livelihoods and life itself. The estate of biodiversity over most of the globe is declining, despite increased activity by policy makers, civil society and the private sector to underpin resilience. Leadership and collaboration from all sectors is required to address this challenge.

As an ICMM member, ARM is committed to:

- > Respecting legally designated protected areas;
- > Disseminating scientific data on and promote practices and experiences in biodiversity assessment and management; and
- > Supporting the development and implementation of scientifically sound, inclusive and transparent procedures for integrated approaches to land use planning, biodiversity, conservation and mining.

Mining and associated activities impact on the physical environment and therefore effective processes and controls must be implemented to safeguard the biodiversity in the biomes in which we operate. Biodiversity baseline studies are conducted during the early stages of new and expansion projects and include investigations to identify the potential risks to biodiversity and landscape which have to be mitigated and monitored.

Three of ARM's operations are located in close proximity to sensitive areas:

Operation	Proximity to sensitive areas
Two Rivers Mine	Located within the Sekhukhune Land Centre for Plant Endemism.
Cato Ridge Works	Protected Ngonigoni grasslands to the south and south-east of the operations.
Machadodorp Works	Within the proposed Lydenburg Centre of Endemism.

Biodiversity Action Plans (BAPs) have been drafted for all operations and operations are at different stages of implementation of their biodiversity management programmes.

EIA and/or EMP processes include land use planning that involves structured engagement with community forums, local municipalities and other affected stakeholders.

The BAPs include commitments to conserve protected areas such as wetlands, zones of endemism, archaeological and heritage sites, protected and endangered species (as per the IUCN). An example of commitment to biodiversity conservation, is the biodiversity offset area which was purchased by Khumani Mine. Operational biodiversity performance audits are conducted biennially as part of external EMP audits.

Access is provided to sites for scientific research purposes if required and ARM often works in concert with government and/ or academic institutions to promote biodiversity protection, including relocations of protected species and removal of alien vegetation.

Employees, contractors and communities are provided with awareness training regarding sensitive and endangered species around our operations.

Nkomati Mine, as part of a stream flow reduction activity programme, has a fulltime team that continuously manages alien invasive plant species within the mine boundaries. Two Rivers Mine completed and submitted a Biodiversity Baseline Assessment Plan (BBAP) for its new tailings storage facility site. The BBAP contains a comprehensive action plan clearly outlining the programme of action to accomplish recommended mitigation measures.



More details of ARM's biodiversity impact and management is available in the online biodiversity management table available at [www.arm.co.za](http://www.arm.co.za).

## FOCUS FOR F2018

### ENVIRONMENTAL STEWARDSHIP

- > Continue to implement carbon emission reduction initiatives and monitor our performance against our emission targets.
- > Improving the carbon intensity of our production by identifying and implementing appropriate emission reduction initiatives.
- > Engaging proactively in the process of implementing various policy measures and environmental instruments, including carbon budgets and carbon tax.
- > Continue collaborating with other stakeholders to ensure equitable access to water and mitigation of catchment-based risks.
- > Proactive engagement with other users around our operations to understand their needs and priorities and to ensure management of water risks.
- > Continue to increase water efficiencies by maximising water recycling and re-use
- > Continue working with the operations to develop water targets.



# SUPPLEMENTARY INFORMATION

## INDEPENDENT ASSURANCE STATEMENT

**To the management and stakeholders of African Rainbow Minerals Limited ("ARM")**

### INTRODUCTION

ARM is a member of the International Council on Mining & Metals ("ICMM") and is therefore 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 for the year ended 30 June 2017 ("the Report").

Ibis ESG Assurance is an independent and licensed provider of sustainability assurance services. The assurance team was led by Petrus Gildenhuys with support from Adam Sutton-Pryce. Petrus is a Lead Certified Sustainability Assurance Practitioner (LCSAP) with 20 years' experience in sustainability performance measurement involving both advisory and assurance work. Adam Sutton-Pryce is a sustainability assurance and reporting specialist with 4 years of experience in climate change, sustainability advisory and assurance work.

### 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 was responsible for preparing the 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's 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. This assurance engagement is the second sustainability assurance engagement conducted for ARM by Ibis.

### SUBJECT MATTERS IN THE 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, included:

- > **ICMM Subject Matter 1:** ARM's alignment with the 10 ICMM Sustainable Development ("SD") Principles and associated mandatory requirements set out in the six 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) ("AA1000APS (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 indicators relating to its material SD risks and opportunities:
  - Fatality Frequency Rate (FFR) (page 38)
  - Total number of work related fatalities (page 37)
  - Lost Time Injury Frequency Rate (LTIFR) (pages 37 to 38 and the Operational Reviews on pages 29 to 60 of the Integrated Annual Report)
  - Total Recordable Injury Frequency Rate (TRIFR)
  - Electricity consumption in GWh (page 5)
  - Total fuels consumed (page 5)
  - Total volume of water abstracted from all sources (page 5)
  - Total volume of water discharged from sites (page 83)
  - Amount of CSI and LED spend (page 62)
  - Total number of new PTB cases (2016 calendar year) (page 50)
  - Total number of occupational diseases identified and submitted for compensation (page 44)
  - Total number of employees and contractors on ART (page 49)
- > **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.arm.co.za/>)

### ASSESSMENT CRITERIA

- > **ICMM Subject Matter 1:** ICMM's 10 SD principles' mandatory Requirements and the six ICMM Position Statements
- > **ICMM Subject Matter 2:** AA1000APS (2008) Principles of Inclusiveness, Materiality and Responsiveness criteria
- > **ICMM Subject Matter 3:** The Company'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:** Accuracy, validity and completeness of reported information
- > **ICMM Subject Matter 5:** GRI Standards and GRI Mining and Metals Sector Disclosure guidelines
- > **King IV:** King Report on Governance for South Africa 2016 and the King Code of Governance Principles

### ENGAGEMENT LIMITATIONS

The evidence gathering procedures for moderate assurance are more restricted than for high assurance and therefore less assurance is obtained with moderate assurance 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.

## ASSURANCE PROCEDURES PERFORMED

Our moderate assurance procedures included:

- > Interviews with relevant functional managers at head office and operations mentioned below to understand and test the processes in place for maintaining information in relation with the subject matters in the assurance scope
- > Site visits to ARM Head Office, Beeshoek, Black Rock and Modikwa operations involving testing, on a sample basis, the measurement, collection, aggregation and reporting processes in place
- > Inspection and corroboration of evidence in support of satisfying the assurance criteria at ARM's head office and the operations as mentioned above
- > Reporting the assurance observations to management as they arose to provide an opportunity for corrective action prior to completion of the assurance process
- > Assessing the presentation of information relevant to the scope of work in the Report for consistency with the assurance observations

## 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 position statements.

### In relation to ICMM Subject Matter 2

**Inclusivity:** ARM's Code of Conduct provides for dealing with stakeholder communication and relations. Documented evidence assessed at site level pointed to a high level of inclusive stakeholder engagement and collective decision-making performed, the results of which were reported regularly to the Social and Ethics Committee and the Board. However, a corporate stakeholder engagement strategy and pilot guidelines are still work in progress. It is recommended that this process be continued to support the corporate strategy. Closer alignment with the AA1000SES (Stakeholder Engagement Standard) is recommended to execute a more structured and consistent approach with stakeholder engagement across the group.

**Materiality:** In our view, ARM has applied due process in mapping and disclosing its material stakeholder issues in a transparent and balanced manner. A materiality determination process was followed and integrated with the internal risk management process. Material issues for the reporting period have been revised,

considered at Board level 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. An area for improvement identified is a mechanism for inviting public engagement on ARM's website from outside of the organisation.

### In relation to ICMM Subject Matter 3

The process observed to identify the group's material risks and opportunities are mature and ARM's reporting demonstrates the year-on-year shift in issues compared to the previous year.

### In relation to ICMM Subject Matter 4

It was observed that comprehensive measures are in place to provide source-data for the selected Key Performance Indicators (KPIs) assessed. A corporate-level data reporting procedure aimed to ensure the consistent interpretation of definitions across the group, and to provide guidance on key internal controls required for reliable data reporting throughout the year, is still in the process of development. It is recommended that this procedure be finalised and implemented prior to the next reporting cycle.

### 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 pack documents and other meeting minutes as well as policy documents, confirmed application of King IV.

A comprehensive management report detailing specific findings and recommendations for continued sustainability reporting improvement has been submitted to ARM management for consideration.



**Petrus Gildenhuys**

Director

Ibis ESG Assurance (Pty) Ltd



**AA1000**

Licensed Assurance Provider  
000-156

Johannesburg, 10 October 2017

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.

## SUPPLEMENTARY INFORMATION continued

## ARM'S REPORTING IN TERMS OF THE UN GLOBAL COMPACT AND THE ICMM SUSTAINABLE DEVELOPMENT PRINCIPLES

ARM's approach to sustainability reporting is guided by a range of environmental, social and governance (ESG) frameworks and guidelines. These are listed on page 29 and represented in the diagram on pages 2 and 3. ARM's GRI table is available on page 95 and the UN Sustainable Development Goals are linked diagrammatically throughout this report and referenced in the table on pages 92 and 93.

The table below provides a reference to where this report provides guidance regarding reporting in terms of the United Nations Global Compact (UNGC) and the International Council on Mining and Metals (ICMM) Sustainable Development Principles. The principles of both guidelines are published on page 91 for reference.

ESG Area	Principles	Reference
<b>Environmental</b>		
Environmental Stewardship	UNGC 7 UNGC 8 UNGC 9 ICMM 6 ICMM 7	Ensuring responsible stewardship of our natural resources (pages 72 – 87) Our contribution to society (pages 22 – 25) Biodiversity tables available on the ARM website <a href="http://www.arm.co.za">www.arm.co.za</a>
<b>Social</b>		
Social responsibility	ICMM 9	Our contribution to society (pages 22 – 25) Transformation (pages 66 – 69) Corporate social responsibility (pages 58 – 65)
Product responsibility	ICMM 8	Our contribution to society (page 25)
Health and safety	ICMM 5	Executive Chairman's report (IAR) (pages 6 – 9) Chief executive officer's report (pages 26 – 27) Safety, occupational health and wellness (pages 34 – 51)
Fair labour practices	UNGC 3 UNGC 4 UNGC 5 UNGC 6	Human resources management (page 52 – 57) Human rights (page 70) Report of the Social and Ethics Committee (pages 32 and 33)
<b>Governance</b>		
Ethics and human rights	UNGC 1 UNGC 2 UNGC 10 ICMM 1 ICMM 3	Report of the Social and Ethics Committee (pages 32 and 33) Our approach to sustainability (pages 28 – 31) Comment from the Sustainability Assurance Provider (page 69) Ethics (page 69) Human rights (page 70)
Risk management	ICMM 4	Our most material matters (pages 12 – 15) Corporate Governance Report (pages 22 – 28) available at <a href="http://www.arm.co.za">www.arm.co.za</a>
Stakeholder inclusivity	ICMM 10	Our key stakeholders (pages 16 – 21)
Strategic integration of sustainability	ICMM 2	Our most material matters (pages 12 – 15) Executive Chairman's report (IAR) (pages 6 – 9) Chief executive officer's report (pages 26 and 27) Our approach to sustainability (pages 28 – 31) Report of the Social and Ethics Committee (pages 32 and 33)

## 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.
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



1. Implement and maintain ethical business practices and sound systems of corporate governance.
2. Integrate sustainable development considerations within the corporate decision-making process.
3. Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities.
4. Implement risk management strategies based on valid data and sound science.
5. Seek continual improvement of our health and safety performance.
6. Seek continual improvement of our environmental performance.
7. Contribute to conservation of biodiversity and integrated approaches to land use planning.
8. Facilitate and encourage responsible product design, use, re-use, recycling and disposal of our products.
9. Contribute to the social, economic and institutional development of the communities in which we operate.
10. Implement effective and transparent engagement, communication and independently verified reporting arrangements with our stakeholders.

## SUPPLEMENTARY INFORMATION continued

# THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDGs)

SDG	How ARM makes a difference	Reference
 <b>1 NO POVERTY</b>	<p>Payment of taxes and royalties; direct employment; sourcing goods and services locally; enterprise development, building capacity in communities and investing in Corporate Social Investment (CSI) and Local Economic Development (LED).</p>	<p>Our contribution to society (page 24) Human resources management (pages 52 – 57) Corporate Social Responsibility (pages 58 – 65) Transformation (pages 66 – 69)</p>
 <b>2 ZERO HUNGER</b>	<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. ARM manages its impacts on natural resources through a precautionary approach to environmental stewardship, consultative land management, including biodiversity conservation and rehabilitation and closure planning.</p>	<p>Ensuring responsible stewardship of our natural resources (pages 72 – 87)</p>
 <b>3 GOOD HEALTH AND WELLBEING</b>	<p>Our employees' health, hygiene and safety are critical to ARM's long-term sustainability. Our wellness programme integrates safety, occupational hygiene and health, TB, HIV &amp; Aids and chronic disease management. Our three operations in the Northern Cape have partnered with the Department of Health to improve health services among employees and local communities.</p> <p>ARM's CSI and LED projects focus on building capacity in local communities and prioritise women, HIV &amp; Aids projects, the advancement of people living with disabilities, the advancement of people living with disabilities, youth and the socially destitute.</p>	<p>Occupational health and wellness (pages 42 – 51) Corporate Social Responsibility (pages 58 – 65)</p>
 <b>4 QUALITY EDUCATION</b>	<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 also 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 54 and 55) Corporate Social Responsibility (pages 58 – 65) Our contribution to society (page 24)</p>
 <b>5 GENDER EQUALITY</b>	<p>ARM promotes gender equality. 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 development (pages 56 and 57) Corporate Social Responsibility (pages 58 – 65)</p>
 <b>6 CLEAN WATER AND SANITATION</b>	<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.</p>	<p>Ensuring responsible stewardship of our natural resources (pages 81 – 83)</p>
 <b>7 AFFORDABLE AND CLEAN ENERGY</b>	<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>Ensuring responsible stewardship of our natural resources (pages 79 and 80) Our contribution to society (pages 22 and 23)</p>
 <b>8 DECENT WORK AND ECONOMIC GROWTH</b>	<p>Direct and indirect employment, enterprise and supplier development, and local procurement create large economic multipliers. For growth to be fully inclusive, we require government to effectively manage revenues from mining and encourage linkages to the broader economy.</p>	<p>Our contribution to society (page 24) Human resources management (pages 52 – 57) Corporate Social Responsibility (pages 58 – 65) Transformation (pages 66 – 69)</p>

## SDG

## How ARM makes a difference



Mining requires significant infrastructure investments in order to develop, operate and mine products in remote areas. We make significant investments in infrastructure.

ARM conducts research and development to identify innovative applications in mining technology.



We embrace an inclusive approach to community consultation and participation in decision-making.



The products of our mining and smelting operations such as steel and copper play a vital role in construction of cities.



While mining produces the materials essential for modern society and contained in the products we use every day, it also generates large quantities of waste. We manage our waste and look for recycling opportunities such as donating the modern pallets our equipment is packed in for delivery at Lubambe Mine to a local community furniture manufacturing project.



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. We report publicly our carbon emissions in this Sustainability Report and in our annual CDP Report.



We work closely with our partners to ensure safe and responsible shipping with minimal risk to marine ecology.



As a manager of large areas of land, we play an important role in biodiversity and conservation management.



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.



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.

## Reference

Corporate Social Responsibility  
(pages 58 – 65)

Our key stakeholders  
(pages 16 – 21)  
Corporate Social Responsibility  
(pages 58 – 65)  
Transformation (pages 66 – 69)

Our contribution to society  
(pages 22 and 23)

Our contribution to society  
(pages 22 and 23)  
Ensuring responsible stewardship  
of our natural resources  
(pages 85 and 86)

Ensuring responsible stewardship  
of our natural resources  
(pages 75 – 78)  
[www.cdp.net](http://www.cdp.net)

Product stewardship (page 25)

Ensuring responsible stewardship  
of our natural resources  
(pages 84 – 86)

Our key stakeholders (pages 16 – 21)  
Report of the Social and Ethics  
Committee (pages 32 and 33)  
Our approach to sustainability  
(pages 28 – 31)  
Ethics (page 69)  
Human Rights (page 70)

Our key stakeholders (pages 16 – 21)  
Our approach to sustainability  
(pages 28 – 31)

## SUPPLEMENTARY INFORMATION continued

**BEE VERIFICATION AGENCY CC****Black Economic Empowerment Verification Certificate**

A12-03

**Measured Entity**

Registered Name	African Rainbow Minerals Limited
Reg. Number	1933/004580/06
Trade Name	African Rainbow Minerals Limited including Subsidiaries as per Annexure "A"
Location	29 Impala Road Chislehurst, Sandton 2196
VAT Number	4010113662

**BEE Status**

Certificate Number	VER180
Issue Date	2017/10/25
Expiry Date	2018/10/24
Applicable Scorecard	DTI Generic Government Gazette No.36928 11 October 2013
Applicable BEE Codes	Code Series 100-500
BBBEE Status Level	Level 7 Contributor (Discounted)
Procurement Recognition Level	50%
Black Ownership	55.42%
Black Female Ownership	1.37%
Modified Flow Trough Principal Applied	Yes
Empowering Supplier	Yes
Designated Group Supplier	No

**BEE Score Per Element**

Ownership	21.54/25
Management Control	10.52/15
Skills Development	11.50/20
Enterprise and Supplier Development	22.42/40
Socio-Economic Development	5/5
<b>Total:</b>	<b>70.98/105</b>

BEE Verification Agency CC (BVA214) has assessed the BEE credentials of the above verified entity and certifies hereby that the BEE status, as certified above, is a true and impartial reflection of the BEE status of the enterprise.

Signature: Compliance Manager  
T van Zyl

BEE Verification Agency CC  
2008/062532/23  
Tel: 021 975 3689  
info@bee-verification.com

**sanas**  
BEE Verification Agency  
BVA214



**BEE VERIFICATION AGENCY CC**


### **Annexure A – Subsidiary List**

This letter serves to confirm that the BEE rating received by African Rainbow Minerals Limited (VER180) is equally applicable to the following operations as listed below:

Assmang (Pty) Ltd operating the following operations:

- Beeshoek Iron Ore Mine
- Khumani Iron Ore Mine
- Black Rock Manganese Operations
- Cato Ridge Manganese Works
- Cato Ridge Alloys
- Machadodorp Works

Two Rivers Platinum Mine  
 Modikwa Platinum Mine  
 Nkomati Nickel Mine  
 Venture Building Trust (Pty) Ltd

  
 Signature: Compliance Manager  
 T van Zyl  
 Date: 25 October 2017

BEE Verification Agency CC  
 2008/062532/23  
 Tel: 021 975 3689  
[info@bee-verification.com](mailto:info@bee-verification.com)

 **sanas**  
 BEE Verification Agency  
 BVA214

## SUPPLEMENTARY INFORMATION continued

# GRI CONTENT INDEX

This Sustainability Report has been prepared and presented in accordance with the Global Reporting Initiative's (GRI) Standards "CORE" application level and its Mining and Metals Sector Disclosures. The GRI content index that follows lists the General Disclosures, as well as the Management Approach Disclosures and topic-specific disclosures for the relevant material topics.

## REPORTING PRINCIPLES FOR DEFINING REPORT CONTENT

- > **Materiality** – Our most material matters inform our strategy, governance structures, risk management, operational management and reporting. More detail is available on pages 12 to 15.
- > **Stakeholder inclusiveness** – Our engagements with our key stakeholders provide the context for the way we do business and shape our strategy. Our approach to stakeholder engagement, key engagements during the year and an overview of our stakeholder groups are shown on pages 16 to 21.
- > **Sustainability context** – The sustainability context is described at the start of each section of this Sustainability Report, which is structured around the most material issues.
- > **Completeness** – We believe that this report covers all matters material to ARM during F2017 in appropriate detail.

### GRI 102: General Disclosures

Disclosure Number	Disclosure Title	Description	Reference
<b>102-1</b>	Name of the organisation	Name of the organisation	About this report (page 1)
<b>102-2</b>	Activities, brands, products and services	a. A description of the organisation's activities. b. Primary brands, products, and services, including an explanation of any products or services that are banned in certain markets.	Our structure (pages 8 and 9) Our business model (pages 10 and 11) Our contribution to society (pages 22 – 25)
<b>102-3</b>	Location of headquarters	Location of the organisation's headquarters.	Contact details (Inside back cover)
<b>102-4</b>	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 6 and 7)
<b>102-5</b>	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.
<b>102-6</b>	Markets served	Markets served, including: i. geographic locations where products and services are offered; ii. sectors served; iii. types of customers and beneficiaries.	Where we operate (pages 6 and 7) Our contribution to society (pages 22 – 25)
<b>102-7</b>	Scale of the organisation	Scale of the organisation, including: i. total number of employees; ii. total number of operations; iii. net sales (for private sector organisations) or net revenues (for public sector organisations); iv. total capitalisation (for private sector organisations) broken down in terms of debt and equity; v. quantity of products or services provided.	Our sustainability performance year-on-year (page 5) Where we operate (pages 6 and 7) Group Financial Review (IAR) (pages 102 – 124) Operational reviews (IAR) (pages 30 – 67)

Disclosure Number	Disclosure Title	Description	Reference
102-8	Information on employees and other workers	<ul style="list-style-type: none"> <li>a. Total number of employees by employment contract (permanent and temporary), by gender.</li> <li>b. Total number of employees by employment contract (permanent and temporary), by region.</li> <li>c. Total number of employees by employment type (full-time and part-time), by gender.</li> <li>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.</li> <li>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).</li> <li>f. An explanation of how the data have been compiled, including any assumptions made.</li> </ul>	<p>Human resources management (page 52)</p> <p>8% of our workforce is female</p> <p>Most employees are full-time or contractors</p> <p>More information on ARM's workforce breakdown is available in the 2017 sustainability data tables on the ARM website <a href="http://www.arm.co.za">www.arm.co.za</a></p> <p>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 2017</p> <p>Note that occupational health and safety statistics use average annual employees and contractors as discussed on page 1</p>
102-9	Supply chain	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>Our contribution to society (page 25)</p> <p>Corporate social responsibility (page 61)</p>
102-10	Significant changes to the organisation and its supply chain	<p>Significant changes to the organisation's size, structure, ownership, or supply chain, including:</p> <ul style="list-style-type: none"> <li>i. Changes in the location of, or changes in, operations, including facility openings, closings, and expansions;</li> <li>ii. Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organisations);</li> <li>iii. Changes in the location of suppliers, the structure of the supply chain, or relationships with suppliers, including selection and termination.</li> </ul>	<p>About this report (page 1)</p> <p>Dwarsrivier Mine was sold in July 2016. Apart from this transaction, there were no significant changes during the reporting period in ARM's size, structure, ownership or supply chain</p> <p>Where we operate (pages 6 and 7)</p>
102-11	Precautionary Principle or approach	Whether and how the organisation applies the Precautionary Principle or approach.	<p>Executive chairman's report (IAR) (page 9)</p> <p>Occupational health and safety (page 45)</p> <p>Ensuring responsible stewardship of our natural resources (page 72)</p>
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.	<p>Our roadmap to sustainable development reporting (pages 2 and 3)</p> <p>Inputs into our approach to sustainable development (pages 29 and 30)</p> <p>UN Global Compact (pages 90 and 91)</p> <p>UN Sustainable Development Goals (pages 92 and 93)</p>

## SUPPLEMENTARY INFORMATION continued

Disclosure Number	Disclosure Title	Description	Reference
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 9) Chief Executive Officer's report (pages 26 and 27) Our key stakeholders (page 21) Our contribution to society (page 25) Inputs into our approach to sustainable development (page 29)
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 6 – 9) Chief Executive Officer's report (pages 26 and 27)
102-15	Key impacts, risks, and opportunities	a. A description of key impacts, risks, and opportunities.	Our most material matters (pages 12 – 15) Risk report (pages 22 – 28 of the Corporate Governance Report available at <a href="http://www.arm.co.za">www.arm.co.za</a> )
102-16	Values, principles, standards, and norms of behaviour	A description of the organisation's values, principles, standards, and norms of behaviour.	Our values and strategy (page 9) Maintaining our social licence to operate (pages 58 and 59) Report of the Social and Ethics Committee (pages 32 and 33) Ethics (page 69) Human rights (page 70)
102-17	Mechanisms for advice and concerns about ethics	A description of internal and external mechanisms for: i. seeking advice about ethical and lawful behaviour, and organisational integrity; ii. reporting concerns about unethical or unlawful behaviour, and organisational integrity.	Maintaining our social licence to operate (page 59) Human rights (page 70)
102-18	Governance structure	a. Governance structure of the organisation, including committees of the highest governance body. b. Committees responsible for decision-making on economic, environmental, and social topics.	Report of the Social and Ethics Committee (pages 32 and 33) Summarised Corporate Governance Report (IAR) (pages 75 – 81) Corporate Governance Report available at <a href="http://www.arm.co.za">www.arm.co.za</a>
102-19	Delegating authority	Process for delegating authority for economic, environmental, and social topics from the highest governance body to senior executives and other employees.	How we manage sustainability in our business (page 31) Summarised Corporate Governance Report (IAR) (pages 74 – 84)
102-20	Executive-level responsibility for economic, environmental, and social topics	a. Whether the organisation has appointed an executive-level position or positions with responsibility for economic, environmental, and social topics. b. Whether post holders report directly to the highest governance body.	How we manage sustainability in our business (page 31)
102-21	Consulting stakeholders on economic, environmental, and social topics	a. Processes for consultation between stakeholders and the highest governance body on economic, environmental, and social topics. b. If consultation is delegated, describe to whom it is delegated and how the resulting feedback is provided to the highest governance body.	Our key stakeholders (pages 16 – 21) Maintaining our social licence to operate (pages 58 and 59) Report of the Social and Ethics Committee (pages 32 and 33)

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"> <li>i. executive or non-executive;</li> <li>ii. independence;</li> <li>iii. tenure on the governance body;</li> <li>iv. number of each individual's other significant positions and commitments, and the nature of the commitments;</li> <li>v. gender;</li> <li>vi. membership of under-represented social groups;</li> <li>vii. competencies relating to economic, environmental, and social topics;</li> <li>viii. stakeholder representation.</li> </ul>	<p>Summarised Corporate Governance Report (IAR) (pages 75 – 81)</p> <p>Corporate Governance Report available at <a href="http://www.arm.co.za">www.arm.co.za</a></p>
102-23	Chair of the highest governance body	<ul style="list-style-type: none"> <li>a. Whether the chair of the highest governance body is also an executive officer in the organisation.</li> <li>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.</li> </ul>	<p>Summarised Corporate Governance Report (IAR) (pages 78 and 79)</p> <p>Corporate Governance Report available at <a href="http://www.arm.co.za">www.arm.co.za</a></p>
102-24	Nominating and selecting the highest governance body	<ul style="list-style-type: none"> <li>a. Nomination and selection processes for the highest governance body and its committees.</li> <li>b. Criteria used for nominating and selecting highest governance body members, including whether and how: <ul style="list-style-type: none"> <li>i. stakeholders (including shareholders) are involved;</li> <li>ii. diversity is considered;</li> <li>iii. independence is considered;</li> <li>iv. expertise and experience relating to economic, environmental, and social topics are considered.</li> </ul> </li> </ul>	<p>Corporate Governance (IAR) (pages 78 and 79)</p> <p>Corporate Governance Report available at <a href="http://www.arm.co.za">www.arm.co.za</a></p>
102-25	Conflicts of interest	<ul style="list-style-type: none"> <li>a. Processes for the highest governance body to ensure conflicts of interest are avoided and managed.</li> <li>b. Whether conflicts of interest are disclosed to stakeholders, including, as a minimum: <ul style="list-style-type: none"> <li>i. Cross-board membership;</li> <li>ii. Cross-shareholding with suppliers and other stakeholders;</li> <li>iii. Existence of controlling shareholder;</li> <li>iv. Related party disclosures.</li> </ul> </li> </ul>	<p>Summarised Corporate Governance Report (IAR) (page 84)</p> <p>Corporate Governance Report available at <a href="http://www.arm.co.za">www.arm.co.za</a></p>
102-26	Role of highest governance body in setting purpose, values, and strategy	Highest governance body's and senior executives' roles in the development, approval, and updating of the organisation's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental, and social topics.	<p>Summarised Corporate Governance Report (IAR) (pages 74 – 84)</p> <p>Corporate Governance Report available at <a href="http://www.arm.co.za">www.arm.co.za</a></p>
102-27	Collective knowledge of highest governance body	Measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental, and social topics.	<p>Summarised Corporate Governance Report (IAR) (page 79)</p> <p>Corporate Governance Report available at <a href="http://www.arm.co.za">www.arm.co.za</a></p>

## SUPPLEMENTARY INFORMATION continued

Disclosure Number	Disclosure Title	Description	Reference
<b>102-28</b>	Evaluating the highest governance body's performance	<ul style="list-style-type: none"> <li>a. Processes for evaluating the highest governance body's performance with respect to governance of economic, environmental, and social topics.</li> <li>b. Whether such evaluation is independent or not, and its frequency.</li> <li>c. Whether such evaluation is a self-assessment.</li> <li>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.</li> </ul>	Summarised Corporate Governance Report (IAR) (page 79) Corporate Governance Report available at <a href="http://www.arm.co.za">www.arm.co.za</a>
<b>102-29</b>	Identifying and managing economic, environmental, and social impacts	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	How we manage sustainability in our business (page 31) Our most material matters (pages 12 – 15) Risk report (pages 22 – 28 of the Corporate Governance Report available at <a href="http://www.arm.co.za">www.arm.co.za</a> )
<b>102-30</b>	Effectiveness of risk management processes	Highest governance body's role in reviewing the effectiveness of the organisation's risk management processes for economic, environmental, and social topics.	How we manage sustainability in our business (page 31) Risk report (pages 22 – 28 of the Corporate Governance Report available at <a href="http://www.arm.co.za">www.arm.co.za</a> )
<b>102-31</b>	Review of economic, environmental, and social topics	Frequency of the highest governance body's review of economic, environmental, and social topics and their impacts, risks, and opportunities.	How we manage sustainability in our business (page 31) Report of the Social and Ethics Committee (pages 32 and 33)
<b>102-32</b>	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.	Social and Ethics Committee
<b>102-33</b>	Communicating critical concerns	Process for communicating critical concerns to the highest governance body.	Summarised Corporate Governance Report (IAR) (page 74) Corporate Governance Report available at <a href="http://www.arm.co.za">www.arm.co.za</a>

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"> <li>i. Fixed pay and variable pay, including performance-based pay, equity-based pay, bonuses, and deferred or vested shares;</li> <li>ii. Sign-on bonuses or recruitment incentive payments;</li> <li>iii. Termination payments;</li> <li>iv. Clawbacks;</li> <li>v. Retirement benefits, including the difference between benefit schemes and contribution rates for the highest governance body, senior executives, and all other employees.</li> </ul> <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>Summarised Remuneration Report (IAR) (pages 85 – 99)</p> <p>The Remuneration Report is available in the Corporate Governance Report at <a href="http://www.arm.co.za">www.arm.co.za</a></p>
102-36	Process for determining remuneration	<p>a. Process for determining remuneration.</p> <p>b. Whether remuneration consultants are involved in determining remuneration and whether they are independent of management.</p> <p>c. Any other relationships that the remuneration consultants have with the organisation.</p>	<p>Summarised Remuneration Report (IAR) (pages 85 – 99)</p> <p>The Remuneration Report is available in the Corporate Governance Report at <a href="http://www.arm.co.za">www.arm.co.za</a></p>
102-37	Stakeholders' involvement in remuneration	<p>a. How stakeholders' views are sought and taken into account regarding remuneration.</p> <p>b. If applicable, the results of votes on remuneration policies and proposals.</p>	<p>Summarised Remuneration Report (IAR) (pages 85 – 99)</p> <p>The Remuneration Report is available in the Corporate Governance Report at <a href="http://www.arm.co.za">www.arm.co.za</a></p>
102-38	Annual total compensation ratio	<p>a. Ratio of the annual total compensation for the organisation's highest-paid individual in each country of significant operations to the median annual total compensation for all employees (excluding the highest-paid individual) in the same country.</p>	<p>Summarised Remuneration Report (IAR) (pages 85 – 99)</p> <p>The Remuneration Report is available in the Corporate Governance Report at <a href="http://www.arm.co.za">www.arm.co.za</a></p>
102-40	List of stakeholder groups	<p>a. A list of stakeholder groups engaged by the organisation.</p>	Our key stakeholders (pages 16 – 21)
102-41	Collective bargaining agreements	<p>a. Percentage of total employees covered by collective bargaining agreements.</p>	Labour relations (pages 55 and 56)
102-42	Identifying and selecting stakeholders	<p>a. The basis for identifying and selecting stakeholders with whom to engage.</p>	Our key stakeholders (pages 16 – 21)
102-43	Approach to stakeholder engagement	<p>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>	<p>Our key stakeholders (pages 16 – 21)</p> <p>There was no stakeholder engagement undertaken specifically as part of the report preparation process</p>

## SUPPLEMENTARY INFORMATION continued

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: <ul style="list-style-type: none"> <li>i. how the organisation has responded to those key topics and concerns, including through its reporting;</li> <li>ii. the stakeholder groups that raised each of the key topics and concerns.</li> </ul>	Our key stakeholders (pages 16 – 21)
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). We report only on those JVs over which we have 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) The introduction to this table (page 95) Our most material matters (pages 12 – 15) How we manage sustainability in our business (page 31)
102-47	List of material topics	a. A list of the material topics identified in the process for defining report content.	Our most material matters (pages 12 – 15)
102-48	Restatements of information	a. The effect of any restatements of information given in previous reports, and the reasons for such restatements.	About this report (page 1) We continue to improve our systems for measuring and monitoring our performance to ensure comprehensive and reliable data. Minor restatements were made to F2016 waste and training spend per person to reflect improved information.
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) There were no significant changes in the scope, boundary or measurement methods applied.
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 2016 and covered the 12-month period ending 30 June 2016.
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 95)

Disclosure Number	Disclosure Title	Description	Reference
102-55	GRI content index	<ul style="list-style-type: none"> <li>a. The GRI content index, which specifies each of the GRI Standards used and lists all disclosures included in the report.</li> <li>b. For each disclosure, the content index shall include: <ul style="list-style-type: none"> <li>i. the number of the disclosure (for disclosures covered by the GRI Standards);</li> <li>ii. the page number(s) or URL(s) where the information can be found, either within the report or in other published materials;</li> <li>iii. if applicable, and where permitted, the reason(s) for omission when a required disclosure cannot be made.</li> </ul> </li> </ul>	This table (pages 95 – 120)
102-56	External assurance	<ul style="list-style-type: none"> <li>a. A description of the organisation's policy and current practice with regard to seeking external assurance for the report.</li> <li>b. If the report has been externally assured: <ul style="list-style-type: none"> <li>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;</li> <li>ii. The relationship between the organisation and the assurance provider;</li> <li>iii. Whether and how the highest governance body or senior executives are involved in seeking external assurance for the organisation's sustainability report.</li> </ul> </li> </ul>	About this report (page 1) Independent Assurance Statement (pages 88 and 89)

## SUPPLEMENTARY INFORMATION continued

GRI 200: Economic			
Disclosure Number	Disclosure Title	Description	Reference
<b>201</b>	Management approach disclosures – Economic performance	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 (IAR) (page 1) Summarised Corporate Governance Report (IAR) (pages 75 – 81) Financial Review (IAR) (pages 102 – 124)
<b>201-1</b>	Direct economic value generated and distributed	a. Direct economic value generated and distributed (EVG&D) on an accruals basis, including the basic components for the organisation's global operations as listed below. If data are presented on a cash basis, report the justification for this decision in addition to reporting the following basic components: <ul style="list-style-type: none"> <li>i. Direct economic value generated: revenues;</li> <li>ii. Economic value distributed: operating costs, employee wages and benefits, payments to providers of capital, payments to government by country, and community investments;</li> <li>iii. Economic value retained: 'direct economic value generated' less 'economic value distributed'.</li> </ul> b. Where significant, report EVG&D separately at country, regional, or market levels, and the criteria used for defining significance.	ARM's direct contribution to the economy (page 24) Group value add statement (IAR) (page 28)
<b>201-2</b>	Financial implications and other risks and opportunities due to climate change	a. Risks and opportunities posed by climate change that have the potential to generate substantive changes in operations, revenue, or expenditure, including: <ul style="list-style-type: none"> <li>i. a description of the risk or opportunity and its classification as either physical, regulatory, or other;</li> <li>ii. a description of the impact associated with the risk or opportunity;</li> <li>iii. the financial implications of the risk or opportunity before action is taken;</li> <li>iv. the methods used to manage the risk or opportunity;</li> <li>v. the costs of actions taken to manage the risk or opportunity.</li> </ul>	Ensuring responsible stewardship of our natural resources (pages 75 – 78) Our contribution to society (pages 23) The ARM CDP Report available at <a href="http://www.cdp.net">www.cdp.net</a>

Disclosure Number	Disclosure Title	Description	Reference
201-3	Defined benefit plan obligations and other retirement plans	<ul style="list-style-type: none"> <li>a. If the plan's liabilities are met by the organisation's general resources, the estimated value of those liabilities.</li> <li>b. If a separate fund exists to pay the plan's pension liabilities: <ul style="list-style-type: none"> <li>i. the extent to which the scheme's liabilities are estimated to be covered by the assets that have been set aside to meet them;</li> <li>ii. the basis on which that estimate has been arrived at;</li> <li>iii. when that estimate was made.</li> </ul> </li> <li>c. If a fund set up to pay the plan's pension liabilities is not fully covered, explain the strategy, if any, adopted by the employer to work towards full coverage, and the timescale, if any, by which the employer hopes to achieve full coverage.</li> <li>d. Percentage of salary contributed by employee or employer.</li> <li>e. Level of participation in retirement plans, such as participation in mandatory or voluntary schemes, regional, or country-based schemes, or those with financial impact.</li> </ul>	Note 43 to the Annual Financial Statements (AFS)
201-4	Financial assistance received from government	<ul style="list-style-type: none"> <li>a. Total monetary value of financial assistance received by the organisation from any government during the reporting period, including: <ul style="list-style-type: none"> <li>i. tax relief and tax credits;</li> <li>ii. subsidies;</li> <li>iii. investment grants, research and development grants, and other relevant types of grant;</li> <li>iv. awards;</li> <li>v. royalty holidays;</li> <li>vi. financial assistance from Export Credit Agencies (ECAs);</li> <li>vii. financial incentives;</li> <li>viii. other financial benefits received or receivable from any government for any operation.</li> </ul> </li> <li>b. The information in 201-4-a by country.</li> <li>c. Whether, and the extent to which, any government is present in the shareholding structure.</li> </ul>	ARM did not receive financial assistance from government during F2017 in any of its countries of operation.
		MMSD: Report countries of operation that are either candidate to or compliant with the Extractive Industries Transparency Initiative (EITI).	Zambia is compliant with the EITI. South Africa and Malaysia are not candidate to or compliant with the EITI.
203	Management approach disclosures – Indirect economic impacts	<ul style="list-style-type: none"> <li>103-1 Explanation of the material topic and its Boundary</li> <li>103-2 The management approach and its components</li> <li>103-3 Evaluation of the management approach</li> </ul>	Corporate Social Responsibility (pages 58 – 61)

## SUPPLEMENTARY INFORMATION continued

Disclosure Number	Disclosure Title	Description	Reference
<b>203-1</b>	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.	Corporate Social Responsibility (pages 60 – 65) Corporate Social Responsibility initiatives are delivered through Corporate Social Investment projects and Local Economic Development projects. ARM tracks the capital invested as well as the number of jobs created through the projects.
<b>204</b>	Management approach disclosures – Procurement practices	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 66 and 67)
<b>204-1</b>	Proportion of spending on local suppliers	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'.	ARM's direct contribution to the economy (page 24) Transformation (pages 67 –69) 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.
<b>205</b>	Management approach disclosures – Anti-corruption	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	Our roadmap to sustainable development reporting (pages 2 and 3) Our approach to sustainability (page 28) Ethics (page 69) Summarised Corporate Governance Report (IAR) (pages 75 – 81)
<b>205-1</b>	Operations assessed for risks related to corruption	a. Total number and percentage of operations assessed for risks related to corruption. b. Significant risks related to corruption identified through the risk assessment.	Analysing for risk of corruption is inherent to the risk management process which is applied to all our operations and on corporate level. Process level risk assessment in relation to Human Resources includes potential corruption risks, risk assessments relating to external supply and services include corruption risk and the internal and external auditors cover corruption risk.

Disclosure Number	Disclosure Title	Description	Reference
205-2	Communication and training about anti-corruption policies and procedures	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>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.</li> <li>d. Total number and percentage of governance body members that have received training on anti-corruption, broken down by region.</li> <li>e. Total number and percentage of employees that have received training on anti-corruption, broken down by employee category and region.</li> </ul>	Existing employees have been trained in the Code of Conduct which is available to employees on the intranet and on the Company website. All new employees receive training in the Code of Conduct. Online training on the Code of Conduct has been carried out at the ARM Corporate Office, the ARM Platinum and the ARM Ferrous operations. The Code was most recently amended with effect 1 July 2017.
205-3	Confirmed incidents of corruption and actions taken	<ul style="list-style-type: none"> <li>a. Total number and nature of confirmed incidents of corruption.</li> <li>b. Total number of confirmed incidents in which employees were dismissed or disciplined for corruption.</li> <li>c. Total number of confirmed incidents when contracts with business partners were terminated or not renewed due to violations related to corruption.</li> <li>d. Public legal cases regarding corruption brought against the organisation or its employees during the reporting period and the outcomes of such cases.</li> </ul>	<p>Pages 21 and 25 of the Corporate Governance Report.</p> <p>There were no confirmed incidents of corruption reported in F2017.</p>

## SUPPLEMENTARY INFORMATION continued

GRI 300: Environmental			
Disclosure Number	Disclosure Title	Description	Reference
<b>302</b>	Management approach disclosures – Energy	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Ensuring responsible stewardship of our natural resources (pages 72 – 74 and 79 and 80)
<b>302-1</b>	Energy consumption within the organisation	a. Total fuel consumption within the organisation from non-renewable sources, in joules or multiples, and including fuel types used. b. Total fuel consumption within the organisation from renewable sources, in joules or multiples, and including fuel types used. c. In joules, watt-hours or multiples, the total: i. electricity consumption ii. heating consumption iii. cooling consumption iv. steam consumption d. In joules, watt-hours or multiples, the total: i. electricity sold ii. heating sold iii. cooling sold iv. steam sold e. Total energy consumption within the organisation, in joules or multiples. f. Standards, methodologies, assumptions, and/or calculation tools used. g. Source of the conversion factors used.	Fuels consumed in our operations include diesel, petrol, aviation fuel, paraffin, acetylene, natural gas and LPG. Diesel is the most used fuel and accounts for 99.2% of carbon emissions from fuel use. Diesel use in F2017 totalled 87.0 million litres, which equates to 3.2 million gigajoules (F2016: 3.4 million GJ). There are currently no fuels from renewable resources used at ARM. Total electricity consumption in F2016 of 1.8 million megawatt hours equates to 6.4 million gigajoules (F2016: 6.6 million GJ). No electricity or others forms of energy were sold during F2017. Total energy consumed (including electricity and diesel) in F2017 was 9.6 million gigajoules (F2016: 9.6 million GJ). Fuel and electricity consumption is collected directly from supplier notes and by monitoring electricity meters and metering on fuel tanks. Diesel is converted to GJ using the conversion factor supplied in the GRI G3.1 indicator protocol set.
<b>302-3</b>	Energy intensity	a. Energy intensity ratio for the organisation. b. organisation-specific metric (the denominator) chosen to calculate the ratio. c. Types of energy included in the intensity ratio; whether fuel, electricity, heating, cooling, steam, or all. d. Whether the ratio uses energy consumption within the organisation, outside of it, or both.	Gigajoules of energy used per full-time employee increased to 727 GJ/FTE in F2017 (F2016: 718). This calculation includes diesel and electricity consumed within the organisation.
<b>303</b>	Management approach disclosures – Water	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Ensuring responsible stewardship of our natural resources (pages 72 – 74 and 81 – 83) Our key stakeholders (page 18)
<b>303-1</b>	Water withdrawal by source	a. Total volume of water withdrawn, with a breakdown by the following sources: i. Surface water, including water from wetlands, rivers, lakes, and oceans; ii. Ground water; iii. Rainwater collected directly and stored by the organisation; iv. Waste water from another organisation; v. Municipal water supplies or other public or private water utilities. b. Standards, methodologies, and assumptions used.	Ensuring responsible stewardship of our natural resources (pages 81 – 83) Surface water: 5.6 million m <sup>3</sup> Ground water: 4.3 million m <sup>3</sup> Municipal water: 4.3 million m <sup>3</sup> Total water abstracted: 14.3 million m <sup>3</sup> Water abstraction is measured directly in cubic metres through flow meters installed in the water system.

Disclosure Number	Disclosure Title	Description	Reference
304	Management approach disclosures – Biodiversity	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Ensuring responsible stewardship of our natural resources (pages 72 – 74 and 86)
304-2	Significant impacts of activities, products, and services on biodiversity	a. Nature of significant direct and indirect impacts on biodiversity with reference to one or more of the following: i. Construction or use of manufacturing plants, mines, and transport infrastructure; ii. Pollution (introduction of substances that do not naturally occur in the habitat from point and non-point sources); iii. Introduction of invasive species, pests, and pathogens; iv. Reduction of species; v. Habitat conversion; vi. Changes in ecological processes outside the natural range of variation (such as salinity or changes in groundwater level). b. Significant direct and indirect positive and negative impacts with reference to the following: i. Species affected; ii. Extent of areas impacted; iii. Duration of impacts; iv. Reversibility or irreversibility of the impacts.	Ensuring responsible stewardship of our natural resources (page 86) Online biodiversity table available on the ARM website <b>www.arm.co.za</b>
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	a. Total number of IUCN Red List species and national conservation list species with habitats in areas affected by the operations of the organisation, by level of extinction risk: i. Critically endangered ii. Endangered iii. Vulnerable iv. Near threatened v. Least concern	Ensuring responsible stewardship of our natural resources (page 86) Online biodiversity table available on the ARM website <b>www.arm.co.za</b>
		MMSD: Include impacts identified as a consequence of any resettlement and closure activities reported under indicators MM9 and MM10 respectively.	Ensuring responsible stewardship of our natural resources (page 86) Online biodiversity table available on the ARM website <b>www.arm.co.za</b>
305	Management approach disclosures – Emissions	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Ensuring responsible stewardship of our natural resources (pages 72 – 74)

## SUPPLEMENTARY INFORMATION continued

Disclosure Number	Disclosure Title	Description	Reference
<b>305-1</b>	Direct (Scope 1) GHG emissions	<ul style="list-style-type: none"> <li>a. Gross direct (Scope 1) GHG emissions in metric tons of CO<sub>2</sub> equivalent.</li> <li>b. Gases included in the calculation; whether CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub>, or all.</li> <li>c. Biogenic CO<sub>2</sub> emissions in metric tons of CO<sub>2</sub> equivalent.</li> <li>d. Base year for the calculation, if applicable, including: <ul style="list-style-type: none"> <li>i. the rationale for choosing it;</li> <li>ii. emissions in the base year;</li> <li>iii. the context for any significant changes in emissions that triggered recalculations of base year emissions.</li> </ul> </li> <li>e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source.</li> <li>f. Consolidation approach for emissions; whether equity share, financial control, or operational control.</li> <li>g. Standards, methodologies, assumptions, and/or calculation tools used.</li> </ul>	<p>Ensuring responsible stewardship of our natural resources (pages 75 – 78)</p> <p>The ARM CDP Report available at <a href="http://www.cdp.net">www.cdp.net</a> provides additional information regarding base years, standards, methodologies, assumptions, sources of emission factors and global warming potential rates used. While the 2017 CDP Report reflects emissions data for F2016, the additional information remains relevant year-to-year.</p>
<b>305-2</b>	Energy indirect (Scope 2) GHG emissions	<ul style="list-style-type: none"> <li>a. Gross location-based energy indirect (Scope 2) GHG emissions in metric tons of CO<sub>2</sub> equivalent.</li> <li>b. If applicable, gross market-based energy indirect (Scope 2) GHG emissions in metric tons of CO<sub>2</sub> equivalent.</li> <li>c. If available, the gases included in the calculation; whether CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub>, or all.</li> <li>d. Base year for the calculation, if applicable, including: <ul style="list-style-type: none"> <li>i. the rationale for choosing it;</li> <li>ii. emissions in the base year;</li> <li>iii. the context for any significant changes in emissions that triggered recalculations of base year emissions.</li> </ul> </li> <li>e. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source.</li> <li>f. Consolidation approach for emissions; whether equity share, financial control, or operational control.</li> <li>g. Standards, methodologies, assumptions, and/or calculation tools used.</li> </ul>	<p>Ensuring responsible stewardship of our natural resources (pages 75 – 78)</p> <p>The ARM CDP Report available at <a href="http://www.cdp.net">www.cdp.net</a> provides additional information regarding base years, standards, methodologies, assumptions, sources of emission factors and global warming potential rates used. While the 2017 CDP Report reflects emissions data for F2016, the additional information remains relevant year-to-year.</p>

Disclosure Number	Disclosure Title	Description	Reference
305-3	Other indirect (Scope 3) GHG emissions	<ul style="list-style-type: none"> <li>a. Gross other indirect (Scope 3) GHG emissions in metric tons of CO<sub>2</sub> equivalent.</li> <li>b. If available, the gases included in the calculation; whether CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub>, or all.</li> <li>c. Biogenic CO<sub>2</sub> emissions in metric tons of CO<sub>2</sub> equivalent.</li> <li>d. Other indirect (Scope 3) GHG emissions categories and activities included in the calculation.</li> <li>e. Base year for the calculation, if applicable, including: <ul style="list-style-type: none"> <li>i. the rationale for choosing it;</li> <li>ii. emissions in the base year;</li> <li>iii. the context for any significant changes in emissions that triggered recalculations of base year emissions.</li> </ul> </li> <li>f. Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source.</li> <li>g. Standards, methodologies, assumptions, and/or calculation tools used.</li> </ul>	<p>Ensuring responsible stewardship of our natural resources (pages 75 – 78)</p> <p>The ARM CDP Report available at <a href="http://www.cdp.net">www.cdp.net</a> provides additional information regarding base years, standards, methodologies, assumptions, sources of emission factors and global warming potential rates used. While the 2017 CDP Report reflects emissions data for F2016, the additional information remains relevant year-to-year.</p>
305-4	GHG emissions intensity	<ul style="list-style-type: none"> <li>a. GHG emissions intensity ratio for the organisation.</li> <li>b. organisation-specific metric (the denominator) chosen to calculate the ratio.</li> <li>c. Types of GHG emissions included in the intensity ratio; whether direct (Scope 1), energy indirect (Scope 2), and/or other indirect (Scope 3).</li> <li>d. Gases included in the calculation; whether CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub>, or all.</li> </ul>	Ensuring responsible stewardship of our natural resources (page 78)
305-6	Emissions of ozone-depleting substances (ODS)	<ul style="list-style-type: none"> <li>a. Production, imports, and exports of ODS in metric tons of CFC-11 (trichlorofluoromethane) equivalent.</li> <li>b. Substances included in the calculation.</li> <li>c. Source of the emission factors used.</li> <li>d. Standards, methodologies, assumptions, and/or calculation tools used.</li> </ul>	We do not have ozone-depleting substances at our operations, no Persistent Organic Pollutants (POPs) and no volatile organics.
305-7	Nitrogen oxides (NOx), sulphur oxides (SOx), and other significant air emissions	<ul style="list-style-type: none"> <li>a. Significant air emissions in kilograms or multiples, for each of the following: <ul style="list-style-type: none"> <li>i. NOx</li> <li>ii. SOx</li> <li>iii. Persistent organic pollutants (POP)</li> <li>iv. Volatile organic compounds (VOC)</li> <li>v. Hazardous air pollutants (HAP)</li> <li>vi. Particulate matter (PM)</li> <li>vii. Other standard categories of air emissions identified in relevant regulations</li> </ul> </li> <li>b. Source of the emission factors used.</li> <li>c. Standards, methodologies, assumptions, and/or calculation tools used.</li> </ul>	<p>Our 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 Organic Compounds (VOCs).</p>

## SUPPLEMENTARY INFORMATION continued

Disclosure Number	Disclosure Title	Description	Reference
		MMSD: Include emissions from both major mobile sources and on-site stationary sources.	The two smelters are the significant sources of air emissions and are stationary sources.
<b>306</b>	Management approach disclosures – Effluents and waste	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Ensuring responsible stewardship of our natural resources (pages 72 – 74 and page 85)
<b>306-1</b>	Water discharge by quality and destination	The reporting organisation shall report the following information: a. Total volume of planned and unplanned water discharges by: i. destination; ii. quality of the water, including treatment method; iii. whether the water was reused by another organisation. b. Standards, methodologies, and assumptions used.	Ensuring responsible stewardship of our natural resources (page 83)
<b>306-2</b>	Waste by type and disposal method	a. Total weight of hazardous waste, with a breakdown by the following disposal methods where applicable: i. Reuse ii. Recycling iii. Composting iv. Recovery, including energy recovery v. Incineration (mass burn) vi. Deep well injection vii. Landfill viii. On-site storage ix. Other (to be specified by the organisation) b. Total weight of non-hazardous waste, with a breakdown by the following disposal methods where applicable: i. Reuse ii. Recycling iii. Composting iv. Recovery, including energy recovery v. Incineration (mass burn) vi. Deep well injection vii. Landfill viii. On-site storage ix. Other (to be specified by the organisation) c. How the waste disposal method has been determined: i. Disposed of directly by the organisation, or otherwise directly confirmed ii. Information provided by the waste disposal contractor iii. organisational defaults of the waste disposal contractor	Ensuring responsible stewardship of our natural resources (pages 85 and 86)

Disclosure Number	Disclosure Title	Description	Reference
306-3	Significant spills	a. Total number and total volume of recorded significant spills . b. The following additional information for each spill that was reported in the organisation's financial statements: i. Location of spill; ii. Volume of spill; iii. Material of spill, categorised by: oil spills (soil or water surfaces), fuel spills (soil or water surfaces), spills of wastes (soil or water surfaces), spills of chemicals (mostly soil or water surfaces), and other (to be specified by the organisation). c. Impacts of significant spills.	Ensuring responsible stewardship of our natural resources (page 85)
		MMSD: Include spillage of tailings, slimes or other significant process materials.	There were no spillages of tailings or slimes. Minor hydrocarbon spillages are disclosed on page 85. Water discharges are described on page 83.
306-4	Transport of hazardous waste	a. Total weight for each of the following: i. Hazardous waste transported ii. Hazardous waste imported iii. Hazardous waste exported iv. Hazardous waste treated b. Percentage of hazardous waste shipped internationally. c. Standards, methodologies, and assumptions used.	ARM does not transport, import or export any waste categorised as hazardous under the terms of the Basel Convention.
307	Management approach disclosures – Environmental compliance	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Ensuring responsible stewardship of our natural resources (pages 72 – 74)
307-1	Non-compliance with environmental laws and regulations	a. Significant fines and non-monetary sanctions for non-compliance with environmental laws and/or regulations in terms of: i. total monetary value of significant fines; ii. total number of non-monetary sanctions; iii. cases brought through dispute resolution mechanisms. b. If the organisation has not identified any non-compliance with environmental laws and/or regulations, a brief statement of this fact is sufficient.	Legal compliance (page 21 of the Corporate Governance Report) Maintaining our social licence to operate (page 59) Ensuring responsible stewardship of our natural resources (page 74)

## SUPPLEMENTARY INFORMATION continued

GRI 400: Social			
Disclosure Number	Disclosure Title	Description	Reference
<b>401</b>	Management approach disclosures – Employment	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 52 – 53)
<b>401-1</b>	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 54) More information on new employee hires and turnover is available in the sustainability data tables available on the ARM website <a href="http://www.arm.co.za">www.arm.co.za</a>
<b>401-2</b>	Benefits provided to full-time employees that are not provided to temporary or part-time employees	a. Benefits which are standard for full-time employees of the organisation but are not provided to temporary or part-time employees, by significant locations of operation. These include, as a minimum: i. life insurance; ii. health care; iii. disability and invalidity coverage; iv. parental leave; v. retirement provision; vi. stock ownership; vii. others. b. The definition used for 'significant locations of operation'.	Occupational health and wellness (pages 42 – 51) 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.
<b>402</b>	Management approach disclosures – Labour/management relations	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Labour relations (pages 55 and 56)
<b>402-1</b>	Minimum notice periods regarding operational changes	a. Minimum number of weeks' notice typically provided to employees and their representatives prior to the implementation of significant operational changes that could substantially affect them. b. For organisations with collective bargaining agreements, report whether the notice period and provisions for consultation and negotiation are specified in collective agreements.	Labour relations (pages 55 and 56) The minimum notice period regarding operational changes is specified in collective agreements, and varies between one month and three months, on average.
<b>403</b>	Management approach disclosures – Occupational health and safety	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 manage safety and occupational health (page 35) Safety (pages 36 – 41) Occupational health and wellness (pages 42 – 51)

Disclosure Number	Disclosure Title	Description	Reference
403-1	Workers representation in formal joint management-worker health and safety committees	<ul style="list-style-type: none"> <li>a. The level at which each formal joint management-worker health and safety committee typically operates within the organisation.</li> <li>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.</li> </ul>	<p>Ensuring a safe, health and appropriately skilled workforce (pages 34 – 51)</p> <p>Health and safety agreements are concluded at every operation and are agreements between employees (including organised labour) and the employer.</p>
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"> <li>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"> <li>i. region;</li> <li>ii. gender.</li> </ul> </li> <li>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"> <li>i. region;</li> <li>ii. gender.</li> </ul> </li> <li>c. The system of rules applied in recording and reporting accident statistics.</li> </ul>	<p>Safety (pages 36 – 41)</p> <p>Occupational health and wellness (pages 42 – 51)</p> <p>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 <a href="http://www.arm.co.za">www.arm.co.za</a></p>
		MMSD: Provide a description of each accident resulting in a fatality and actions taken following the accident.	There were no fatalities at ARM operations in F2017.
403-3	Workers with high incidence or high risk of diseases related to their occupation	<ul style="list-style-type: none"> <li>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.</li> </ul>	Occupational health and wellness (pages 42 – 51)
403-4	Health and safety topics covered in formal agreements with trade unions	<ul style="list-style-type: none"> <li>a. Whether formal agreements (either local or global) with trade unions cover health and safety.</li> <li>b. If so, the extent, as a percentage, to which various health and safety topics are covered by these agreements.</li> </ul>	<p>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 TB, HIV &amp; Aids.</p> <p>Representation is recorded in minutes of these meetings and records kept at the operations. Percentage representation is not centrally recorded.</p>
404	Management approach disclosures – Training and education	<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 resources management (pages 53 and 54)

## SUPPLEMENTARY INFORMATION continued

Disclosure Number	Disclosure Title	Description	Reference
404-1	Average hours of training per year per employee	a. Average hours of training that the organisation's employees have undertaken during the reporting period, by: <ul style="list-style-type: none"> <li>i. gender;</li> <li>ii. employee category.</li> </ul>	<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.</p> <p>More information on training hours is available in the sustainability data tables available on the ARM website <a href="http://www.arm.co.za">www.arm.co.za</a></p>
404-2	Programs for upgrading employee skills and transition assistance programs	<ul style="list-style-type: none"> <li>a. Type and scope of programs implemented and assistance provided to upgrade employee skills.</li> <li>b. Transition assistance programs provided to facilitate continued employability and the management of career endings resulting from retirement or termination of employment.</li> </ul>	Human resources management (pages 54 and 55)
404-3	Percentage of employees receiving regular performance and career development reviews	a. Percentage of total employees by gender and by employee category who received a regular performance and career development review during the reporting period.	All full-time employees receive various levels of regular performance and career development reviews as part of the ARM remuneration and incentive system.
405	Management approach disclosures – Diversity and equal opportunity	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 53, 54, 56, 57) Transformation (pages 66 – 69) Summarised Corporate Governance Report (IAR) (page 78)
405-1	Diversity of governance bodies and employees	<ul style="list-style-type: none"> <li>a. Percentage of individuals within the organisation's governance bodies in each of the following diversity categories:               <ul style="list-style-type: none"> <li>i. Gender;</li> <li>ii. Age group: under 30 years old, 30-50 years old, over 50 years old;</li> <li>iii. Other indicators of diversity where relevant (such as minority or vulnerable groups).</li> </ul> </li> <li>b. Percentage of employees per employee category in each of the following diversity categories:               <ul style="list-style-type: none"> <li>i. Gender;</li> <li>ii. Age group: under 30 years old, 30-50 years old, over 50 years old;</li> <li>iii. Other indicators of diversity where relevant (such as minority or vulnerable groups).</li> </ul> </li> </ul>	Human resources management (pages 56 and 57) Transformation (pages 67 – 69) Summarised Corporate Governance Report (IAR) (pages 76 – 78) More information on the workforce breakdown is available in the sustainability data tables available on the ARM website <a href="http://www.arm.co.za">www.arm.co.za</a>

Disclosure Number	Disclosure Title	Description	Reference
406	Management approach disclosures – Non-discrimination	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 53) Transformation (page 66) Human rights (page 70)
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.	Allegations of discrimination reported on the Whistleblower hotline were investigated and found to be unsubstantiated.
407	Management approach disclosures – Freedom of association and collective bargaining	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 53) Human rights (page 70)
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	a. Operations and suppliers in which workers' rights to exercise freedom of association or collective bargaining may be violated or at significant risk either in terms of: i. type of operation (such as manufacturing plant) and supplier; ii. countries or geographic areas with operations and suppliers considered at risk. b. Measures taken by the organisation in the reporting period intended to support rights to exercise freedom of association and collective bargaining.	No operations or suppliers have been identified in which employee rights to exercise freedom of association or collective bargaining may be violated or at significant risk. We respect our employees' rights to collective bargaining.
408	Management approach disclosures – Child labour	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Human rights (page 70)

## SUPPLEMENTARY INFORMATION continued

Disclosure Number	Disclosure Title	Description	Reference
<b>408-1</b>	Operations and suppliers at significant risk for incidents of child labour	a. Operations and suppliers considered to have significant risk for incidents of: <ul style="list-style-type: none"> <li>i. child labour;</li> <li>ii. young workers exposed to hazardous work.</li> </ul> b. Operations and suppliers considered to have significant risk for incidents of child labour either in terms of: <ul style="list-style-type: none"> <li>i. type of operation (such as manufacturing plant) and supplier;</li> <li>ii. countries or geographic areas with operations and suppliers considered at risk.</li> </ul> c. Measures taken by the organisation in the reporting period intended to contribute to the effective abolition of child labour.	We do not use child labour. 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.
<b>409</b>	Management approach disclosures – Forced or compulsory labour	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Human rights (page 70)
<b>409-1</b>	Operations and suppliers at significant risk for incidents of forced or compulsory labour	a. Operations and suppliers considered to have significant risk for incidents of forced or compulsory labour either in terms of: <ul style="list-style-type: none"> <li>i. type of operation (such as manufacturing plant) and supplier;</li> <li>ii. countries or geographic areas with operations and suppliers considered at risk.</li> </ul> b. Measures taken by the organisation in the reporting period intended to contribute to the elimination of all forms of forced or compulsory labour.	ARM's operations do not pose such risk. Our policies are compatible with international human rights standards and with the South African Constitution. Through the implementation of our supplier engagement plan we review the practices of suppliers and contractors and have not detected significant risk.
<b>410</b>	Management approach disclosures – Security practices	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Human rights (page 70)
<b>410-1</b>	Security personnel trained in human rights policies or procedures	a. Percentage of security personnel who have received formal training in the organisation's human rights policies or specific procedures and their application to security. b. Whether training requirements also apply to third-party organisations providing security personnel.	Human rights training is provided to all security personnel, including contractors, and refresher training is provided every second week.
<b>411</b>	Management approach disclosures – Rights of indigenous peoples	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Human rights (page 70)

Disclosure Number	Disclosure Title	Description	Reference
411-1	Incidents of violations involving rights of indigenous peoples	a. Total number of identified incidents of violations involving the rights of indigenous peoples during the reporting period. b. Status of the incidents and actions taken with reference to the following: <ul style="list-style-type: none"> <li>i. Incidents reviewed by the organisation;</li> <li>ii. Remediation plans being implemented;</li> <li>iii. Remediation plans that have been implemented, with results reviewed through routine internal management review processes;</li> <li>iv. Incident no longer subject to action.</li> </ul>	There have been 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	Management approach disclosures – Local communities	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	Maintaining our social licence to operate (pages 58 – 65)
413-1	Operations with local community engagement, impact assessments, and development programs	a. Percentage of operations with implemented local community engagement, impact assessments, and/or development programs, including the use of: <ul style="list-style-type: none"> <li>i. social impact assessments, including gender impact assessments, based on participatory processes;</li> <li>ii. environmental impact assessments and ongoing monitoring;</li> <li>iii. public disclosure of results of environmental and social impact assessments;</li> <li>iv. local community development programs based on local communities' needs;</li> <li>v. stakeholder engagement plans based on stakeholder mapping;</li> <li>vi. broad based local community consultation committees and processes that include vulnerable groups;</li> <li>vii. works councils, occupational health and safety committees and other worker representation bodies to deal with impacts;</li> <li>viii. formal local community grievance processes.</li> </ul>	Corporate social responsibility (pages 58 – 65)
413-2	Operations with significant actual and potential negative impacts on local communities	a. Operations with significant actual and potential negative impacts on local communities, including: <ul style="list-style-type: none"> <li>i. the location of the operations;</li> <li>ii. the significant actual and potential negative impacts of operations.</li> </ul>	ARM's operations comply with the environmental and social legal requirements and thereby manage and minimise as far as practically possible significant actual or potential negative impacts on local communities.

## SUPPLEMENTARY INFORMATION continued

Disclosure Number	Disclosure Title	Description	Reference
419	Management approach disclosures – Socio-economic compliance	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Report of the Social and Ethics Committee (pages 32 and 33) Ensuring responsible stewardship of our natural resources (pages 72 – 74)
419-1	Non-compliance with laws and regulations in the social and economic area	a. Significant fines and non-monetary sanctions for non-compliance with laws and/or regulations in the social and economic area in terms of: i. total monetary value of significant fines; ii. total number of non-monetary sanctions; iii. cases brought through dispute resolution mechanisms. b. If the organisation has not identified any non-compliance with laws and/or regulations, a brief statement of this fact is sufficient. c. The context against which significant fines and non-monetary sanctions were incurred.	Refer to the Section 54 Notices discussed on pages 36 and 39 of the Safety section.
		MMSD: Report a summary of judgements made against the organisation in the areas related to health and safety and labour laws.	No judgements were made against ARM in terms of health and safety, and labour laws in F2017.

## GRI Sector Supplement: Metals and Mining

Disclosure Number	Description	Reference
MM1	Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated.	Land use management (page 84) Online biodiversity table available on the ARM website <a href="http://www.arm.co.za">www.arm.co.za</a>
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.	Biodiversity (page 86) Online biodiversity table available on the ARM website <a href="http://www.arm.co.za">www.arm.co.za</a>
MM3	Total amounts of overburden, rock, tailings, and sludges presenting potential hazards.	Waste management (pages 85 and 86) ARM does not collect data centrally on this parameter. This is managed regularly and inspected by qualified engineers and if a risk is identified, it is included in the risk register of the operation.
MM4	Number of strikes and lockouts exceeding one week's duration, by country.	Human resources management (page 55)
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 Mine, Nkomati Mine, Modikwa Mine and Lubambe Mine.
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 (page 59)
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 F2017.
MM10	Number and percentage of operations with closure plans.	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.

## SUPPLEMENTARY INFORMATION continued

**GLOSSARY**

<b>AA1000APS</b>	Accountability Principles Standard 2008
<b>ABC</b>	Anti-Fraud Bribery and Corruption
<b>AET</b>	Adult Education and Training
<b>AFS</b>	Annual Financial Statements
<b>Aids</b>	Acquired Immune Deficiency Syndrome
<b>AMCU</b>	Association of Mineworkers and Construction Union
<b>AR</b>	Absentee Rate
<b>ARM</b>	African Rainbow Minerals Limited
<b>ART</b>	Anti-Retroviral Treatment
<b>ASM</b>	Artisanal and Small-scale Mining
<b>BAP</b>	Biodiversity Action Plan
<b>BBAP</b>	Biodiversity Baseline Assessment Plan
<b>BEE</b>	Black Economic Empowerment
<b>B-BBEE</b>	Broad-Based Black Economic Empowerment
<b>BUSA</b>	Business Unity South Africa
<b>CDP</b>	Carbon Disclosure Project
<b>CEO</b>	Chief Executive Officer
<b>CGR</b>	Corporate Governance Report
<b>CoGP</b>	Codes of Good Practice
<b>COM</b>	Chamber of Mines
<b>CSI</b>	Corporate Social Investment
<b>CSR</b>	Corporate Social Responsibility
<b>CTF</b>	Culture Transformation Framework
<b>CTPV</b>	Coat Tar Pitch Volatiles
<b>Cu</b>	Copper
<b>CVT</b>	Counselling and Voluntary Testing
<b>dB</b>	Decibels
<b>DEA</b>	Department of Environmental Affairs
<b>DMR</b>	Department of Mineral Resources
<b>DoH</b>	Department of Health
<b>DoL</b>	Department of Labour

<b>dTi</b>	Department of Trade and Industry
<b>DWS</b>	Department of Water and Sanitation (previously DWA: Department of Water Affairs)
<b>EBITDA</b>	Earnings before interest, tax, depreciation and amortisation
<b>ED</b>	Enterprise Development
<b>EE</b>	Employment Equity
<b>EIA</b>	Environmental Impact Assessment
<b>EITI</b>	Extractive Industries Transport Initiative
<b>EMP</b>	Environmental Management Plan
<b>EMPR</b>	Environmental Management Programme Report
<b>EMS</b>	Environmental Management System
<b>ESG</b>	Environmental, Social and Governance
<b>ERM</b>	Enterprise Risk Management
<b>EVP</b>	Employee Value Proposition
<b>FAPA</b>	Ferro Alloys Producers' Association
<b>FFR</b>	Fatality Frequency Rate
<b>FTE</b>	Full-Time Employees
<b>GHG</b>	Greenhouse Gas
<b>GHS</b>	Globally Harmonised System
<b>GRI</b>	Global Reporting Initiative
<b>GWP</b>	Global Warming Potential
<b>HDSAs</b>	Historically Disadvantaged South Africans
<b>HIV</b>	Human Immunodeficiency Virus
<b>HR</b>	Human Resources
<b>IAR</b>	Integrated Annual Report
<b>ICDA</b>	International Chrome Development Association
<b>ICMM</b>	International Council on Mining and Metals
<b>IFRS</b>	International Financial Reporting Standards

<b>IIRC</b>	International Integrated Reporting Council
<b>IMnI</b>	International Manganese Institute
<b>IR</b>	Injury Rate
<b>Iron Ore</b>	(FE)
<b>IUCMA</b>	Inkomati Usuthu Catchment Management Agency
<b>IUCN</b>	International Union for Conservation of Nature
<b>JSE</b>	JSE Limited
<b>JV</b>	Joint Venture
<b>King IV</b>	King Report on Governance for South Africa 2016 and the King Code of Governance Principles
<b>KPI</b>	Key Performance Indicator
<b>LCSAP</b>	Lead Certified Sustainability Assurance Practitioner
<b>LDR</b>	Lost Day Rate
<b>LED</b>	Local Economic Development
<b>LOM</b>	Life of Mine
<b>LTI</b>	Lost Time Injury
<b>LTIFR</b>	Lost Time Injury Frequency Rate
<b>MBOD</b>	Medical Bureau for Occupational Diseases
<b>MDR TB</b>	Multi-Drug Resistant Tuberculosis
<b>MERSETA</b>	Manufacturing, Engineering and Related Services Sector Education and Training Authority
<b>METF</b>	Minerals Education Trust Fund
<b>MHSA</b>	Mine Health and Safety Act
<b>MHSC</b>	Mine Health and Safety Council
<b>MMSD</b>	(GRI) Mining and Metals Sector Disclosures
<b>Mn</b>	Manganese
<b>MOSH</b>	Mining Industry Occupational Safety and Health
<b>MPRDA</b>	The Mineral and Petroleum Resources Development Act
<b>MQA</b>	Mining Qualifications Authority
<b>NAEIS</b>	National Atmospheric Emissions Information System

<b>NBI</b>	National Business Initiative
<b>NDP</b>	National Development Plan
<b>NEMA</b>	National Environmental Management Act
<b>NGO</b>	Non-Governmental Organisation
<b>NIHL</b>	Noise-Induced Hearing Loss
<b>NOx</b>	Nitrogen Oxides
<b>NSP</b>	National Strategic Plan (for South Africa)
<b>NUM</b>	National Union of Mineworkers
<b>NUMSA</b>	National Union of Metalworkers of South Africa
<b>PCB</b>	Participating Coal Business
<b>PGMs</b>	Platinum Group Metals
<b>PHC</b>	Primary Health Care
<b>PLH</b>	Percentage Loss of Hearing
<b>POP</b>	Persistent Organic Pollutants
<b>PTB</b>	Pulmonary Tuberculosis
<b>ODR</b>	Occupational Disease Rate
<b>ODS</b>	Ozone-Depleting Substances
<b>OHSA</b>	Occupational Health and Safety Act
<b>OHSAS 18001</b>	Occupational Health and Safety Assessment Series
<b>PM</b>	Particulate Matter
<b>RIFR</b>	Reportable Injury Frequency Rate
<b>RWI</b>	Restricted Work Injury
<b>SABCOHA</b>	South African Business Coalition on HIV & Aids
<b>SABPP</b>	South African Board for People Practices
<b>SAMREC</b>	South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves
<b>SANS</b>	South African National Standard
<b>SAWIS</b>	South African Waste Information Centre
<b>SD</b>	Sustainable Development
<b>SDG</b>	Sustainable Development Goals
<b>SED</b>	Socio-Economic Development

## SUPPLEMENTARY INFORMATION continued

<b>SENS</b>	Stock Exchange News Services
<b>SETA</b>	Sector Education and Training Authority
<b>SHE</b>	Safety, Health and Environment
<b>SHEQ</b>	Safety, Health, Environment and Quality
<b>SLP</b>	Social and Labour Plan
<b>SMME</b>	Small, Medium and Micro Enterprise
<b>SOx</b>	Sulphur Oxides
<b>STEM</b>	Science, Technology, Engineering and Math
<b>STI</b>	Sexually Transmitted Infections
<b>STMO</b>	Strategic, Tactical and Major Operational
<b>STS</b>	Standard Threshold Shift
<b>TB</b>	Pulmonary Tuberculosis
<b>TRIFR</b>	Total Recordable Injury Frequency Rate
<b>UASA</b>	United Association of South Africa
<b>UNGC</b>	United Nations Global Compact
<b>URTI</b>	Upper Respiratory Tract Infections
<b>VGGWSS</b>	Vaal Gamagara Water Supply Scheme
<b>VOC</b>	Volatile Organic Compounds
<b>WUL</b>	Water Use Licence
<b>XDR TB</b>	Extensively Drug Resistant TB

# STAKEHOLDER FEEDBACK FORM

## ARM F2017 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

---



---



---



---

### Contact details:

**Nerine Botes-Schoeman**

Executive: Sustainable Development

**Physical address:** Office block 1, 29 Impala Road, Chislehurst, Sandton, 2146

**Postal address:** PO Box 786136, Sandton, 2146, Johannesburg

**Telephone:** +27 11 779 1545 **Fax:** +27 86 575 9024 **email:** nerine.botes@arm.co.za



# CONTACT DETAILS

## African Rainbow Minerals Limited

Registration number: 1933/004580/06  
Incorporated in the Republic of South Africa  
JSE share code: ARI  
ADR ticker symbol: AFRBY  
ISIN: ZAE000054045

## Registered and Corporate Office

ARM House  
29 Impala Road  
Chislehurst  
Sandton  
2196

PO Box 786136, Sandton, 2146

Telephone: +27 11 779 1300  
Fax: +27 11 779 1312  
E-mail: [ir.admin@arm.co.za](mailto:ir.admin@arm.co.za)  
Website: [www.arm.co.za](http://www.arm.co.za)

## Company Secretary

Alyson D'Oyley, BCom, LLB, LLM  
Telephone: +27 11 779 1300  
Fax: +27 11 779 1312  
E-mail: [alyson.doyley@arm.co.za](mailto:alyson.doyley@arm.co.za)

## Sustainable Development

Nerine Botes-Schoeman  
Executive: Sustainable Development  
Telephone: +27 11 779 1545  
Fax: +27 86 575 9024  
E-mail: [nerine.botes@arm.co.za](mailto:nerine.botes@arm.co.za)

Cheryl Munitich  
Sustainable Development  
Telephone: +27 11 779 1540  
Fax: +27 11 779 1341  
E-mail: [cheryl.munitich@arm.co.za](mailto:cheryl.munitich@arm.co.za)

## Investor Relations

Jongisa Magagula  
Corporate Development and Head of Investor Relations  
Telephone: +27 11 779 1507  
Fax: +27 11 779 1312  
E-mail: [jongisa.magagula@arm.co.za](mailto:jongisa.magagula@arm.co.za)

## Auditors

External auditor: Ernst & Young Inc.  
Internal auditor: KPMG

## External Assurance Provider

Ibis ESG Assurance (Pty) Ltd

## Bankers

ABSA Bank Limited  
FirstRand Bank Limited  
The Standard Bank of South Africa Limited  
Nedbank Limited

## Sponsors

Deutsche Securities (SA) Proprietary Limited

## Transfer Secretaries

Computershare Investor Services Proprietary Limited

### To 27 November 2016:

Ground Floor, 70 Marshall Street  
Johannesburg 2001

### From 28 November 2016:

Rosebank Towers  
15 Biermann Avenue  
Rosebank, 20196

PO Box 61051, Marshalltown, 2107

Telephone: +27 11 370 5000  
Fax: +27 11 688 5222  
E-mail: [web.queries@computershare.co.za](mailto:web.queries@computershare.co.za)  
Website: [www.computershare.co.za](http://www.computershare.co.za)

---

## Directors

P T Motsepe (Executive Chairman)  
M P Schmidt (Chief Executive Officer)  
F Abbott\*  
M Arnold  
Dr M M M Bakane-Tuoane\*  
T A Boardman\*

A D Botha\*  
J A Chissano (Mozambican)\*  
W M Gule\*  
A K Maditsi\*  
H L Mkatshana

Dr R V Simelane\*  
Z B Swanepoel\*  
A J Wilkens

\* Independent 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.



[www.arm.co.za](http://www.arm.co.za)