



2017

sustainability report

Sustainability report

OVERVIEW

Sustainable development issues remain material to the business operations of Assore Limited (Assore) and extend beyond the level of mere legal compliance. We recognise that the long-term viability of our business depends on Assore taking a proactive role in shaping and enhancing the economic, social and environmental performance of our business, as well as anticipating current and future issues that may present opportunities or risk to the group's business. Our approach to sustainability is founded on a strong governance system and informed by ongoing stakeholder engagement.

SCOPE OF THIS REPORT

This sustainability report covers all the entities in which the Assore group has an interest, other than portfolio investments, and distinguishes between the Assmang Proprietary Limited (Assmang) operations and the Assore operations as defined in the "scope and boundary" (refer to the contents page of the Assore Integrated Annual Report). As Assore follows a decentralised management model, we report in terms of each operation to give stakeholders a clearer understanding of our sustainability performance.

In F2016, we announced the acquisition of African Rainbow Minerals' (ARM's) indirect interest in the Dwarsrivier Chrome Mine Proprietary Limited

(Dwarsrivier), held through Assmang, which is reported under Assore operations in this report. As from F2018, reporting will also cover the performance of the Sakura Ferroalloys smelting plant in Malaysia, in which Assmang holds a 54,36% interest.

IronRidge Resources Limited (IronRidge), a minerals exploration company with a diversified portfolio of gold, lithium, bauxite, titanium and iron ore in regions of Africa and Australia, in which the Assore group holds a 29,9% interest, is excluded from this report.

Wonderstone Limited (Wonderstone), an Assore subsidiary company, has acquired a 40% shareholding in Dakot Wear Ceramics Proprietary Limited (DWC), effective 1 April 2017. The conclusion of this transaction complements the Wonderstone group of companies' existing interest in the ceramic wear resistant market. Based in Gingindlovu, KwaZulu-Natal, DWC specialises in the manufacturing of ceramic beads that are used in high-intensity stirred mills for fine and ultra-fine grinding applications as well as the manufacturing of ceramic components that can extend the life of equipment in high wear applications. DWC's operations are not included in this report.

ABOUT THIS REPORT

The report covers our sustainable development policies, practices and

performance for the 12-month period from 1 July 2016 to 30 June 2017 (F2017).

The group reports on sustainability performance and is guided by the Global Reporting Initiative (GRI) G3.1 guidelines and the associated Metals and Minerals Sector disclosures. A suite of reporting indicators has been selected on the basis of their materiality to the specific risk profiles of the operations. Going forward, we will transition to the new GRI standards, in line with the GRI's recommendations.

The sustainability management systems the group has put in place control the ongoing collection and verification of pertinent data sets, which are assured in accordance with the processes outlined on pages 34 to 35. Analysis of these data sets serves to inform management decision-making with respect to health, safety, training, environmental and other sustainability considerations.

SUSTAINABILITY MANAGEMENT SYSTEMS

The group's sustainability risk management systems form part of the group's overall enterprise risk management system and are designed to inform and guide group strategy and business performance. As set out in the diagram below, the boards of Assore and Assmang are ultimately responsible for establishing policy and guiding responsible management of sustainability risks and opportunities associated with the group's operations.

Sustainability management approach and structures



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PRODUCT STEWARDSHIP

As the company responsible for marketing the group's products, Assore's wholly owned subsidiary, Ore & Metal Company Limited (Ore & Metal), has a responsibility to proactively manage financial and reputational risk by positively influencing the business and social environment in which we operate. Accordingly, the group plays an active role in industry associations that aim to promote the responsible use and sustainability of the commodities they produce, and to foster cooperation between peer companies to address issues of common concern. The group also monitors national and international legislation that could impact our business.

Playing an active role in industry associations

– Business Unity South Africa

(BUSA): Assore's interests are communicated via Assmang which is represented by a group Electrical Engineer appointed by ARM to attend regular meetings and discuss any issues raised within the forum.

– Energy Intensive Users' Group

(EIUG): Assore's interests are communicated via Assmang which is represented by a group electrical engineer appointed by ARM to attend regular meetings and discuss any issues raised within the forum. The EIUG acts as a vehicle for industry to discuss, debate and negotiate on any energy-related issues such as energy security, pricing and the potential impact of carbon tax on the industry. The group, through Assmang, is a member of the EIUG.

– International Manganese Institute

(IMni): An Ore & Metal representative currently serves as committee Chairman of the Occupational Health, Environment and Safety (OHES) Committee of the IMni. As an active member of IMni, Assore attends meetings regularly and actively participates in the development of life cycle assessments and further studies that establish a platform for understanding the environmental and health impacts associated with the production of manganese which can be used as a tool for the development of business and engagement

strategies to manage and mitigate the impact of climate change.

– International Chromium

Development Association (ICDA):

Priorities for the Health, Safety and Environment (HSE) Committee of the ICDA include continued environmental performance monitoring and the management of environmental risks associated with the production of chromium, as well as regulatory risks like carbon tax.

– Ferroalloys Producers' Association

(FAPA):

This national association represents the interests of the South African ferroalloys industry and is involved in the development of energy efficiency initiatives. The association also actively participates in public consultation on upcoming legislation such as the carbon tax, national greenhouse gas (GHG) reporting regulations, carbon budgets and national pollution prevention plans. Assmang holds the deputy chairmanship of FAPA and representatives from both the Machadodorp Works and Cato Ridge Works smelters sit on the Environmental, Technical and Logistics committees. The group attends regular meetings to discuss and participate in the development and implementation of industry-wide initiatives to address common challenges.

Responding to changes in national and international legislation

Assore, in collaboration with various industry associations such as the IMni and ICDA, monitors and responds to changes in national and international legislation that could influence the mining, beneficiation, sale, transport or usage of our products.

An important area of the IMni's focus in recent years has been the revision of the International Maritime Organisation's (IMO) codes, which has implications for the categorisation of the company's products. To address the requirements of the revised International Maritime Solid Bulk Cargoes (IMSBC) code, test work undertaken in F2016 confirmed that Assmang's manganese and iron ore fines products do not have the potential to liquefy in transit. IMni has also been active in lobbying the IMO for the

revision of the International Maritime Solid Bulk Cargoes (IMSBC) code for silicomanganese alloy, which involved recategorising the commodity from a Group B cargo (defined as a cargo possessing a chemical hazard that could give rise to a dangerous situation on a ship) to a lower risk Group C cargo. Tests have been concluded and results have been submitted to IMO. However, the stringent classification still remains in the code as the IMO only updates its code every two years. The next revision of the code book is only scheduled for 2018.

Assore continues to track the implementation of Registration, Evaluation and Authorisation of Chemicals (REACH) type initiatives in key markets such as China, Japan, South Korea, India and Turkey which may require registration of our products. Similarly, we monitor changes to the requirements of the Globally Harmonised System (GHS) of hazard classification which may require modifications to product labelling and safety data sheets.

In terms of the recently revised Mining Charter, we concur with the Chamber of Mines' view that in its current form, the Department of Mineral Resources' (DMR's) charter will jeopardise the viability of an industry that is already under significant economic pressure, one which contributes significantly to transformation and also contributes overwhelmingly to the economy of South Africa.

Regarding the proposed carbon tax for South Africa, Assore, through its position on various trade organisations such as BUSA, opposes the implementation of a carbon tax in the current economic climate. BUSA's view is that there is no need for the imposition of a tax to change behaviour that contributes to carbon intensity as emissions have naturally reduced due to electricity supply constraints and poor economic growth. In addition, the proposed carbon tax is an inappropriate instrument given the current context of South Africa's growth and employment problem, due to the current energy mix and availability of alternative sources. Accordingly, the focus should rather be on providing an enabling environment to increase access to lower carbon energy sources.

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Concerns raised have indicated that, without creating greater access to lower carbon energy alternatives, the impact of the carbon tax on GHG emissions will be muted.

At a national level in South Africa, the design for carbon budgets is currently under review. Assore supports the implementation of a carbon budget provided there is alignment with other legislation such as the carbon tax in order to avoid double cost implications. Currently, the two mechanisms are not aligned.

COMMITMENT TO INTERNATIONAL CERTIFICATION

All Assmang operations, as well as Assore's Dwarsrivier Chrome Mine Proprietary Limited (Dwarsrivier), Rustenburg Minerals Development Company Proprietary Limited (Rustenburg Minerals), Wonderstone and Wonderstone Grader Road operations are certified to both the International Organisation for Standardisation (ISO) 9001 quality and ISO 14001 environmental management standards. In addition, all Assmang operations, with the exception of Black Rock Manganese Mines (Black Rock), are certified to the Occupational Health and Safety Assessment Series (OHSAS) 18001 health and safety management standard. Black Rock's OHSAS certification was planned for February 2016 but after a review of

the entire safety management system, the operation opted not to acquire the OHSAS 18001 health and safety standard certification, but to follow an alternative route. Alternative options are currently being investigated.

The quality and environmental system documentation at Wonderstone and Wonderstone Grader Road has been updated in order to align these operations with the new ISO 9001:2015 and the ISO 14001:2015 standards.

The ISO 9001 and ISO 14001 certifications at Rustenburg Minerals were allowed to lapse at the end of the cycle in December 2016 due to the downsizing of the operation.

COMMITMENT TO LEGAL COMPLIANCE

The achievement and maintenance of legal compliance is at the core of the group's environmental, health and safety policies and is the primary objective of the group's environmental, health and safety procedures.

Legal compliance remains a minimum performance requirement for the group's operations and is determined by an ongoing programme of internal and external auditing. As part of their ISO-based management systems, each operation maintains a site-specific legal register detailing the applicable

legislation with which the operation needs to comply. Legal compliance is also periodically reviewed by external service providers.

LEGAL COMPLIANCE STATUS

As required by law, all mining operations within the group have approved environmental management plans (EMPs) which are periodically reviewed and revised to reflect changes to operational practices and infrastructure on the sites.

Neither Assmang nor the Assore operations were prosecuted for any anti-competitive behaviour or anti-trust monopolistic practices over the current financial year. Similarly, neither Group nor any of its operating divisions received any fines for non-compliance in respect of legislation concerning the provision and use of products and services.

ENGAGEMENT WITH OUR STAKEHOLDERS

Our ability to establish and maintain strong relationships with a diversity of stakeholders is integral to our sustainability. Accordingly, we continue to seek, develop and strengthen mutually beneficial partnerships with key stakeholders through a variety of mechanisms in order to support our business strategy.

Stakeholder group	Ongoing material issues	Key issues in 2017	Method of engagement
Shareholders and the investment community	<ul style="list-style-type: none"> – Profitability – Regulatory compliance – Financial and non-financial risk management – Outlook for the base metals/alloys market – Performance against targets – Long-term sustainability of the business 	<ul style="list-style-type: none"> – Assore achieved a 199% increase in headline earnings to R5,2 billion for F2017 compared with R1,7 billion in F2016 – Attributable earnings amounted to R5 billion, an improvement of 226% from 2016 and a record level for the group – The difference of R188 million between headline and attributable earnings was mainly the result of a once-off transaction, following Assmang's sale to Assore of the Dwarsrivier Chrome Mine in Limpopo – IronRidge acquired further prospecting rights in Chad and gold and lithium licences in Ivory Coast and Ghana both directly and through joint ventures – Sakura exceeded its design capacity of 216 000 tonnes of ferromanganese per annum by 10% in the last quarter of F2017 	<ul style="list-style-type: none"> – Annual and six-monthly reports – SENS announcements – Press statements

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Stakeholder group	Ongoing material issues	Key issues in 2017	Method of engagement
Industry associations <ul style="list-style-type: none"> – Chamber of Mines – Energy Intensive Users' group – Ferroalloy Producers Association – International Chromium Development Association – International Council on Mining and Metals – International Manganese Institute 	<ul style="list-style-type: none"> – Worker safety – Occupational health – Environmental issues – Carbon-related issues (including carbon taxation) – Trends in national and international legislation – Logistics – Risks associated with land tenure and nationalisation 	<ul style="list-style-type: none"> – Further details of worker safety and occupational health on pages 13 to 17 and environmental and carbon-related issues on pages 18 to 21 of this report 	<ul style="list-style-type: none"> – Representation on the executive bodies of these associations, as well as task groups established in terms of their strategic work
Employees and organised labour <ul style="list-style-type: none"> – Association of Mineworkers and Construction Union (AMCU) – National Union of Metalworkers of South Africa (NUMSA) – National Union of Mineworkers (NUM) – Solidarity 	<ul style="list-style-type: none"> – Remuneration and benefits – Conditions of service – Job security – Career development (including training) – Accommodation – Worker safety – Occupational health – Transformation and employment equity 	<ul style="list-style-type: none"> – Labour relations were amicable in F2017. As in the previous two years, there was no strike action at any of our operations – There was a 620% increase in staff numbers (discussed in further detail on page 7 of this report) – Five owner houses and two speculative houses were completed (see pages 11 to 13) – Literacy levels increased and there was a significant increase in bursaries and learnerships awarded (page 9) 	<ul style="list-style-type: none"> – Staff meetings at all levels – “Toolbox talks” – Induction – Health, Safety, Environment meetings – Internal publications – Notice boards – Union negotiations – Career path planning
Host communities	<ul style="list-style-type: none"> – Employment – Safety and health considerations – Preferential procurement – Small and medium enterprise development – Social upliftment – Land management and Environmental Issues – Mine closure and rehabilitation 	<ul style="list-style-type: none"> – As discussed on page 28, the Assore and Assmang Groups invested a combined total of R97,1 million in community upliftment projects for F2017 <p>Rustenburg Minerals</p> <ul style="list-style-type: none"> – Last year we announced that due to the resources allocated to this operation's mining rights being depleted, we were engaging with the DMR and an empowerment entity regarding the use of resources on community land. After prolonged discussions and negotiations, the transaction did not go ahead and we are currently looking at alternative solutions for the future of Rustenburg Minerals 	<ul style="list-style-type: none"> – Public meetings – Public participation process for environmental impact assessments – Participation in local economic development initiatives – Funding of corporate social responsibility initiatives

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Stakeholder group	Ongoing material issues	Key issues in 2017	Method of engagement
Customers	<ul style="list-style-type: none"> – Product quality – Product pricing – Development of new products – Adherence to delivery schedules – GHG-related issues – Product stewardship – Compliance with REACH/ GHS requirements for registration and product labelling 		<ul style="list-style-type: none"> – Customer site visits – Contract negotiations – Quality management system – Conference attendance – Use of customer feedback to influence integrated annual report content
Joint venture partners <ul style="list-style-type: none"> – African Rainbow Minerals – China Steel – Dakot Wear Ceramics Proprietary Limited – Exxaro – IronRidge Resources Limited – Mampa Investment Holdings – Sumitomo 	<ul style="list-style-type: none"> – Profitability – Regulatory compliance – Financial and non-financial risk management – Outlook for the base metals/alloys market – Performance against targets – Long-term sustainability of the business – Roles and responsibilities within the respective joint ventures 	<ul style="list-style-type: none"> – Increase of 199% in headline earnings to R5,2 billion 	<ul style="list-style-type: none"> – Representation on the Assmang board and excom – Board meetings for individual Assore operations – Active participation in industry associations
National, provincial and municipal government <ul style="list-style-type: none"> – Department of Environmental Affairs – Department of Labour – Department of Mineral Resources – Department of Trade and Industry – Department of Water and Sanitation – Receiver of Revenue – Various provincial and municipal authorities 	<ul style="list-style-type: none"> – Regulatory compliance – Fulfilment of statutory reporting requirements – GHG-related issues – Land management – Mine closure (including adequate financial provision for rehabilitation) – Pollution prevention – Conservation of surface and groundwater resources – Employee health and safety – Workforce transformation and employment equity – Preferential procurement – Tax payment – Community spend 	<ul style="list-style-type: none"> – A post-rehabilitation audit of Zeerust Chrome Mine will be conducted during the course of F2018 – Assmang is funding the upgrade of the Olifantshoek bulk water infrastructure to ensure adequate water supply in cases when the Vaal Gamagara pipeline in the Northern Cape is short of water supply – Assmang also assisted the Sedibeng Water Board with the upgrade, expansion and debottlenecking of the Beeshoek pump station 	<ul style="list-style-type: none"> – Statutory reporting – Inspections by government representatives – Licence/permit applications – Legal compliance audits – Public participation process for environmental impact assessments – Engagement on targeted issues
Parastatal service providers <ul style="list-style-type: none"> – Eskom – Transnet – Portnet 	<ul style="list-style-type: none"> – Continuity of electricity supply – Power and freight tariffs – Availability of rail berths – Upgrade of port facilities – Negotiation of mutually beneficial contracts and service agreements 	<ul style="list-style-type: none"> – The group has measures in place to mitigate production losses when Eskom requests mines to reduce consumption. This includes approximately 12 MW of diesel generator capacity at Black Rock which is synchronised to the grid 	<ul style="list-style-type: none"> – Contract negotiations – Meetings

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Stakeholder group	Ongoing material issues	Key issues in 2017	Method of engagement
Contractors and other service providers <ul style="list-style-type: none"> – Mining contractors – Transport companies – Construction contractors – Consultants – Healthcare providers – Shipping companies – Insurance companies 	<ul style="list-style-type: none"> – Procurement practices (including preferential procurement) – Terms and conditions of contracts (including penalties) – Regulatory compliance – Occupational health and safety – Environmental management 		<ul style="list-style-type: none"> – Contract negotiations – Tender processes – HSE inductions – Health and safety meetings – Site inspections and audits – Performance review – ISO certification
Non-governmental organisations <ul style="list-style-type: none"> – groundWork – Bench Marks Foundation 	<ul style="list-style-type: none"> – Pollution prevention – Conservation of surface and groundwater resources – Employee health and safety – Community concerns 		<ul style="list-style-type: none"> – Engagement through established open forums created for general engagement with host communities

ECONOMIC MANAGEMENT

Assore's fundamental goal is to generate financial returns for shareholders, investors and other providers of capital. This economic imperative is balanced with a responsible approach to the environmental and social aspects of our operations to ensure that all our stakeholders benefit from the value created by the business.

SOCIAL MANAGEMENT OUR PEOPLE

We strive to continuously create an open and diverse workplace which attracts the best talent and to establish an environment in which employees are empowered to reach their full potential. This includes promoting health and safety, investing in our employees' skills and capabilities and ensuring fair, ethical working practices.

Our people policies aim to promote equality and eliminate unfair discrimination on the basis of gender, race, religion, age, disability and sexual orientation.

We focus on sourcing labour from the communities close to our areas of operation. In Malaysia, for example, while we have government permission for 54% of our staff complement to comprise

foreign skills, over 89% of our workforce is made up of local nationals.

At year-end, the combined number of contractors and permanent employees at Assore and Assmang, amounted to 2 345 and 11 918 people respectively, which meant Assore accounted for 16% of the total workforce, while Assmang accounted for 84%.

The group had a total operational staff of 14 263 (2016: 11 841), comprising 6 053 permanent employees and 8 210 contractors. Contractors accounted for 46,3% and 59,8% of the workforce at Assore and Assmang operations respectively.

The 620% increase in staff numbers for the Assore group as a whole was primarily the result of the 100% acquisition of Dwarsrivier. At Black Rock, the 12% increase in permanent employees was due to the improved market conditions and greater demand for the operation's commodity, which meant the site experienced operational expansion and thus an increased intake of personnel.

At Rustenburg Minerals, 46 employees were retrenched due to the plant production ceasing on 26 October 2016.

The 60-day notice period stipulated by the Labour Relations Act (LRA) to allow for consultation with the representative union was applied and the union entered into a collective agreement regarding the termination of employees based on operational requirements.

Assore has at all times complied with the requirements of section 189 of the LRA, in terms of which employers must:

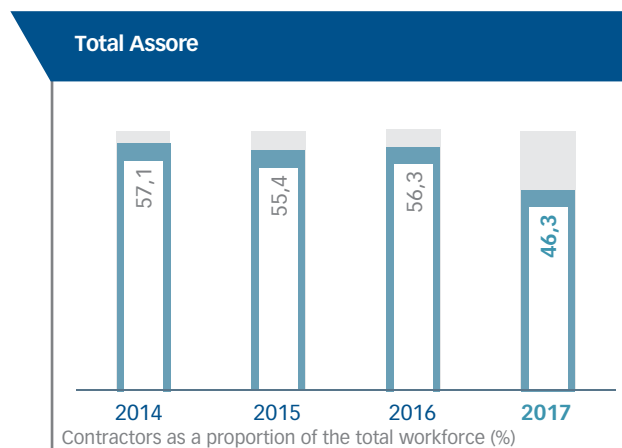
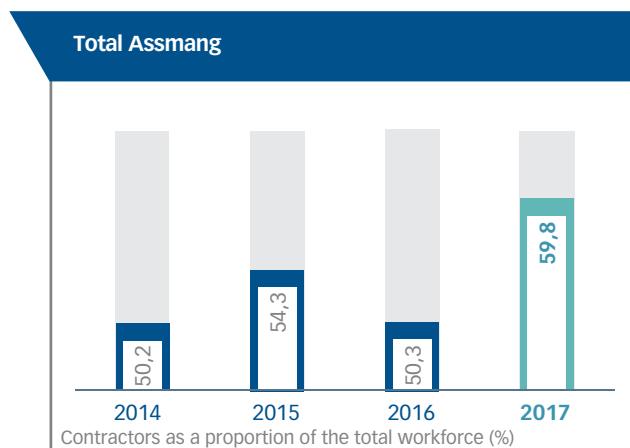
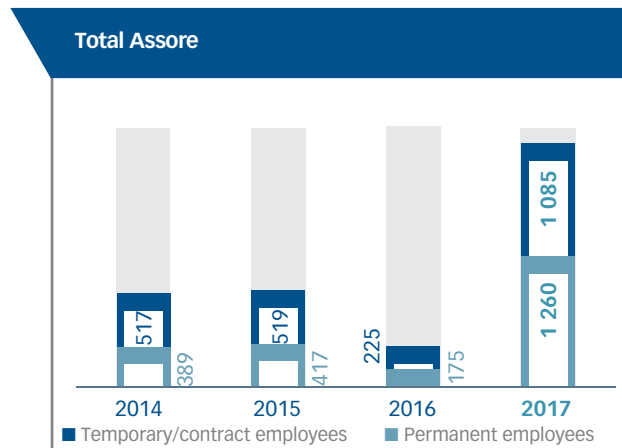
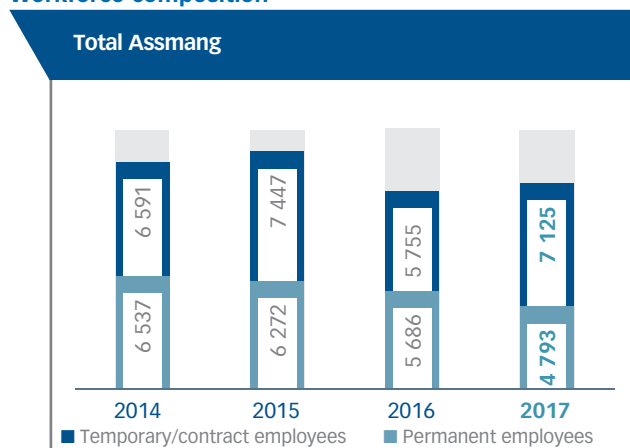
- have a good reason for the need to retrench;
- use fair criteria in deciding which employees are to be retrenched; and
- follow an intricate consultation procedure aimed primarily at seeking ways of avoiding retrenchment.

Assore provides support to career endings by:

- making social worker counselling services available, thereby enhancing financial and emotional coping skills;
- providing records of service;
- assisting in claiming employee benefits;
- facilitating access to portable skills training as/if identified during consultation; and
- making Assore group vacancies available to affected employees.

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Workforce composition



Note: permanent employees for Wonderstone in 2015 restated and consequently, 2015 figure for Assore restated.

Note: contractors as a percentage of total workforce for 2015 restated for Wonderstone, and consequently, 2015 figure for Assore restated.

TRANSFORMATION

The principles of transformation are integrated into our human resources strategy to ensure that it continues to effectively support the representation of Historically Disadvantaged South Africans (HDSAs), with an emphasis on black women, into our workforce.

In addition, Assore is committed to promoting the inclusion of all South Africans into the mainstream of the economy in general and the mining industry in particular, by identifying and developing business opportunities and by making them available to BBBEE suppliers at all our operations. Further details are available on page 40 of our 2017 integrated annual report.

Employment equity: Women in Mining (WIM) and Historically Disadvantaged South Africans (HDSAs)

Operation	WIM 2017 %	WIM 2016 %	WIM 2015 %	WIM 2014 %
Beeshoek	13	9	8	13
Khumani	15	5	7	8
Black Rock	6	4	3	3
Cato Ridge Works	16	15	14	16
Machadodorp Works	8	8	7	16
Dwarsrivier	13	13	13	15
Wonderstone	22	25	26	22
Rustenburg Minerals	0	0	15	12
Zeerust	0	0	0	9

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	HDSA management 2017 %	HDSA management 2016 %	HDSA management 2015 %	HDSA management 2014 %
Beeshoek	89	62	57	57
Khumani	86	57	56	13
Black Rock	89	54	46	44
Cato Ridge Works	93	50	50	40
Machadodorp Works	80	33	39	33
Dwarsrivier	61	66	59	75
Wonderstone	42	30	24	39
Rustenburg Minerals	50	29	48	53
Zeerust	14	0	15	50

Groupline Projects was acquired by Wonderstone in 2012 and effectively operated as a division of the Wonderstone group of companies until June 2016. It became a standalone subsidiary company of Wonderstone in July 2016, based on a strategic decision to separate the traditional Wonderstone (pyrophyllite) and wear ceramics businesses as they are not related and operate in different markets. The decrease of Women in Mining (WIM) at Wonderstone was due to the Groupline split from Wonderstone. The zero values in WIM at Rustenburg Minerals and Zeerust are due to the fact that the former went into a non-productive status in 2016 and the latter has been in non-productive status since September 2015.

Khumani reported a significant increase in WIM for the reporting period. Small increases in WIM were also reported at three of the other Assmang operations. The increase was due to a concerted focus on encouraging the development of women, including:

- a recruitment action plan for women;
- emphasis on women in succession planning processes;
- ensuring access of women to coaching, mentoring and leadership development programmes (21 women were enrolled in the latter in 2016); and
- affording women opportunities for line experience and delegating them to core business roles.

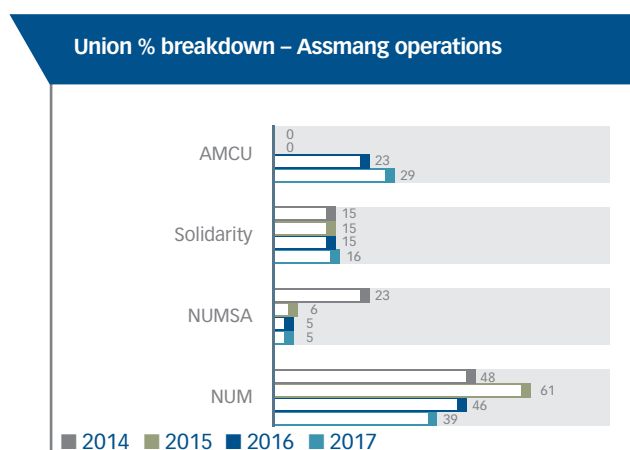
The strategy is to give women first preference in line with the BBBEE compliance strategy. Vacant positions are filled with females, where possible.

LABOUR RELATIONS

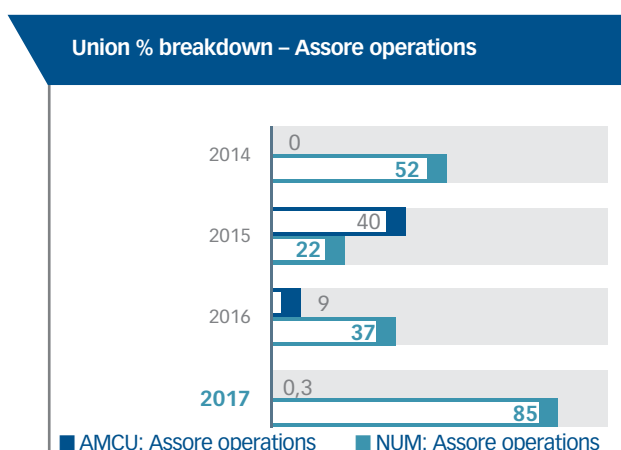
We recognise the right to collective bargaining. Labour relations in F2017 were stable. As in 2016 and 2015, there was no employee strike action at any of the Assmang or Assore operations and no production days were lost.

In F2017, total union membership at Assmang and Assore operations was 89% and 86% respectively.

UNION % REPRESENTATION BY GROUP OPERATIONS Assmang operations



Assore operations



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TRAINING AND DEVELOPMENT

Our skills development programmes include internal and external Adult Basic Education Training (ABET) courses, training courses, learnerships, internal and external bursaries and study assistance. We view our investment in these programmes as essential to enhancing our employee value proposition, and as an important facilitator for continuous improvement in productivity and safety performance.

Training spend as a percentage of payroll for F2017 was fairly constant when compared with F2016, with a 0,8% decrease at Assmang operations and a 0,5% increase at Assore operations.

The significant increase in both learnerships and bursaries awarded at Assore during F2017 is due to Dwarsrivier becoming part of the Assore operations. Literacy levels at Wonderstone increased due to the operation's ABET programme, and also increased at Rustenburg Minerals and Zeerust due to staff turnover.

The Assmang operations reported a 44% reduction in learnerships due to:

- an issue between the Mining Qualifications Authority (MQA) and the DMR regarding the blasting certificate training for mining learnerships that resulted in a very low intake of these learnerships over the reporting period; and

- a reduction in the intake of artisan learnerships – it is becoming increasingly difficult to employ learners after completion of their trade tests as experienced artisans are becoming readily available in the labour market.

As indicated in the table below, literacy levels across the group are high. Literacy levels at Wonderstone increased in F2017 due to more employees participating in the ABET programme, as well as a higher staff turnover for F2017. Literacy levels at Rustenburg Minerals and Zeerust increased due to high staff turnover at both operations, together with a drastic reduction in staff numbers at Rustenburg Minerals after production ceased in October 2016.

Learnerships and bursaries

Group company	Learnerships 2017	Bursaries 2017	Learnerships 2016	Bursaries 2016	Learnerships 2015	Bursaries 2015	Learnerships 2014	Bursaries 2014
Assmang operations	164	50	137	169	143	285	114	141*
Assore operations	35	5	11	4	1	17	2	21

*Restated.

% of payroll spent on training

Group company	Proportion of payroll spent on training 2017 %	Proportion of payroll spent on training 2016 %	Proportion of payroll spent on training 2015 %	Proportion of payroll spent on training 2014 %
Assmang operations	7,5	8,7	9,4	10,0
Assore operations	4,5	4,0	6,0	4,0

Literacy levels per operation

Operation	% of workforce literate 2017	% of workforce literate 2016	% of workforce literate 2015	% of workforce literate 2014
Beeshoek	100	95	96	92
Khumani	99	100	98	97
Black Rock	99	100	99	97
Cato Ridge Works	100	100	100	100
Machadodorp Works	100	100	100	97
Dwarsrivier	94	94	91	91
Wonderstone	93	71	76	73
Wonderstone Grader Road	100	100	96	97
Rustenburg Minerals	100	84	73	72
Zeerust	100	60	81	86

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HOUSING

Map of Northern Cape showing Kathu, Kuruman, Postmasburg



Map of Mpumalanga showing Mashishing (Lydenburg)



We strive to facilitate processes that promote the ownership of affordable housing by employees at our operations. Through the housing strategy and policy, we support initiatives to provide quality housing for people residing and working in mining towns, in line with government policy. Our strategy is to ensure that mining towns with great potential for future mining in line with the life of mine, are prioritised. Our practice is to ensure that every employee has decent accommodation in line with the relevant legislation.

Northern Cape

Assmang has a property development and housing finance unit that assists in the provision of housing for employees in identified local communities in the Northern Cape. Accommodation is supported through a combination of mine rented accommodation and housing subsidies.

In F2015, a housing survey covering more than 3 000 employees was conducted at Beeshoek Iron Ore Mine

(Beeshoek), Black Rock and Khumani to better understand employees’ living conditions and preferences, and to ensure that the current housing scheme/ subsidy is having a positive impact.

Against the backdrop of a subdued housing market in the Northern Cape – the result of the impact of low commodity prices on the mining industry – and an attendant slowdown in demand, there was a sharp decline in the building of new houses in F2017. The number of houses we constructed allowed for sufficient available stock houses under prevailing market and mine operating conditions and also took cognisance of the uptake rate of houses by existing employees.

Should the need arise in future for additional houses, we do have sufficient serviced stands available to build more houses. However, we are sensitive to the need not to upset the housing markets in the municipal areas where we operate by providing an oversupply of houses.

Northern Cape housing portfolio at a glance

- **Kathu:** One owner house was completed in Uitkoms Home Owners Association during F2017. A total of 964 houses have been constructed in Kathu to date, of which 789 have been sold to employees.
- **Kuruman:** No houses were constructed in Kuruman during F2017. A total of 196 houses have been constructed to date in Kuruman of which 144 have been sold to employees.
- **Postmasburg:** Four owner houses and two speculative houses were completed during F2017. At year-end there were seven speculative houses under construction. A total of 350 houses have been constructed in Postmasburg to date, of which 230 have been sold to employees.

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Assmang Northern Cape employee housing status

Housing scheme	Extension 3 Kathu	Uitkoms Kathu	Rooisand Kathu	Kuruman	Postmasburg	Total
2017						
Houses completed	327	105	532	196	350	1 510
Sold	301	93	395	114	230	1 133
Rental units	26	12	137	82	120	377
Under construction	0	0	0	0	7	7
2016						
Houses completed	327	104	532	196	344	1 536
Sold	298	95	396	108	226	1 123
Rental units	29	9	136	88	118	413
Under construction	0	1	0	0	9	10
2015						
Houses completed	327	96	515	181	308	1 427
Sold	301	87	384	98	208	1 078
Rental units	26	9	131	83	100	349
Under construction	0	9	17	14	32	72
2014						
Houses completed	327	88	515	155	203	1 288
Sold	294	80	328	37	125	864
Rental units	33	8	187	118	78	424
Under construction	0	7	0	26	50	83

Limpopo

Dwarsrivier is fundamentally not in the housing business. Nonetheless, in order to attract and retain staff, and in the absence of a home ownership scheme, the mine is now providing accommodation for its employees with scarce and critical skills.

The accommodation is currently provided in Lydenburg, which is approximately 60 kilometres from the mine. Dwarsrivier currently owns a total of 87 accommodation units (houses and units) and is leasing a total of 39 accommodation units (houses and units).

Dwarsrivier does not have a home ownership scheme in place. Management and the union are currently investigating options to establish and implement a home ownership scheme for all employees. In the interim, the company is paying a housing allowance to employees who are not accommodated in company-provided accommodation. This will fall away once the home ownership scheme is finalised and implemented. The mine also owns vacant stands which could be developed in future, once the home ownership scheme is finalised.

A housing survey was conducted at Dwarsrivier during the F2017 reporting period.

The main findings obtained from the survey were:

- 78% of the workforce participated in the survey
- 61% of employees were home owners (paid off)
- 17% of employee homes were financed
- 18% of employees are renting houses
- 54% owns three to four bedroom houses
- 89% of the houses have electricity
- 72% of the houses have water services
- 41% of employee houses have ablution and sewer facilities (in house)
- 43% of employees own a second property

Sustainability report continued

Assore Limpopo employee housing status

Housing scheme	Circle View Estate	Kuit Park	The Heads	Lydenburg CBD	Sterkspruit Estates	Total
2017						
Houses completed	33	36	2	8	8	87
Sold	0	0	0	0	0	0
Rental units	0	0	7	2	30	39
Under construction	0	2	0	1	0	3
2016						
Houses completed	33	36	2	8	8	87
Sold	0	0	0	0	0	0
Rental units	0	0	7	1	27	35
Under construction	0	1	0	0	0	1

SAFETY PERFORMANCE

Assmang safety highlights F2017 at a glance

- 15 lost-time injuries (LTIs) reported for F2017 compared to 25 for F2016
- Lowest lost-time injury frequency rate (LTIFR) achieved to date: 0,17 (2016: 0,22) – 22% improvement year on year
- Machadodorp Works achieved one million fatality-free shifts during December 2016
- Black Rock Mine completed five million fatality-free shifts on 11 October 2016 and received an award from the DMR as the safest underground mine in the Northern Cape
- Khumani mine achieved one million fatality-free shifts at the beginning of December 2016

To achieve our goal of zero harm, we have a strong, proactive safety culture in terms of which safety is the responsibility of every individual employee. For the purposes of safety reporting and as regulated by the Mine Health and Safety Act (MHSA) and Occupational Health and Safety Act (OHSA), contractors are treated as employees and receive the same training as employees.

In terms of our decentralised management structure, each operation has their own approach to safety. Accordingly:

- the operational executives oversee the implementation of functional, suitable safety systems at each of the operations;
- the Senior General Manager or General Manager and their management team are primarily responsible for the implementation, review and

maintenance of these safety systems while ensuring compliance with the requirements of the MHSA and OHSA; against this backdrop, each Senior General Manager or General Manager is appointed and empowered to develop and implement a health and safety system suitable to the size and nature of their operation; and

- the operational executive is responsible for implementing a governance system to monitor the implementation of health and safety systems at each operation.

Despite this decentralised approach, there is a common safety framework across all operations:

- all employees and contractor employees undergo safety induction;
- each operation and task are subject to a baseline risk assessment;
- employees are represented on health and safety committees;
- safety toolbox talks are held on a daily basis before each shift;
- lost-time injuries and near misses are reported to senior management teams and to the Social and Ethics Committees (SECs) in order to facilitate follow up and remediation;
- safety policies and strategies are embedded into our working practices through continual training and re-training of the workforce as well as through continuous health and safety awareness campaigns; and
- compliance is assessed and areas for improvement identified through annual internal and external audits of operating procedures and safety practices, external legal compliance and certification audits (OHSAS 18001, ISO 9001 and ISO 14001) as well as external SHE legal compliance audits which are facilitated every second year by the corporate office.

There were no fatalities during the past financial year and there was a pleasing decrease of 23% in LTIFRs at the Assmang operations and an 87% decrease in LTIFRs at the Assore operations. Assmang reported a 40% reduction in the number of LTIs: 15 (F2017) versus 25 (F2016) and Assore reported a 50% reduction in LTIs for the same period: 7 (F2017) versus 14 (F2016).

A 48% decline was also reported for reportable injuries at the Assmang operations, with 11 reported for F2017 (F2016: 21). The 31% and 40% decreases at Black Rock and Khumani respectively were due to better management of safety initiatives on site. The significant reduction in LTIs at Rustenburg Minerals was due to the drastic reduction of employees on site and the lack of new LTIs at Zeerust was due to the operation being non-producing.

Only one section 54 notice (with no associated production losses) was issued to the Assmang operations, compared with six notices issued in F2016. A total of four section 54 notices were issued to the Assore operations (F2016: three), resulting in the loss of 15 production shifts. There were no section 55 notices issued to any of the Assmang operations for F2017 versus (F2016: one), however, eight section 55 notices were issued to the Assore operations (F2016: nine), with no production shifts lost.

No prohibition notices in terms of the OHSA were issued to any of the Assore or Assmang operations during the reporting period.

Sustainability report continued

Lost-time injuries (LTIs)

Operation	LTI 2017	LTI 2016	LTI 2015	LTI 2014
Beeshoek	2	1	1	0
Khumani	3	5	10	4
Black Rock	9	13	14	14
Cato Ridge Works	1	1	3	1
Dwarsrivier	–	4	4	10
Machadodorp Works	0	1	0	2
Total Assmang operations	15	25	32	31
Dwarsrivier	5	–	–	–
Wonderstone	0	1	4	0
Wonderstone Grader Road	0	0	0	1
Rustenburg Minerals	2	13	12	9
Zeerust	0	0	2	1
Total Assore operations	7	14	18	11

Lost-time injury frequency rates (LTIFRs)

Operation	LTIFR weighted 2017	LTIFR weighted 2016	LTIFR weighted 2015	LTIFR weighted 2014
Beeshoek	0,15	0,07	0,07	0,00
Khumani	0,10	0,17	0,29	0,10
Black Rock	0,24	0,35	0,35	0,44
Cato Ridge Works	0,19	0,17	0,38	0,12
Dwarsrivier	–	0,17	0,18	0,45
Machadodorp Works	0,00	0,55	0,00	0,32
Total Assmang operations	0,17	0,22	0,26	0,25
Dwarsrivier	0,20	–	–	–
Wonderstone	0,00	0,99	3,97	0,00
Wonderstone Grader Road	0,00	0,00	0	1,76
Rustenburg Minerals	1,14	2,66	1,62	1,23
Zeerust	0,00	0,00	1,49	1,35
Total Assore operations	0,25	1,99	1,72	1,15

Note: LTIFR calculated on a basis of 200 000 hours.
Figures include contractors.

Section 54 and section 55 notices issued in terms of the Mine Health and Safety Act

	Section 54 notices 2017	Section 54 notices 2016	Section 54 notices 2015	Section 54 notices 2014
Assmang operations	1	6	6	5
Assore operations	4	3	3	3

	Shifts lost due to section 54 notices 2017	Shifts lost due to section 54 notices 2016	Shifts lost due to section 54 notices 2015	Shifts lost due to section 54 notices 2014
Assmang operations	0	11	23	18
Assore operations	15	1	33	17

Sustainability report continued

	Section 55 notices 2017	Section 55 notices 2016	Section 55 notices 2015	Section 55 notices 2014
Assmang operations	0	1	2	10
Assore operations	8	9	2	2

	Shifts lost due to section 55 notices 2017	Shifts lost due to section 55 notices 2016	Shifts lost due to section 55 notices 2015
Assmang operations	0	0	0
Assore operations	0	0	0

OCCUPATIONAL HEALTH AND WELLNESS

Assmang operations have implemented integrated policies on Human Immune-Deficiency Virus (HIV), Tuberculosis (TB) and Sexually Transmitted Infections (STIs) as required by the National Strategic Plan 2012 – 2016 and the Mining Charter. Each Assmang operation has a site clinic that offers primary healthcare services to employees and contractors.

In terms of Assore operations, Dwarsrivier has an onsite clinic that offers primary healthcare services and Rustenburg Minerals has a site clinic offering basic occupational medical services.

Employees requiring more than basic occupational healthcare services are referred to the local hospital for further treatment if and when required.

The following mandatory Codes of Practice (CoPs) were submitted to the DMR in 2017:

- minimum standards of fitness to work at a mine;
- management of medical incapacity due to ill health and injury;
- mandatory CoP for occupational health on thermal stress;
- mandatory CoP on the right to refuse dangerous work and leave a dangerous area;
- trackless mobile machinery;
- emergency preparedness and response;

- personal protective equipment (PPE) for women in mining;
- combating rock falls and rock bursts in metalliferous mines;
- prevention of fires at mines;
- conveyor belts; and
- occupational health programme on personal exposure to airborne pollutants.

A corporate standard on medical surveillance of employees exposed to manganese at the smelters and Black Rock Mine has been finalised and implemented.

A 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 reporting of pulmonary TB) by the Northern Cape Department of Mineral Resources. A corporate standard which detailed reporting procedures to various regulatory and statutory bodies was drafted and is now being implemented.

In addition to the outreach programme described on the next page, three wellness events were afforded to Dwarsrivier employees during the reporting period. The first was held in October 2016. All employees had access to blood pressure and blood glucose testing, along with HIV counselling and testing, and general health education. A total of 425 employees underwent HIV

testing, with 14 employees testing positive. Eight out of the 14 who tested positive were new cases diagnosed and were referred to their respective GPs and or local clinic for initial Antiretroviral (ARV) treatment. Four of the identified cases knew their status but were not on High Active Antiretroviral Therapy (HAART). Two employees knew their status and were already taking ARVs. Blood pressure testing and health education, as well as blood glucose testing services were also offered at the event.

The second wellness event was hosted in December 2016. On the day, 702 employees opted to undergo HIV testing and 28 employees tested positive for HIV. Six out of the 28 were new cases and these were referred for initial ARVs. Ten people were aware of their status but not on any form of treatment, while 12 knew their status and were undergoing active ARV treatment. Once again, health education, blood pressure and blood glucose testing were offered to everybody. A third wellness campaign was held at Dwarsrivier during June 2017 where the same healthcare services were offered as at the previous two campaigns. This time, 837 employees tested for HIV and 37 employees tested positive for HIV. In addition to the other testing offered, TB screening was also offered to 74 employees at this wellness event. All of them tested negative.

Sustainability report continued

Dwarsrivier: promoting community wellness

In partnership with the Ngwaabe Clinic, Dwarsrivier sponsored the annual community health awareness campaign in GaMasha Village.

The event, held in December 2016, ensured residents had access to healthcare services and could be counselled and tested for HIV, screened for TB and have hypertension and glucose tests done. These services were extensively utilised, with 145 HIV tests, 128 TB screening tests, 150 hypertension tests and five glucose tests undertaken on the day.

On World Aids Day, in December 2016, the focus was on creating HIV awareness. Of the tests completed, five people tested positive for HIV and will now receive the necessary care and guidance needed to cope with the disease. Twelve people will have further TB sputum tests completed and receive treatment while 11 were referred for hypertension treatment.



Community members participating in the health awareness campaign

The mine further funded a mental health awareness campaign at GaMasha Village in June 2017. The campaign, with the theme "Let's Talk", focused the spotlight on mental health awareness, while giving community members the opportunity to be tested for a variety of health issues. Tests for HIV, blood glucose, blood pressure and even a facility to have pap smears done were set up to serve the community on the day.

Certification

Both Khumani and Beeshoek are successfully certified in terms of the South African National Standard (SANS 16001:2013) disease and wellness management programme.

Black Rock was certified to the same standard in F2017.

HIV/Aids

HIV counselling is a compulsory part of any medical surveillance but HIV testing is voluntary – this is referred to as the counselling and voluntary testing (CVT) policy. STI screening is part of the overall HIV counselling and testing process.

At Assmang operations, a total of 2 240 employees opted to be tested for HIV/Aids, with 112 testing positive. A total number of 2 415 employees (including contractors) received ARV treatment during F2017.

In terms of Assore operations, 1 422 employees underwent HIV/Aids screening, with 12 new cases being identified. The following number of people received ARV treatment, through either their individual GPs or the local government clinics during F2017: Dwarsrivier: 19, Rustenburg: 1, Zeerust: 1 and Wonderstone: 1.

ARVs are provided through the individual employees' medical aid schemes and through the government ARV programme for the contractor employees.

Statistics SA estimates that the overall HIV prevalence rate for South Africa is 12,7%¹. As indicated in the table below, the HIV prevalence rate at Assmang and Assore operations is lower than this at all operations with the exception of Cato Ridge. At all operations the prevalence

rate is lower than the provincial and district averages.

In terms of Assmang operations, at Cato Ridge and Machadodorp, the prevalence rate has stayed the same as there have been no new surveys at these operations since 2014.

At our Assore operations, there was a drastic decrease in the workforce at Rustenburg Minerals because the operation is now in a rehabilitation phase. Of the remaining personnel on site 91 people opted to be tested for HIV, with one testing positive. At Zeerust, a total number of 10 people opted to be tested for HIV, with one testing positive. At Wonderstone, only 15 employees opted to be tested for HIV, none of whom tested positive, while at Dwarsrivier, 1 306 employees opted to be tested for HIV, with 10 testing positive.

HIV prevalence rates per operation

Operational prevalence	HIV prevalence	Source	Provincial prevalence		Source	District prevalence		Source		
			2013/14	2014/15		2012/13	2013/14			
Assmang operations										
Khumani	7,0%	UGM Wellness	N Cape	17,5%	17,5%	DoH	JT Gaetsewe	14,8%	23,2%	DoH
Beeshoek	6,7%	Life Occupational	N Cape	17,5%	17,5%	DoH	Siyanda	14,3%	14,3%	DoH
Black Rock	3,7%	Virtue Life	N Cape	17,5%	17,5%	DoH	JT Gaetsewe	14,8%	23,2%	DoH
Cato Ridge Works	20%	ILIFU (2014 survey)	KZN	37,4%	37,4%	DoH	Ethekwini	39%	39%	DoH
Machadodorp	9,4%	HCT campaign done by DoH (2014 survey)	Mpumalanga	35,6%	35,6%	DoH	Nkangala	32,1%	32,1%	DoH
Assore operations										
Dwarsrivier	0,8 %	Careways	Limpopo	22,3%	16,3%	DoH	Sekhukhune	23%	23%	DoH
Rustenburg Minerals*	1,1 %	Discovery Health	North West province	29,5%	29,7%	DoH	Bojanala	29,3%	31,5%	DoH
Zeerust	10%	Discovery Health	North West province	29,5%	29,7%	DoH	Ngaka Modiri Molema	25,9%	22,3%	DoH
Wonderstone	0%	Discovery Health	North West province	29,5%	29,7%	DoH	Ngaka Modiri Molema	25,9%	22,3%	DoH

¹ Estimated overall HIV prevalence rate for SA, as published in the Stats SA mid-year population estimates report 2016 = 12,7%.

Sustainability report continued

TUBERCULOSIS

Almost 1% of South Africa's population of about 50 million people develops active TB each year, or 860 per 100 000 to use the conventional measure – one of the highest rates in the world. It is estimated that about 80% of the population of South Africa is infected with TB bacteria, the vast majority of whom have latent TB rather than active TB disease. TB is most pervasive under certain social conditions, many of which are present in South Africa. Experts, including the Minister of Health, have stated that TB in SA is most prevalent in prisons and in the mining industry.²

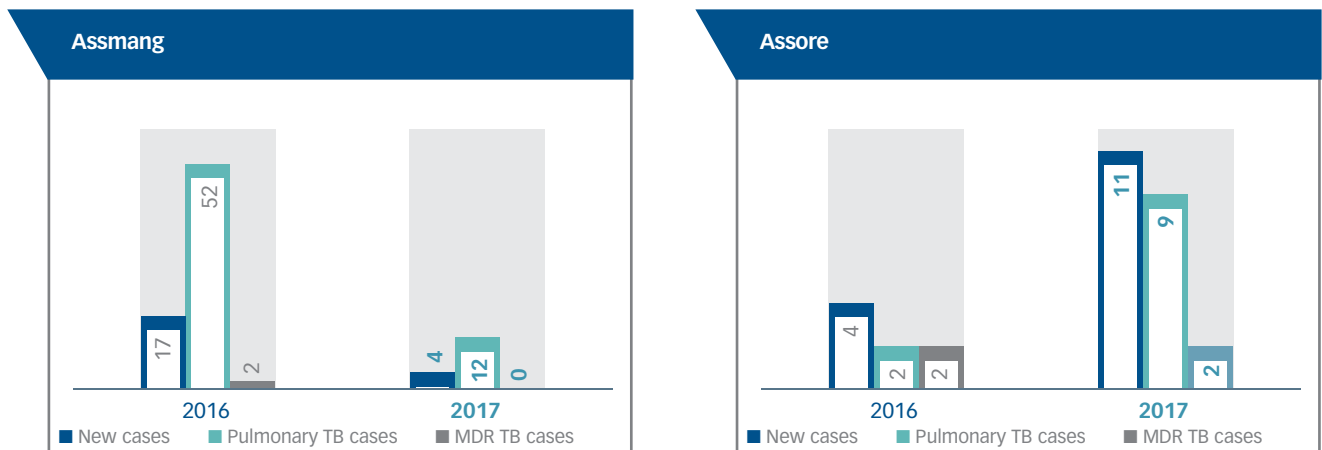
² Source: Chamber of Mines.

Against this backdrop, we take TB screening and reporting very seriously. A standard TB reporting process is in place that includes workplace investigations and compulsory TB screening for those in contact with TB-infected employees at the workplace, as required by the DMR and the Department of Health (DoH). Assmang's TB management programme incorporates the guidelines distributed by the DMR, as well as the broader requirements for monitoring TB, multi-drug resistant TB (MDR TB) and extreme drug resistant TB (XDR TB).

Both Khumani and Beeshoek have signed Memoranda of Understanding (MoUs) with the DoH regarding identification, treatment and monitoring including management of transfer-ins. Both Khumani and Beeshoek have dedicated TB management nurses to manage TB.

At all operations, where there are cases of MDR TB, these are admitted to special MDR hospitals for further management as required by the DoH. There were two cases of MDR TB at Assmang and two at Assore operations in F2017.

TB statistics



NOISE INDUCED HEARING LOSS (NIHL)

In order to meet the DMR's milestones for the elimination of NIHL in the workplace, hearing conservation programmes to prevent NIHL are a key component of the occupational health management programme at all group operations. The hearing conservation programmes that have been implemented across the group to control occupational noise exposure are a combination of noise reduction strategies, monitoring of occupational noise levels, issuing of personal protective equipment (PPE) – with disciplinary action being taken against employees found not to be wearing hearing protection in designated noise areas – and mandatory audiometric testing as part of routine medical surveillance.

Hearing conservation remained a focus at all Assmang and Assore operations in F2017, with 23 428 audiometric tests conducted, including both employees and contractors, during the financial year (F2016: 16 815). Of these, 66 cases (F2016: 39) were referred for further investigation.

At Assmang operations, the number of medical examinations (including audio tests) increased because all job candidates were examined, irrespective of whether their candidacy was successful or not. Khumani had more referrals because most of the employees and contractors presented with NIHL of >10% from their previous employment as identified during the initial pre-employment medicals.

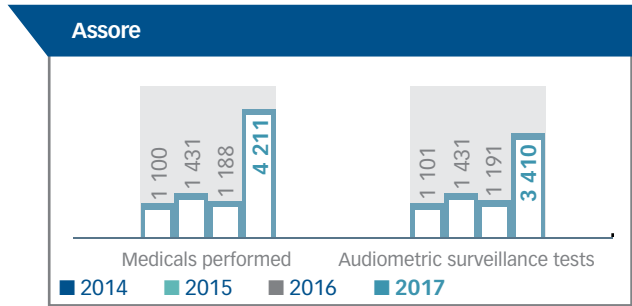
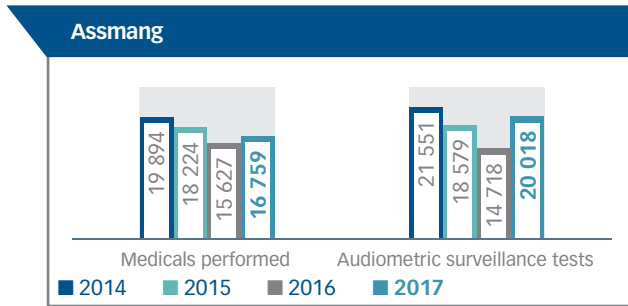
Audiometric referrals decreased at Black Rock and Beeshoek due to the improved

hearing conservation programme and awareness campaigns that included the provision of customised hearing protection devices.

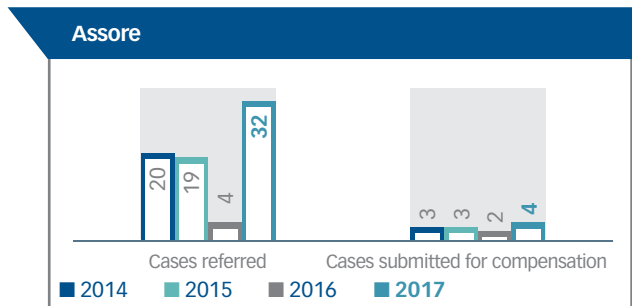
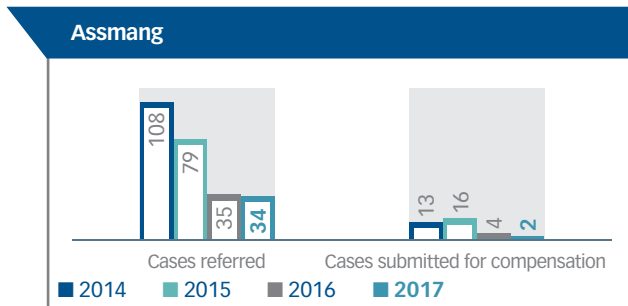
In terms of Assore operations, the drastic decrease at Rustenburg Minerals in the number of medicals, audiometric test, referrals and compensation submissions is directly related to the reduction in employees due to the operation being in a rehabilitation phase. Similarly, at Zeerust there are only nine people on site, including contractors who comprise part of the care and maintenance team. Personnel numbers were reduced at Wonderstone Grader Road when Ceramox Manufacturing moved off site. At Dwarsrivier, there was a 78% increase in medicals performed and a 53% increase in audio surveillance testing numbers due to an increase in contractors on site during F2017.

Sustainability report continued

Occupational health surveillance



Number of cases referred and submitted for compensation



Note: the number of cases referred for 2016 for Beeshoek and Black Rock were restated and hence the 2016 number for Assmang is restated.

ENVIRONMENTAL MANAGEMENT

Environmental aspects are identified, monitored and reported on at an executive level. At site level, aspects and impacts are identified as per process flow activities, facilities, products and services. A pre-mitigation and post-mitigation impact assessment is done on the basis of the resultant impact rating. If an impact is still deemed significant according to the risk matrix, a management plan is developed and implemented to mitigate the impact to an acceptable level. The impact assessment also includes monitoring and measurement of existing controls according to the frequency determined by the impact profile. A mini-impact assessment is conducted and used as an issue-based impact assessment on all new activities, facilities, products and services as well as on all infrequent activities.

The group ensures that regular audits, both internal and external, in respect of legislation are conducted and reported to authorities such as the Department of Environmental Affairs (DEA) where necessary.

Energy consumption and carbon emissions

We have been quantifying our greenhouse gases (GHGs) since 2009 to inform the development of the group's energy and emissions management strategy. During the period under review, progress was made in improving the reliability of energy consumption data, and on calculating energy intensity for the group's operations. This information will input to the development of a carbon budget for the company in line with the evolving requirements of South African environmental legislation.

Ultimately, once a reliable baseline for both Assore and Assmang has been calculated, and an understanding of realistic reduction opportunities has been developed, the group will embark on a process to set performance objectives and emission targets that are in line with the group's strategy for energy efficiency and emissions reduction.

The group is committed to reducing energy usage and the generation of GHGs.

Corporate carbon footprint

In line with the methodology laid down in the Greenhouse Gas Protocol – Corporate Standard – as well as ISO 14064, GHG emissions are reported under three categories:

- Scope 1: Direct GHG emissions which occur from sources that are either owned or controlled by the company (eg emissions resulting from diesel consumption by mine vehicle fleets, consumption of reductants in furnaces and burning of liquid petroleum gas).
- Scope 2: GHG emissions from the generation of purchased electricity consumed by the company. This is purchased from Eskom, whose power is predominantly generated by coal-fired power stations.
- Scope 3: GHG emissions that are a consequence of the company's activities, but occur from sources not owned or controlled by the company (eg product transportation and business travel) which are not reported on in this document.

Sustainability report continued

During the 2017 financial year, submissions to the Carbon Disclosure Project (CDP) were made for the Assore operations and joint venture partners in respect of the Assmang operations.

For the third year, an external consultant was commissioned to provide independent assurance in respect of identified energy use and GHG emissions in accordance with the GHG Protocol. This assurance was guided by the International Standard on Assurance Engagements (ISAE) 3000, and reviewed energy consumption and GHG emissions in respect of Assmang's Beeshoek and Black Rock operations, as well as the Assore Dwarsrivier operation.

In order to manage the risks related to carbon taxation, current plans include more detailed monitoring of energy and electricity consumption in order to

establish areas of focus for reduction initiatives/targets to reduce emissions. Assmang – in which Assore holds a 50% share and which contributes over 94% to the group's carbon footprint – has already implemented or is investigating initiatives to drive energy efficiency and reduction within the business.

These initiatives include actions to mitigate the risk of rising energy prices (electricity, diesel, gas) through the implementation of a number of programmes that reduce carbon footprint, for example:

- installing energy-efficient LED lighting replacements at Beeshoek, Black Rock and Dwarsrivier;
- replacing diesel vehicles with battery powered ones;
- installing variable speed drives; and
- installing a solar photovoltaic plant at Khumani.

The group electrical engineer focuses on enhanced efficient and optimal use of allocations as well as exploring alternative (renewable) energy sources. The group has measures in place to mitigate production losses when Eskom requests mines to reduce consumption. This includes approximately 12 MW of diesel generator capacity at Black Rock which is synchronised to the grid. It does come at a significant financial cost (although this is deemed to be better than reducing production) and results in higher levels of GHG emissions as the electricity from diesel generation is more carbon intensive than the current grid average. Other measures include the installation of standby generator capacity at all mines, thereby enabling the critical systems to continue running during power outages.

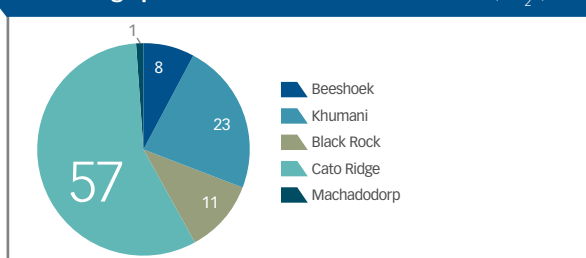
Scope 1 and 2 emissions in CO₂e tonnes

	Scope 1 tonnes CO ₂ e	Scope 2 tonnes CO ₂ e	Total emissions CO ₂ e
2017			
Assmang operations	377 768	866 660	1 244 428
Assore operations	10 046	64 771	74 817
2016			
Assmang operations	344 868*	887 274	1 232 142*
Assore operations	7 617	8 972	16 589
2015			
Assmang operations	533 014	1 094 366	1 627 380
Assore operations	13 019	15 114	28 133
2014			
Assmang operations	507 210*	1 142 684	1 649 895*
Assore operations	13 901*	14 003	27 905*

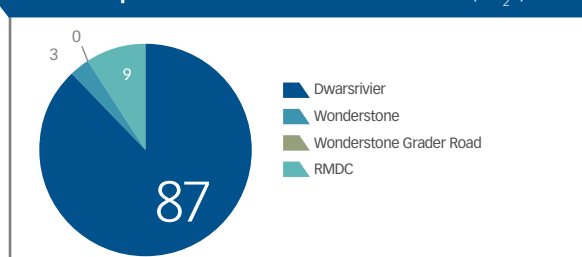
*Restated from previous year.

Operations as a % of total emissions

Assmang operations as a % of total emissions (CO₂e)



Assore operations as a % of total emissions (CO₂e)



Sustainability report continued

	F2017		F2016		F2015	
	Scope 1 CO ₂ e	Scope 2 CO ₂ e	Scope 1 CO ₂ e	Scope 2 CO ₂ e	Scope 1 CO ₂ e	Scope 2 CO ₂ e
Assmang operations						
Beeshoek	66 172	34 588	38 612*	35 984	49 777	36 092
Black Rock	15 894	120 440	15 212*	109 120	45 444	99 394
Dwarsrivier	–	–	5 450*	58 704	4 937	52 845
Khumani	84 794	203 962	90 656	202 132	90 330	174 946
Cato Ridge	209 552	495 694	193 242	478 024	269 295	571 777
Machadodorp	1 356	11 976	1 696*	3 310	73 231	159 312
Scope totals	377 768	866 660	344 868*	887 274	533 014	1 094 366
Operations total	1 244 428		1 232 142*		1 627 380	

	F2017		F2016		F2015	
	Scope 1 CO ₂ e	Scope 2 CO ₂ e	Scope 1 CO ₂ e	Scope 2 CO ₂ e	Scope 1 CO ₂ e	Scope 2 CO ₂ e
Assore operations						
Dwarsrivier	5 608	59 611	–	–	–	–
Wonderstone	628	1 361	656	1 482	739	2 027
Wonderstone Grader Road	186	139	195	143	201	136
Rustenburg Minerals	3 624	3 471	6 127	6 863	8 433	9 929
Zeerust	0	189	639	485	3 646	3 022
Scope totals	10 046	64 771	6 766	7 348	12 079	12 951
Operations total	74 817		14 114		25 030	

* Restated from previous report.

SCOPE 1 AND 2 EMISSIONS

In F2017, both scope 1 and scope 2 emissions at Assore operations increased by 32% and 622% respectively due to the Dwarsrivier mining operation becoming part of the Assore operations, while at Assmang, scope 1 emissions declined by 2%, with scope 2 emissions increasing by 10%.

Machadodorp showed a 20% decrease in scope 1 emissions as the furnaces were switched off during F2017 and only the Metal Recovery Plant (MRP) was running. This was also due to the reduction in contractors on site

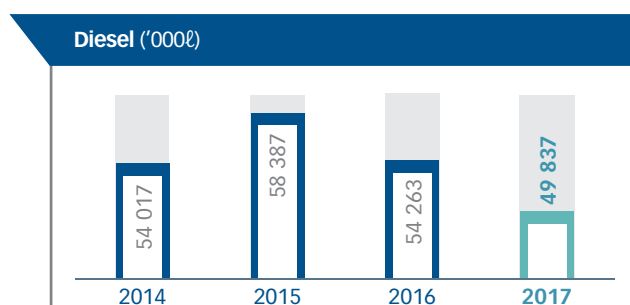
– there was only one contractor working on the reclamation of the slag dump. However, the same site reported a 262% increase in scope 2 emissions due to the operation conducting test work at the pelletising plant and the briquetting plant coming into operation towards the end of the 2016 calendar year. Beeshoek reported a 71% increase in scope 1 emissions. This was due to the high number of contractors on site who were involved in the village pit development.

An increase in production at Black Rock translated into a 10% increase in scope 2 emissions.

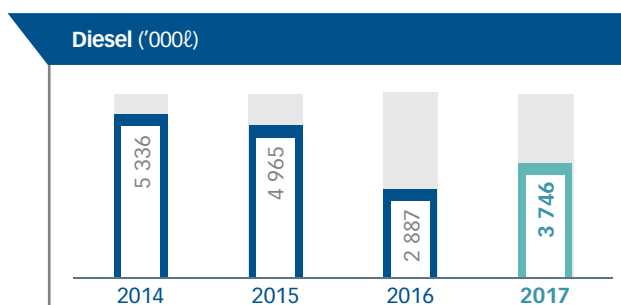
Assore operations' Rustenburg Minerals reported a reduction of 41% and 49% respectively for scope 1 and 2 emissions due to the fact that there was no production on site and also because of the significantly reduced number of employees on site as rehabilitation started during the second half of 2016. Zeerust reported 100% less scope 1 emissions and 61% less scope 2 emissions because the operation has been non-producing since 2015 and currently only has a staff complement of nine people conducting care and maintenance at the operation.

ELECTRICITY AND DIESEL USAGE

Assmang diesel usage



Assore diesel usage



Note: diesel usage for Black Rock in 2016 has been restated and consequently, so has the 2016 diesel usage figure for Assmang operations. Similarly, the 2014 figure for Zeerust has been restated and thus the 2014 total for Assore operations.

Sustainability report continued

Electricity usage

Operation	Electricity use 2017 MWh	Electricity use 2016 MWh	Electricity use 2015 MWh	Electricity use 2014 MWh
Beeshoek	34 937	35 627	38 396	38 970
Khumani	206 023	200 131	186 112	175 213
Black rock	121 656	108 039	105 739	102 881
Cato Ridge Works	500 701	473 292	608 273	639 712
Dwarsrivier	–	58 122	56 218	50 872
Machadodorp Works	12 097	12 171	169 480	207 973
Assmang operations total	875 415	887 383	1 164 218	1 215 621
Dwarsrivier	63 742	–	–	–
Wonderstone	1 456	1 585	2 168	2 083
Wonderstone Grader Road	149	152	146	150
Rustenburg Minerals	3 712	7 339	10 617	9 618
Zeerust	202	518	3 232	3 123
Assore operations total	69 261	9 594	16 163	14 974

Note: measurement unit change in 2014.

A reduction of 8% in diesel and 1% in electricity used was evident at the Assmang operations during F2017. Diesel usage declined by 5% at Black Rock as the mine did not run the generators in F2017. It also dropped by 25% at Machadodorp Works because of reduced activities on site. The 12% increase in diesel usage at Cato Ridge Works was due to the operation of an additional furnace during the reporting year. At Black Rock electricity used increased by 13% because of increased production.

The 41% and 49% respective decrease in diesel and electricity used at Rustenburg Minerals is due to the fact that the operation has not been producing since October 2016. Rehabilitation of the mining sites started in August 2016 and is envisaged to continue until November 2017.

At Zeerust, the 100% reduction in diesel usage and 61% reduction in electricity used is due to the fact that there was no production on the site during the past financial year. At Dwarsrivier, there was a 10% increase in electricity usage due to the plant upgrade and the North Shaft expansion project. The 12% increase in diesel consumed at Wonderstone was due to the installation of additional machinery, while the 8% reduction in electricity used was because of the ceramic factory being moved off site.

WATER MANAGEMENT



Water monitoring at Dwarsrivier

Minimising the impact of the group's operations on water quality is a priority, particularly for operations located in catchment areas that are challenged by declining water quality. Extensive surface and groundwater quality monitoring programmes are undertaken by all operations to demonstrate compliance with the conditions of their water use licences and other environmental authorisations. The group also plays an active role in the catchment management authorities where its sites are located.

The group's mines are largely located in arid regions and the provision of a reliable water supply to sustain mining and processing remains an ongoing challenge. Accordingly, opportunities for improved water efficiency are being identified and implemented across all operations.

Overall water security in the Northern Cape continues to be a material risk that challenges both the sustainability of current mining operations and constrains potential future growth throughout the region. Water availability in this area has been compromised in recent years both as a result of shifts in rainfall patterns, and also by a deterioration in the integrity of water distribution infrastructure across the region. Assmang strives to responsibly manage water use on all its operations in line with its water use licence and EMPr commitments.

The sites have developed management tools such as water balances to allow them to optimise the usage and management of water. Discharges only take place in line with permit conditions after periods of extreme precipitation. At the smelters, new lined slag dumps have been put in place with historical slag dumps moved to prevent pollution of groundwater or seepage into groundwater.

Machadodorp Works has established a water management project team and has constructed cut off trenches to capture any dirty run-off water and redirect it to the sump and then to the stormwater dams. At Dwarsrivier the risk is currently managed through containment and the mine is in the process of commissioning a water treatment plant.

Sustainability report continued

Investing in water infrastructure

The group anticipates greater investment in water infrastructure in areas where this risk is material (mostly in the Northern Cape).

A water task team has been established to address the shortage of water with Sedibeng Water Board (Sedibeng) and authorities at provincial and national level. Efforts to date include:

- funding the upgrade of the Olifantshoek bulk water infrastructure to ensure adequate supply in cases when the Vaal Gamagara pipeline is short of water supply. Six municipalities benefit from the Vaal Gamagara bulk water supply scheme which is critical to ensure the continued sustainability of iron

ore and manganese mining operations between Kathu and Hotazel, while also ensuring water supply to over 22 villages;

- assisting Sedibeng with the upgrade, expansion and debottlenecking of the Beeshoek pump station to ensure all water discharged by Kolomela into the Vaal Gamagara pipeline is available for sustainable supply; and
- Beeshoek is also considering investing further in additional water supply infrastructure to increase water delivery as part of the Sedibeng Scheme, further assisting communities and emerging farmers in the area.

While the group does not intend to become a water service provider, these investments will result in communities having increased water security. This in turn will contribute to Assmang's social licence to operate and support Assmang's local labour and supply chain needs.

Providing water to Kalkfontein Village

As part of its first and second social and labour plans (SLPs), Dwarsrivier Chrome Mine has been involved in a project to provide water to the residents of the Kalkfontein village. The village was not formalised by the time the water reticulation designs were completed. As the formalisation of a township or village can take up to a year, this means that the villagers would have to wait for the formalisation process to be finalised before the project can begin.

Accordingly, the mine opted for an interim solution where boreholes have been drilled in different points within the community area to enable better access to water. To date, six boreholes have been drilled and nine water tanks where community members can access water easily have been constructed. In addition, a land surveyor and a town planner have been appointed for the formalisation process, the construction of the water



reservoir has been completed and the procurement of material for reticulation, as well as the appointment of contractors are underway. Environmental Impact Assessment (EIA) exemption was approved by the Department of Economic Development, Environment and Tourism (DEDET).

The key remaining activities of the project include electricity connections to power the water supply, formalisation of the area and water reticulation into individual households.

Sustainability report continued

Year on year, water consumption at our Assmang operations declined by 15%, and increased by 68% at our Assore operations, due to Dwarsrivier now being included in the calculations for Assore.

There was an 8% reduction in water usage at Cato Ridge Works, which was due both to a decrease in labour activities and to fewer activities on site requiring water usage. The 17% reduction in consumption reported at Machadodorp Works was because no water was abstracted at the works which is on care and maintenance. The MRP, currently the only operational plant, uses stormwater that is being recycled rather than abstracted water. The 11% reduction indicated at Black Rock was largely due to the completion of the new water

metering system which has improved accuracy of water measurements and reporting on site. In addition, the operation ceased the watering of the golf course from boreholes and also started pumping water (from dewatering underground workings) to the game farm. The 14% decrease in water consumption at Khumani is the result of a more accurate water consumption measurement system installed since the last reporting period.

At Rustenburg, the 42% decrease in water consumption was due to the fact that only rehabilitation was ongoing and there was no production on site. The reduction in the number of inhabitants in the on-site village was also a contributing factor. The 40% decrease at Zeerust was

due to the site having been non-producing. While the hostels are currently not being utilised, there was some water consumption due to contractors occupying the village houses.

Wonderstone indicated a 12% increase in water consumption year on year, due to more water abstracted from boreholes for use in the production process. Operational water is usually derived from available surface water, but less surface water was available during F2017 due to drought conditions experienced in the area. The Wonderstone Grader Road operation reported a 125% increase in water consumption for the financial year. This was due to a significant increase in production for the period.

Water consumption per operation

Operation	Water consumption 2017 m ³	Water consumption 2016 m ³	Water consumption 2015 m ³	Water consumption 2014 m ³
Beeshoek	4 552 211	5 023 349	5 237 869	6 608 293
Khumani	3 999 709	4 634 128	3 647 534	3 440 654
Black Rock	1 008 977	1 129 808	877 478	916 126
Cato Ridge Works	222 329	242 051	322 400	394 247
Dwarsrivier	–	449 792	639 268	290 175
Machadodorp Works	28 675	34 599	105 799	52 261
Assmang operations total	9 811 901	11 513 727	10 830 348	11 701 756
Dwarsrivier	463 088	–	–	–
Wonderstone	33 178	29 669	30 622*	28 240*
Wonderstone Grader Road	1 496	666	1 523	1 230
Rustenburg Minerals	145 197	251 870	233 277	264 002
Zeerust	93 986	156 644	222 690	292 750
Assore operations total	736 945	438 849	488 112*	586 222*

*Restated.

Sustainability report continued

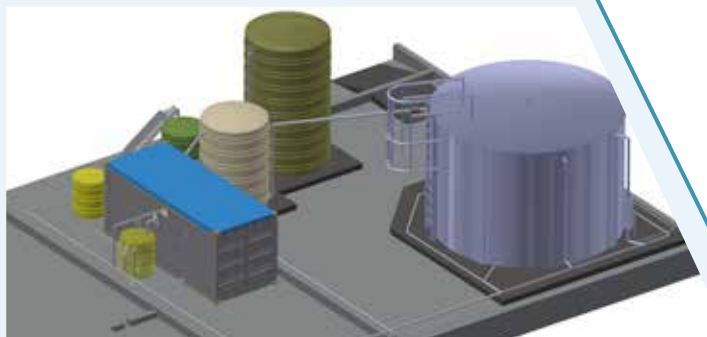
Water treatment plant at Dwarsrivier Chrome Mine

Return water dams at Dwarsrivier were at high risk of overrunning their banks during the rainy season, with the potential for substances to be deposited into the environment and ecosystem. The main contaminant in the water at mining operations is nitrates arising from the use of explosives.

The mine contracted a third-party service provider to install a modular and low-cost water treatment solution for treating mining effluent with the flexibility for a daily capacity of 200 m³ to 480 m³ to meet the corresponding standards of SANS 241.

The project involved the construction of an anaerobic treatment unit coupled with an ultrafiltration system based on Ceramic Flat Membranes (CFM) which is very unique and durable. The focus was on selective elimination of the contaminants to ensure that the required water quality could be achieved without increasing the generation of hazardous by-products.

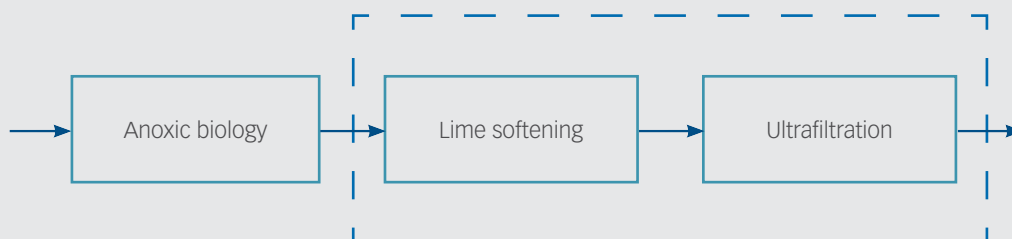
The unique feature of this modular water treatment plant is the efficient separation of



molecules as they typically occur in the mining effluent due to the average pore size of 200 nm. Advantages of this particular CFM system include excellent combinations of mechanical, chemical and thermal stability, longer shelf life and better defouling properties at relatively lower capital expenditure and operating costs in comparison to typically used polymer membranes.

The final process combines the biological and chemico-physical treatment, which consists of three steps:

- anaerobic nitrate removal;
- lime softening; and
- ultrafiltration.



The entire plant has a footprint of less than 150 m² and the CMF unit is implemented in a 20' ISO container.

Sustainability report continued

WASTE MANAGEMENT

Waste rock and process waste (including tailings from the mines and slag from the smelter operations) are the largest waste streams generated by the group's operations.

All Assmang operations have waste inventories that describe the source, the volume, and the type of waste generated by each process at the operation, as well as the disposal method. Typically, waste such as used oil is recycled through third-party service providers, while other hazardous waste such as oil contaminated material and used filters is sent to registered waste disposal facilities which issue safe disposal certificates. All Assmang operations are registered on the South African Waste Information System (SAWIS) and report on a monthly basis on both volume and type of waste generated and disposed.

While the smelters have always included slag in their waste inventories, mine residue has historically been excluded. As this is now included under the new waste regulations, all Assmang mining operations are currently in the process of updating their waste inventories.

Assore operations make use of third-party service providers to remove hazardous waste materials such as ball mill grease, used oil, used oil rags, contaminated soil, oil contaminated sawdust and florescent tubes from site. Print cartridges and used batteries are returned to the suppliers who dispose of them, while steel offcuts are removed by recycling companies.

The -40% year-on-year variance in waste rock produced at Beeshoek is due to a restatement of the F2016 figure. At Black Rock, there was -52% year-on-year variance in tailings produced due to the restatement of the F2016 figure and also because mining and the Seam 2 plant

stopped for six months over the F2016/ F2017 period.

The 95% decrease in waste rock and 69% drop in tailings at Rustenburg Minerals was due to the fact that the operation is in a rehabilitation phase with the waste rock material on site being utilised to backfill the open mine voids identified as part of Phase one of the rehabilitation process. A 20% reduction in waste rock was reported for the Wonderstone mining operation. This is due to reduced production in F2017. As Zeerust is in a non-producing phase, there was no difference in waste generated on site from the previous year.

The significant reduction in slag sales (90 748 tonnes F2017) versus 304 127 tonnes F2016) at Cato Ridge was due to two of the furnaces being switched off during F2016 and a third furnace being switched off in F2017, as well as the fact that the historic slag dump has been depleted.

Waste generated by operations

Operation	Waste rock 2017 m ³	Tailings/ slag/ discard waste 2017 tonnes	Waste rock 2016 m ³	Tailings/ slag/ discard waste 2016 tonnes	Waste rock 2015 m ³	Tailings/ slag/ discard waste 2015 tonnes*	Waste rock 2014 m ³	Tailings/ slag/ discard waste 2014 tonnes*
Beeshoek	5 513 127	950 135	9 116 059*	1 003 885	30 378 392	903 037	49 648 892	722 343
Khumani	15 009 835	5 354 262	13 714 857*	5 226 991*	26 370 969	2 627 668*	29 227 913	2 693 916
Black Rock	365 253	185 926	381 939	383 748*	236 096*	137 521*	40 926	211 871
Cato Ridge Works	N/A	90 748	N/A	93 953	N/A	119 411	N/A	122 042
Dwarsrivier	-	-	-	711 081	0*	647 751*	0*	531 896*
Machadodorp Works	N/A	0	N/A	0	N/A	33 389*	N/A	27 213
Assmang operations total	20 888 215	6 581 071	23 212 855*	7 419 658*	56 985 457*	4 468 777*	78 917 731*	4 309 281*
Dwarsrivier	0	761 974	-	-	-	-	-	-
Wonderstone	36 236	N/A	45 320	N/A	55 044	N/A	48 568	N/A
Rustenburg Minerals	98 359	21 178	1 985 874	67 629	2 233 021	46 435	1 626 859	46 055
Zeerust	0	0	0	0	1 475 737	53 948	663 764	22 723
Assore operations total	134 595	783 152	2 031 194	67 629	3 763 802	100 383	2 339 191	68 778

*Restated.

Sustainability report continued

Cato Ridge slag (tonnes per year)

Operation	2017	2016	2015	2014
Cato Ridge Works	90 748	304 127	334 262	729 294

LAND MANAGEMENT AND FINANCIAL PROVISION FOR CLOSURE

All Assmang sites have biodiversity action plans which are used to inform land use management practices and post-operational land use alternatives. At Khumani, a condition of the EMP approval was the establishment of a biodiversity offset agreement to compensate for clearance of priority species from mining areas. A biodiversity offset area adjacent to an existing conservation area was identified and negotiations for the purchase of the site were concluded in F2016.

We are currently working with the national Department of Nature Conservation as well as the national Department of Environmental Affairs to have the area registered as a

conservancy and to finalise the management agreement. Both Departments have indicated their satisfaction and approval of the land and the process. Khumani has already commenced with fencing and invader plant control. For all practical purposes, the condition for establishment of an offset area has been fulfilled.

Up-to-date closure plans are in place for each of the group's operational sites, which inform the financial quantum required for the eventual rehabilitation and closure of each site at the end of its operational life. Independent consultants are used to calculate financial provisions for closure in line with the requirements of the Mineral and Petroleum Resources Development Act (MPRDA). These closure provisions constitute the single largest environmental liability for the

group's operations, totalling R693 476 million for the Assmang operations (2016: R723 976 million) and R71 500 million for the Assore operations (2016: R26 000 million).

The Assore group's liability amount increased significantly with Dwarsrivier becoming part of the group companies. The Assore purchase of Dwarsrivier necessitated an independent review of the existing provision for closure evaluation by an external consultant hence the 84% increase in liability due to the various factors reported on in last year's sustainability report. Assore is therefore reporting a shortfall in financial provision for F2017 as we are still in the process of having the financial provision guarantees updated to include the final liability amount indicated for Dwarsrivier.

Sustainability report continued

Rehabilitation and closure provision

Operation/mine	2017			2016		
	Total liability R'000	Environmental fund R'000	Current guarantees in place R'000	Total liability R'000	Environmental fund R'000	Current guarantees in place R'000
Beeshoek	128 477	81 285	51 359	128 322	75 435	51 359
Khumani	308 267	76 893	254 566	307 228	71 354	254 566
Black Rock	207 747	71 312	158 062	231 009	64 001	158 062
Dwarsrivier	–	–	–	89 289	9 836	39 363
Assmang operations sub-total	644 491	229 489	463 986	755 848	220 626	503 350
Alloy operations						
Cato Ridge	117 156	0	0	132 722	0	0
Machadodorp	203 158	0	0	203 158	0	0
Assmang operations total	964 806	229 489	463 986	756 184	220 626	503 350
Dwarsrivier	102 393	0	44 500	–	–	–
Wonderstone	3 855	0	4 500	3 636	0	4 500
Rustenburg Minerals	14 837	0	18 000	14 241	0	18 000
Zeerust	1 856	0	4 500	1 751	0	3 500
Assore operations total	122 941	0	71 500	19 628	0	26 000

Note that closure and rehabilitation liabilities are reported on a 100% basis.

Operation/mine	2015			2014		
	Total liability R'000	Environmental fund R'000	Current guarantees in place R'000	Total liability R'000	Environmental fund R'000	Current guarantees in place R'000
Beeshoek	119 273	70 327	51 009	117 186	66 082	38 389
Khumani	320 784	66 518	254 266	298 681	62 577	187 032
Black Rock	209 506	59 664	149 842	178 609	55 940	122 669
Dwarsrivier	48 533	9 169	39 363	42 249	8 576	33 673
Assmang operations sub-total	698 096	205 678	494 480	636 725	193 175	381 763
Alloy operations						
Cato Ridge	119 705	0	0	105 842	0	0
Machadodorp	204 095	0	0	74 596	0	0
Assmang operations total	698 420	205 678	494 480	817 163	193 175	381 763
Dwarsrivier	0	0	0	0	0	0
Wonderstone	3 605	0	4 500	2 967	0	4 500
Rustenburg Minerals	15 987	0	13 000	12 750	0	13 000
Zeerust	3 452	0	3 500	4 088	0	3 500
Assore operations total	23 044	0	21 000	19 805	0	21 000

Sustainability report continued

Rehabilitation progress at Assore subsidiary companies

Rustenburg Minerals

The last blast at the Rustenburg Minerals open pit operations occurred on 18 August 2016, while the plant processing activities ceased in October 2016 and the final sales were dispatched from the mine in February 2017. Since August 2016, the focus has been on the rehabilitation of the open mining voids, including backfilling (to natural ground level) and top soiling of selected mining areas.

Strategic mining cuts have been left open to provide a starting point for continued mining should this be required in future. Phase 1 rehabilitation, including the backfilling of mining voids, was complete by the end of the third quarter of F2017.

Phase 2 rehabilitation began towards the end of F2017 and involved the top soiling and shaping of the remaining dumps in accordance with the approved EMP. Good progress was shown in the rehabilitated areas. Phase 2 rehabilitation also includes ripping on



Before



After

slope and the creation of storm water paddocks. This phase is expected to be completed by November 2017.

Zeerust

Zeerust was successfully rehabilitated during F2016 in line with the approved EMP as well as with input from independent/expert recommendations. The rehabilitation not only involved the quarries but also the successful rehabilitation of the plant tailings dams and dumps. Ongoing maintenance and upkeep is still in progress and will continue as planned.

COMMUNITY ECONOMIC DEVELOPMENT

We recognise that we have a responsibility to social upliftment in the communities in which we operate. Accordingly, we seek to respond to the challenges of livelihood support and economic diversification in a manner that is appropriate for the different socio-economic and geographical settings of our operations.

Structure of the CED function

The Assore group's community economic development (CED) programme is structured to encompass aspects of corporate social investment (CSI), social economic development (SED) and enterprise development (ED). These three activities are aimed at directing financial and other resources so that economic opportunities and social conditions in host communities can be sustainably improved.

Assore's CSI expenditure has a particular emphasis on education and is funded by the Boleng Trust, the Chairman's Fund as well as operational funding for SED. The latter is primarily sourced from the Boleng Trust, with some contribution from the Assore operations. The exception is Dwarsrivier, which contributes substantially toward SED, with ED only funded by the Assore operations during F2017, although

the Boleng Trust also contributed towards ED during previous reporting periods.

Similarly, Assmang's SED initiatives are funded at an operational level to meet commitments made to skills development, capacity building, social upliftment and poverty alleviation. The complex reporting requirements around aspects of SED performance are critical in maintaining the company's social licence to operate. These include reporting to the DMR in terms of social and labour plans (SLPs), the Mining Qualifications Authority (MQA) with respect to skills development and the Department of Trade and Industry (dti) in terms of the dti codes of good practice (which focus mainly on issues related to BBBEE). Assore also emphasises reporting to other stakeholders such as government departments and the communities in an effort to operate transparently and effectively.

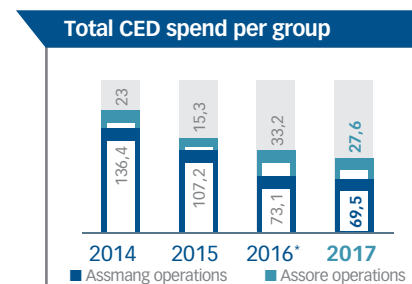
In accordance with the requirements of the Mining Charter, the group has prioritised identifying and supporting enterprise development projects, which present the most sustainable opportunities for social upliftment and poverty alleviation in communities surrounding our operations.

At Assmang, CED spend dropped by 5%, with R69,5 million spent for F2017 against the R73,1 million spent during F2016. The

reduction in budget was driven by the adverse economic situation facing the industry. However, the under-expenditure was also due to the disruption in the progress of project implementation in some areas, in particular due to community unrest which resulted in construction workers stopping operations for extended periods.

At Assore, there was a 17% decrease in CED expenditure (total spend R27,6 million) as there was very little requirement for infrastructure projects during F2017, compared to F2016 when infrastructure development was more in demand. The Rustenburg Minerals SLP and all associated projects were completed the end of 2016 which significantly reduced the CED commitments for the specific site.

Funding of community economic development (CED) expenditure (total)



* Restated from previous report.

Sustainability report continued

FOCUS OF FUNDING

In 2017, the most significant proportion of spend at Assmang operations was allocated firstly to infrastructure development (R47 million) and secondly to education (R2,8 million), while at Assore R15,7 million was allocated to infrastructure development and R5,7 million to education. Other categories of spend included health, basic needs and social development, as well as arts and culture.

Examples of infrastructure supported include the provision of roads, including the R577 regional road constructed under the auspices of the Mine Management Association, buildings and gravesites fencing for GaMalekane and Talane villages under Dwarsrivier's SLP.

Social development includes support for sporting activities. A snapshot of our educational and entrepreneurship development initiatives is set out on the following pages.

Education

Our support to education is holistic, and is provided at every level of the education value chain, from early childhood development to ABET and involvement at tertiary level. Bursaries are provided at group and operational level, with some operations providing funding for school fees.

Despite the fact that public spending on education is 6,4% of GDP in South Africa – the average share in European Union countries is 4,8% – educational outcomes are poor. Only 37% of South African children starting school go on to pass the matriculation exam; whereas just 4% earn a degree. In a league table of education systems drawn up in 2015 by the OECD club of mainly rich countries, South Africa ranks 75th out of 76.

The situation is particularly concerning when it comes to science and mathematics. In 2016, the trends in international mathematics and science study a quadrennial test sat by 580 000 pupils in 57 countries, placed South Africa at or near the bottom of its various rankings, though the country's scores had improved since 2011.¹

Educational initiatives

Early childhood development (ECD)

International research states that 90% of brain growth and development takes place before the age of five. Research also indicates that children whose development is nurtured early in life are more likely to be:

- Successful in school, have fewer learning disabilities and be more likely to finish high school and seek further education or training;
- More productive in the workforce, hold better jobs, own their own homes, and
- Healthier throughout their lives, physically and mentally, with a lower risk of heart disease, Type II diabetes, obesity, depression and substance abuse.

Against this backdrop, the group has established the following initiatives:

- Dwarsrivier has invested in ECD by constructing an ECD centre, the Mogoshadi crèche at GaMalekane, together with flushing toilets and a pavement at the centre for the community. The centre caters for over 250 children, ranging from three months to five years. For F2017, the mine bought furniture for the centre, while the Boleng Trust and Assore also donated furniture.
- In 2015, Wonderstone and the Boleng Trust, together with the Love Trust, an organisation which provides training for ECD facilitators, established an ECD training project. Accredited ECD training was provided to 20 current and future ECD teachers to enable them to qualify for a Level 4 SAQA accredited qualification. The students are expected to graduate before the end of 2017. Support is ongoing and workshops for existing ECD facilitators in the Letsopha area will be held in F2018.
- Wonderstone assists the Rainbow Crèche with maintenance on an ongoing basis as well as with the ThataKaKitiso teaching Intervention (since 2013). Support is aimed at enhancing the physical learning environment as well as teaching outcomes. Improvements can be seen in terms of teacher methodology and

creativity. In 2017, an on-site security facility was constructed. The crèche was part of the 2017 ECD stationery drive whereby the TEP students (see pages 30 to 31) made playdough as part of the pay-it-forward programme. The playdough, together with stationery packs, was handed over to the crèche learners.



Crèche learners with their stationery packs

Primary education

The main purpose of primary education is to give children a strong foundation in the basics of a general curriculum, with an emphasis on reading and mathematics. Research has found that children who attend a more academically effective primary school show better attainment and progress than children with similar characteristics who attend a less effective school.²



A learner at Makgophe Crèche and Primary School

Against this backdrop, the group is involved in the following:

- Rustenburg Minerals provides support to the Makgophe Crèche and Primary School in a number of areas, including maintenance, English teaching intervention and also funds safe, reliable transport to and from the school for pupils. In F2017, Rustenburg Minerals constructed a staff room for the school in the development centre.

¹ <https://www.economist.com/news/middle-east-and-africa/21713858-why-it-bottom-class-south-africa-has-one-worlds-worst-education>

² <https://www.theguardian.com/education/2008/nov/27/primary-school-importance>

Sustainability report continued

The recently completed development centre is used by the school as both a library and a computer centre. The students attend CAMI (educational software) classes in the computer room which is facilitated by ThataKaKitiso. The CAMI programme is used as a revision tool for the Department of Education approved curriculum for mathematics and English (literacy and language) for the Foundation and Intermediate Phases. ThataKaKitiso continues to assist the crèche and Grade R educators at Makgophe Primary School with English language intervention.

Rustenburg Minerals further assists some of the parents with transport subsidies.



High levels of concentration in maths awareness classes

- The Boleng Trust and Zeerust funded the building of the entire new school building for the Mmasebodule Primary School which was opened in 2015. The school houses seven classrooms, admin block, ablution facilities as well as a kitchen and canteen. Support is provided in the form of maintenance and ThataKaKitiso teaching intervention.

A vegetable garden was established to supplement the school feeding scheme initiated by the DoE. Gardening tools, seedlings and other equipment were donated to the project to enable the students to work in the garden. A trainer was contracted to provide training to both the teachers and students on how to grow their own vegetables, thus teaching them some agricultural skills.

ThataKaKitiso's main focus is to provide effective English language intervention solutions to South African rural schools, as well as teacher training and development, with the emphasis on English second language teaching methodology and practices.

- For many years, Wonderstone and the Boleng Trust have supported the Natanja Christian School in Ottosdal. The next phase in the equipping of the school is the construction of a sports complex which includes a swimming pool, netball courts, sports pavilion and change room and toilet facilities. The sports facility will not only benefit the technical training centre and bridging school, but also the entire community and schools in the surrounding area.

The Environment Impact Assessment has been completed and we are currently in the process of negotiating the purchase of the land.

- Dwarsrivier has provided infrastructure in the form of a borehole and equipment to Shaga Primary School and has renovated classrooms at the school. The mine has also constructed toilet blocks at Masago Primary.

In 2017, the Boleng Trust and Wonderstone installed an outdoor play area and outdoor gym for the Letsopa community in the Ottosdal area.

Secondary education

- Dwarsrivier, together with Young Legacy, handed over a library to Ngwanangoato Secondary School in February 2017, to promote a culture of reading and research. The library is fully stocked with a variety of books donated by Young Legacy with shelves and burglar proofing provided by the mine. The mine also helped with the renovation of classrooms at the school.

In addition, Dwarsrivier has drilled a borehole at Mhlaekoma Secondary School and provided equipment and renovated two classrooms at the school. The mine has also provided Sengange Secondary School with equipment for the science laboratory.

- In South Africa, many girls miss as much as ten weeks of school a year because they cannot afford to buy sanitary pads. This means that many never fulfil their potential academically, socially or economically. Against this backdrop, in February 2017 Dwarsrivier handed over reusable packs of sanitary towels to over 200 school learners from Grades 8 to 12. In addition to the provision of sanitary packs, the boys and girls also attended a week of educational sessions pertaining to puberty and teen pregnancy which was hosted by trained councillors. The councillors were also there to provide support to students who have been victims of abuse or violence.



Recipients of the sanitary packs

Tertiary education

Recognising that skills for the knowledge economy are built at tertiary level, the group is involved in the following tertiary initiatives:

- Two forms of bursaries are offered at Dwarsrivier, university bursaries and TVET bursaries. The university bursaries are advertised, after which applicants undergo a selection and recruitment process. In terms of TVET bursaries the top five students from ABET centres were offered funding to aid the completion of their studies, The TVET programme has reached an end and has subsequently been discontinued.
- Funded by Dwarsrivier, Wonderstone and Boleng Trust, the tertiary education preparatory (TEP) programme aims to prepare and support 20 students academically for university or other tertiary education. The programme began in February 2016 and was housed at the Nasor College where the learners (known

Sustainability report continued

internally as TEPIES) attended classes in mathematics, physical science, English for academic purposes, computer application training and life orientation.

The aim of the programme is to bridge the huge gap between matric in rural schools and tertiary education. English for academic purposes forms a large part of the programme as the majority of students (according to the national statistics received from universities) enter university with a Grade 5/6 level of reading.

The learners are continuously assessed before they rewrite their matric mathematics and science papers to improve on their mark received at the end of their matric year. They also write the Independent Examination Board (IEB) exam for mathematics and science to assess their progress through the year. All the students completed the course and successfully applied to universities, with several being awarded bursaries from other corporates and the Boleng Trust for their tertiary studies.

The TEPIES took part in the pay-it-forward programme which saw them volunteering in other community economic development (CED) initiatives in the area. Activities included knitting beanies for the Tsolonang Disability Centre learners; assisting with the set-up and handing out of promotional items in the Drug Awareness Day, Easter celebrations at the Rainbow Crèche and Natanja Christian School.



TEPIES graduates celebrate

- The Boleng Trust TEP programme prepares learners both socially and academically for the National Senior Certificate exams. The January 2017 intake included learners from Rustenburg and Limpopo. Learners are housed at the Boleng Trust Bridging School in Ottosdal which is equipped with two lecture rooms, an admin office, hostel facilities for male and female students, recreation room, storage facility and covered parking. The curriculum includes mathematics, physical science, life science, and entrepreneurship, English for academic purposes, national benchmark test preparation and life orientation.

As in 2016, the learners attended lectures and were continuously assessed.

Apart from the academic aspects of the course, the aim is to socially equip the students for life at university, away from home. This year the students took part in the Let's Go programme, a social development course which aims to assist with self-discovery and self-awareness but also make one sensitive to other people feelings and cultures. In addition, the students engaged in a team building exercise to promote togetherness.

As part of the pay-it-forward programme, the students made playdough that they then handed out at the Rainbow Crèche (see page 29). In 2017, the maths assist programme was implemented in order to assist the high school students in the Letsopa area with mathematics. This involved the TEPIES being given a basic maths problem which they needed to solve and then help the math assist pupils with understanding the problem and how to get to the answer.

- The success of the pilot TEP programme highlighted the need for additional facilities and infrastructure. Accordingly, the Boleng Trust and Wonderstone jointly authorised the construction of the Boleng Trust Bridging School which houses the TEP

and the maths assist programmes. The overall aim is to provide infrastructure for TEP students, thereby enhancing the programme's potential for growth.

The Bridging School is equipped with two lecture rooms, admin office, and hostel facilities for male and female students, recreation room, storage facility, covered parking and an outdoor gym. A management team, including the principal, administrator, cleaning staff, gardener, hostel supervisors and a sports and recreation coordinator, have been appointed.

- Technical education has a critical role to play in building the economic prosperity and social stability of South Africa, by offering second chance education and training in the craft, technical and business skills so gravely needed by the economy. To help meet this need, Nasor Technical College, built as part of the Natanja Christian School construction, has been registered as a separate entity and has opened its doors to a total of 14 students of which four are fee-paying and 10 are sponsored by the Boleng Trust. The learners have completed N1 and are currently doing the N2 and N3 courses.



Nasor College

Some promising students have come through the ranks and shown great potential in the electrical engineering and fitting and turning disciplines. The college is in the process of being accredited as an exam centre as well as partnering with Vuselela Technical and Vocational Education and Training (TVET) College.

Sustainability report continued

Giving matric learners career guidance

In April 2017, Dwarsrivier partnered with Kukanang Career Expo to stage career exhibition to help matric learners from 15 different schools to unpack their passion and get the career guidance they need to create a successful future for themselves. They were joined by Sekhukhune TVET College and other stakeholders.

The Career Expo took place at Ngwaabe Comprehensive Secondary School. Despite it being school holidays, Grade 12 learners from the Ngwaabe and Jane Furse areas attended the event in large numbers.

The programme included a short formal session with introductions, messages from stakeholders and a keynote address. After the formal programme learners had the opportunity to attend break-away sessions with students and professionals in careers in which they are interested.

Entrepreneurship and enterprise development initiatives

Entrepreneurship and enterprise development create new companies, open up new markets and nurture new skills, thereby promoting socio-economic development. The group's entrepreneurship and initiatives include:

- A business development enterprise programme initiated by Rustenburg Minerals aimed at improving entrepreneurs' chances of accessing funds and markets by delivering business training, facilitating business registrations and assisting with business compliance certificates. The

programme involved the development of a model called "the six-stage Business Restoration Practice" which comprises two phases: organising the business, which takes six months; and mentoring, monitoring and reporting which takes 12 months. The first workshop took place in December 2016 and was attended by 65 entrepreneurs.

- A candle-making project funded by Wonderstone. This project, which has five beneficiaries, currently supplies many of the churches and stores in the Ottosdal area. The beneficiaries are

currently undergoing training and mentoring from the South African Institute of Entrepreneurship to improve their business practices, widen their client base and area and develop and improve their marketing strategy. The project workers used the Business Simulation Game for practical application over a four-day period. The game helped the participants assess their past and current business practices which enabled them to identify the areas that need to be changed, improved on or implemented. The project will continue to receive mentoring and coaching sessions.



A participant in the candle-making project funded by Wonderstone

Sustainability report continued

- Waste management at Wonderstone. In phase 1 of this project, Wonderstone donated a branded waste removal truck and 3 300 wheelie bins to service households in Letsopha. Phase 2 included adapting the truck to empty waste skips, placing 42 skips throughout Letsopha for additional waste management solutions and supplying private bins to the new wards developed. The focus is now on preparing for the landfill site as well as conducting awareness campaigns and researching income generating opportunities. Six of the project workers attended day one of the SAIE Entrepreneurial Skills training with the candle making project beneficiaries (described on the previous page) and received valuable insight into how to run a business. In terms of income generation, a number of ideas have been explored but the one that looks most promising is compost production business.
- In terms of their SLP 1, Khumani Mine established a brickmaking training programme for 10 unemployed youths, five women and 10 men, from the Gamagara municipal area. During training, the trainees were supported with a daily stipend and the required personal protective equipment (PPE). The beneficiaries, who were issued with certificates in April 2017, can now manufacture cement bricks through a manual method and lay them in a construction environment.
- Dwarsrivier has established the following SMME incubators:
 - Group of 17: Office cleaning
 - Malebaneng: Canteen
 - Baleseng: Spillage cleaning
 - Phuti Tsoga: Construction
 - Bokone Bowa: Vegetation.

Sustainability report continued

INDEPENDENT ASSURANCE REPORT TO THE MANAGEMENT AND STAKEHOLDERS OF ASSORE LIMITED

INTRODUCTION

Ibis ESG Assurance Proprietary Limited (Ibis) was appointed by Assore Limited (Assore) to conduct an independent third-party assurance engagement in relation to selected sustainability information in Assore's Sustainability Report for the year ended 30 June 2017 (the Report).

Ibis is an independent and licensed provider of sustainability assurance services. The assurance team was led by Petrus Gildenhuys with support from Adam Sutton-Pryce and Ravanya Naidoo consultants from Ibis. Petrus is a Lead Certified Sustainability Assurance Practitioner (LCSAP) with more than 20 years' experience in sustainability performance measurement involving both advisory and assurance work.

ASSURANCE STANDARD APPLIED

This assurance engagement was performed in accordance with AccountAbility's AA1000AS (2008) standard and was conducted to meet the AA1000AS Type II moderate level requirements.

RESPECTIVE RESPONSIBILITIES AND IBIS' INDEPENDENCE

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

Ibis' responsibility is to the management of Assore alone and in accordance with the terms of reference agreed with Assore.

Ibis applies a strict independence policy and confirms its impartiality to Assore in delivering the assurance engagement. This assurance engagement is the second sustainability assurance engagement conducted for Assore by Ibis.

ASSURANCE OBJECTIVES

The purpose of the assurance engagement was to provide the management of Assore and its stakeholders with an independent moderate level assurance opinion on whether the Report meets the following objectives:

- Adherence to the AA1000APS (2008) AccountAbility principles of inclusivity, materiality and responsiveness
- Fair presentation of the following selected disclosures in the Report:
 - Fatality frequency rate (FFR)
 - Total number of work-related fatalities
 - Lost-time injury frequency rate (LTIFR)
 - Total recordable injury frequency rate
 - Electricity consumption in MWh
 - Total fuels consumed
 - Total volume of water abstracted from all sources
 - Total volume of water discharged from sites
 - Amount of CSI and LED spend

WORK PERFORMED BY IBIS

Ibis performed the assurance engagement in accordance with the AccountAbility AA1000AS (2008) Type II requirements. The following suitable assessment criteria were used in undertaking the work:

- AA1000APS (2008) (AccountAbility Principles Standard) published criteria for inclusivity, materiality and responsiveness respectively
- Accuracy, validity and completeness of reported information

Our assurance methodology included:

- Interviews with relevant functional managers at head office and operations to understand and test the processes in place for adherence to the AA1000APS stakeholder engagement principles and disclosure of the selected KPIs in the assurance scope
- Site visit to the Dwarsrivier operation, which involved testing, on a sample basis, the measurement, collection, aggregation and reporting of selected sustainability information
- Inspection and corroboration of supporting evidence to evaluate the data generation and reporting processes against the assurance criteria
- 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 to ensure consistency with the assurance observations

ENGAGEMENT LIMITATIONS

Ibis planned and performed the work to obtain all the information and explanations believed necessary to provide a basis for the assurance conclusions for a moderate assurance level in accordance with AA1000AS (2008).

Sustainability report continued

The procedures performed in a moderate assurance engagement vary in nature from, and are less in extent than for, a high assurance engagement. As a result, the level of assurance obtained for a moderate assurance engagement is lower than for high assurance as per AA1000AS (2008).

ASSURANCE CONCLUSION

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 boundaries and reporting criteria, and are free from material misstatement in respect of:

- Assore’s adherence to the AA1000APS principles of inclusivity, materiality and responsiveness
- The selected disclosures identified under assurance objectives above and as presented in the published Report

KEY OBSERVATIONS AND RECOMMENDATIONS

Based on the work set out above, and without affecting the assurance conclusions, the key observations and recommendations for improvement are as follows:

In relation to the inclusivity principle

Assore is still in the process of formalising its stakeholder engagement process. Stakeholder groups have been mapped out and general means of engagement identified pointing to a level of stakeholder inclusivity and the acknowledgement of stakeholders’ interests in Assore.

However, it is recommended that Assore takes steps towards rolling out a formal stakeholder engagement framework across the group.

In relation to the materiality principle

Assore has maintained due process in identifying its material issues influencing its decisions, actions, performance and stakeholders in a transparent and balanced manner.

Going forward, it is recommended that the Report explains the materiality determination process, how opportunities and risks that material issues present are addressed, and what the future focus elements in these areas are.

In relation to the responsiveness principle

Assore’s responses to stakeholder issues observed across different stakeholder groups, at both corporate and operational levels, indicate a level of accountability to issues raised.

Once a formal stakeholder engagement framework is implemented, the focus should be on consistent recordkeeping of its key responses to stakeholders across the group, that will improve analyses and responsiveness going forward.

Another identified area for improvement is a mechanism for inviting public engagement on Assore’s website from outside of the organisation.

In relation to the selected disclosures

A number of data inconsistencies were identified during the audit that were consequently corrected by Assore. Although Ibis is satisfied with the data accuracy in the assurance scope in general, it was found that the control environment governing the collection, verification, and reporting of sustainability information needs improvement.

To ensure the complete disclosure of sustainability information, it is recommended that Assore develop and implement a reporting procedure covering KPI definitions, reporting mechanisms, responsibilities, controls and audit trail requirements.

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



Petrus Gildenhuys

Director, Ibis ESG Assurance Proprietary Limited
Johannesburg, 27 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 Assore.

GLOSSARY

ABET	Adult Basic Education and Training
AIDS	Acquired Immune Deficiency Syndrome.
AMCU	Association of Mineworkers and Construction Union
AMT	African Mining and Trust Company Limited
ARM	African Rainbow Minerals
ARVs	Antiretrovirals
Assmang	Assmang Proprietary Limited
Assore	Assore Limited
BBBEE	Broad-Based Black Economic Empowerment
Beeshoek	Beeshoek Iron Ore Mine
Black Rock	Black Rock Manganese Mines
BUSA	Business Unity South Africa
Cato Ridge	Cato Ridge Works
CDP	Carbon Disclosure Project
CED	Community Economic Development
CFM	Ceramic Flat Membranes
CO₂e	Carbon Dioxide Equivalent
COP	Code of Practice
CSI	Corporate Social Investment
CVT	Counselling and Voluntary Testing
DEA	Department of Environmental Affairs
DEDET	Department of Economic Development, Environment and Tourism
DMR	Department of Mineral Resources
DoH	Department of Health
dti	Department of Trade and Industry
Dwarsrivier	Dwarsrivier Chrome Mine Proprietary Limited
DWC	Dakot Wear Ceramics Proprietary Limited
ECD	Early Childhood Development
ED	Economic Development
EIA	Environmental Impact Assessment
EIUG	Energy Intensive Users Group
EMP	Environmental Management Plan
EMPr	Environmental Management Programme
FAPA	Ferroalloys Producers' Association
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GHS	Globally Harmonised System
GRI	Global Reporting Initiative
HAART	High Active Antiretroviral Therapy
HDSA	Historically Disadvantaged South African
HIV	Human Immuno-Deficiency Virus
ICDA	International Chrome Development Association
IMni	International Manganese Institute
IMSBC Code	International Maritime Solid Bulk Cargoes Code
IMO	International Maritime Organisation
ISAE	International Standard on Assurance Engagements
ISO	International Organisation for Standardisation
Khumani	Khumani Iron Ore Mine
LED	Light Emitting Diode
LTI	A Lost-Time Injury is 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 an LTI

GLOSSARY continued

LTIFR	The Lost-Time Injury Frequency Rate indicates the number of injuries per 100 employees per 200 000 hours (based on the calculation that 200 000 hours is the hours worked by 100 employees for 50 weeks per annum at 40 hours per week)
LRA	Labour Relations Act
m³	Cubic Metre
MDR TB	Multi-Drug Resistant Tuberculosis
MHSA	Mine Health and Safety Act
MPRDA	Mineral and Petroleum Resources Development Act
MoU	Memorandum of Understanding
MQA	Mining Qualifications Authority
MRP	Metal Recovery Plant
MW	Megawatt
NEMA	National Environmental Management Act
NIHL	Noise Induced Hearing Loss
No	Number
NUM	National Union of Mineworkers
NUMSA	National Union of Metalworkers of South Africa
OECD	Organisation for Economic Cooperation and Development
OHES	Occupational Health, Environment and Safety
OHSA	Occupational Health and Safety Act
OHSAS	Occupational Health and Safety Assessment Series
Ore & Metal	Ore & Metal Company Limited
PDS	Proximity Detection System
PPE	Personal Protective Equipment
Prohibition notice	This is issued in terms of the Occupational Health and Safety Act when serious hazards are found by a safety inspector. The notice can prohibit the use of certain machines, equipment, hazardous substances or processes; or prohibit certain actions until the hazardous situation is shown to have been remediated
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RoD	Record of Decision
Rustenburg Minerals	Rustenburg Minerals Development Company Proprietary Limited
SANS	South African National Standard
SAWIS	South African Waste Information System
SAQ	South African Qualifications Authority
SEC	Social and Ethics Committee
Section 54 notice	This is issued in terms of the Mine Health Safety Act when an inspector 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, the inspector may give any instruction necessary to protect the health and safety of persons at the mine
Section 55 notice	As above
SED	Social Economic Development
SENS	Stock Exchange News Services
SHEQ	Safety, Health, Environment, Quality
SLP	Social and Labour Plan
STI	Sexually Transmitted Infection
TB	Tuberculosis
TEPP	Tertiary Education Preparatory Programme
TMM	Trackless Mobile Machinery
TVET	Technical & Vocational Education & Training
VSP	Voluntary Severance Package
WIM	Women in Mining
Wonderstone	Wonderstone Limited
XDR TB	Extreme Drug Resistant TB
Zeerust	Zeerust Chrome Mines Limited