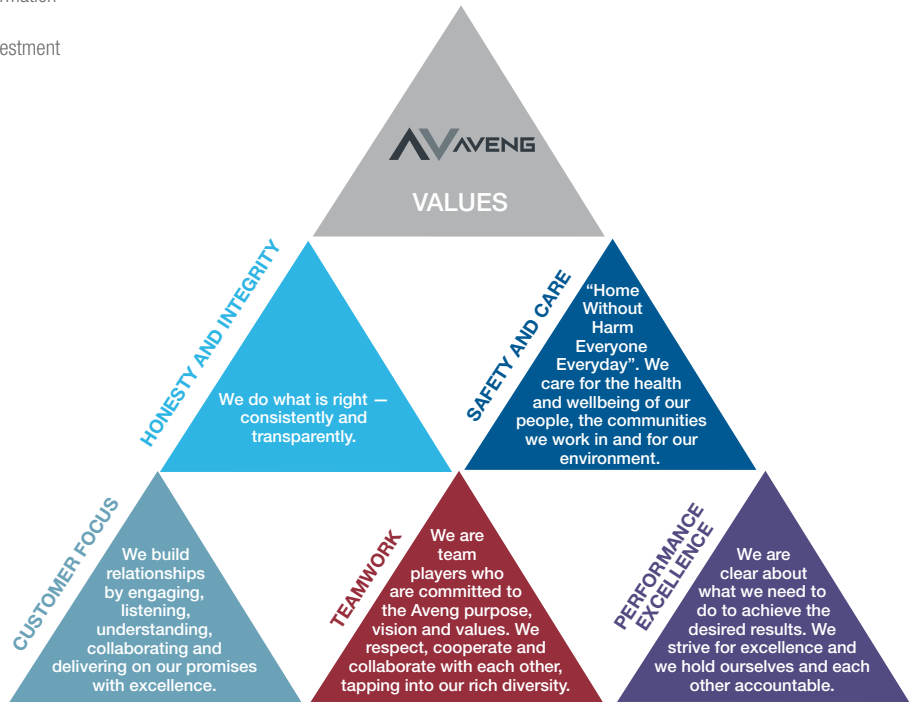





Sustainability report
2018


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Navigating this report

 This icon indicates where further information on a matter can be found elsewhere in this report

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2018 at a glance

Safety and care

Regrettably, Anele Nwelende lost his life in a road accident at our R61 All Saints road project (2017: two fatalities)


Reduced lost-time and recordable injuries reflected an overall **improvement in safety performance**

Aveng prioritises the **mitigation of noise-induced hearing loss and promotes HIV testing**

See our safety and health reports on pages 17 and 23 

A sustainable capital structure

R493 million rights issue, early redemption of **R2 billion convertible bond** and renegotiation of bank debt reduced Aveng's gross debt/equity from 127% to 40%

See our integrated report at www.aveng.co.za 

Investing in people

Despite the challenges Aveng faced, we:

- ▶ Enrolled **643 candidates** on a range of learning programmes
- ▶ Invested **R17,8 million** in education-focused socio-economic development

See our strategic people management and CSI reports on pages 37 and 52 



Transformation beyond compliance

We achieved **level 2 B-BBEE** contributor status
Black representation in our middle management **increased** by **55%** to 40,3%

Aveng spent **R3,1 billion** with black-owned suppliers (R839 million with black women-owned suppliers)

See our transformation report on page 45 



Environmental stewardship

No major environmental incidents (2017: 0)

Aveng used **less electricity** but its diesel and water consumption increased

Our businesses focused on **improving water and energy efficiency**, and reducing waste

See our environment report on page 28 



Boundary and scope of report



Boundary and scope


Sustainability touches every aspect of our business and is therefore critical to our success. Aveng recognises that in creating value for its stakeholders it needs to be financially stable and support sustainability in the way it conducts its business.

The sustainability report provides an overview on how Aveng, through its operations, manages and addresses sustainability focus areas across its diverse business scope. The 2018 report takes into account Aveng's strategy to dispose of non-core businesses.

Reporting approach

This sustainability report covers the period 1 July 2017 to 30 June 2018 and includes the sustainability performance of all the Group's operations across all geographies it operates in. Relevant developments between 1 July 2018 and the date of publication are included. Any limitations to this boundary are indicated where applicable. For instance, the reporting boundary of the environmental performance information disclosed represents approximately 90% coverage across all operating groups that currently have systems in place to generate this information. Where any restatements or changes in measurement methods have taken place, these are described in the relevant report section.

We have streamlined our reporting in line with the recommendations of the King Code of Governance for South Africa 2016 (King IV™*) and in accordance with the International <IR> Framework. For a comprehensive view of Aveng's commitment to sustainability, the sustainability report should be read in conjunction with the integrated report at www.aveng.co.za . The interaction between Aveng's 2018 suite of reports is explained on page 5 .

Key matters have been identified in line with accepted best practice, and the matters regarded as being most material for Aveng and its stakeholders are reported on pages 13 and 14  and in the integrated report. Aveng defines the materiality of matters for reporting purposes as those matters that substantially affect the Group's ability to create and sustain value over the short, medium and long term.

Our sustainability report demonstrates the integration of sound sustainability practices throughout our organisation. Our policies and framework guidelines across the sustainability pillars of safety, health and environment (SHE), human capital, transformation and socio-economic development, ensure strategic alignment with our operations. Impact targets for 2018 contributed meaningfully towards the wellbeing of our people and the communities and environment in which we operate.

Aveng focuses on improving its data management and reporting as part of its commitment to strengthen the sustainability focus areas and deliver positive impact to all stakeholders through

strategic alignment and performance management by its business operations. Aveng embeds appropriate responses to group sustainability risks and opportunities into core business processes and management.

The 2018 sustainability report builds on the 2017 report, with detail on performance improvement initiatives implemented by the Group's business units. As part of Aveng's commitment to continuous improvement, and in line with current international norms, the Group adopted and reported on the total recordable injury frequency rate (TRIFR), replacing the all injury frequency rate (AIFR). The TRIFR forms part of Aveng's SHE KPIs included as part of the independent assurance scope.

We provide insight into the context and focus areas in each section and identify and correlate relevant stakeholder concerns and risks with actions Aveng executes across the Group. A review of performance against targets (where applicable) and prior periods is provided at a group level and, where necessary, cascades down to operating group level. Aveng's approach to setting improvement targets is aligned with the continuous improvement drive and considers an analysis of data and trends based on the previous year's performance and changing market trends and requirements. A risk-based approach remains the foundation of all activities and development of policies and procedures, to ensure we uphold our commitment to sustainability.

Aveng draws on multiple frameworks and guidelines, such as the Global Reporting Initiative, the Carbon Disclosure Project, the Greenhouse Gas Protocol, the Water Disclosure Project, and various other laws or requirements relevant to our operations relating to environmental and occupational health and safety. Our sustainability information has been prepared in accordance with our internally developed guidelines, which are available on request from Aveng.

Governance

Sustainability forms part of the Board's roles and responsibilities.

The primary activities undertaken in 2018 by the Board's social, ethics and transformation committee, the audit and risk committee and the safety, health and environmental committee were as follows:

Social, ethics and transformation committee


The social, ethics and transformation committee provides independent oversight by reviewing the actions of management through an ethical lens and being accountable for specific areas within its mandate. The committee proactively reviews management actions and efforts to comply with relevant legislation and charters, including the principles of King IV.

This includes the review and recommendation, for approval by the Board, of policies, strategies and plans for management implementation.

Boundary and scope of report continued


Competition law training

Aveng's competition law training remains a key part of running business. The training programme reinforces Aveng's commitment to eliminating anti-competitive practices. The online certification competition law training ensures employees comply with relevant competition laws set for each business's country and region of operation. Refresher training is conducted annually. In 2018, 453 employees[Ⓢ] received competition law training, the decrease in number can be attributed to the reduction in the number of employees across the Group.

[Ⓢ] This item was the subject of the limited assurance engagement performed by EY. Refer to assurance report on pages 6 to 8. 

Fraud awareness training

In line with Aveng's ethical organisational culture, fraud awareness training was conducted across the Aveng Africa operations, by an independent, external company. The training focused on enhancing employee awareness and knowledge in identifying and reducing fraud-related risks, as well as emphasising the vital role that all Aveng employees can play in identifying and preventing fraud. A total of 356 employees[Ⓢ] received anti-corruption training.

[Ⓢ] This item was the subject of the limited assurance engagement performed by EY. Refer to assurance report on pages 6 to 8. 

Safety, health and environmental committee

The safety, health and environmental (SHE) committee upholds the Aveng goal of "Home Without Harm Everyone Everyday". While the committee is content that it complied with its charter, it recognises the value of continuous improvement. The committee further underpins the importance of consistent leadership, value in the safety of people and the commitment to effective risk mitigation and the reduction of incidents. The committee performed its functions against its set work plan to ensure the Group upholds its commitment to its value of safety and care.

The SHE committee has established a structured approach to governance and oversight which includes engaging with operational management levels and providing support for underperforming operations, reviewing its charter annually and planning each year's activities.

Safety remains the first item of discussion on all Board and operating group management agendas.

During 2018, leadership engagement continued to be well demonstrated, while accountability was encouraged across all levels of the Group. The SHE committee monitored the implementation of the revised SHE strategy to improve SHE performance. The committee's charter and work plan guides the committee in addressing strategic SHE matters, compliance, risk management and a review of continuous improvement of the Group's operational activities.

Action plans to manage performance against the SHE Plan on a Page (PoP) were implemented and monitored through quarterly review to ensure continuous improvement in achieving SHE objectives.

Focused effort continues to ensure the identification and consistent application of appropriate expertise, management tools and approaches across the Group. It is expected of leadership to proactively engage with personnel to demonstrate and influence the safety culture positively and eliminate harmful conditions and sources of human error. While improvement in safety performance has been noted the Group continues to pursue its vision of "Home Without Harm Everyone Everyday".

The integrated SHE policy was revised to ensure strategic alignment and was approved by the Board in 2018.

Audit and risk committee

The audit committee and risk committee were combined into one audit and risk committee in 2018. The committee acts as the governing body for the combined risk management assurance model.

The committee oversees the activities of all three lines of defence. It receives reports from the group commercial executive on the efficacy of the risk management model and reports from internal and external audit (third line of defence). The committee reviews all group material risks, major and problematic projects with specific focus on delays, changes in costs, commercial claims, margins and any other items of concern that occurred since the prior reporting period. Peer reviews and "breaking news" on underperforming contracts are brought to the committee's attention. Concerns raised by the committee are communicated to the relevant operating groups for management actions. Lessons learnt of underperforming or highly successful projects are presented to the committee, providing a feedback loop to enable continuous improvement in processes and project execution.

The tender approval process is a critical process in the project lifecycle and remains robust with the Aveng executive committee reviewing all major bids and high-risk projects to satisfy itself that all technical, programme, commercial and project risks are adequately dealt with in the preparation of the bid. This is then presented to the Board's tender risk committee (a sub-committee of the Board's audit and risk committee) which must satisfy itself that appropriate business processes have been followed in the preparation of the bid and that risks have been considered and appropriately transferred or mitigated prior to bid submission. Particular attention is paid to the key commercial terms, with a mandate given to the relevant operating group specifying the terms under which a contract may be accepted.

The committee oversees the activities of the external and internal audit functions and receives input on the adequacy of financial reporting and control mechanisms. It also relies on input on material risk issues that could impact the financial results.

Refer to www.aveng.co.za  for the full corporate governance report.

Boundary and scope of report continued

Assurance

As part of the audit and risk committee's responsibilities, it reviewed and recommended the approval of an appropriate external assurance services provider in respect of the material elements of the sustainability overview. EY has undertaken a limited assurance engagement for selected key performance indicators in this report. The scope of the assurance, selected performance information and independent assurance report can be found on pages 6 to 8 of this report .

Board responsibility and approval statement

The sustainability report was approved by the Board on 31 October 2018 and signed on its behalf by:



Eric Diack


Executive chairman and interim CEO

Boundary and scope of report continued

Aveng 2018 suite of reports

Interaction between reports

The 2018 sustainability report complements the 2018 integrated report by providing more detailed disclosures on Aveng's sustainability performance. Certain topics, such as the organisational overview and business model, stakeholder engagement, risk management and material matters, as well as business strategy are disclosed in the 2018 integrated report. Throughout the sustainability report, references are provided to show where further detail can be obtained from the suite of reports.

	Integrated report	Audited consolidated annual financial statements	
Contents	<ul style="list-style-type: none"> ▶ Information on Aveng's material matters, business model, strategy, performance and outlook 	<ul style="list-style-type: none"> ▶ Audit and risk committee report ▶ Executive chairman's report ▶ Directors' report ▶ Report of the independent auditors ▶ Audited consolidated financial statements 	
Relationship of information between suite of reports	<ul style="list-style-type: none"> ▶ Relevant cross-references to more comprehensive information across the suite of reports 	<ul style="list-style-type: none"> ▶ Summarised audited consolidated financial statements extracted from the audited consolidated financial statements included in the integrated report 	
Frameworks and guidelines applied	<ul style="list-style-type: none"> ▶ King Code on Corporate Governance for South Africa 2016™ (King IV) ▶ International <IR> Framework ▶ Companies Act 71 of 2008 (Companies Act) ▶ JSE Limited (JSE) Listings Requirements 	<ul style="list-style-type: none"> ▶ International Financial Reporting Standards (IFRS) ▶ Companies Act ▶ JSE Listings Requirements 	
Web link	 www.aveng.co.za		
	Sustainability overview	Corporate governance	Annual general meeting documents
Contents	<ul style="list-style-type: none"> ▶ Safety ▶ Health ▶ Environment ▶ Reporting and governance ▶ Strategic people management ▶ South Africa transformation ▶ Independent limited assurance report 	<ul style="list-style-type: none"> ▶ Full corporate governance report ▶ King IV compliance register 	<ul style="list-style-type: none"> ▶ Code of business conduct ▶ Letter to shareholders ▶ Shareholders' diary ▶ Summarised audited consolidated financial statements ▶ Notice of annual general meeting (AGM) ▶ Explanatory notes: AGM ▶ Form of proxy ▶ Notes to the form of proxy ▶ Shareholders' analysis ▶ Corporate information
Relationship of information between suite of reports	<ul style="list-style-type: none"> ▶ Key elements of the sustainability overview incorporated into executive and operational reviews of the integrated report 	<ul style="list-style-type: none"> ▶ The full corporate governance report is included in the integrated report 	<ul style="list-style-type: none"> ▶ This statutory information is posted to shareholders prior to the AGM
Frameworks and guidelines applied	<ul style="list-style-type: none"> ▶ Aveng safety, health and environment, and human resource policies and frameworks ▶ Global Reporting Initiative (GRI) ▶ Carbon Disclosure Project (CDP), Water Disclosure Project (WDP) and Greenhouse Gas (GHG) protocol ▶ B-BBEE Codes of Good Practice ▶ Construction Sector Charter 	<ul style="list-style-type: none"> ▶ King IV ▶ Companies Act ▶ JSE Listings Requirements ▶ Employment Equity Act 	<ul style="list-style-type: none"> ▶ King IV ▶ Companies Act ▶ JSE Listings Requirements

Independent limited assurance report

For selected key performance indicators in Aveng Limited’s sustainability report for the year ended 30 June 2018

To the directors of Aveng Limited

Our conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the selected key performance indicators

(KPIs) and related disclosures as presented in the Aveng sustainability report for the year ended on 30 June 2018 (report), are not prepared and presented, in all material respects, in accordance with Aveng’s internally defined measurement and reporting criteria for reporting the selected KPIs.

Ernst & Young Inc. (EY) has undertaken a limited assurance engagement for the selected KPIs described below and related disclosures as presented in the Aveng Limited (Aveng) sustainability


overview for the year ended 30 June 2018.


This engagement was conducted by a multidisciplinary team of environmental and assurance specialists with relevant experience in sustainability and carbon footprint reporting.

Subject matter

Our limited assurance engagement was performed on the selected KPIs listed below and related disclosures as presented in the report.

Category	Selected KPIs
Social and ethics	1. Number of personnel trained on competition law 2. Number of personnel trained on fraud awareness
Environment	3. Scope 1 – diesel consumption 4. Scope 2 – purchased electricity
Health and safety	5. Injury frequency rates (total recordable and lost-time injury frequency rate) 6. Number of registered cases related to noise-induced hearing loss (NIHL)
Community	7. Corporate social investment (CSI) trust spend (R)

These selected KPIs prepared and presented in accordance with management’s internally defined measurement and reporting criteria (measurement and reporting criteria), are marked with a  on the relevant pages of the report where they appear.

The measurement and reporting criteria applied for these selected KPIs are described on Aveng’s website: www.aveng.co.za. 

The scope of work was limited to the matters stated above in relation to the selected KPIs as presented in the report, and did not include coverage of data sets or information relating to areas other than the selected KPIs, information reported outside of the report, comparisons against historical data, or management’s forward looking statements.

Directors’ responsibilities

You are responsible for the selection, preparation and presentation of the selected KPIs in accordance with management’s internally developed measurement and reporting criteria, as

presented in the report. You are also responsible for determining the appropriateness of those measurement and reporting criteria in view of the intended users of the selected KPIs disclosed in the report (ie Aveng’s stakeholders) and for disclosing those criteria for the intended users (ie disclosed on the website). Furthermore, you are responsible for the identification of stakeholders and stakeholder requirements, material issues, for commitments with respect to sustainability performance and also for the design, implementation and maintenance of internal control relevant to the preparation and presentation of the selected KPIs in the report free from material misstatement, whether due to fraud or error.

Inherent limitations

Inherent limitations of assurance engagements include use of selective testing of the information being examined, which means that it is possible that fraud, error or non-compliance may occur and not be detected in the course of performing the engagement.

Carbon emissions quantification is subject to inherent uncertainty because of incomplete scientific knowledge used to determine emissions factors and the values needed to combine emissions of different gases.

There are additional inherent risks associated with assurance engagements performed for non-financial information given the characteristics of the subject matter and associated with the compilation of source data using definitions and methods for determining, calculating, and estimating such information that are developed internally by management. The absence of a significant body of established practice on which to draw, allows for the selection of different but acceptable measurement techniques which can result in materially different measurements and can impact comparability. The precision of different measurement techniques may also vary. Qualitative interpretations of relevance, materiality and the accuracy of data are subject to individual assumptions and judgements. In particular, where the

Independent limited assurance report continued

information relies on factors derived by independent third parties, our assurance work has not included examination of the derivation of those factors and other third-party information.

Our independence and quality control

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants as well as the Code of Professional Conduct for Registered Auditors issued by the Independent Regulatory Board for Auditors, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

In accordance with International Standard on Quality Control 1, *Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and other Assurance and Related Service Engagements*, we maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our responsibility

Our responsibility is to perform our limited assurance engagement to express our conclusion on whether anything has come to our attention that causes us to believe that the selected KPIs as presented in the report are not prepared, in all material respects, in accordance with the measurement and reporting criteria for those KPIs. We have performed our limited assurance engagement in accordance with the terms of reference for this engagement agreed with Aveng, which include performing the engagement in accordance with the International Standard on Assurance Engagements ISAE 3000 (Revised), *Assurance Engagements other than the Audits or Reviews of Historical Financial Information and ISAE 3410, Assurance Engagements on Greenhouse Gas Statements*, issued by the International Auditing and

Assurance Standards Board. Those standards require that we plan and perform our engagement to obtain limited assurance about whether the selected KPIs as presented in the report, are free from material misstatement.

A limited assurance engagement undertaken in accordance with ISAE 3000 (Revised) and ISAE 3410 involves assessing the suitability in the circumstances of the measurement and reporting criteria as the basis of preparation for reporting the selected KPIs, assessing the risks of material misstatement of those selected KPIs, whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the selected KPIs.

A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

The procedures we performed were based on our professional judgement and included enquiries, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, our procedures performed included those listed below:

- ▶ Reviewed Aveng's activities, processes and documents at Group-level that support the assertions and claims made in the report, including in respect of the selected KPIs and related disclosures;
- ▶ Interviewed management and senior executives to obtain an understanding of the following as relevant to the sustainability reporting process:
 - Basis of preparation used for the selected KPIs and related disclosures (including the reporting criteria and reporting definitions applied);

- Governance and accountability arrangements in respect of Aveng's sustainability issues, including governance oversight of management's process to identify Aveng's material issues, in particular, as relevant to the selected KPIs;
- Objectives and priorities for embedding and managing sustainability expectations and the progress against these;
- The processes for reporting progress and providing internal assurance to the board and to management on Aveng's sustainability issues, including in respect of the selected KPIs; and
- The control environment and information systems relevant to preparing the selected KPIs and their presentation in the report – but not for the purpose of evaluating the design of particular control activities, obtaining evidence about their implementation or testing their operating effectiveness;
- ▶ Inspected supporting documentation on a sample basis to corroborate the statements of management and senior executives in our interviews;
- ▶ Performed analytical procedures to evaluate the data generation and reporting processes against the measurement and reporting criteria;
- ▶ Evaluated the reasonableness and appropriateness of significant estimates and judgements made by the directors in the preparation of the selected KPIs and related disclosures;
- ▶ Evaluated whether the selected KPIs and related disclosures as presented in the report are consistent with our overall knowledge and experience of sustainability and carbon footprint management and performance at Aveng.

The procedures performed in a limited assurance engagement vary in nature from, and are less in extent than for, a reasonable assurance engagement. As a result the level of assurance obtained in our limited assurance engagement is substantially lower than the assurance

Independent limited assurance report continued

that would have been obtained had we performed a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance opinion about whether the selected KPIs presented in the report have been prepared, in all material respects, in accordance with management's internally developed measurement and reporting criteria for those KPIs.

Other matters

Information relating to prior reporting periods has not been subject to assurance procedures. Our report does not extend to any disclosures or assertions relating to future performance plans and / or strategies disclosed in the report.

The maintenance and integrity of Aveng's website is the responsibility of Aveng's management. Our procedures did not involve consideration of these matters and, accordingly we accept no responsibility for any changes to either the selected KPIs in the report or our independent assurance report that may have occurred since the initial date of presentation on the Aveng's website.

Restriction of use and liability

Our work has been undertaken to enable us to express a limited assurance conclusion in respect of the selected KPIs in our report provided to the directors of

Aveng in accordance with the terms of our engagement, and for no other purpose. Our report is intended solely for the directors of Aveng and should not be used by any other parties.

To the fullest extent permitted by the law, we do not accept or assume liability to any party other than the directors of Aveng, for our work, for this report, or for the conclusion we have reached. We agree to the publication of this assurance report in Aveng's report for the year ending 30 June 2018, provided it is clearly understood by recipients of the report that they enjoy such receipt for information only and that we accept no duty of care to them whatsoever in respect of this report.

Ernst & Young Inc.

Ernst & Young Inc.

Partner: Allister Carshagen
Registered Auditor
Chartered Accountant (SA)

102 Rivonia Road
Sandton
2196

30 October 2018

Reporting and governance

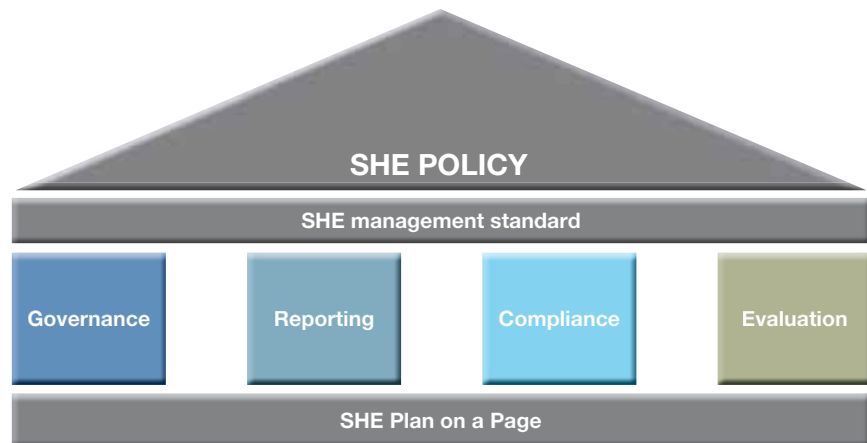
Aveng's approach to sustainable development is actioned through clear commitments, plans, engaged management, monitoring and review. This enables effective and informed decision-making across the Group's operations.

To achieve continuous improvement in safety, health and environmental (SHE) performance, the Group monitors and reviews SHE key performance indicators (KPIs) that are aligned with the revised SHE strategy, to allow efficient trending and analysis that informs improvement initiatives.

A SHE reporting and governance framework was developed as part of the revised SHE strategy to ensure further performance enhancement. The framework is aligned with the SHE Plan on a Page (PoP) requirements, the SHE management standard and the SHE policy, to govern and improve SHE reporting. The framework provides guidance on internal and external reporting requirements and ensures clarity on performance and accountability required across all operating groups and business units.

Aveng upholds and believes in the engagement of strong leadership and adherence to legal and other requirements, set standards and best practice. The framework serves as an extension of Aveng's commitment to sustainable development and continuous improvement, which is realised through the effective reporting of SHE KPIs and setting of improvement initiatives.

Aveng requires its operating groups to maintain the practice of sound reporting and governance along with the effective running of SHE management systems.



Safety, health and environment management systems

Aveng operating groups maintain the certified SHE management systems. Businesses are expected to ensure that these systems efficiently address and mitigate risks related to SHE operational exposures.

The third edition of ISO 14001:2015 EMS standard was released with additional requirements. Companies that are certified for ISO 14001:2004 had until 14 September 2018 to comply with the requirements of the new standard. Migration to the revised standard progressed well to uphold certification. A number of our businesses are certified on the revised standard, as disclosed further on in this section.

All operating groups are conducting gap analyses across business units in preparation for transition to the new ISO 45001 certification requirements. The Group's risk-based approach allows for easy alignment with the increased focus on risk management.

Approximately 95% (by headcount) of the operating group's SHE management systems comply with externally verified health and safety and environmental management systems. Standards complied with include:

- ▶ AS / NZS 4801:2001 Occupational Health and Safety Management Systems (Australia)
- ▶ BS OHSAS 18001:2007 Occupational Health and Safety Management Systems
- ▶ ISO 14001:2004 / ISO 14001:2015 Environmental Management Systems

All operations retained their certification during 2018, while the following operating groups and business units were certified on the revised ISO 14001:2015 standard:

- ▶ Aveng Mining, the first mining contracting company to achieve the Integrated SHEQ system certification, retained its certification
- ▶ Aveng Grinaker-LTA's Building South business unit.

In 2018, 10 486 audit findings were raised. Of these, 9 797 (93%) were addressed. These findings include audits conducted on sub-contractors under the control of Aveng operations, the majority of which were conducted at Moolmans and Aveng Grinaker-LTA. This represented a significant improvement in the close-out rate for the Group (2017: 86%), as this is a focus area to improve SHE performance.

Aveng operating groups continue to measure and monitor performance indicators, such as fuel consumption, municipal water consumption, general and hazardous waste, environmental incidents and carbon emissions. The corporate office consolidates non-financial information from its business operations for the selected KPIs under scope.

Legal compliance is monitored, managed and reported in accordance with requirements. The Group's legal counsel and SHE office engage with relevant stakeholders and provide support and guidance to affected operating groups.

Reporting and governance continued

Certification performance

Operating group	Certification status	Comments
McConnell Dowell	100% certified	H&SMS ¹ and EMS ² maintained. Surveillance audits successfully completed. Certification retained.
Aveng Grinaker-LTA	100% certified	H&SMS ¹ and EMS ² maintained. Surveillance audits successfully completed. Certification retained. REHM Grinaker Construction Co. Limited (Mauritius) excluded.
Moolmans	100% certified	SHEQMS ³ maintained. Integrated system. Surveillance audits successfully completed. Certification retained.
Aveng Manufacturing	95% certified	H&SMS ¹ and EMS ² maintained. Except in operations outside South African scope, adoption of management systems applied.
Aveng Trident Steel	100% certified	S&HMS ¹ and EMS ² is maintained. Surveillance audits successfully completed. Certification retained.

¹ Health and Safety Management System.

² Environmental Management System.

³ Safety, Health, Environmental and Quality Management System.

SHE risk management

Aveng's SHE strategy supports the Group's focus on sound risk-based management of safety, health and environment across its operations. The SHE standard, frameworks and SHE PoP protocol are used to monitor and measure the implementation of the SHE strategy and review the efficiency of controls for material risk exposures and high potential incidents.

The Group monitors SHE material matters and applies the three lines of defence combined assurance model across all its operations. The Group SHE risk register is monitored quarterly for movements in trends and performance, and business responses are developed accordingly to ensure risks are mitigated and opportunities are identified.

SHE risk registers are managed at operational level to ensure ownership. Legal compliance registers are in place according to each business unit's operational exposure and legal requirements.

The Group's SHE office continues to facilitate oversight through the governance and reporting roles it fulfils.

Compliance update

Aveng is committed to upholding compliance with legal and regulatory requirements as a core element of its risk-based sustainability management. Aveng operations monitor and track responses to compliance requirements set by regulators as part of the SHE management systems. Each business unit endeavours to comply with national, provincial and local by-law regulations. In cases where authorities deliver compliance inspections businesses engage to ensure all observations are addressed and recommendations received are implemented as part of operational continuous improvement.


Following engagement between Aveng and Gauteng Department of Agriculture and Rural Development (GDARD) regarding the existing operation of a thermal zinc diffusion plant in Germiston, a directive was issued by GDARD which concluded that an Air Emissions Licence is required for this process and subsequently the National Environmental Management Act (107 of 1998) (NEMA) section 24(G) rectification process needed to be followed. Aveng Duraset proceeded with the section 24(G) application as per the directive. GDARD responded to the application and issued an administrative fine of R140 000, which was disbursed.

Prior to the sale of properties, Aveng conducts environmental assessments to identify and address existing contamination. During this process, under the guidance of an environmental consultant, four sites were identified where contamination existed. As required by the National Environmental Management Waste Act on notification of "contaminated land" formal reporting to the Department of Environmental Affairs (DEA) was conducted. The preliminary remediation report was submitted to the DEA to obtain clearance or next steps required for the potential contaminated sites.

Group SHE and operating groups continue to monitor various legislative requirements to ensure compliance. The environmental framework is aligned with, and supports, legislative compliance relevant to the various businesses' operational streams. The Group prepared and collated environmental and operational data in response to the greenhouse gas reporting requirements issued by the DEA. The initial baseline reporting was prepared and submitted for the April 2018 deadline, in response to the first legislated reporting requirement.

Risk and materiality

Aveng has formalised and strengthened its ability to identify, evaluate and manage risks and opportunities.

Aveng defines materiality of matters for reporting purposes as matters that materially affect the Group's ability to create and sustain value over the short, medium and long term. Aveng's material matters determination process is largely informed by the International Integrated Reporting Council (IIRC) guidance, whereby relevant internal and external matters are identified, followed by the evaluation of the importance of such matters and thereafter prioritising and addressing these matters. Further detail on Aveng's risk and materiality is discussed in the integrated report at www.aveng.co.za. 

Identifying relevant internal and external matters

Aveng identifies material matters through various processes as defined below:

Aveng enterprise risk management

Aveng recognises that it needs to be financially stable and sustainable to succeed in creating value for its stakeholders. This requires:

- ▶ appointment and retention of highly skilled and motivated employees with requisite skills to fulfil their roles
- ▶ embedding a culture of high performance in the operations
- ▶ implementing policies and procedures with appropriate oversight
- ▶ commitment to a formal process of risk and opportunity management.

Risk and opportunity management approach

Aveng operates in complex environments where risk and opportunity are inherent in all of our business activities, therefore, it is impossible to completely eliminate risk.


Our approach to managing risk and opportunity is based on a "three lines of defence" combined assurance model.

- ▶ The first line of defence involves early identification, quantification and

assessment, and mitigation of risks and opportunities

- ▶ The second line of defence monitors the effectiveness of the management of risks and opportunities
- ▶ The third line of defence provides independent assurance, through external audit, that the overall risk and opportunity management process is functioning appropriately.

Governance oversight

The Board's audit and risk committee acts as the governing body for the combined risk management assurance model and is discussed further on page 3. 

The audit and risk committee oversees the activities of the external and internal audit functions and receives input on the adequacy of financial reporting and control mechanisms. The committee also considers material risk issues that could impact the financial results and reporting.

Key business risks

Key business risks are identified as internal or external risks that have the potential to cause significant financial loss, or affect the safety and wellbeing of employees, matters which may fundamentally undermine the Group's competitive position and adversely impact its reputation.

A group risk register is updated quarterly and reported to the Board and the audit and risk committee. This information is used to determine the strategic interventions and mitigation measures required to minimise the impact of risks.

Aveng operates in a challenging external environment across the infrastructure investment, mining and manufacturing markets in South Africa, other markets in sub-Saharan Africa, Australasia and Southeast Asia. Some of the main risks and opportunities affecting the Group's sectoral and geographic markets are:

South African economy

The South African economy remains subdued with persistent delays in public sector infrastructure investment. This is compounded by political volatility, policy uncertainty and concerns about the

governance of state-owned entities. Most of Aveng's domestic market sectors have been adversely impacted by these factors which are likely to continue influencing investor confidence in 2019, despite the favourable leadership changes that occurred in the ruling party.

To mitigate these external impacts, Aveng seeks to:

- ▶ allocate resources to market sectors that offer growth opportunities
- ▶ expand into growth markets beyond South Africa
- ▶ strengthen engagement with key clients.

Rest of Africa

The signs of recovery in many other economies in Africa following a loss of growth momentum in 2016 should have a positive effect on our business development activities in sub-Saharan Africa. While the Group has experienced limited success in securing new work in sub-Saharan Africa, the region offers sound medium-term to long-term opportunities in mining.

Australasia and Southeast Asia

Increasing public and private sector investment in infrastructure development in Australia and Southeast Asia contributed to an improvement in the performance of McConnell Dowell. This growth trend is expected to continue for the next five years, supported by an improvement in the commodity cycle. However, competition for available work, particularly in Southeast Asia, remains a prominent feature of the region.

While not as buoyant as Australia and Southeast Asia, New Zealand continues to offer opportunities in McConnell Dowell's core markets. Larger capital projects in the marine, water and transport sectors are returning to the medium-term pipeline.

Evaluating importance of matters identified

Aveng risk management, stakeholder engagement and the business environment inform the material matters.

Risk and materiality continued

Magnitude of effect on the Group

Once the relevant material matters are identified, they are assessed based on their potential impact on Aveng.

1.	Low
2.	Minor
3.	Moderate
4.	Major
5.	Catastrophic

The assessed impact of these material matters focuses (among others) on the following risk areas:

1.	Impact on the safety of our people
2.	Loss of profit or increase in capital cost
3.	Delays in achieving strategic business objectives
4.	Legal ramifications
5.	Environmental impact
6.	Reputational damage

Likelihood of occurrence

These matters are assessed according to the likelihood that they will occur based on the following ranges:

1.	Rare chance of occurrence (1% to 3%)
2.	Unlikely chance of occurrence (3% to 10%)
3.	Possible chance of occurrence (10% to 30%)
4.	Likely chance of occurrence (30% to 60%)
5.	Almost certain (60% to 100%)

In low likelihood scenarios (rating 1 to 3) risks are managed mainly through corrective measures in that should a risk occur, plans have been formulated to manage its impact.

In instances where a material matter has already occurred, lessons learnt are undertaken to ascertain the likelihood of reoccurrence and to ensure that correct processes are implemented to mitigate reoccurrence.

Quantitative and qualitative considerations

Quantitative considerations focus largely on financial impacts (loss of profit), an increase in capital cost and the ability to achieve business objectives. Qualitative considerations focus primarily on safety, legal, environmental and reputational impacts. These are assessed based on the likelihood of occurrence.

Prioritising matters

After identifying potential material matters, Aveng performed a correlation exercise. Several sources were consulted to determine how often the risks already


identified appeared in other sources that relate to Aveng and the industries it operates in. These included investor feedback, mega-trends, emerging risks and opportunities, Aveng strategy and business model, and geographic and sector outlook. The more prevalent the risks and opportunities were in different sources, the greater the evaluation of these issues against qualitative and quantitative factors which informed the likelihood and the impact of these matters on Aveng.

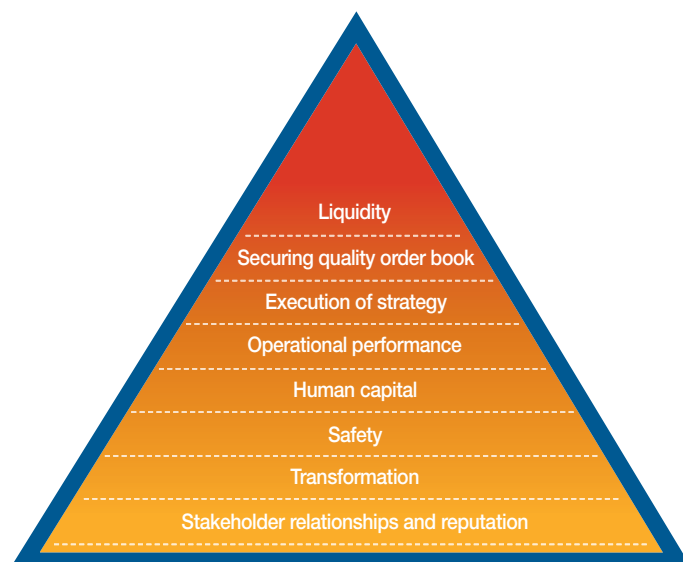
Furthermore, the Board considered what constitutes a material matter to the Group with further interrogation conducted through various forums, such as the Board and Board committee meetings.

The identified material matters were ranked based on their potential probability of occurring in the Group as well as their potential quantitative and qualitative impact on the Group.

The resultant matters were then plotted on a heat map to demonstrate that only the most material matters emerge.

Focus on the most important matters

The diagram below lists the top business risks emerging from the enterprise risk management for the period. These risks are discussed more fully in the following pages and in the integrated report. 



Risk and materiality continued

Material matters

Our material matters which the Group reviews regularly in line with the recommendations of King IV, and our strategic responses, are discussed on the following pages:

Material matter	How we mitigated or managed material matters
<p>1</p> <p>Liquidity The maintenance of sufficient working capital through the business cycle influences credit facilities and the ability to raise cost-effective borrowings.</p>	<ul style="list-style-type: none"> ▶ Successfully raised R493 million in a rights issue ▶ Settled the majority of outstanding claims to address balance sheet risk and uncertainty ▶ Negotiated an amended common terms agreement with South African lending banks and secured additional facilities on extended terms ▶ Completed early redemption of R2 billion convertible bond post year end ▶ Strengthened cash flow forecasting and liquidity management ▶ Disposed of non-core property assets and Aveng Rail post year end ▶ Stabilising non-core operations prior to disposal
<p>2</p> <p>Securing quality order book Aveng's order book declined by 28% to R17,9 billion (December 2017: R25,1 billion) as a result of challenging market conditions in South Africa, a highly competitive environment in McConnell Dowell's core markets and a more selective approach to tendering.</p>	<ul style="list-style-type: none"> ▶ Increased focus on balancing order book growth and project risk profiles ▶ Robust application of the three lines of defence model to improve tendering procedures ▶ Focused on winning projects where Aveng has a record of technical experience and successful execution ▶ Renewed focus on market intelligence and business development to increase order book ▶ McConnell Dowell is progressing a substantial pipeline of work that is being tendered on an early contractor involvement basis which takes longer but reduces project risk ▶ The withdrawal from two projects and difficulty securing new work timeously impacted Moolmans' order book. While the long-term nature of many Moolmans' projects mitigates downturns, new work has a long gestation period ▶ Implemented an enhanced business development strategy at Moolmans as part of a structured Group-led intervention ▶ Allocation of resources to growth opportunities, cost reduction in line with market demand and increased client engagement
<p>3</p> <p>Execution of strategy Delayed or non-execution of the strategy will hamper the Group's ability to create value in the longer term.</p>	<ul style="list-style-type: none"> ▶ Concerted effort across Aveng to execute the strategy, including workstreams and weekly progress reviews of delivery against planned outcomes ▶ A number of planned corporate and capital-raising actions were successfully executed, and agreement was reached on the sale of the Jet Park and Vanderbijlpark properties and Aveng Rail. Interest in the other non-core operations has been received from credible buyers

Risk and materiality continued

Material matter	How we mitigated or managed material matters
<p>4</p> <p>Operational performance Operational performance drives Aveng's financial performance.</p>	<ul style="list-style-type: none"> ▶ A strategic intervention at McConnell Dowell improved operational and financial performance ▶ Loss-making projects impacted the performance of Moolmans. Agreement was reached with clients to mitigate the financial impact, where possible. Further cost optimisation and a structured Group-led intervention is under way to improve performance ▶ Aveng Grinaker-LTA was impacted by ongoing challenges in Civil Engineering, while Building encountered challenges in closing out three large projects. Mechanical and Electrical and Aveng Water delivered planned results. New management is addressing underperformance ▶ Sustained weakness in most of its markets impacted the financial performance of Aveng Manufacturing. A structured plan was implemented to improve efficiency and track performance against strategy ▶ Aveng Steel returned to profitability and pursued new opportunities in challenging market conditions
<p>5</p> <p>Human capital Specialist skills are required to deliver projects successfully. Loss of critical skills affects performance with an associated negative impact on earnings.</p>	<ul style="list-style-type: none"> ▶ Underperformance in some operations and the uncertainty imposed by a disposal process have increased the risk of losing key and critical staff in South Africa ▶ An internal communication plan was implemented to ensure continuous engagement with employees during the reorganisation process
<p>6</p> <p>Safety Aveng operates in a diverse, complex environment and employs a large workforce. The safety of employees is a core value that is integral to the way the Group conducts its business and will not be compromised.</p>	<p>Aveng's strategic response to safety management is based on the safety, health and environment (SHE) Plan on a Page.</p> <p>Our key focus areas and objectives are:</p> <ul style="list-style-type: none"> ▶ Monitoring conformance to Aveng SHE standards ▶ Implementation of various initiatives to reduce safety incidents ▶ Measuring against the Aveng SHE Plan on a Page to improve SHE performance
<p>7</p> <p>Transformation* Drop in scorecard impacts both future and current SA business operations.</p>	<ul style="list-style-type: none"> ▶ Developing individual business unit scorecards in support of non-core disposal strategy ▶ Focus on mechanisms to improve enterprise and supplier development scores ▶ Constant evaluation of restructuring impact on employment equity
<p>8</p> <p>Stakeholder relationships and reputation Stakeholder expectations can impact Aveng's ability to create and sustain value.</p>	<ul style="list-style-type: none"> ▶ High-level executive engagement with funding banks and shareholders ▶ Proactive communications strategy and increased internal communication

* Specific to South Africa.

Safety, health and environment overview

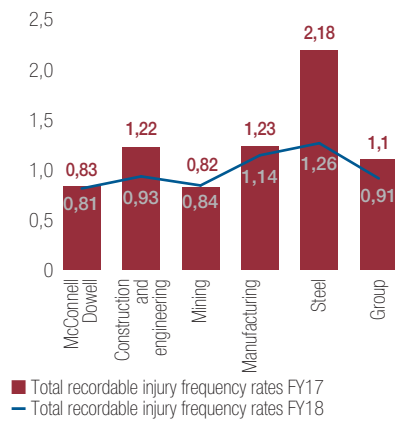
Aveng is committed to ensuring the safety of our employees during the execution of our operations, even in diverse and complex operating environments. As a caring and responsible organisation, the safety and wellbeing of our employees is essential to the sustainability of our organisation and the communities we operate in, aligned with our aspiration of “Home Without Harm Everyone Everyday”.

Aveng introduced a revised safety, health and environment (SHE) strategy during the prior year. The Group focused on the execution of the strategy in 2018 by setting, monitoring and evaluating SHE KPIs and rolling out risk-based performance improvement initiatives. After further assessment against the 2017 performance, the Group revised SHE KPIs to improve performance.

Aveng replaced the all injury frequency rate (AIFR) with the total recordable injury frequency rate (TRIFR) as a KPI in line with international norms. The total recordable injuries measure provides more reliable data to monitor, enables more meaningful trend analysis and allows for the implementation of more effective controls.

Regrettably, Mr Anele Nwelende, lost his life in a road construction accident. He was an employee from the local community who was working on our R61 All Saints Roads Project. Hazards in road construction remain of significant concern to Aveng and the Group is revisiting current practices and standards.

Total recordable injury frequency rate



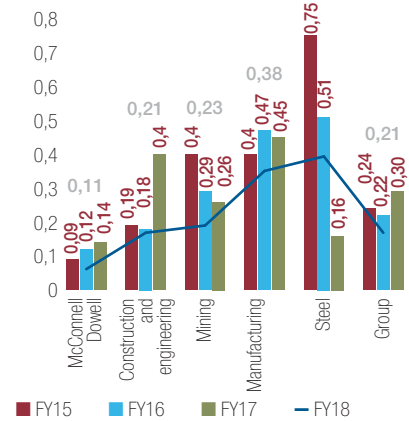
Difficult operating conditions contributed to less man hours worked and fewer projects. However, the Group achieved the lowest lost-time injury frequency rate in the past four years. This is attributed to the more focused SHE strategy. Nonetheless, safety remains a key focus area for the leadership of Aveng who will continue to apply the actions required to prevent harm to our employees.

To ensure that Aveng is equipped to deliver on the SHE strategy, the following were implemented:

SHE policy

The revised integrated SHE policy supports strategic alignment and clear communication of the Aveng safety vision of “Home Without Harm Everyone Everyday”. While the leaders throughout Aveng operations are held accountable for the adoption, communication and implementation of this policy, the Group also expects all employees to take responsibility for their own health and safety, and protection of the environment. Each operating group is responsible for the allocation of appropriate resources, including the provision of training, consultation and auditing of the implementation of the policy. This SHE policy is a summary of the Aveng SHE

Lost-time injury frequency rate



management standard and the SHE frameworks. The Board’s SHE committee monitors compliance with the policy.

Aveng’s SHE policy is available at www.aveng.co.za

SHE roadmap

The SHE roadmap continues to be utilised to outline and track the key activities the SHE office will focus on during 2019. The SHE office tracks the progress of these activities during the year.

The key focus areas include:

- ▶ Implementation and compliance to the standard and framework
- ▶ Assessment and monitoring of SHE KPIs
- ▶ Review and monitoring of risks and controls.

Strategic objectives

Aveng is committed to creating a safe, controlled work environment through the implementation of the SHE standard and frameworks throughout its operations. The Aveng SHE Plan on a Page (PoP) outlines the processes to deliver on the requirements of the SHE policy and strategy. The periodic assessment of the key focus areas as set out in the SHE PoP provides the status and areas for improvement of all operations in the execution of the strategy.

Safety, health and environment overview continued

Focus

Sustained focus on the following areas is planned for 2019:

- ▶ Further implementation of the “Just Culture” at all levels of the organisation to instil fairness, consistency and transparency in the treatment of employees
- ▶ Assessments of performance against the SHE strategy and development and implementation of action plans to improve performance
- ▶ Audits, inspections and reviews – verification of controls and standards
- ▶ Visible felt leadership improvement – engagement, verification, recognition
- ▶ Focused initiatives aligned with risk exposure
- ▶ Employee competency verification and validation
- ▶ Enforcement of critical behaviours and lifesaving rules
- ▶ Sub-contractor improvements – support, monitoring and accountability
- ▶ Proactive focus and executive visits on new projects and poor performing sites.

SHE risk management

Risk-based approach

Operating groups embarked on rigorous review and evaluation of risks and effectiveness of implemented controls, leading to the development and implementation of risk-based initiatives to improve SHE risk management. As part of the SHE strategy and proactive management, Aveng continues to focus on risk exposures and controls.

Message from the chairman of the safety health and environment committee

“This was a challenging year with a great deal of change, inevitably affecting operational systems, practice and morale. Extra vigilance and effort was required at every level and of everyone. Regrettably Anele Nwelende lost his life in a road construction accident at our R61 All Saints Road Project.

Aveng’s commitment, “Home Without Harm Everyone Everyday”, remains central to our approach to safety, health and environment (SHE). The robust platform set through the new SHE strategy launched in October 2016 proved its value. The Group’s lost-time injuries and recordable injuries have reduced, which is a positive development. Addressing SHE is, of course, an ongoing undertaking and we have noted the need for further work in certain areas to ensure continuous improvement.

The experience of the past year really underscored the importance of maintaining systems and standards in times of change.”

May Hermanus



Safety

Safety

Safety is a core value in the way Aveng conducts its business. A commitment to consistent leadership engagement with employees, collaboration and accountability for safety supports Aveng in the journey towards realising its vision of “Home Without Harm Everyone Everyday”.

Non-negotiable lifesaving and cardinal rules, reporting of at-risk conditions or behaviour and incident management ensure that safe operating standards are in place to mitigate and manage safety risks. Visible leadership, together with a range of safety initiatives implemented by the operating groups, support Aveng’s drive for a safe working culture.

Strategic progress

The Aveng Board and its safety, health and environmental committee, assisted by the group SHE office, guided the implementation of the revised SHE strategy.

The roll out of the SHE Plan on a Page across all operations progressed well and the SHE office provided support and measured performance against the strategy. Adjustments were made to facilitate Aveng’s strategy to decentralise its operations and dispose of non-core businesses.

Safety framework

The Aveng safety framework defines the Group’s approach to safety stewardship. The framework sets the minimum requirements all operations need to adopt in order to achieve their safety goals.

The framework has five overarching pillars as depicted below:

The pillars represent the minimum non-negotiable requirements for each operating group to contribute to a safe work culture.

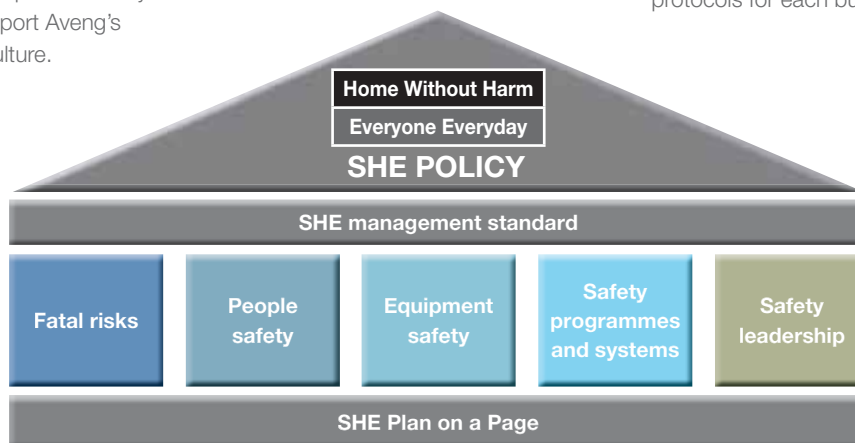
Key focus areas

The key safety focus areas during 2018 were:

- ▶ Leadership engagement through visible felt leadership
- ▶ Reduction of injuries
- ▶ Prevention of fatalities

SHE Plan on a Page – safety

The SHE Plan on a Page (PoP) was used to guide the revised strategy. The PoP provides a safety performance base for the Group and its business units and identifies action plans and risk response protocols for each business unit.



SAFETY		
Prevent fatalities	▶ 1. Identify the fatal risks and implement preventative and mitigating controls ▶ 2. Develop and implement Life Saving or Golden or Cardinal Rules	▶ Peer and management reviews to verify control effectiveness of fatal risk control plans ▶ Verify implementation of Life Saving or Golden or Cardinal rules ▶ Verification and distribution of case studies
Reduce injuries	▶ 1. Correct hazard identification and implementation of controls and management of associated risks ▶ 2. Prevention of repeat incidents through accurate identification of root causes and implementation of lessons learnt ▶ 3. Implement PTO/PJO program ▶ 4. Timeous, proactive reporting of incidents ▶ 5. AIFR and LTIFR within plan	▶ Verify execution of risk based controls ▶ Review of incident investigations, quality of outcomes and close out compliance ▶ Verification of quality as well as timeliness of PTOs/PJOs and close out of deviations ▶ Analysis of incident trends and resultant intervention plans ▶ Validate TRIFR and LTIFR against plan
Leadership Engagement (VFL)	▶ 1. Develop and implement VFL training including behavioural interventions ▶ 2. Implement schedule for VFL activities ▶ 3. Conduct legal liability training	▶ Verify compliance to VFL schedules and KPIs ▶ Verification of action close out ▶ % compliance to VFL and legal training plans

PTO: Planned task observation
 PJO: Planned job observation

Safety continued

2018 safety performance

Overall safety performance

- ▶ One life was lost under direct Aveng supervision (2017: 2)
- ▶ All injury frequency rate (AIFR) 2,43 (2017: 3,28)
- ▶ Total recordable injury frequency rate (TRIFR) 0,91[Ⓢ] (2017: 1,10)*
- ▶ Total recordable injuries are 37% of all injuries recorded
- ▶ Lost-time injury frequency rate (LTIFR) 0,21[Ⓢ] (2017: 0,30)
- ▶ Lost-time injuries are 8% of all injuries recorded

- ▶ Resilience in at-risk conditions and behaviours (near-miss) reporting with 68 417 at-risk conditions and behaviours reported, of which 95% were addressed (2017: 61 820; 92% addressed)**
- ▶ More than 95% of Aveng operations achieved OHSAS 18001 certification (by headcount)
- ▶ 52% increase in leadership visits by managing directors and their direct reports to 1 412 (2017: 928), representing 86% of planned visits.

* The Group has adopted reporting on total recordable injuries frequency rate (TRIFR) instead of all injury frequency rate in 2018. This KPI adoption allows for more accurate recording and classification of injuries. TRIFR is a well-accepted industry KPI.

** This improvement in performance is attributed to an increased focus on safety initiatives and improved reporting at site level. Business unit level senior managers and site supervisors maintained VFL visits or visiting manager reports.

Performance area	2018	2018 Target	2017	2016	2015	2014
Lives lost under Aveng supervision	1	0	2	0	4	6
AIFR	2,43	3,28	3,28	2,7	3,5	3,8
TRIFR	0,91[Ⓢ]	0,98	1,10	–	–	–
LTIFR	0,21[Ⓢ]	0,20	0,30	0,22	0,24	0,22
Number of safety leadership visits by senior management*	1 412	1 642	928	729	903	801
% operations with OHSAS 18001 certification (by headcount)	>95	90	>95	>90	70	>95

Ⓢ This item was the subject of the limited assurance engagement performed by EY. Refer to the assurance report on pages 6 to 8.

Stakeholder management

Aveng has identified its main safety stakeholders as employees, clients, agents, suppliers, contractors and the authorities responsible for ensuring compliance with safety regulations. Aveng continues to build on open-communication engagement with all its stakeholders while driving its strategic intent to ensure effective engagement and strengthening of relationships.

The key safety concerns, and actions taken to address them, are reported in the following table:

Stakeholder	Concern	Impact on business	Actions
Employees	Safe workplace	Harm to employees	▶ Safety policies, systems and procedures to minimise risks are reviewed by executive management and external verification authorities
	No injuries to workers	Low worker morale	
Clients	Injury-free operations on projects	Reputational damage associated with harm to employees	▶ Each operating group has an experienced safety professional who provides advice and support, and conducts regular reviews ▶ Encouraging a reporting and learning culture
Agents	Compliance with 2014 Construction Regulations and OHS Act	Delays in project execution	▶ Compliance reviews and audits ▶ Sharing of leading practices, enabled by Aveng SHE forum
		Poor relationship with clients	
Authorities	Compliance with legislation	Work stoppages	▶ Consultative discussion about future legislative amendments and practical challenges in implementation ▶ Engagements through formal industry associations
	High accident rates in construction industry	Increased scrutiny	

Safety continued

Employee life lost

One life was regrettably lost during 2018. A fatal accident occurred on Monday, 18 June 2018, claiming the life of Mr Anele Nwelende, a general worker employed from the local community on the R61 All Saints Roads project. Anele was part of the slurry team working on the Mbashe bridge. At the time of the incident, the slurry team was awaiting transport to another section. The driver of a project traffic control truck travelling on the Mbashe bridge swerved to avoid an oncoming public vehicle and hit Anele. Trauma counselling was provided to the family and the project team. Aveng Grinaker-LTA provided support to Anele's family.

TRIFR

As part of Aveng's focus on continuous improvement in SHE performance and reporting, the Group replaced the AIFR indicator with the TRIFR indicator. TRIFR includes fatalities, lost-time injuries, restricted workday cases and medical treatment cases, excludes first aid, and is calculated using 200 000 man hours as the baseline for its frequency rate. Aveng's TRIFR improved to 0,91[Ⓢ] (2017: 1,10), surpassing the targeted 0,98.

LTIFR

Safety initiatives implemented by the business units contributed to the improvement in safety performance, resulting in an LTIFR of 0,21[Ⓢ] (2017: 0,30) which was marginally higher than the LTIFR improvement objective of 0,20.


Performance achievements



Winners of the 2018 National MBA competition.

Building Inland and Building South projects and Plant Yard participated in the National Master Builder Association (MBA) competition and achieved the following results in safety performance:

- ▶ First place Dr Pixley Ka Isaka Seme Memorial Hospital – Category R500 million plus
- ▶ First place Aspen SVP2 – Category R250 million to R450 million
- ▶ First place KZN Plant Yard – Category Plant and Storage Yards.

Additional information on operational safety achievements is available in the integrated report. 

Reporting and learning culture

Efforts to improve harmful conditions and decisions reporting continued throughout the Group. In total 68 417 harmful conditions and decisions were reported (2017: 61 820), approximately 95% of which were addressed at the site or at premises where they occurred (2017: 92%), ensuring that responsibility for safety remains where it belongs, at site level.

Operating groups and business units continue to participate in the sharing of incidents and lessons learnt. This has positively encouraged discussions across business operations and improvement in incident management.

Ensuring executive leadership engagement with the workforce

Focusing on improvement in the quality of leadership engagement and close-out of incident investigation findings remains imperative to ensure proactive management of deviations and prevention of incidents.

Moolmans exceeded its KPI target for visible felt leadership (VFL) engagement. McConnell Dowell continued to focus on increasing visible manager reports (VMR) and VFL at its project sites.

Aveng Trident Steel exceeded its target for VFL engagement.

Manufacturing did not meet its KPI for leadership engagement. However, a notable improvement in performance was achieved during the second half of 2018. An initiative to focus on the quality of performance was applied, resulting in an improvement in behaviour and risk mitigation.

Aveng Grinaker-LTA did not meet its KPI for VFL performance, despite an improvement in the final quarter of 2018. The operating group will focus on risk-based initiatives to strengthen its safety culture and ensure consistent improvement in safety performance.

Managing transport safety risks

Engagements were held between SANRAL and SAFCEC regarding mitigation of the risk exposure of employees working on road projects. SANRAL noted the concerns raised by the industry and will review current specifications for road projects to identify potential opportunities to mitigate identified risks. SAFCEC awaits further feedback from SANRAL.

The following initiatives were implemented to improve transport-related safety at our sites:

- ▶ Operating groups reviewed risks and initiatives to address high risk activities
- ▶ Continuous monitoring of risk management processes and controls was conducted at site and business unit levels and reviewed by operating groups and the SHE office.

Safety continued

Strategy in action

Safety improvement interventions

The following examples of safety initiatives demonstrate the implementation of the safety strategy across Aveng operations.

SHE induction programmes

Induction programmes were reviewed and revised to encapsulate Aveng's risk-based approach in an engaging and accessible manner. The induction programmes raise awareness of risk exposures and lifesaving rules intended to mitigate risk.

Reducing the risk of injury on construction sites – Aveng Grinaker-LTA

Building South introduced the Nudge campaign to improve safety decision-making and reduce the risk of injury. The campaign contributed to a reduction in the number of safety incidents and the entrenchment of a strong safety culture. This is a noteworthy achievement in the building industry where employees are exposed to construction risks daily.

During 2018, Building Inland implemented extensive leadership training to improve the SHE culture. In addition, a risk reduction campaign was launched to improve employee safety decision-making on project sites and embed a "safety savvy" approach in their safety culture where STOP, LOOK,

THINK and ACT is part of every task. The commitment and influence of leadership was visible and the campaign led to an improvement in safety performance.

Tracking good safety behaviour – McConnell Dowell

Rather than focus only on negative impacts, McConnell Dowell introduced "positive behaviour" reporting categories in its SHE reporting system. This improves the availability of data on positive behaviours that prevent or mitigate safety risks at project sites.

The positive behaviour initiative was one of the innovative ideas presented during McConnell Dowell's New Zealand Safety Leaders Forum. The ideas will be developed and adopted across McConnell Dowell.

Communicating the do's and don'ts of safety behaviour – Moolmans

Moolmans implemented a programme of weekly safety themes, identified through risk and incident reviews, to communicate key messages in an engaging manner.

The themes focused on the do's and don'ts of executing work in line with Moolmans' Fatal Risk Controls and Protocols (FRCPs). FRCPs outline compulsory administration and engineering controls.

Obeya safety initiative – Aveng Trident Steel



An ATS Obeya room.

The managing director of Aveng Trident Steel (ATS) meets weekly with his management team for an operational feedback session, including an update on the BICStrategy launched in 2017 to propel the business forward. The strategy focuses on budget achievement, innovative ideas, customer services and social responsibility.

During the February 2018 BICStrategy update, ATS introduced "Obeya" (Japanese for "big room"), a lean manufacturing tool in which a dedicated room is set aside for employees to meet and set key performance areas (KPIs) and KPIs to measure performance against targets in areas including safety.

The purpose of Obeya is for leadership to inspire their people to be more productive. Each department has its own Obeya room and employees are encouraged to move out of their workspaces into central locations where they can meet, discuss key information, and solve problems. Obeyas break down barriers that prevent employees from collaborating and sharing information, enabling efficient decision-making.

At the launch of the Obeya campaign, the managing director identified core characteristics that should form part of the DNA of each ATS employee:

- ▶ Creating a WOW feeling at work
- ▶ Having a small business mentality
- ▶ Treating your workspace as your own business
- ▶ Working as teams towards common goals.



Winners of a risk reduction competition.

Safety continued

Key drivers of improved safety performance

The following key drivers of safety performance are prioritised in the operating groups' safety management programmes:

- ▶ Strengthening the learning and communication culture of Aveng
- ▶ Growing a safe and just work culture across all levels
- ▶ Creating an environment where employees feel valued and cared for
- ▶ Improving transport risk management on public roads and employee and public safety
- ▶ Ensuring compliance with the 2014 Construction Regulations
- ▶ Continued entrenchment of lifesaving rules, supporting standards and critical behaviours
- ▶ Improving accountability for safety by leaders and employees
- ▶ Improving engagement with sub-contractors and strengthening sub-contractor safety management and performance.

Looking ahead

2019 focus areas	Desired outcomes	Actions
Focus on developing a resilient learning culture	Develop formal case studies and disseminate lessons learnt from significant or high-potential incidents	<ul style="list-style-type: none"> ▶ Encourage sharing of lessons learnt through case studies from potential or actual significant incidents ▶ Drive improvement in quality of incident investigation reports and assessing effectiveness of controls.
Entrench continued improvement in safety performance	10% or greater improvement in the average two-year injury rates	<ul style="list-style-type: none"> ▶ Review risks, assess effectiveness of controls, implement improved controls ▶ Assess continued suitability of standard operating procedures and ergonomics related to task and work environment ▶ Assess effectiveness of improvement initiatives.
Continue to focus on demonstrating visible leadership in safety	All planned leadership visits effectively completed by senior management	<ul style="list-style-type: none"> ▶ Continue to provide training for Aveng leaders and management on how to conduct VFLs effectively to implement learning and improve quality of engagement during site visits.
Continue to improve management of sub-contractor and service provider safety	Zero lives lost involving sub-contractors and service providers	<ul style="list-style-type: none"> ▶ Centre-led procurement invested in software to enable pre-qualification evaluation and on-the-job auditing of sub-contractors ▶ Improved sub-contractor management, induction and training initiatives ▶ Training and consistent application of all lifesaving rules.
Management of high-consequence activities	Zero lives lost involving employees, sub-contractors and service providers	<ul style="list-style-type: none"> ▶ Improve quality of incident investigation reports and effectiveness of controls ▶ Consistent application of all lifesaving rules ▶ Improve leadership visibility on site.
Management of SHE incidents	Operating group's focus on implementing procedures and associated training to address SHE high-consequence activities, improve root and generic cause analysis and share lessons learnt from SHE incidents.	<ul style="list-style-type: none"> ▶ Revise significant incident investigation and management procedure ▶ Encourage case study reporting and sharing of lessons learnt across the operating groups. ▶ Assess incident investigation technique and engagement by senior and SHE operations managers.
Improved reporting and governance	Improved monitoring and compliance	<ul style="list-style-type: none"> ▶ Improve systems and data accuracy ▶ Ensure internal and external compliance with legal and other requirements is maintained.



Health

Health

Aveng recognises the importance of protecting employees, contractors and other stakeholders, and managing all occupational illnesses. The Group identifies all health risks associated with its work processes and implements and monitors measures to manage these risks.

Our objectives are to:

- ▶ Protect our employees, contractors and stakeholders against health-related work hazards
- ▶ Adapt work and the work environment through the correct placement of personnel based on inherent job requirements

- ▶ Contribute towards the physical and mental adjustment and social wellbeing of employees, contractors and other stakeholders
- ▶ Mitigate occupational hazards, incidents and occupational health-related diseases with early identification
- ▶ Provide a support function for employees and their families.

Aveng exercises a duty of care to protect the health of its employees, contractors and stakeholders at all times. We take “reasonable and practical” steps to minimise harm to people when there is a direct or indirect potential for harm to their health.

Aveng is committed to driving behaviour across the organisation which ensures the safety of employees, contractors and stakeholders in the work place and, as such, recognises that health and wellness are core enablers for safety.

Aveng’s framework has been updated to ensure the Group is able to meet its objectives effectively.

Health framework

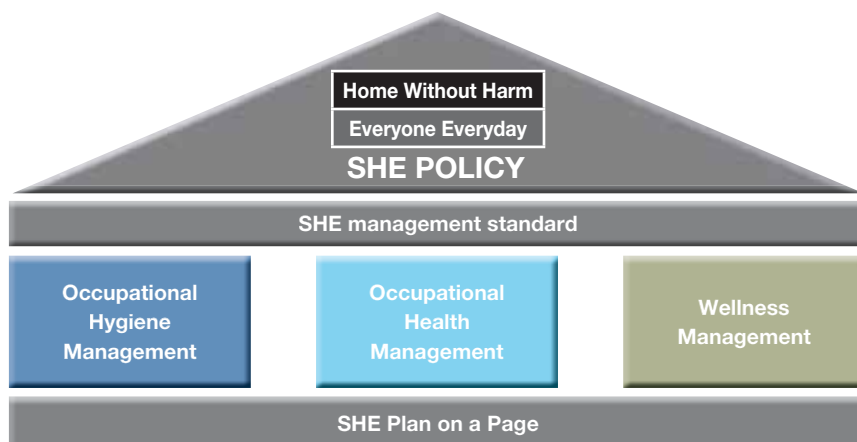
- ▶ Occupational hygiene management: the key fundamentals are to assess the risk, develop risk assessments and then implement reduction plans
- ▶ Occupational health management: ensures that Aveng has a Risk-Based Medical Surveillance (RBMS) programme and incorporates the emergency response, record keeping and service provider management
- ▶ Wellness management: ensures that Aveng has functional programmes to manage employee assistance, fatigue, communicable disease, incapacity and disability.

Each Aveng operating group develops and manages its own health programme and procedures within the guidelines of the Group’s framework. Regular meetings between the human resources and safety health and environmental (SHE) management teams ensure that the impact of health on safety is fully understood and managed. This includes reviews of absenteeism rates, incapacity and ill health cases. Regular reviews of the health strategy are undertaken in each operating group to evaluate impact and improve performance.

Aveng engages with its occupational health service providers to ensure that they meet legal requirements and the Group’s standards to create a proactive medical surveillance programme.

According to the International Commission on Occupational Health Triennial report 2015 to 2017 (Helsinki 2018) there are 2,78 million death reports across the working world, with 2,4 million attributed to work-related diseases. This is 89% more health-related deaths than deaths from safety-related incidents.

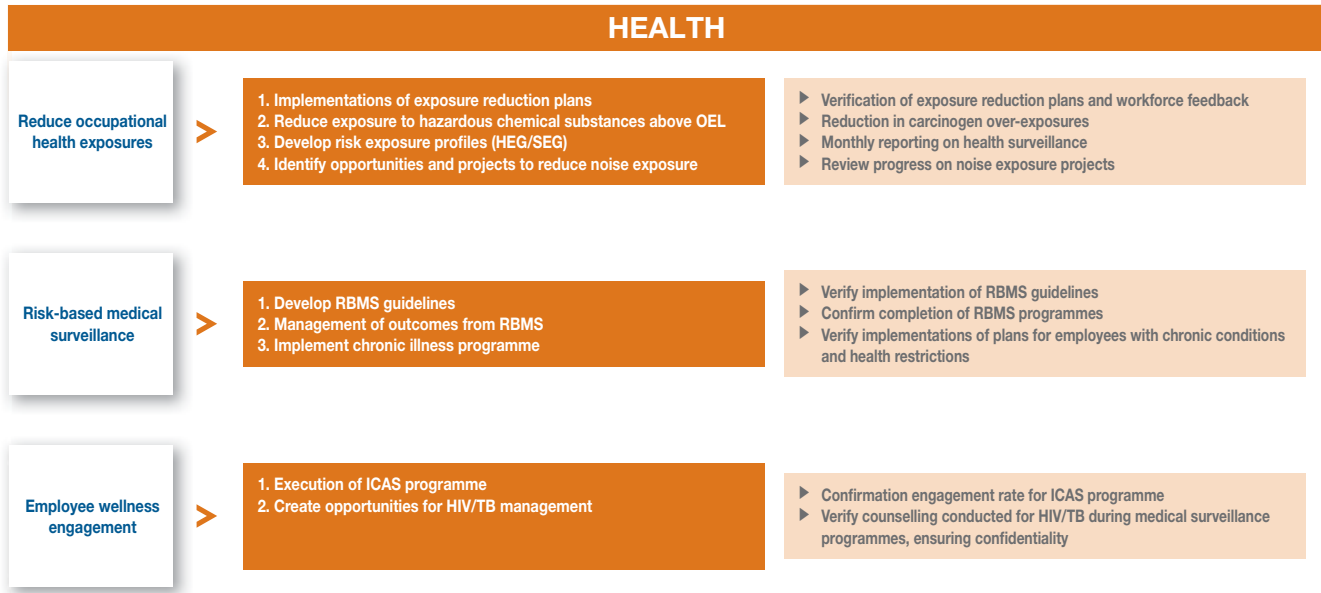
Aveng continues to improve its approach to health in line with its duty of care and to ensure alignment to the National Strategic Health Programme for South Africa. The Group seeks to ensure that sound practical standards of health and wellness behaviour and performance are adopted and achieved across its operations and activities.



Health continued

Key focus areas

As part of its journey to further operationalise the health framework, Aveng developed the Plan on a Page to prioritise the following areas of focus:



2018 salient features

Performance area	2018	2017	2016	2015	Industry benchmark
Occupational health examinations	13 890	18 850	20 915	25 592	n/a
Ill health profile* (outcome of medical testing) (%)	7,29	7,13	10,9	6,8	30*
HIV counselling and testing (HCT)** employees	4 062	2 588	2 104	3 068	n/a
					458 600
Noise-induced hearing loss (NIHL) (assured KPI)	25[Ⓐ]	8	25	48	18%***
EWP engagement rate (%)	9,30	10,4	10,8	9,3	12

Ⓐ This item was the subject of the limited assurance engagement performed by EY (refer to assurance report on pages 6 and 8).

* Number of employees who have restrictions and limitations compared to medical testing conducted.

** Volunteer training and testing for HIV/TB and wellness screening results have been obtained for South African operations only. While testing is being conducted across South African borders the results are not easily accessible; McConnell Dowell operations do not routinely conduct HIV tests, unless a request is made by the client or country in which operations occur.

***The WHO estimates that 18% of adult onset hearing losses in the 20 southern most countries in Africa (AFRE region), including South Africa, might be due to NIHL in the workplace (Nelson et al., 2005b).

Health and wellness performance

The following performance indicators were undertaken in 2018 as part of the Group's programme to manage health and wellness focus areas and challenges:

Occupational health

Operating groups	Medical completed	Number of drug tests 2018	Positive drug tests as % of test 2018
McConnell Dowell	877	1 183	1
Construction and Engineering	6 298	2 382	2
Moolmans	3 644	604	0,3
Aveng Manufacturing	2 279	418	5
Aveng Trident Steel	762	163	3
Corporate	30	6	0
Aveng Group	13 890	4 756	2

Health continued

The Group conducted 13 890 occupational health examinations (2017: 18 850). The decrease was due to lower activities and fewer personnel. Nevertheless, all Aveng operating groups improved reporting in line with the Risk Based Medical Surveillance (RBMS) programme as a result of their significant efforts to build internal capacity, share best practice and learnings, and enhance partnerships with service providers to acquire results of examinations. In addition, the streamlined health and wellness KPIs required by the Group improved reporting. There have been no serious medical evacuations since 2016 and the review of cross-border guidelines in 2017 was successfully implemented.

Noise-induced hearing loss

NIHL continues to be an area of focus in the operating groups. In 2018 all policies were reviewed and baseline potential cases were identified and are being investigated for potential claims in 2019. Reducing NIHL risk will be a key focus area in 2019.

Management of communicable and non-communicable diseases

The unique socio-economic conditions and demographic trends of work in Africa increase the risk of the Aveng workforce contracting communicable diseases and the monitoring of both communicable and non-communicable diseases is a focus for Aveng.

A total of 4 062 (2017: 2 558) employees were tested for HIV in 2018, with 81 (2017: 56) testing positive, thus the Group's prevalence rate is 2%. Aveng is actively monitoring and managing restrictions and conditions identified during employee medical surveillance to mitigate and manage this potential risk.

Aveng will continue to encourage its construction and mining operating groups to partner with district health clinics, non-governmental organisations, the South African Business Coalition on Health and Aids (SABCOH), and funders, to ensure that the Group addresses the challenges of HIV / Aids and the burden of disease for our greater communities.

Employee wellbeing programme

An independently managed employee wellbeing programme (EWP) is available in the South African and Australian operations. It provides employees and members of their households with responsive and proactive services to assist them to be the best they can be at work and at home, in the physical, mental, psychological and financial spheres of their lives. Quarterly reports on the prevalence and status of engagement are provided by the service provider.

The overall engagement rate, which includes uptake of all services provided, such as onsite post-trauma debriefing and counselling, face-to-face consultations, substance abuse awareness sessions, and manager referrals amounted to 9,3% (2017: 10,8%) for South African operations and exceeded the benchmark of 6%. For Australian operations, the engagement rate is 9,4% (2017: 9,4%), which is below the industry benchmark. A key focus area in 2019 will be to ensure cross-referral between occupational health management and wellness management.

Policy and wellness incentives and improvements

The following policies were implemented in 2018:

- ▶ Health framework
- ▶ Aveng RBMS guideline
- ▶ Aveng cross-border travel guideline.

The operating groups have developed procedures specific to their businesses and risk profiles to operationalise these guidelines.

Several health and wellness campaigns were conducted by the operating groups in 2018, including:

- ▶ Lifestyle disease management
- ▶ Personal hygiene awareness
- ▶ TB awareness
- ▶ World hypertension awareness
- ▶ Wellness testing days – the results of these assist in the design of our health and wellness campaigns.

The following initiatives were conducted:

- ▶ HIV testing selfie campaign
- ▶ Wellness Day screening at head office
- ▶ Limited number of occupational service providers (construction moving from 15 to 5).

Health continued

Key challenges

<ul style="list-style-type: none"> ▶ Compliance with health legislation ▶ Relatively unknown, undocumented burden of occupational and non-occupational illness ▶ Medical records keeping track 	<ul style="list-style-type: none"> ▶ Adverse effect on employee health ▶ Potential fines for non-compliance ▶ Reputational risk ▶ Unbudgeted health and wellness costs ▶ Additional inspections from Department of Labour and Department of Mineral Resources
<ul style="list-style-type: none"> ▶ Compliance with health legislation ▶ Efficient fitness to work processes to ensure appropriate placement and maintenance of employees in the occupational environment 	<ul style="list-style-type: none"> ▶ Sub-optimal quality assurance ▶ Legal compliance risk ▶ Reduced productivity ▶ Increased costs
<ul style="list-style-type: none"> ▶ Scarce resources in occupational health and wellness, hence partnering with key stakeholders is critical 	<ul style="list-style-type: none"> ▶ Inadequate competency levels at the operating groups ▶ Under-resourced health and wellness structures

Looking ahead

To address the abovementioned challenges the following objectives will be implemented and monitored:

Key objectives	Measurable deliverables	Performance verification
Reduce occupational health exposures	Review all exposure reduction plans	▶ Verification of exposure reduction plans and workforce feedback
	Reduce exposure to hazardous chemical substances above occupational exposure limit	▶ Reduction in hazardous chemical substance over-exposures
	Ensure risk profiles (HEG/SEG) are implemented for all medical examinations	▶ Monthly reporting on health surveillance programmes and occupational illnesses ▶ Biological monitoring
	Identify opportunities and projects to reduce noise exposure	▶ Review progress on noise exposure projects
Risk-based medical surveillance	Maintain a RBMS standard, including executive health management	▶ Verify implementation of RBMS guidelines ▶ Ongoing engagement with occupational medical service providers to ensure a proactive risk-based occupational health programme. This includes the active monitoring of the Group's ill health profile (2018: 7,29% of the workforce) to ensure that employees with restrictions or limitations are managed in a proactive manner
	Manage outcomes of RBMS	▶ Confirm completion of RBMS programmes and management plans for all restrictions and conditions
	Implement chronic illness programme	▶ Verify implementation of plans for employees with chronic conditions and health restrictions
	No time to lose campaign	▶ Training and awareness around mental health campaign
Employee wellness engagement	Execution of Independent Counselling and Advisory Services (ICAS) programme	▶ Confirm engagement rate for ICAS programme ▶ Improve management referral on ICAS programme
	Create opportunities for management of communicable diseases and lifestyle management diseases	▶ Verify opportunities and counselling conducted for all communicable diseases including HIV/TB during medical surveillance programmes, ensuring confidentiality ▶ Improve follow up on TB/HIV to ensure closing of the loop of treatment management
	Mental health programme	▶ Implement mental first aider programme



Environment

Environment

Aveng is committed to sound environmental stewardship and supports a culture of continuous improvement and learning. The Group recognises the critical interaction it has with the environment in which it operates, the potential impact its activities and operations may have on the environment, and the responsibility associated with this. The Group is committed to conducting business in a responsible and sustainable manner and works systematically to improve its environmental management performance.

The South African government has responded to the need to minimise, or better manage, the release of emissions from industrial and business operations. National Development Goals (NDGs) have been set for South Africa and Aveng reviews its role and capacity to support this initiative.

Aveng’s environmental vision is to minimise harm and maximise conservation of the environment. The operating groups are expected to manage their businesses responsibly and ensure compliance wherever possible with environmental

regulations across the Group’s diverse operating environments.

Aveng’s sustainability KPIs demonstrate its commitment to the duty of care principle upheld by its operations. KPIs are aligned with its operations’ environmental streams and linked to the environmental framework.

The nature of Aveng’s operations presents an inherent challenge in the collation and monitoring of data due to the temporary and often remote locations of its projects. There is a structured process to improve data collection, monitoring and reporting on the sustainability KPIs.

Strategy

Aveng operating groups adopted and rolled out the revised SHE policy, strategy, environmental framework and SHE Plan on a Page (PoP). Aveng operating groups responded positively to the SHE strategy, implementing the minimum requirements of the environmental framework, and developing improvement initiatives in their areas of operation. The corporate SHE office ensured that the initiatives were aligned with the strategy and risk-based approach.

In response to growing concerns about climate change and its impact on the availability of some natural resources, such as water and extreme heat conditions, Aveng considers responsible sourcing and efficient use of materials.

The Group builds and maintains relationships with its stakeholders, and participates in efforts that drive sustainable

environmental management, such as the Green Building Council South Africa, while the building operations deliver Green Star rated buildings. A number of innovative ideas were implemented to reduce the impact of Aveng’s operations on the environment. These included projects to conserve and recycle water, recycle waste and preserve indigenous listed plants.

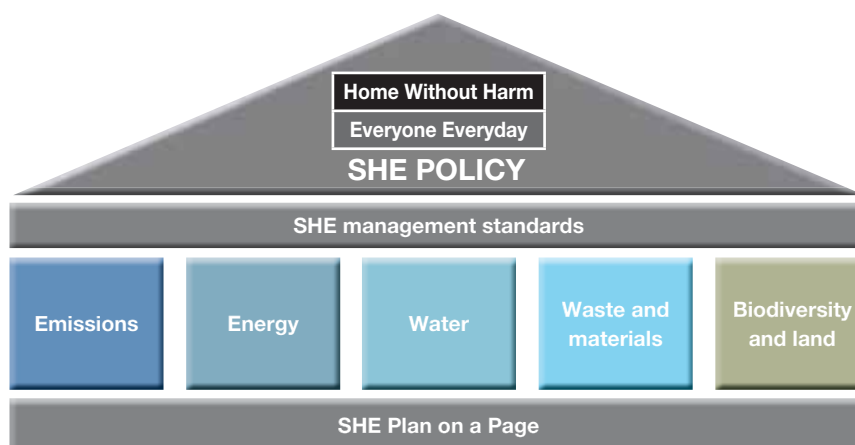
Aveng operating groups maintain environmental management systems to identify, manage and effectively respond to foreseeable environmental risks and opportunities. They adhere to the following management guidelines and requirements:

- ▶ ISO 14001 certification
- ▶ SHE policy
- ▶ Environmental framework
- ▶ SHE PoP – ensures practical implementation of the strategy and environmental compliance.

All operating groups successfully maintained certification in line with the ISO 14001:2007 standard and prepared to transition to the revised ISO 14001:2015 version before the September 2018 deadline.

Environmental framework

The environmental framework defines Aveng’s approach to environmental stewardship. The framework establishes the requirements that each operating group uses to develop and manage its own programmes and actions to contribute towards improved environmental management.



Environment continued

Aveng’s environmental vision is implemented through the pillars of the revised environmental framework as follows:

Key focus areas

The key environmental focus areas identified as part of this process are:

- ▶ Compliance with authorisations and licences
- ▶ Carbon and waste management.

These focus areas and specific actions to manage them are discussed in more detail in the environment PoP below. The PoP provides guidance for operating groups to drive compliance and develop implementation plans for business-specific strategic objectives, while ensuring compliance and continuous improvement in environmental management. Each operating group has developed and implemented initiatives to ensure these focus areas are implemented.

SHE PoP – environment

Aveng operations focused on strengthening environmental stewardship through improved awareness and training. Key focus areas to improve environmental management were implemented through improvement initiatives, with a strong emphasis on reduction of waste to landfill. Operating groups were encouraged to share knowledge and adopt best practice

to demonstrate their accountability for environmental management.

Key drivers of improved environmental performance

Aveng reports on environmental KPIs informed by externally developed guidelines and its internally developed standards.

The Group continues to work on the following focus areas that drive improvement in environmental management. They are prioritised in the operating groups’ environmental management programmes. While some have been implemented, others are in progress:

- ▶ Improving accuracy and confidence levels of data collection processes and reporting systems with the aim of setting improvement goals
- ▶ Ensuring continuous improvement in the accuracy of data reported and improving use of the Group’s IT-based SHE reporting platform to enable improved analysis of trends and monitoring of governance matters
- ▶ Ensuring compliance with legal and other identified requirements
- ▶ Improving Aveng’s score for the Carbon Disclosure Project (CDP) and the Water Disclosure Project (WDP), which will demonstrate improved performance and progress in the sustainability journey

- ▶ Identifying and developing improvement initiatives.

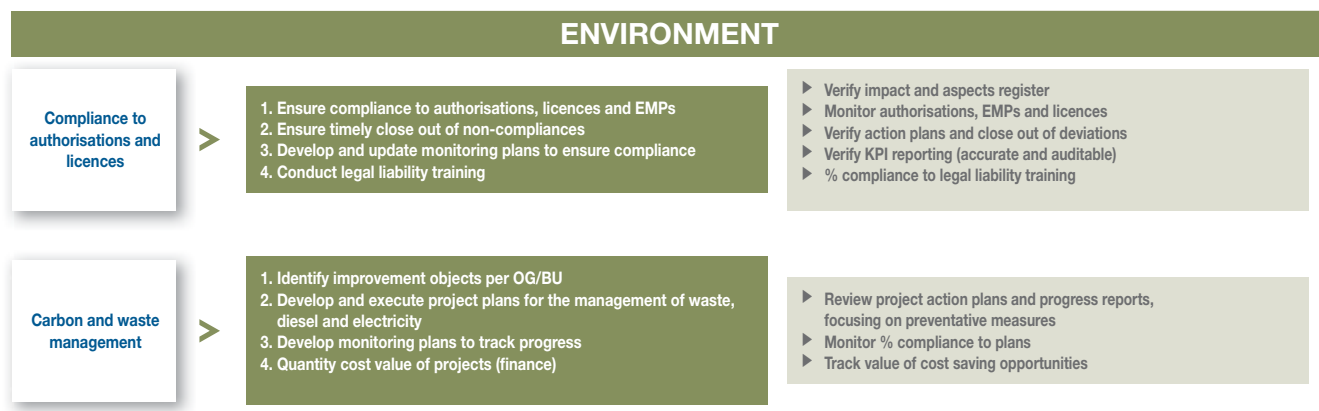
Implementation of some of the drivers will be reviewed in line with the Group’s decentralisation strategy.

2018 environmental performance

No major environmental incidents were recorded (2017: zero).

In total 231 minor environmental incidents were reported (2017: 292). The nature of the environmental incidents is predominately hydrocarbon spillages which are consistent with Aveng’s business scope and industry profile. The majority of the minor incidents recorded in the South African operations relate to hydrocarbon spillages, while minor incidents recorded by McConnell Dowell operations include the impact of small fires and spillages on land and flora, and some surface water discharges as a result of cementitious runoff.

Operations are required to record and monitor minor environmental incidents and conduct trend analysis, to measure and ensure effective controls to minimise impact and demonstrate good environmental management and responsibility in accordance to their respective operational interfaces with the environment.



Environment continued

Compliance updates

The long-term engagement between Aveng and the authorities regarding an Air Emissions Licence for the thermal zinc diffusion plant in Germiston resulted in a section 24(G) application and a response from South African Gauteng Department of Agriculture and Rural Development. An environmental regulatory notice fine was issued in April 2018. (2017: zero carrying notices).

Performance area	2018	2017	2016	2015	2014
Major environmental incidents	0	0	2	4	5
Percentage operations (by headcount) with ISO 14001 certification of EMS* (%)	>90	>90	>90	70	75
Carbon emissions (tCO ₂ e) total**	111 761 [Ⓔ]	99 632	179 199	247 296	297 592

* In 2018, certification was reported by headcount rather than revenue.

** As a result of the Group's adjustment in reporting approach to derive information from more reliable procurement sources such as utility bills, 2014 is the revised base year for reporting on the carbon footprint. The amendment is a result of the continuous process to improve data quality and integrity with increased scope of coverage.

Business units are encouraged to report near-miss and minor environmental incidents. The operating groups continue to improve environmental awareness.

Carbon emissions (tCO₂e)

Performance area	2018	2017	2016	2015	2014
Direct carbon dioxide (CO ₂) – scope 1 (from combustion of diesel procured)	70 838 [Ⓔ]	56 571	123 549	184 626	229 713
Direct carbon dioxide (CO ₂) – scope 2 (from purchased electricity)	40 923 [Ⓔ]	43 061	55 650	62 670	67 879
Carbon emissions (tonnes) total (tCO ₂ e)	111 761 [Ⓔ]	99 632	179 199	247 296	297 592

[Ⓔ] This item was the subject of the limited assurance engagement performed by EY. Refer to assurance report on pages 6 to 8.

South African operations – emission factors:

- ▶ Department for Environment Food and Rural Affairs (DEFRA) (2017) emission factors were used to calculate scope 1 emissions (2,68779)
- ▶ Eskom (2017) emission factors were used for purchased electricity (0,99)

McConnell Dowell – emission factors:

- ▶ scope 1 – Australian National Greenhouse Accounts (2017) emission factors
- ▶ scope 2 Greenhouse Gas Protocols
- ▶ Indirect (scope 2) emission factors for consumption of purchased electricity or loss of electricity from the grid

State or territory	Emission factor kg CO ₂ e / kWh
New South Wales and Australian Capital Territory	0,82
Victoria	1,07
Queensland	0,80
South Australia	0,51
South West Interconnected System (SWIS) in Western Australia	0,70
North Western Interconnected System (NWIS) in Western Australia	0,60
Darwin Katherine Interconnected System (DKIS) in the Northern Territory	0,56
Tasmania	0,19
Northern Territory	0,64

Sources: National Greenhouse and Energy Reporting (Measurement) Determination 2008 (Schedule 1) and Department of the Environment and Energy.

Environment continued

Aveng's operations implemented initiatives to improve efficiencies of energy and water usage in response to its carbon and water footprints. The Group's project performance during the economic downturn also contributed to the movement in trends for the overall emission results.

Aveng consumed 26 533kℓ of diesel in 2018, a 25% increase, which equated to 70 838tCO₂e[Ⓒ] (2017: 56 571tCO₂e). McConnell Dowell and Aveng Grinaker-LTA used 79% of the Group's total consumption, consistent with their industry profile and an increase in McConnell Dowell's project activity. Aveng Mining recorded a reduction in diesel usage due to economic constraints, the reduction in active projects and the structuring of some projects.

In line with Aveng's strategy and implementation of the SHE PoP, one of the key objectives of reporting and governance includes continuous improvement in the accuracy and reporting of data. The focus placed by all operating groups resulted in an improvement in the collection and reporting of data from site level. While some businesses faced challenges, which resulted in a decrease in the number of projects, overall data reporting improved. McConnell Dowell's management system contributed positively to data recording which correlates with the increase in diesel consumption reported due to improved reporting. Similarly, Aveng Grinaker-LTA's improvement in reported diesel consumption was a result of improved data reporting.

Aveng consumed 43 054 886KWh of electricity in 2018, a 5% reduction,

which equates to 40 923tCO₂e[Ⓒ] (2017: 43 061tCO₂e). Aveng Trident Steel and Aveng Manufacturing were the highest consumers of electricity, followed by McConnell Dowell. While the direct impact of fewer projects was observed in the reduced amount of electricity consumed, the operating groups continued to explore efficiency measures and alternatives to improve energy consumption levels.

The total amount of water consumed by the Group was 940 260kℓ, a 54% increase. McConnell Dowell was the highest consumer of water (56% of the Group's total water use) due to the nature of a linear pipeline project undertaken during the year.

The Group captures actual consumption volumes based on invoices, which are auditable.

Operating group environmental performance

	Emission diesel		Emission electricity		Water purchased
	kℓ	tCO ₂ e	KWh	tCO ₂ e	kℓ
McConnell Dowell	14 420	38 281	7 000 342	5 229	535 875
Aveng Grinaker-LTA	6 695	17 995	2 628 052	2 602	184 389
Aveng Mining	2 712	7 289	700 086	693	5 826
Aveng Manufacturing	1 234	3 317	16 161 209	16 000	115 515
Aveng Trident Steel	1 461	3 926	16 018 410	15 858	45 304
Aveng Corporate	11	30	546 787	541	53 350
Aveng Group (total)	26 533	70 838 [Ⓒ]	43 054 886	40 923 [Ⓒ]	940 260

[Ⓒ] This item was the subject of the limited assurance engagement performed by EY. Refer to assurance report on pages 6 to 8.



Aveng operations use mainly municipal water. The Group has a wide variety of water uses, including dust suppression which forms the bulk of water use in construction, manufacturing and mining operations.

Aveng has improved the data collation of water used. The Group's commitment to reducing water usage is demonstrated in efficiency and reduction initiatives implemented by its operations. Improved monitoring and tracking of water contributes to more sustainable operations.

Carbon and Water Disclosure Project

Aveng's SHE strategic improvement targets promote a better understanding of

the Group's energy and water consumption in order to improve its score for the Carbon Disclosure Project (CDP) and the Water Disclosure Project (WDP). Environmentally focused improvement initiatives developed by each business unit are intended to reduce our carbon footprint.

Aveng submitted its CDP and WDP reports for 2017 (based on 2016 data), and the rating score was received during 2018, as follows:

- ▶ CDP – C
- ▶ WDP – B

The revised criteria assessed four levels, namely: disclosure, awareness,

management and leadership.

Environmental stewardship performance and progressive improvement is measured at each level. The WDP score improved to a B (2017: B -).

Aveng is building on the Group's frameworks and policies to incorporate targets to measure and realise positive contributions to societal, environmental and national development goals. The Group acknowledges and supports the government's commitment to global and local climate change objectives. Various improvement initiatives have been established across business units in response to managing, monitoring and

Environment continued

improving carbon footprint and reducing waste, water and energy consumption. The next phase will include improved monitoring and strategies in response to climate change impacts and opportunities relevant to each business.

Aveng recognises the relevance and impacts of monitoring and measuring climate change drivers and identifying the

risks and opportunities within its operating environment.

The following sustainability drivers were considered and incorporated into the frameworks, policies and procedures to promote sustainability.

- ▶ Constrained resources, which are increasingly difficult and costly to obtain
- ▶ Strained infrastructure and natural resources


- ▶ Value chains and physical assets affected by unpredictable results of climate change
- ▶ Increasingly complex legislation and fiscal instruments as a means to internalise environmental and social externalities
- ▶ Increased emphasis and expectation by employees, clients and investors for socially responsible corporate behaviour.

The CDP assessment levels are listed below with a table that depicts the scoring rate for each level:

	%	
Disclosure	0 – 39	D-
	40 – 74	D
Awareness	0 – 39	C-
	40 – 74	C
Management	0 – 39	B-
	40 – 74	B
Leadership	0 – 74	A-
	75 – 100	A

Source: CDP Scoring Introduction – 2016

Aveng continues on a journey of improvement in understanding, efficiently operating in, and minimising its impact on, the environment. The revised environmental framework, along with continuous monitoring of compliance with legal requirements, and improvement initiatives introduced by the business unit, contribute towards the Group’s responsible environmental management.

In response to the CDP and WDP assessment guidelines and identified drivers, business units responded through innovative solutions and improvement initiatives to contribute towards a reduced carbon footprint. This is demonstrated in case studies under the strategy in action section on page 35  Aveng will monitor and measure its carbon footprint to demonstrate progress from a level of compliance to operating in a sustainable manner across operations.

Stakeholder management

Aveng’s key environmental impacts include consumption of non-renewable resources (fossil fuels), energy consumption, air pollution (greenhouse gas emissions and dust fallout), soil and land contamination, waste, consumption of renewable resources, contamination of surface and ground water, historical contamination and noise pollution.

Environment continued

Key internal and external stakeholders with an interest in Aveng or affected by the Group's operations include authorities responsible for environmental regulation, employees, clients, investors and communities. Aveng also plays a key role in advocacy organisations such as the Green Building Council South Africa, the National Business Initiative and the environmental committee of the South African Forum for Civil Engineering Contractors. Their main environmental concerns, as well as opportunities and actions taken to respond to them, are reported in the table below:

Stakeholder	Concern / opportunity	Impact on the business	Action
Employees	<p>Safe workplace that poses no risk to health and the environment</p> <p>Improved environmental awareness and responsible execution of tasks</p>	<p>Work stoppages</p> <p>Harm to employees and environment</p> <p>Absenteeism due to ill health</p> <p>General awareness of environmental issues</p>	<ul style="list-style-type: none"> ▶ Maintain an environmental management system ▶ Conduct inspections and audits ▶ Awareness training ▶ Issue regular environmental awareness talk topics applicable to work and home settings
Communities	Direct and indirect environmental impacts	<p>Community health and safety</p> <p>Complaints and regulatory notices</p> <p>Reputational damage</p>	<ul style="list-style-type: none"> ▶ Environmental assessments / audits to identify and mitigate risks ▶ Where necessary, establish environmental management forums
Authorities	Compliance with relevant legislation and regulations	<p>Work stoppages</p> <p>Reputational damage</p> <p>Legal sanctions (notices / fines)</p> <p>Site inspections</p>	<ul style="list-style-type: none"> ▶ Maintain compliance with ISO 14001 EMS compliance reviews ▶ Measure, monitor and report against operating licence / authorisations
Clients	Effective environmental management	<p>Work stoppages</p> <p>Reputational damage</p> <p>Penalties and / loss of contract</p>	<ul style="list-style-type: none"> ▶ Comply with client environmental management plan and relevant legislation ▶ Continuous engagement with clients ▶ Conduct environmental due diligence and implement effective remedial actions
Investors	<p>Reputational damage</p> <p>Negative impact on investor relations</p>	<p>Disinvestments or decision not to invest</p>	<ul style="list-style-type: none"> ▶ Continue submitting water and carbon disclosure information ▶ Assessment against JSE and SRI requirements

Environmental priorities and actions

Aveng operating groups focused on environmental awareness and training. Awareness was conducted through toolbox talks, management updates and written material. Improvement initiatives implemented by business units included:

- ▶ Waste reduction management
- ▶ Water saving and reuse initiatives
- ▶ Energy saving initiatives.

The Group communicated this year's World Environmental Day theme, "Beat Plastic Pollution" to employees who were encouraged to consider lifestyle changes to reduce plastic pollution.

Aveng's corporate office reduced its use of bottled water by increasing the use of water dispensers. Used plastic bottles are recycled. A ground water tank was installed to service irrigation and car wash bay requirements.

Environment continued

Strategy in action

The following innovative initiatives introduced by Aveng operating groups demonstrate increasing environmental awareness.

Waste water purification

Aveng Grinaker-LTA

Aveng Grinaker-LTA's 129 Rivonia Road project in Sandton developed a solution to address high water usage and water contamination on building sites.

A waste water purification and recycling system was designed to remove cementitious impurities from contaminated water generated on site and purify it for reuse. The recycled water is used to flush toilets and conduct dust suppression on site, thereby decreasing the demand on municipal water, while reducing the effect of water pollution on site, making this a fully recyclable process. Cementitious effluent is separated during the process and a service provider recovers the fine aggregate filler to manufacture clay bricks.

A study to determine the efficacy of the system yielded positive results. Overall, 145m³ of cementitious material was retained and prevented from entering the storm water system and 180 000 litres of water was recycled. The water quality parameters showed improvements of 90% in total dissolved solids, 80% in alkalinity, 70% in total hardness, 92% in free chlorine and 83% in chemical oxygen demand. The water quality of the final retained water complies with (and exceeds) the ASTM C94 quality standards for the reuse of water for concrete and mortar mixing. Therefore, the quality of the retained water is sufficient to reuse as mixing water.

Plant rescue

Aveng Grinaker-LTA Civil Engineering

The Pampoen Nek road project cuts through the Magaliesberg mountain range in Hartbeespoort – home to a number of indigenous plants. As part of its commitment to good environmental practice and compliance, Civil Engineering conducted a search and rescue operation of several listed plants.



Flora rescued during the Pampoen Nek road project.

In total, 3 556 indigenous plants were rescued, of which 56 were identified species. The rescued plants were relocated to a nursery to ensure proper nursing and monitoring before being replanted at the rehabilitation phase.

- ▶ All plants except the *Boophane disticha* were planted in bags and placed under shade netting
- ▶ *Boophane disticha* were planted in open ground that was best suited for survival.

The plants were grouped into the two watering zones, A and B to facilitate the different watering requirements of different types of plants.

- ▶ Zone A (low water requirements) consist of succulent plants and bulbs. Watering is carefully monitored to prevent over-watering that can lead to rotting
- ▶ Zone B (higher water requirements), are herbaceous and perennial plants, but many become dormant during winter, with reduced water needs
- ▶ The *Boophane disticha* in the open ground only receives rain water.

The target was to deliver 3 500 plants from this operation.

Waste reduction

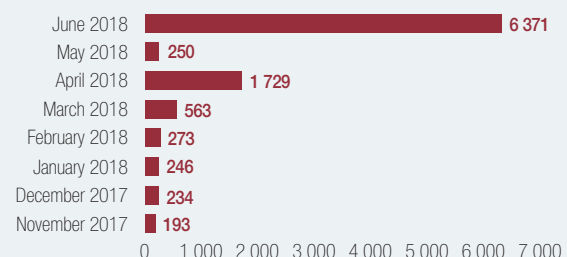
Aveng Manufacturing ACS

Aveng ACS selects annual sustainability projects to lessen its impact on the environment. In 2018, ACS implemented a waste recycling programme to reduce waste to landfill.

Legally compliant waste recyclers were identified and cleaning staff and employees received training to ensure the effective implementation of the programme. Waste streams are systematically identified and managed to prevent waste from accumulating on site. Packaging from products delivered to Aveng ACS are reused to package goods delivered to ACS' end-users.

Monthly monitoring indicated a steady reduction in the amount of waste generated by Aveng ACS from 6 x 6 m³ waste skips to landfill monthly to an average of three plastic bags of general waste. The following graph demonstrates the increase in the rebates of R9 859 ACS received for recycling waste.

Rebate (R)



Environment continued

Environmental priorities

2019 focus areas	Desired outcomes	Actions
Continue to improve capturing, recording and reporting of environmental KPIs	Baseline data sets for carbon, energy, waste and water for the Group that will enable the setting of achievable reduction targets Improved data quality	▶ Operating group SHE executives and the Group SHE office conduct quarterly assurance on environmental data
Continue with energy efficiency audits at fixed facilities	Identify and develop bespoke energy-efficient programmes at operations	▶ Operations have identified efficiencies and are developing implementation plans
Maintain ISO 14001:2010 certification coverage of operations	Ensure that a comprehensive, structured and systematic approach to environmental management is in place for continuous improvement in environmental performance	▶ Ensure ISO 14001 certification is maintained by all operating groups
Continue to improve carbon management and performance to improve the CDP score	Publicly declare and demonstrate management of climate change risks and opportunities at operations Increase energy and emissions efficiency at operations	▶ Respond to CDP results ▶ Identify, prioritise and implement improvement initiatives to reduce emissions and energy intensity measures
Continue responding to the WDP and improve on performance	Publicly declare and demonstrate Aveng's approach and efforts towards managing water-related risks and impacts at the operations Increase energy and emissions efficiency at operations	▶ Respond to WDP results ▶ Identify, prioritise and implement improvement initiatives to reduce emissions and energy intensity measures
Improve learning and awareness	Establish good understanding of caring for the environment Implementation of framework Develop improvement initiatives	▶ Increase accountability ▶ Improve environmental stewardship ▶ Drive sustainability initiatives ▶ Minimise harm and maximise conservation
Improve reporting and governance	Improved data collation and quality Improved monitoring and compliance systems	▶ Compliance with SHE PoP – environment ▶ Implementation of environmental framework



Strategic people management

Strategic people management

Strategic people management in Aveng measures and manages business performance in each operating group and business unit by assessing and building leadership and functional capability. An important part of this involves equipping managers with the skills and capability to effectively engage with employees, set clear accountabilities and deliverables that align to the organisational goals and monitor performance. Our focus in 2018 was to maintain a stable operating environment while implementing a strategy to redefine Aveng’s business model and restore financial stability.

Key focus areas

Key actions to achieve these goals included:

- ▶ Ensuring we have the right people in the right positions with the right skills and capabilities in all critical roles through:
 - assessing the capability of all managers in critical roles to determine cognitive and behavioural compatibility to their roles and their potential for upward mobility
 - addressing underperformance through regular performance reviews and taking required corrective action
 - developing leadership skills through in-house, tailor-made leadership programmes for junior and middle managers and local and international flagship leadership programmes for executives
 - relevant technical and non-technical skills development programmes.
- ▶ Continuing to build an ethical performance culture where every employee assumes personal accountability for Aveng’s performance

- ▶ Regular employee engagement through formal and informal engagement sessions to ensure employees are informed and aligned to the new organisational strategy
- ▶ Reviewing the organisation’s succession bench strength in all key and critical positions and retaining key employees through renewed performance and reward strategies. These focus on short-term deliverables in line with strategic goals
- ▶ Reviewing progress towards achieving employment equity (EE) targets with the objectives of overall improved representation of historically disadvantaged South Africans and women
- ▶ Rightsizing businesses, where required, to align with market conditions.

Underpinning these actions is the key principle of line management responsibility and accountability for the management of employees.

Implementing the new strategy

A key and significant impact on human resources was the operationalisation of the Aveng strategy to simplify its operating structure and dispose of non-core businesses. This required the decentralisation of corporate office services to business units to enable them to function as stand-alone businesses.

A number of work streams were formed to drive the execution of the strategy, including the functional design work stream which focused on the decentralisation of the corporate shared services functions to the operating businesses. The following table describes risks associated with this process, and actions implemented to mitigate the risks:

Key risk	Mitigation / action
High probability for labour unrest / employee turnover	<ul style="list-style-type: none"> ▶ Secured legal advice before implementing the process ▶ Continuous employee engagement ▶ Taking the interest of employees into account when implementing significant organisational changes
Key talent retention	<ul style="list-style-type: none"> ▶ Ongoing retention strategy for key and critical staff
Ensuring all key activities are effectively transitioned to business units	<ul style="list-style-type: none"> ▶ Established a multi-disciplinary team comprising functional experts and representatives from the corporate office and each business unit to ensure seamless transition and buy-in
Maintaining employee productivity during the transition	<ul style="list-style-type: none"> ▶ Continuous engagement by line management ▶ Structured employee engagement sessions ▶ Ensuring business units are equipped with skills to function in a decentralised environment
Ensuring compliance with employment equity and other labour regulatory obligations	<ul style="list-style-type: none"> ▶ Regular monitoring and measurement of EE plans, given increased turnover ▶ Talent retention
Ensuring institutional knowledge is maintained	<ul style="list-style-type: none"> ▶ Ensured effective hand-over, skills transfer into business units and/or outsourcing employees to service providers

Strategic people management continued

2018 salient features

The table below details the progress made across specific people management activities in 2018, aligned with the new strategy and processes to transition to a new business model.

Performance area	Target	2018	2017	2016	2015	2014
Implementing an integrated talent management and succession planning model	Mission-critical and key management positions identified and incumbents assessed					
	Talent identified, trained and developed to move into key and mission-critical positions as they become available					
	The identification and development of historically disadvantaged South African candidates for middle and senior management positions prioritised					
Measuring and managing performance	Formal, standardised performance contracts in place for all junior, middle and senior managers with improved quality of performance reviews					
	Individual development plans in place					
Employee relations strategy	Informed, engaged and committed employees					
	Reduction in propensity for unprocedural strikes					
Optimising our organisation / flattening levels	A high-performing workforce with clearly understood roles and accountabilities within a flatter organisation					
	While there has been flattening of management structures, we have not yet achieved a high-performing organisation					
Human resource systems capability	An integrated human resource information system (SAP HCM) providing accurate people management information and a B-BBEE reporting and analysing tool (Mpowered B-BBEE toolkit) implemented					
Targeted training and development	Integrated training interventions focused on development gaps identified through succession plans, performance management reviews and psychometric assessments					

Not implemented
 Not fully implemented
 Implemented further work required
 Fully implemented

As can be seen in the table above there has been some regression since 2017. This is largely due to turnover in various businesses as well as a reorganisation at operating group and business unit level due to the revised Aveng strategy which includes the disposal of non-core businesses.

Strategic people management continued

Stakeholder engagement

Aveng has identified its main people management related stakeholders and continuously engages with them through various formal and informal methods, as detailed in the table below.

Stakeholder	Issue	Impact on the business if not addressed	2018 actions
Employees Australasia operations: ▶ Overhead 411 ▶ Project staff 1 089 ▶ Waged 1 314 South Africa and rest of the world operations: ▶ Salaried 3 289 ▶ Waged 8 055	Alignment of employees with the Aveng strategy, organisational culture and values	▶ Sub-optimal performance and failure to meet targets ▶ Talent loss ▶ Labour disruption ▶ Misaligned organisation	▶ A review of corporate office and business unit requirements, given the revised Aveng strategy ▶ Regular employee engagement regarding the revised strategy at business unit level
Organised labour NUM, NUMSA, UASA, AMCU and Solidarity in South Africa AWU and CFMEU in Australia	Quality / consistency of engagement with unionised and non-unionised labour	▶ Tough labour relations environment ▶ High propensity for labour disruption ▶ Emergence of new union federations	▶ Ongoing engagement with employees and organised labour
Managers	Ownership and accountability for performance in areas of responsibility Effective succession planning to ensure business continuity	▶ Sub-optimal business performance and failure to meet performance objectives	▶ Ongoing measurement of performance and succession plans ▶ Ongoing capability reviews with all management levels ▶ Ongoing coaching programmes with key and critical staff ▶ Addressing underperformance ▶ Tailored reward and recognition processes
Regulatory bodies relating to labour	Compliance with legislation	▶ Reputational and / or financial risk	▶ Ongoing reviews to ensure compliance with applicable legislation / codes

Employee performance

Talent and succession planning


In the current business environment, retention of key and critical talent is important for business continuity. Aveng invested in the management of talent in key business roles, the development of future leadership capability and the retention of high-performing talent in the non-core and core businesses. The improvement in McConnell Dowell's financial and operational performance reflected effective implementation of this approach.

A number of interventions were implemented, including coaching, leadership development programmes and poor performance interventions, where required, to address identified shortfalls.

Performance management

Accountability for business performance was implemented throughout the organisation. Weekly cash management and operations review meetings chaired by the chief financial officer ensured a focus on operational performance.

Performance targets were set and tracked. Operational performance reviews were conducted more regularly and immediate corrective actions were taken, where required.

Additional information is available in the remuneration report in the 2018 integrated report at www.aveng.co.za .

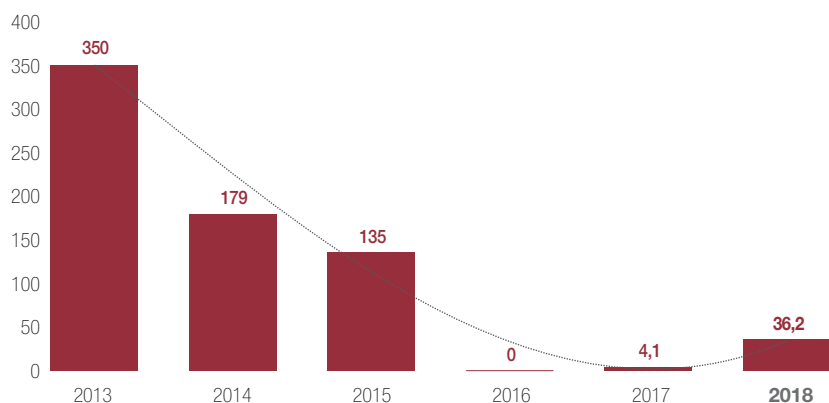
Employee relations

From 2013 to 2018 Aveng experienced a decline in costs related to strike actions from R350 million to R36,3 million. This improvement is attributed to the Group's

Strategic people management continued

ongoing engagement with employees and unions, during tough economic conditions and changes in strategy. The slight increase in strike costs during 2018 is mainly attributable to national strike action which impacted Mining operations. The graph below details the significant reduction in costs associated with strike action.

Cost impact as a result of strike action on net operating earnings/loss (Rm)



The employee relations climate within McConnell Dowell remained stable, with no notable incidents.

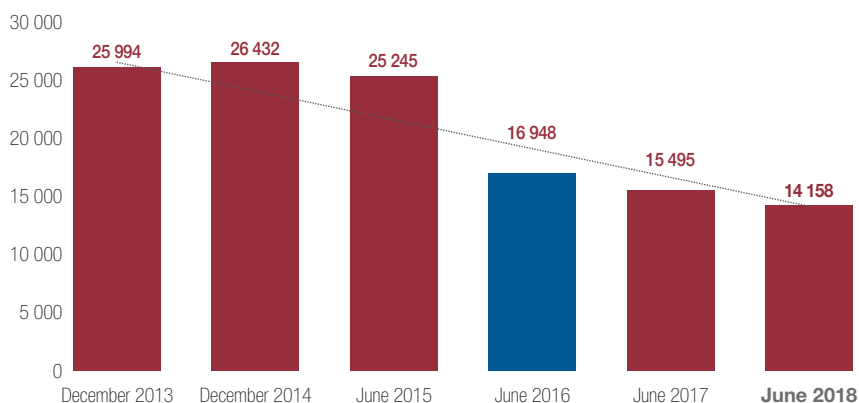
Organisation optimisation

Interventions (both people and production related) were implemented to ensure the optimal functioning of non-core businesses prior to disposal. The core businesses were prepared for optimal functioning in growing markets. While McConnell Dowell is well positioned for growth, Moolmans is undergoing further optimisation.

Aveng’s headcount decreased to 14 158 (2017: 15 495), as a result of ongoing optimisation and restructuring in difficult market conditions and underperformance. Careful consideration was given to other alternatives prior to launching restructuring engagements.

The following graph indicates the headcount movement since December 2013.

Aveng total headcount: 2013 to 2018



Senior appointments

The following key appointments were made across Aveng during 2018 and early in 2019:

South African operations

- ▶ Executive chairman and interim chief executive officer, Eric Diack
- ▶ Managing director Aveng Grinaker-LTA, Bhekani Mdlalose
- ▶ Strategy executive Aveng Grinaker-LTA, Suzie Nkambule
- ▶ Group financial controller, Liesl Tweedie
- ▶ Group head of human resources, Michael Borgström
- ▶ Interim managing director, Aveng Manufacturing, Wouter de Gidts
- ▶ Managing director, DFC, Luis Falcao De Carvalho
- ▶ Financial director, Moolmans, Dawn Earp
- ▶ Financial director, Aveng Steel, Ravendra Brijrajh
- ▶ Financial executive, Infraset, Waheed Faqi Arai
- ▶ Property executive, Aveng Capital Partners, Rendani Rathando

McConnell Dowell operations

- ▶ Managing director New Zealand, Fraser Wyllie
- ▶ Managing director Southeast Asia, Stephen Rogers
- ▶ Executive general manager Engineering, Technology and Innovation, Vito Trantino.

Strategic people management continued

Learning and development

South African operations

The development and upskilling of employees across Aveng, especially in our key skills categories, is fundamental to ensuring a high-performing organisation. The Group focused on leadership development interventions for key supervisory and first line managers, middle managers and executive development interventions for senior executives.

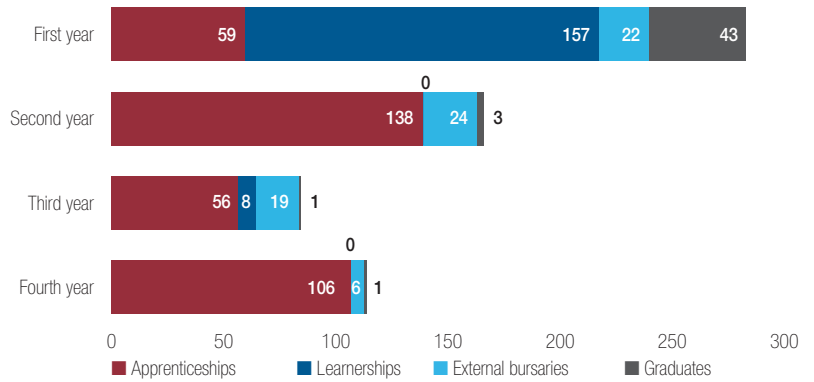
Technical training highlights

Aveng operates one of the most extensive technical training offerings in South Africa. Various Aveng training schools offer accredited training, apprenticeship and learnership programmes, covering trades such as welding, fitting and turning, lifting equipment training, rock breaking, diesel mechanics and construction-related programmes.

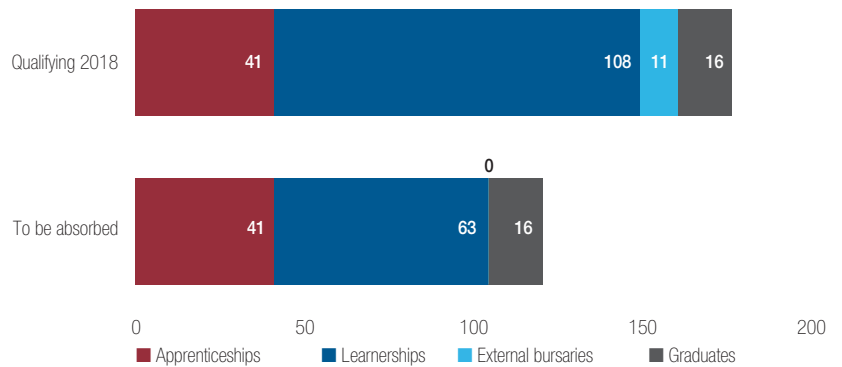
A total of 643 learners and students are currently enrolled on various formal learning programmes across Aveng (South Africa).

The following graph details the enrolment of learners and students in formal learning programmes across Aveng (South Africa):

Learning programme pipeline



Skills absorption tracking



Of the 176 learners qualifying in 2018, 120 (68%) will be absorbed into permanent positions at Aveng (41 apprentices, 63 learners, and 16 graduates). 68% of those absorbed into Aveng are historically disadvantaged South Africans.

Strategic people management continued

Apprenticeships

Aveng's South African operations develop artisans for future career opportunities across the Group. In 2018, 359 (2017: 269) apprentices were trained in a number of disciplines, such as earthmoving equipment, electrician, fitting and turning, millwright, tool, jig and dye maker and tool setter. In alignment with Aveng's transformation aspirations, 89% of the 359 apprentices are black and 14% are female. 85% are from Aveng Mining, 5% from Aveng Grinaker-LTA, 6% from Aveng Manufacturing and 4% from Aveng Trident Steel.

During 2018, Aveng Trident Steel had 13 apprentices enrolled for its apprenticeships in millwrights. One of the apprentices is an African female, and is the first female apprenticeship at Aveng Trident Steel.

In July 2017, three apprentices qualified as artisans. Two of the apprentices completed their trade in millwrights and one in boilermaking. Due to the closing of the Aveng Steel fabrication business, the boilermaker had to take a retrenchment package.

Learnerships

Through its learnership programmes, Aveng develops pools of critical skills required by industry, while generating employment for historically disadvantaged individuals. 165 learners are enrolled in learnership programmes across Aveng, 95% of whom are black and 32% female. 108 of these learners will graduate in 2018.

Graduate development and bursaries

Aveng offers one of the largest bursary programmes in its sector. There are 48 graduates across Aveng's South African operations, 90% of whom are black and 35% female. Aveng currently provides bursaries to 71 external students across various disciplines. Of the 71 bursars, 75% are black and 22% female.

Training highlights

Mentorship towards professional registrations

The Grinaker-LTA Mentorship Programme towards professional registration with ECSA, is progressing employees towards professional registration. During 2018, four employees were professionally registered with ECSA:

- ▶ One professional engineer
- ▶ One professional technologist
- ▶ Two professional technicians.

In addition, Aveng Grinaker-LTA has seven African male mechanical engineering technician candidates who will submit their reports to ECSA by the end of October 2018.

Discretionary grants from CETA

The Grinaker-LTA training centre obtained discretionary grants from CETA to train unemployed youth. The funding granted was for:

- ▶ 20 learnerships (supervision of construction processes) – value R1 million
- ▶ 110 short skills programmes – value R1,65 million.

Australian operations

McConnell Dowell

McConnell Dowell continued to invest in training, development and learning interventions to ensure a high performing organisation.

Highlights include:

E-Learning

In coordination with the launch of the revised operating framework and McConnell Dowell Management System (MMS), a new e-learning platform was launched across McConnell Dowell. The platform provides employees with access to a growing database of internal training content and externally provided professional development and compliance skills training.

Various initiatives included:

Australia

- ▶ Leadership and Management Certificate IV for supervisors. Pilot programme with six participants
- ▶ "Own Your Development" courses (ie Individual Development Plan for business units)
- ▶ Engineers Australia Professional Development programme for our 12 graduate engineers
- ▶ Fatigue management training
- ▶ Risk workshops
- ▶ Meeting effectiveness workshops
- ▶ Resilience workshops.

New Zealand

Aspiring Leaders programme

This six-block programme targeted mid-tier managers and senior project engineers. The participants presented their individual proposals to the wider group. The presentations demonstrated ways to grow our business by improving our processes, system management, site operations and functions, and achieving best value for money.

Safety critical roles

Certificate of Competency (CoC) tickets were issued to a number of managers in our Tunnelling division following an increase in tendering for new tunnelling projects, which has increased demand for the upskilling of tunnel managers, supervisors and officers.

Continuous professional development

As part of the requirement from WorksafeNZ, all ticket holders should undertake continuous professional development (CPD) through formal and informal learning. The CPD courses must be relevant to legislation, operation and safety, emergency management and leadership.

Strategic people management continued

ConstructSafe testing

McConnell Dowell has been accredited as a mobile testing centre for ConstructSafe. This is a random questionnaire in health and safety, including working at heights, chemical use, trenching and excavation, confined space, PPE, etc. In total, 198 of our employees were tested.

Civil trades qualification

A Civil Trades programme was presented to the senior leadership team. The procedural document was updated to reflect recommendations made by the team. Roadshows will be conducted to inform our staff about this programme. Several areas of specialisation are offered including: civil works (earthworks, non-structural concrete, road construction, road maintenance); utilities maintenance (water, wastewater, stormwater), pipe installation (trenched, trenchless); bituminous surfacing (bituminous mixes, chipseal, slurry); and, bituminous product manufacturing (binder manufacturing operation, bituminous mixing operations).

100% of McConnell Dowell students achieved their unit standards and had their credits reported to New Zealand Qualifications Authority. As a result, Individual Development Plan goals, project training requirements, and compliance and regulatory training requirements were all achieved.

Leadership and executive development

Leading in Aveng programme

Aveng is committed to developing its managers and leaders as part of its mission to create an effective and high-performance organisation.

Continuing to strengthen leadership capability through the appointment, training and development of strong leaders across all operating groups is a core focus of the Group’s development interventions. Aveng continued to offer its premier South African leadership development programme, Leading in Aveng (LIA) in 2018. This is a fully accredited Advanced Diploma in Organisational Leadership (NQF Level 7) programme for first line supervisors, middle managers and senior managers. In all, 21 delegates from across the South African operating groups are participating in the 2018 programme.



Leadership in Aveng – graduation of the class of 2016.

Looking ahead

Key HR focus areas for year ahead Desired outcomes / Actions

Decentralise the corporate office services to operating groups (OGs) and business units (BUs)	<ul style="list-style-type: none"> ▶ Effective transitioning of support functions to OG / BUs ▶ BUs functioning as standalone entities ▶ Ownership and accountability at OG / BU level ▶ Do not compromise transformation / localisation objectives and targets ▶ Retain critical talent retention targets
Entrench the employee relations strategy to reduce / eliminate strike impact	<ul style="list-style-type: none"> ▶ Continue engaging employees and unions on business realities, challenges and their role in contributing to the business turnaround
Ensure retention of critical talent	<ul style="list-style-type: none"> ▶ Ensure retention of critical talent in key positions ▶ Ensure continuity of business performance given decentralisation
Continue improving performance of BUs	<ul style="list-style-type: none"> ▶ Decisively address poor performance ▶ Manage key talent to ensure business continuity
Recruitment	<ul style="list-style-type: none"> ▶ Attract high-calibre staff in line with Aveng strategy
Culture and values	<ul style="list-style-type: none"> ▶ Implement a programme to align McConnell Dowell and Moolmans cultures ▶ Entrench Aveng values
Performance management	<ul style="list-style-type: none"> ▶ Align performance targets across the Group ▶ Develop and nurture talent



South Africa transformation

South Africa transformation



Aveng maintained its focus on realising meaningful and sustainable transformation. Aveng’s commitment to transformation is premised on the notion that it is “the right thing to do”. Aveng remains resolute in its compliance with the spirit and intent of the principles of broad-based black economic empowerment (B-BBEE). The Group currently measures its transformation progress against the generic B-BBEE codes of good practice and is a level 2 B-BBEE contributor. Looking forward, Aveng will measure its transformation progress against the revised Construction Charter.

In 2018 Aveng completed a strategic review of its operations from which a revised strategy for the Group was announced and implemented. The outcome of the strategic review had a significant impact on the structure of the Aveng Group and therefore its transformation strategy. The Group focused on ensuring that all businesses remain compliant at an appropriate individual level and implement relevant strategies to achieve their B-BBEE targets.

Key focus areas

Aveng consistently reviews its performance outcomes against the belief that transformation should not be measured by the achievement of targets on the scorecard, but rather by the greater economic and social impact that the Company can achieve, while also realising strategic advantage.

Against this backdrop, the key issues supported across all South African operations are:

- ▶ Improved B-BBEE understanding, performance and compliance
- ▶ Increased emphasis on identifying, training, recruiting and retaining black professionals, with increased emphasis on black women and people with disabilities.

- ▶ Ongoing support for socio-economic development (SED) initiatives. While current initiatives have focused on mathematics and science education, the Group will increase its focus on community development and localised transformation within the communities we operate in
- ▶ Enhancement and fostering of strategic relationships with key stakeholders
- ▶ Creation of opportunities and access to Aveng’s procurement expenditure for black-owned and black women-owned EMEs and QSEs in line with the Group’s strategy.

Transformation monitoring and performance

The development, implementation, monitoring and evaluation of Aveng’s transformation strategy remains a core function of employment equity, skills development and transformation working committees. These committees are overseen by the Aveng social, ethics and transformation committee to ensure alignment with the Group’s strategy, operational implementation, compliance requirements and long-term goals.

The Group continued to invest in appropriate training interventions to capacitate employees and strengthen a culture of learning and continuous improvement, in spite of the current challenging operating environment.

Aveng instils a culture of diversity and inclusion, where everyone is treated fairly, equally and without discrimination. Although our gender balance has been a challenge, this is improving with women representing 16% of Aveng’s population (2017: 15%) and 13% of our most senior managers (2017: 12%).

Diversity and inclusion

Diversity and inclusivity are integral to Aveng’s transformation and human resources strategies and processes.

The economic downturn has, however, required ongoing restructuring and repositioning of the Group. At 30 June 2018, the headcount reduction since December 2013 amounted to 11 836 employees across all employment categories. Aveng’s core focus remains the retention of critical skills that are required to manage, grow and transition its operations.

The Group continues to create awareness of the importance of people with disabilities as a core component of our diversity commitment. This is done by means of recruitment interventions, ongoing declaration campaigns and sensitisation workshops on disability matters. Reasonable accommodation guidelines have been developed to ensure managers are better informed and equipped to provide for employees with disabilities.

South Africa transformation continued

Performance of Aveng (Africa) Proprietary Limited against the Revised Codes of Good Practice Broad-based black economic empowerment scorecard*

Scorecard elements	Aveng Africa 2017	Aveng Africa 2016
Ownership	25,00	23,04
Management control	11,08	9,35
Skills development	15,66	13,02
Enterprise and supplier development (ESD)	40,42	40,69
Socio-economic development (SED)	5,00	5,00
Total	86,08	91,10
Rating	2	3

* For a copy of the Aveng B-BBEE certificate, go to: www.aveng.co.za . The current certificate is valid until 18 October 2018.

Ownership

Aveng's empowered ownership status at the last audit was 89,47% black owned (2017: 67,88%), with 34,10% black women ownership (2017: 19,38%).

Management control

During 2018, we achieved greater diversity at management levels as shown in the following table:

Transformation performance at management level

	Managers		Black employees (%)		Black women employees (%)	
	2018	2017	2018	2017	2018	2017
Senior managers	155	186	29,68	15,07	6,45	4,5
Middle managers	871	1 071	40,30	25,98	8,38	6,34
Junior managers	1 578	2 448	67,24	59,61	16,22	11,66

Representation at senior management level is 29,68%. The Group remains focused on addressing the underrepresentation of black people, particularly African and coloured people relative to the economically active population (EAP) ratios.

At middle management level, Aveng achieved a 55% improvement in black representation to 40,30% (2017: 25,95%). The Group continued to create a diverse leadership pipeline at junior management level. As a result of skills and leadership development programmes implemented in all of the operating groups, 67,24% of the Group's 1 578 junior managers are black, with 16,22% being black women. As women remain underrepresented at all management levels, a focus has been placed on greater female representation across all races, with a particular focus on improving representation in our core

businesses, Moolmans and McConnell Dowell.

Skills development

Aveng recognises that skills development of black and women employees at all levels is necessary to establish a well populated and continuous pipeline of skilled talent that can be promoted within the organisation. The Group is committed to investing in its historically disadvantaged South African employees to ensure they have the skills required to perform at their full potential and can lead the organisation in their respective functions.

Aveng's skills development strategy focuses on formal structured programmes that enable performance and career progression for all of its employees, with an increased focus on black people. Enrolments in training interventions are


aligned with the Group's transformation objectives and critical skills needs.

While the Group complies with relevant training and skills development legislation, its investment in people goes beyond compliance. With a specific focus on talent development in our core businesses, Aveng invests in continuous personal development.

The development and upskilling of employees across Aveng, especially in our key skills categories, is fundamental to ensuring a high-performing organisation. The Group focused on leadership development interventions for key supervisory and first line managers, middle managers and executive development interventions for senior executives.

South Africa transformation continued

Aveng supports broader skills development initiatives through structured internships, apprenticeships and learnerships in several fields, including business administration, engineering and construction, which are offered within Aveng. These programmes develop technical skills that prepare participants for opportunities in the workplace. The programmes are for Aveng employees and unemployed learners, some of whom are offered positions at Aveng. This upskills our current talent pipeline and adds new talent to the organisation.

Additional information on learning and development is available in the strategic people management report .

Learnerships for previously disadvantaged, unemployed and disabled groups in South Africa

The Group's business administration learnership programme provides experiential learning opportunities to people with disabilities to absorb successful learners into permanent roles.

Aveng Trident Steel

During 2018, Aveng Steel implemented three learnerships to upskill employees from previously disadvantaged groups and unemployed individuals.

- ▶ National Certificate: Engineering, Manufacturing and related activities NQF 1 – the 2017 intake comprised six males (55%) and five females (45%) with 100% representation from previously disadvantaged groups.
- ▶ National Certificate: Business Administration NQF 3 – the 2017 intake comprised 11 females, all disabled, unemployed and from previously disadvantaged groups. During 2018, the contracts of nine of the learners were extended, enabling them to continue their learnership on a NQF 4 level.
- ▶ National Certificate: Business Administration NQF 3 – the 2017 intake comprised four males (33%) and eight females (67%) with 100% representation from previously disadvantaged groups.

Moolmans

Moolmans increased its focus on:

- ▶ Training black employees and black employees with disabilities
- ▶ Increasing the number of black people participating in its learning programmes
- ▶ Absorbing all learners who complete its learning programmes. Successful candidates are placed on limited duration contracts to gain meaningful work experience.

Diversity and inclusion at McConnell Dowell

As part of the refresh and relaunch of the McConnell Dowell Management System (MMS), the McConnell Dowell Diversity and Inclusion policy was reviewed and updated. The policy states:

“McConnell Dowell recognises its talented and diverse workforce as a key competitive advantage. Our business success is a reflection of the quality and skill of our people. McConnell Dowell actively embraces a culture and workplace that is diverse and reflective of the communities and geographic environs we serve.”

Further, the policy requires McConnell Dowell to take steps to:

- ▶ Create a safe and inclusive workplace culture free from discrimination, harassment, bullying, victimisation and vilification
- ▶ Facilitate equal employment opportunities based on relative ability, performance or potential
- ▶ Develop specific, targeted programmes for underrepresented groups, such as programmes to identify talented women and indigenous employees for recruitment and development, and localisation programmes to fast-track the development of capability drawn from the local communities in which we operate
- ▶ Attract and retain a skilled and diverse workforce as an employer of choice
- ▶ Enhance customer service and market reputation through a workforce that respects and reflects the diversity of our customers

- ▶ Make a contribution to the economic, social and educational wellbeing of the communities we serve.

McConnell Dowell took further steps to improve diversity and inclusion across the Group. Key achievements include:

- ▶ Significant indigenous workforce participation rates on key projects in Australia (eg Northern Gas Pipeline and Murray Basin Rail) significantly in excess of contractual requirements.
- ▶ Deployment of training and skills development programmes across key projects, such as Western Programme Alliance, Murray Basin Rail and Northern Gas Pipeline, targeting socially disadvantaged demographic groups. These include indigenous persons, migrants, and long term unemployed.
- ▶ Appointment of women and local/nationals into key senior roles across the Group, including female appointees into positions of general manager finance New Zealand, general manager HR New Zealand, national HR manager Australia, national submissions manager Australia, with further appointments pending; local / national appointee into position of business development director Singapore and Malaysia).

A key focus of 2019 will be on the development and deployment of programmes to improve inclusion, to leverage the benefits of increased gender and cultural diversity. Such programmes will assist with developing cross-cultural capability and identifying and addressing unconscious bias. A pilot programme has been run for the Southeast Asia business unit senior leadership team on cross-cultural capability. The Australian business unit is developing a pilot programme on unconscious bias.

Enterprise and supplier development

In line with our strategy to align procurement practices with our B-BBEE goals and targets and to procure within the geographic areas in which we operate, Aveng has made the following progress. The Group scored 40,42 out of a possible 44 points for enterprise and supplier development (2017: 40,69). The Group

South Africa transformation continued

spent R3,1 billion with black-owned suppliers, R839 million of which was spent with black women-owned suppliers in 2018.

The training and development of the supplier development beneficiaries has been completed and supplier development contributions have been met.

The Group expects to retain a high level of compliance during the October 2018 audit and continues to create opportunities for exempted micro-enterprises (EMEs) and qualifying small enterprises (QSEs) as well as black-owned and black women-owned companies in its procurement activities. Central to the Group's ESD strategy:

- ▶ Increased due diligence of B-BBEE requirements at all levels of procurement activity with ongoing monitoring and reporting

- ▶ Increased accountability by procurement officials throughout the Group, including KPI targets at all levels
- ▶ Reduced expenditure on poorly empowered or non-empowered suppliers
- ▶ Ongoing entry into strategic supply contracts with highly empowered suppliers
- ▶ Ongoing entry into three-year commercial supply contracts with qualifying black-owned and black women-owned EMEs and QSEs to assist emerging businesses to become sustainable
- ▶ Increased focus on expenditure with suppliers based in rural and underdeveloped areas, people with disabilities, and youth
- ▶ Ongoing training for all senior decision-makers and influencers on the impact of ESD and its strategic imperative for the Group.

To create long-term sustainability for emerging black-owned and black women-owned businesses, Aveng has 25 ESD beneficiaries in its programme. Aveng has used country-wide networking interventions to identify emerging businesses and facilitate access to its procurement spend. Over R749 million was spent with first time emerging businesses during 2018. Enterprise development initiatives are key to improvement in preferential procurement performance, and the Group has continued with its development programme which identifies rural based companies, emerging entrepreneurs, and start-ups and prepares them to participate in its procurement activities.

Supplier development remains key to creating a more inclusive economy and reducing unemployment. Aveng will continue to assist EMEs to access its procurement expenditure.

The following table sets out the number of suppliers and enterprise development beneficiaries trained in 2018:


Region	Gauteng	Limpopo	KwaZulu-Natal	Eastern Cape	Western Cape	Total trained
Ethics in procurement		48				48
Tendering	11		10	12	18	51
Contract law	18		10	12	18	58
Communication and presentation skills	18	42	8	10	18	96
Customer service	10		8	10	18	46

Socio-economic development

Creating access to quality education remains a challenge in South Africa. Aveng focuses its socio-economic development (SED) initiatives and contributions on broadening access to quality education through mathematics and science programmes for marginalised South Africans, particularly in rural areas. This will remain the key area of focus for our corporate social investment (CSI).

Aveng's CSI efforts are facilitated through the Aveng Community Investment Trust which provides structures for governance, financial accountability, monitoring and reporting. In 2018, the Trust invested R17 007 258 in education related CSI initiatives.

These programmes are run through the LEAP School in Diepsloot, Gauteng and the Kutlwano School in Glencowie, Limpopo.

For additional detailed information about the flagship projects, refer to the corporate social investment report that follows .

South Africa transformation continued

Transformation impacts and management

Aveng values the collaborative engagement it has with its stakeholders and considers it important to understand, respond to, and improve on key material issues that matter to them. These key stakeholders include employees, government departments, clients, contractors, suppliers and the authorities that govern the Group's compliance with employment equity and B-BBEE legislation. Their key concerns or requirements, and the actions Aveng has taken to address them, are reported in the table below:

Stakeholder	Issue	Impact on the business	Actions
Department of Trade and Industry and Construction Sector Charter Council	Compliance with B-BBEE Codes of Good Practice and construction charter targets	Impacts our ability to contribute to broader economic and social objectives Impacts our ability to win work	<ul style="list-style-type: none"> ▶ Engagement through industry consultative bodies ▶ Ensure compliance to spirit of transformation and regulatory environment ▶ Broad-based initiatives that impact the communities within which we operate
Department of Labour	Compliance with employment equity (EE) statutory requirements	Reputational risk of non-compliance and penalties when EE targets not met	<ul style="list-style-type: none"> ▶ Quarterly EE committee meetings ▶ Ongoing site visits to operating groups ▶ EE audits ▶ Ongoing engagement with the Department of Labour ▶ Ongoing stakeholder engagements
Suppliers	Compliance with B-BBEE Codes of Good Practice and construction sector charter targets and retaining empowering supplier status	Lower preferential procurement scoring as suppliers may drop levels under the new codes or charter	<ul style="list-style-type: none"> ▶ All procurement processes are aligned to ensure that B-BBEE due diligence is conducted before appointing suppliers
Employees	Employee engagement on transformation-related matters		<ul style="list-style-type: none"> ▶ Include B-BBEE targets in performance management KPIs ▶ Provide career development opportunities ▶ Ongoing engagement with employees and appropriate bodies ▶ Ongoing transformation awareness programme ▶ Operating group EE and SD committee representation

South Africa transformation continued

Looking ahead

Focus areas for the year ahead	Desired outcomes
Ensure alignment to the Construction Charter	<ul style="list-style-type: none"> ▶ Review key B-BBEE strategic objectives to ensure ongoing alignment to the Construction Charter
Create opportunities for gender and race equity	<ul style="list-style-type: none"> ▶ Focus on recruiting according to EE plans to achieve black and female representation targets ▶ Continue to advance gender representation through workplace transformation committees ▶ Increase and retain black and female employees in senior and technical roles
Skills development	<ul style="list-style-type: none"> ▶ Implement strategies for development of Aveng employees to benefit the business in the short, medium and long term ▶ Focus on recruitment and skills development interventions and initiatives based on EE plan to realise EE targets ▶ Conduct structured skills committee workshops to manage workplace skills advancement plans in a progressive manner
Enterprise and supplier development	<ul style="list-style-type: none"> ▶ Drive talent management and development of core businesses' suppliers ▶ Increase focus on developing black and black women-owned emerging businesses ▶ Increase access to procurement activities for youth, disabled, rural and women-owned enterprises
Socio-economic development (SED)	<ul style="list-style-type: none"> ▶ Conduct regular engagement with internal and external stakeholders to identify and drive key strategic initiatives, with a focus on the communities in which we operate ▶ Strengthen SED initiatives within Moolmans
Localisation and advancement of indigenous people	<ul style="list-style-type: none"> ▶ Develop a strategy to achieve the advancement of indigenous people within operations in Southeast Asia and other international sites where Aveng operates.



Corporate social investment

Corporate social investment

Aveng has a vested interest in the welfare of its employees, communities and local economies in which it operates and embraces its responsibility to play a meaningful role in their socio-economic development. Aveng's approach to corporate social investment (CSI) and socio-economic development (SED) is aligned with the Group's skills requirements and complies with legislation, codes of good practice and business practices that support socio-economic growth and development in a sustainable manner.

South Africa faces significant skills shortages in construction, engineering and manufacturing-related technical disciplines. By investing CSI funds in sound educational and skills training initiatives, Aveng is working to develop a generation of skilled individuals who can be productively employed in the sectors in which it operates.

Aveng commits a portion of its earnings to the economic and social development of communities through the Aveng Community Investment Trust (the Trust). Established in 2005, the Trust is a registered public benefit company governed by a board of trustees. It subscribes to the King Code on Corporate Governance for South Africa that recognises the role of companies in social transformation.

Since its inception, the Trust had a sustainable impact in the delivery of

mathematics and science tuition at secondary school level, artisan training and development, and the development and renovation of building facilities for schools and communities.

Although Aveng was not profitable in 2018, the Group continued to exceed the legislated expenditure requirements for scorecard ratings during the period under review and remains a leading SED contributor in its sector. Aveng remains committed to funding the Trust's two flagship projects.

Key focus areas

Aveng strengthened the alignment of CSI and SED with its business objectives. The Trust prioritised this focus area in Aveng operating groups' CSI and SED management by:

- ▶ ensuring greater collaboration between operating groups and the Trust to

maximise impact with limited available funding

- ▶ ensuring operating groups use budgeted SED and CSI funds to meet their contractual obligations to clients and invest strategically and effectively in areas of operation
- ▶ ensuring CSI activities meet SED requirements of the B-BBEE codes of good practice
- ▶ ongoing monitoring and reporting mechanisms for social investment across Aveng
- ▶ managing and monitoring Aveng's presence and participation in the flagship projects.

Trust expenditure

Despite the tough trading conditions experienced in recent years which negatively impacted funds available for CSI, Aveng continued to financially support its two CSI flagship projects, as follows:

R	2018	2017	2016
Consulting fees	720 000	769 788	518 496
Kutlwanong Rebone Centre and LEAP 4 school	9 398 553	6 816 642	12 277 020
LEAP 4 building project	7 704 018	1 582 019	
Total	17 822 571[Ⓒ]	9 168 449	12 795 516

[Ⓒ] This item was the subject of the limited assurance engagement performed by EY. Refer to assurance report on pages 6 to 8.

Corporate social investment continued

CSI impacts and management

Aveng has identified its main CSI and SED stakeholders as CSI projects and beneficiaries, clients, the authorities that govern Aveng's compliance with B-BBEE regulations and the trustees. Their key concerns or requirements, and actions taken to address them, are reported in the following table:

Stakeholder	Issue	Impact on the business	Actions
CSI projects and beneficiaries	Funding constraints	<ul style="list-style-type: none"> ▶ Lower positive impact on communities ▶ B-BBEE rating ▶ Potential threat to securing work ▶ Investment not delivering sustainable empowerment ▶ Reputational risk 	<ul style="list-style-type: none"> ▶ Improved collaboration with operating groups to align all funding to focus areas ▶ Making best use of "in kind" and "in time" contributions to support cash investments ▶ Ensuring investments are made in projects that qualify as SED
Clients	CSI contractual obligations	<ul style="list-style-type: none"> ▶ Fines for not meeting contractual obligations ▶ Potential threat of losing business from clients ▶ Risk of reputational damage by clients and communities where Aveng operates 	<ul style="list-style-type: none"> ▶ Planning by operating groups to identify contractual obligations and budget to meet these requirements ▶ Greater collaboration between the Trust and operating groups to leverage their investments ▶ Alignment between the Trust and business needs
Regulatory authorities	Compliance with SED requirements of the revised B-BBEE Codes	<ul style="list-style-type: none"> ▶ Risk of losing SED points for B-BBEE scorecard rating ▶ Reputational damage leading to loss of government contracts for not contributing to sustainable SED 	<ul style="list-style-type: none"> ▶ Improved planning, systems and processes across the Company to ensure compliance

Corporate social investment continued

Highlights: Aveng Community Investment Trust

Flagship projects

Leap 4 Science and Maths School

LEAP provides high school education to students from disadvantaged communities, focusing on grades 9 to 12. Learners are given the opportunity to advance mathematics, science and English skills. Presently, LEAP has six schools across the country.

LEAP 4 opened in 2011 and serves 198 students from Diepsloot, Gauteng.

The Aveng Community Investment Trust supports grades 10, 11 and 12 learners at the school which has been a top performer in the Diepsloot area for the past two years. The matric class of 2017 was the first class at LEAP 4 to achieve a 100% pass rate.

Aveng Kutlwanong Rebone Maths and Science Centre

The Aveng Kutlwanong Rebone Maths and Science Centre in Glencowie, Limpopo provides tuition to 480 learners from 22 feeder schools, as well as a

teacher training programme. The centre has produced consistently good results during the seven years Aveng has provided funding and is one of the top performing Kutlwanong centres across South Africa. Kutlwanong is a section 21 (not for profit) organisation, with 21 centres committed to advancing performance of high school mathematics and science learners from disadvantaged areas. The project facilitates entrance to tertiary education and successful bursary application for a number of learners.

2017 matric results achieved by Kutlwanong Rebone Centre and LEAP 4 School

Project	2018 investment	Beneficiaries	Performance
LEAP 4 school	R5 641 208	210 grades 8 to 12 learners (26 wrote matric)	<ul style="list-style-type: none"> ▶ 100% pass rate ▶ 86% achieved Bachelor passes ▶ 14% achieved diploma passes ▶ 26 distinctions in total <ul style="list-style-type: none"> – 1 distinction in mathematics – 2 distinctions in physical science – 5 distinctions in English first additional languages – 1 distinction in accounting – 3 distinctions in history – 1 distinction in Sepedi Home Language – 13 distinctions in life orientation ▶ 100% of students qualified to apply to a university or university of technology for tertiary study
Kutlwanong Rebone Centre	R3 757 345	480 grades 10, 11 and 12 learners (139 wrote matric)	<ul style="list-style-type: none"> ▶ 123 (83%) achieved Bachelor passes ▶ 43 distinctions were achieved in mathematics ▶ 8 learners scored between 90% and 99% in mathematics ▶ 2 learners scored 100% in mathematics ▶ 52 distinctions were achieved in physical sciences ▶ 22 learners scored between 90% and 99% in physical sciences ▶ 2 learners scored 100% in physical sciences ▶ The subject average for mathematics and physical science was 70%

Corporate social investment continued

Prizegiving ceremony at Kutlwanong Rebone Centre

The Trust hosts an annual prizegiving ceremony to recognise sterling matric results from the Aveng Kutlwanong Rebone Centre. The 2018 ceremony was hosted in February 2018 where students were acknowledged for their achievements, hard work and dedication.

LEAP 4 school building project

The LEAP school is housed within the Methodist Church precinct, on the outskirts of the Diepsloot township. The school's facilities are not ideal as learners share a building with a Methodist Church run crèche. The Aveng Community Investment Trust pledged to develop a new school building for LEAP to ensure optimal conditions for learning and teaching.


Land was secured and construction began in July 2017. Aveng committed R8 million to the project, while the Methodist Church and key co-sponsors, Afrisam, Brickor, Total South Africa and the Roy McAlpine Foundation, all contributed significantly.

The new facility, which will be housed in the Methodist Church precinct will be approximately 3 000m² and will include amenities such as a staff and administration block, 12 classrooms to accommodate 250 learners, a community hall, a library, a meeting centre, a learning centre, ablution blocks and an amphitheatre.

Designed by well-renowned architect, Roger Davies, the school building combines conventional building techniques with rammed earth methodology, and honours green building principles and authentic indigenous South African design. The rammed earth building approach has been used for its economics, environmentally friendly methodology and strong enabling of community participation in the building process.

Aveng trained 31 unemployed people from the community in building techniques to ensure meaningful skills development and skills transfer. In total, 31 trainees were selected in consultation with the community. Trainees will work onsite throughout the 16-month construction process (August 2017 to November 2018) and will receive accredited training, as well

as entrepreneurial guidance, during and after the project. Training has been conducted in slab levels and foundations for the classrooms, rammed earth building, health and safety, masonry, carpentry, plumbing, finishing and life skills. The project is expected to be completed by November 2018.

For more details on the status of the LEAP building project, visit the Aveng Community Investment Trust site at www.aveng.co.za/sustainability/csi-trust .



The LEAP school project site in Diepsloot.

Impact beyond the Trust's flagship projects

Aveng's operating groups support the Group's commitment to community upliftment and have adopted a Group SED framework as a guideline for providing CSI and SED support to the communities in which they operate. They identify opportunities to support and invest in local communities. Participation in projects ranged from voluntary contributions to donations to support various initiatives.

Aveng Grinaker-LTA Reigerpark Primary School

Aveng Grinaker-LTA visited the Reigerpark Primary School to officially hand over much-needed donations to the school. The school is about 11km from Aveng Park, west of Boksburg. It is a no-fees school, which means that the school is dependent on government and the community for its existence and upkeep.

Corporate social investment continued

Aveng Grinaker-LTA Mechanical and Electrical, Plant and Assets and Aveng Water joined hands to donate three containers to the school and Aveng Infraset donated paving bricks. One container was converted to a kitchen to prepare and serve learners their meals and the remaining two are to be used as storerooms.

Contractors from Aveng's Ikhule Incubator Programme built a shaded sitting area where learners can enjoy their meals, and renovated the ablution facilities, paving and pedestrian entrance.

“At Aveng Grinaker-LTA, we strive each day to make our communities a better place through small acts of giving and a commitment to community upliftment.”

– Bhekani Mdlalose, managing director of Aveng Grinaker-LTA

Sewing project for Eastern Cape community members

14 women from the communities of Mtentu and Lusikisiki (OR Tambo and Alfred Nzo districts) completed a training programme that provided them with the skills needed to sew overalls for contractors and labourers working on SANRAL's Mtentu Bridge construction project.

Aveng Grinaker-LTA's aim is to incorporate two companies that will be tasked with branding protective equipment as well as sewing overalls for the contractors and Mtentu Bridge project labourers. Aveng Grinaker-LTA is the main contractor for the construction of the bridge.

Furthermore, the contractors will attend a training programme on business skills to equip the group to be self-sufficient when the Mtentu Bridge project concludes.

“Through this programme, I gained a lot of knowledge and experience because I did not even know how to operate a sewing machine before, and now I can operate it with ease.”

– Nompumelelo Nokoni (one of the female trainees)

Aveng Manufacturing

Aveng ACS warms Lindokuhle

The Lindokuhle Home for Children with Disabilities is based in Katlehong and owned by Mam' Eunice Radebe, the primary caregiver. Eunice's daughter had spine complications at a young age and needed to attend a special needs school. Mam' Eunice established Lindokuhle to take care of her daughter and then opened her doors to community members who needed assistance.

The home currently houses 14 people between the ages of six and 30, some whose parents left them at her gate and never returned. The home relies on social grants and looks to the community for assistance with food and other basic needs. Aveng ACS employees donated blankets and clothes to the residents.

Aveng ACS donates goods to old age home

Aveng ACS employees participated in a company-wide CSI initiative where employees donated handbags and sanitary items for the elderly at Floroma Old Age Home in the Roodepoort area. This facility is only partially subsidised and provides housing for less fortunate elderly residents of Roodepoort, Florida and Maraisburg.

“On behalf of Floroma's management and residents, I would like to thank you for giving beautiful handbags to our inhabitants. On a limited income, it is not possible for them to purchase such items themselves. Your generosity is greatly appreciated!”

– Yolanda Fouche, social worker at Floroma.

McConnell Dowell

The Urbanest project team have recycling bins on site to collect donations for HeartKids. The donations are given to families of those affected by childhood heart disease.

The WPA project works with the local communities to build possum houses. The houses are built in partnership with members from the community.

The Auckland Office supports KidsCan, by collecting donations from the business unit and hosting fundraising events. KidsCan is a charity that provides over 161 000 children with access to food, clothing and healthcare in partnership with 675 schools across the New Zealand.

Socio-economic development

Aveng's integrated SED strategy focuses on six pillars namely education, skills development, enterprise development, community infrastructure, environmental management and client-driven SED. It aims to advance Aveng's B-BBEE transformation objectives for development through collaborative and mutually beneficial partnerships that enable sustainable access to economic opportunities for communities.

Key focus areas

Aveng has identified the need to strengthen the alignment of CSI / SED to its business objectives as a key focus area. The Aveng integrated SED strategy focuses on:

- ▶ Improved collaboration within operating groups to maximise impact with limited funding available
- ▶ Ensuring operating groups use budgeted SED funds to meet the contractual obligations of clients and invest strategically in areas of operation
- ▶ Ensuring CSI activities meet SED requirements of the B-BBEE Codes of Good Practice
- ▶ Ongoing monitoring and reporting mechanisms for social investments across Aveng
- ▶ Making the best use of “in kind” and “in time” contributions to support cash investments in projects
- ▶ Increasing Aveng's presence at the Trust's two flagship projects.



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