

RISK AND OPPORTUNITIES

The management of risks and opportunities is an increasingly important business driver for ARM and our stakeholders. It is an entrenched discipline and a recognised business management tool, with the aim of enabling sustainable growth.

Outputs from successful risk management include more informed, less uncertain decisions, a learning organisation that does not repeat mistakes, compliance, assurance and enhanced decision-making. These outputs provide benefits by way of improvements in the efficiency of operations, and effectiveness of tactics.

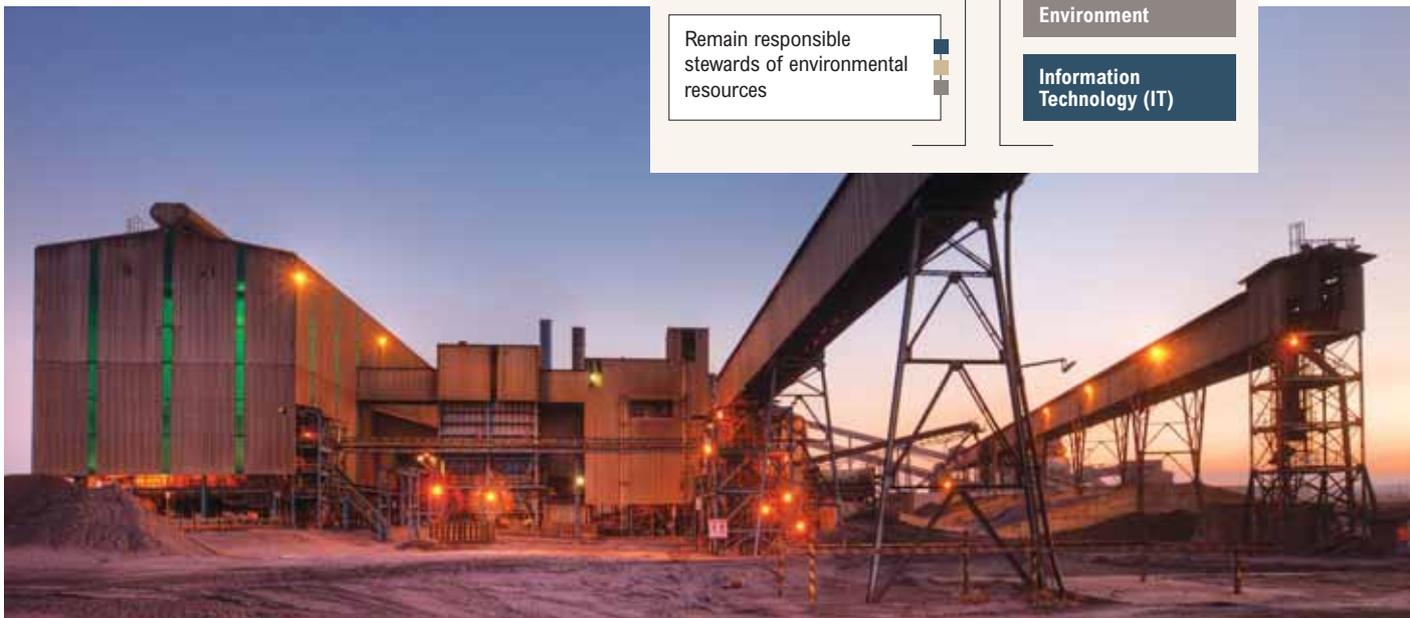
To continuously improve the risk management process, we initiated a review of the company's current risk management methodology, processes, maturity and culture in April 2018.

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

ENHANCED RISK METHODOLOGY

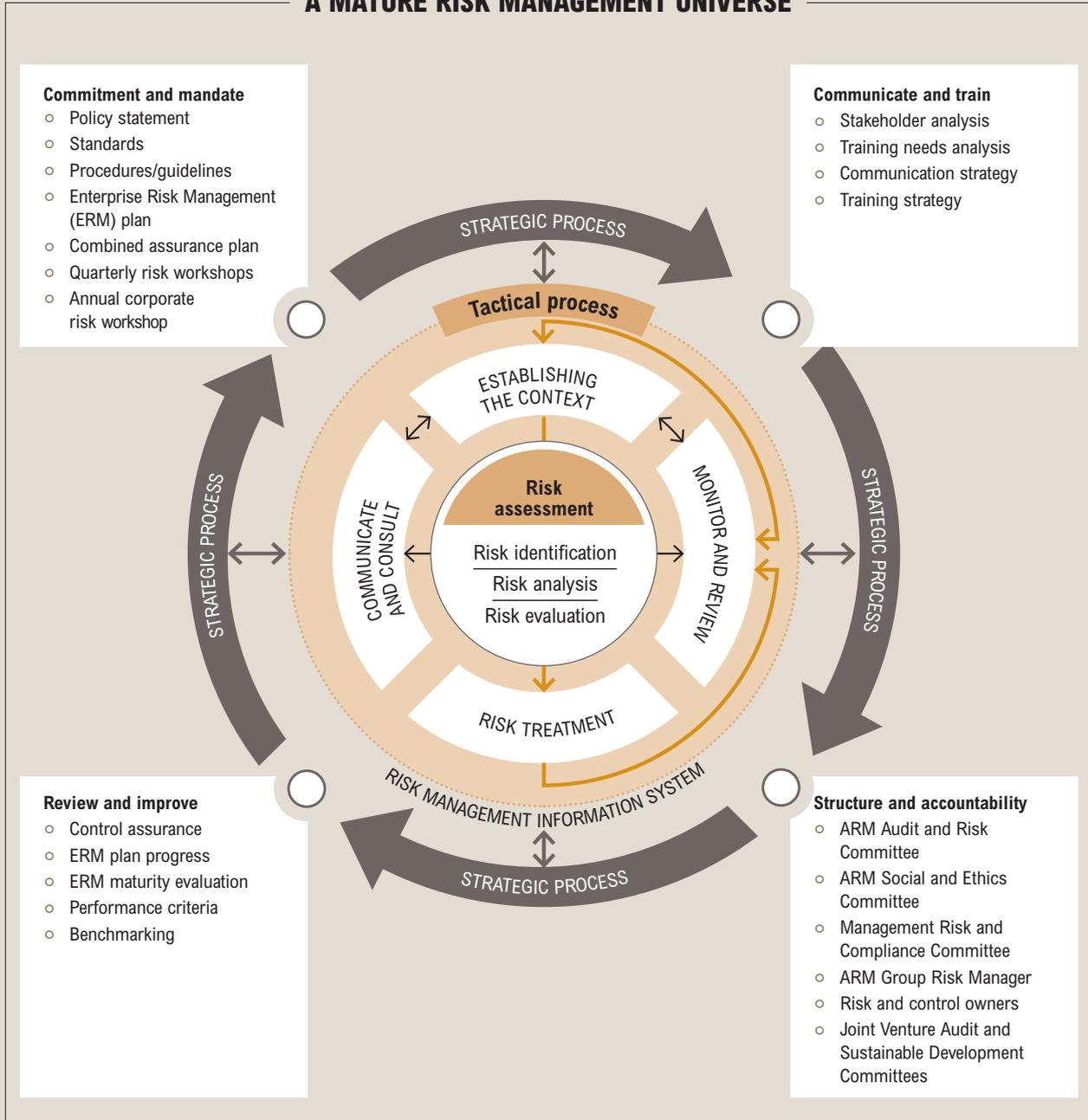
Developing an impact rating scale required alignment of ARM strategy to the strategic factors through which the Company drives and measures business performance.

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



RISK AND OPPORTUNITIES continued

A MATURE RISK MANAGEMENT UNIVERSE



RISK AND RISK DESCRIPTION	STRATEGIC INTENT FACTORS	VALUE IMPACT	CONTROLS
<p>1 The security and cost of supply of water in the Northern Cape ARM is exposed to the risks related to the availability of water as well as the socio-economic impact of water on the communities surrounding the operations. The key risk areas are water availability, costs, the state of existing water infrastructure and the related socio-economic impacts.</p>	<p>Improve operational efficiencies and contain unit cost increases. Remain responsible stewards of natural resources.</p>	<p>The absence of a secure water supply may result in frequent business interruptions to the operations. Increased cost of water may negatively affect operating costs.</p>	<p>There are a number of water conservation initiatives in place. The operations are actively involved with the Sedibeng Water Board to secure cost-effective future supply.</p>
<p>2 Deterioration in safety performance ARM is committed to maintaining a safe work environment for all employees. This requires ongoing effort at all operations to maintain or improve our safety performance. In addition to potential harm or loss of life, safety incidents can result in business interruption that negatively affects productivity and the sustainability of the business.</p>	<p>Maintain a safe and healthy work environment.</p>	<p>Both the direct and indirect cost of safety related stoppages in terms of business interruption, start up difficulties and general work place turmoil are of a similar magnitude.</p>	<p>We have well defined Health and Safety policies. The identification of critical controls is being implemented. Incentive schemes at all operations include safety factors.</p>
<p>3 Business interruption due to community unrest in the Eastern Limb There have been numerous incidents resulting in interruptions to operations in the Eastern Limb, the most serious being when a bus carrying Modikwa Mine employees was torched, which resulted in six fatalities.</p>	<p>Improve our relationship with key stakeholders.</p>	<p>The tragic loss of life is unacceptable. The business interruption caused by this unrest negatively impacts profitability.</p>	<p>There are dedicated resources at both executive and operational level for stakeholder engagement, along with formal communication structures with the communities.</p>
<p>4 Effectiveness of capital deployment This risk refers to capital deployment and the constraints affecting project delivery.</p>	<p>Focus on the efficient allocation of capital.</p>	<p>Life of mine plans may be affected.</p>	<p>A capital allocation framework (which is discussed in the Financial review) is in place. The allocation of capital is monitored by the Board. We continue to refine our capital allocation framework and its associated metrics.</p>
<p>5 Missed opportunities Missed opportunities or pursuing the wrong opportunities refers to the ability to identify, develop and present realistic business cases in line with our strategy to deliver value creation. Opportunities to implement new technology and systems, as well as other growth opportunities could be missed.</p>	<p>Focus on the efficient allocation of capital.</p>	<p>Capital allocation decisions are a key strategic area for ARM. An uninformed decision will result in a lost opportunity.</p>	<p>In addition to sound joint venture relationships, the strategic planning process is a key control.</p>
<p>6 Infrastructure constraints The risk of sub-optimal power, water and transport infrastructure remains. Escalations associated with the cost infrastructure are also of concern.</p>	<p>Improve operational efficiencies and contain unit cost increases. Improve our financial position.</p>	<p>Infrastructure constraints negatively affect our ability to produce efficiently.</p>	<p>Extensive logistics planning is in place for all operations.</p>
<p>7 Exchange rate and commodity price volatility The Rand versus US Dollar exchange rate materially impacts revenues for all our metals produced. Of particular concern is sustained low US Dollar PGM prices.</p>	<p>Improve our financial position.</p>	<p>Exchange rate volatility affects profitability and the ability to make long-term investment decisions as part of the capital allocation process.</p>	<p>Sensitivity analysis on the exchange rate is performed for all budgeting and project assessment processes.</p>
<p>8 Poor employee wellness resulting in a decline in productivity Occupational and employee health receives a high level of focus. HIV and Pulmonary Tuberculosis (PTB) are the main health risks facing employees. The major occupational disease is Noise Induced Hearing Loss (NIHL).</p>	<p>Maintain a safe and healthy work environment.</p>	<p>Poor employee wellness will negatively affect productivity and operating costs.</p>	<p>Pre-employment screening as well as regular medical surveillance. Compliance to the use of protective personal equipment. PTB and pneumoconiosis initiatives. Comprehensive wellness and disease management programmes. Representation on the International Council on Mining and Metals.</p>
<p>9 Lack of delivery of production and productivity targets Production and productivity targets are impacted by <i>inter alia</i> grade changes and labour and equipment productivity.</p>	<p>Improve operational efficiencies and contain unit costs increases. Partner with and invest in our employees.</p>	<p>Adverse impacts are safety and business interruption implications.</p>	<p>There is a significant pre-planning including labour and equipment scheduling and requirement analysis. Team productivity is assessed on an ongoing basis. Supervision and management capability is also assessed and coaching programmes are in place to assist where required. There is ongoing research into technology and systems to improve productivity. Incentives are linked to productivity.</p>
<p>10 Uncertainty regarding policy change in South Africa</p>	<p>Focus on efficient allocation of capital. Improve our relationship with key stakeholders.</p>	<p>Changes in policies may impact the cost of doing business, future capital allocation decisions and ultimately the sustainability of our business.</p>	<p>We have active and ongoing engagement with key stakeholders including government and are a member of the Minerals Council South Africa which represents the mining industry.</p>