

# RISK MANAGEMENT

## Risk and compliance management to ensure Exxaro's sustainability

Exxaro's philosophy on risk management has always been not to entrench a compliance-driven approach but rather to view risk management as a strategic enabler to ensure we think and act proactively at every layer (strategic, tactical and operational) in pursuing our objectives.

The group has made great strides in the past five years in managing risks, within its risk tolerance (risk-appetite thresholds), consistently, comprehensively and economically through effective

enterprise risk management. Risks and risk thresholds, which indicate the appropriate level of risk for Exxaro to achieve its strategic objectives, as approved by the board, are monitored quarterly. Our risk management governance, philosophy and process is set out in the Exxaro enterprise risk management (ERM) framework, which was approved by the board in 2011. This framework was reviewed in 2014 and significant changes made to the impact scale to ensure that consequence levels are aligned to our risk tolerance levels. The process of reporting risk at various levels is set out below:



## Risk process

Enterprise risk management is a systematic application of management policies and procedures to the activities of communicating, consulting, establishing context, and identifying, analysing, evaluating, treating, monitoring and reviewing risk. At Exxaro we understand that effective risk management can only occur when a proactive risk culture has been created, where everybody understands they have a role in managing risks in their environment.

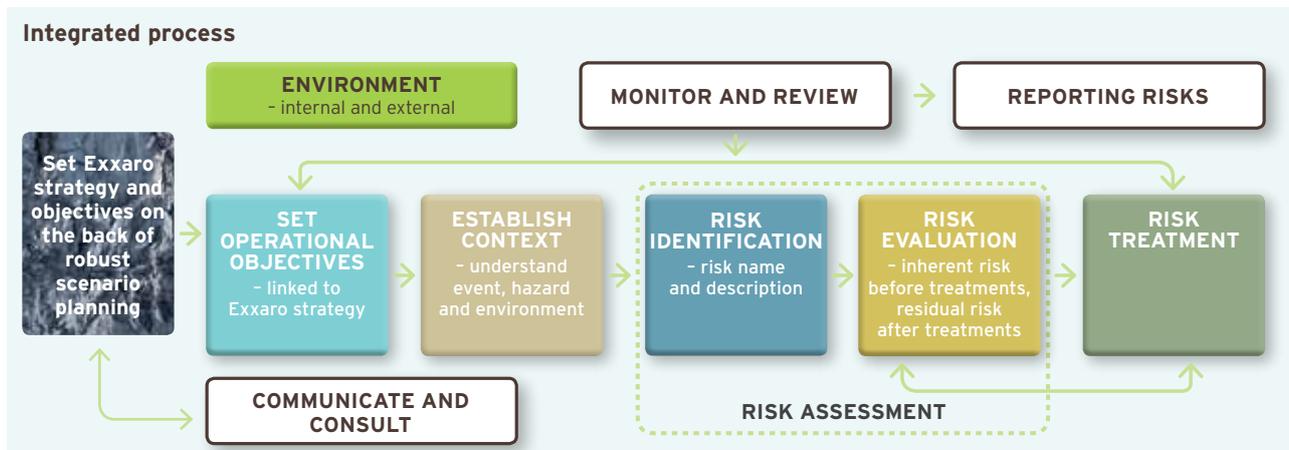
The ERM methodology is therefore followed across all functional areas and considers all hazards/root causes as well as all potential impacts (financial, operational, stakeholder, legal/compliance,

safety, health and environment) that the risk event may trigger. Exxaro does not have a separate risk methodology for every type of impact or functional area, as this would undermine true integration and building a risk culture.

Risk owners are established across all layers for every risk and are accountable for ensuring the appropriate risk strategy is implemented. Control owners are appointed for every control and report to risk owners on the maintenance of controls and implementation of action plans.

Exxaro has reviewed its strategic risks and changes made to risk rankings reflect changes in the internal and external environment.

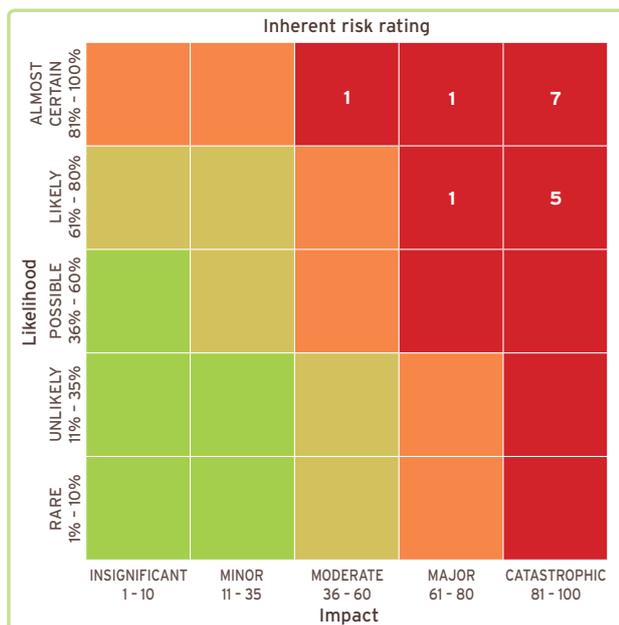
The integrated Exxaro risk process is illustrated below:



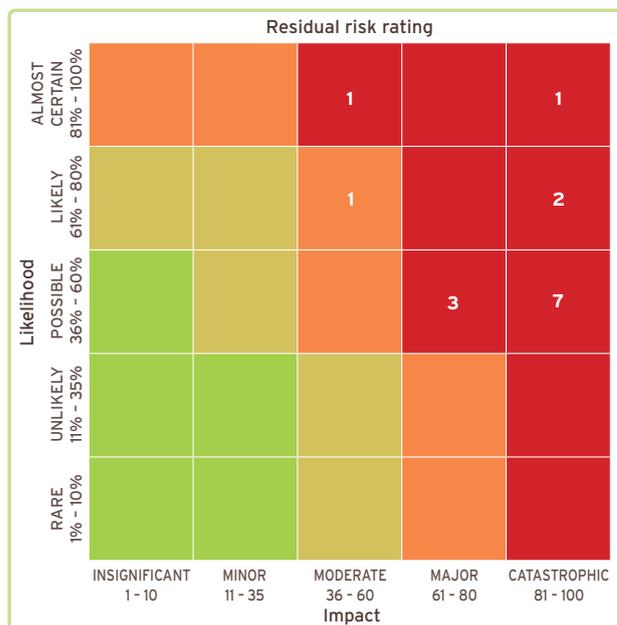
**Top 15 heat map**

Using Exxaro's heat map, management constantly monitors risks (red or orange) that would have an extreme impact on the group. Controls for these risks are considered critical and need to be monitored and reviewed constantly in line with the combined assurance approach. The heat map illustrates Exxaro's top 15 strategic risks inherently (before any controls) as well as residually (after controls), identified through our enterprise risk management (ERM) process and approved by the board. The figures represent the number (not ranking) of risks in each block. A list of the top 15 risks can be found on page 26.

**Inherent risks - number per rating**



**Reducing risks through controls - number per rating**



# RISK MANAGEMENT (CONTINUED)

## Residual risk trends over the last three years

Risks identified			
	2014	2015	2016
1	Key dependency on Eskom	Dependency on Eskom as a key customer	<b>Key dependency on customers</b>
2	Unable to meet production demands	Unavailability of electricity	<b>Safety concerns</b>
3	Safety concerns	Safety concerns	<b>Commodity price volatility</b>
4	Government bureaucracy	Commodity price volatility	<b>Inability to be innovative</b>
5	Commodity price volatility	Inability to meet production demands	<b>Uncompetitive products (cost/tonne)</b>
6	Unavailability of water	Unavailability of water	<b>Health concerns</b>
7	Infrastructure capacity, access, development and funding	Infrastructure capacity, access, development and funding	<b>Ineffective capital project execution</b>
8	Competitiveness of assets (cost/tonne)	Competitiveness of assets (cost/tonne)	<b>Maintain a social licence to operate</b>
9	State intervention in the mining sector	State intervention in the mining sector	<b>Legal and regulatory non-compliance</b>
10	Capital project execution	Capital project execution	<b>Labour unrest</b>
11	Compliance to environmental legislation	Mine rehabilitation	<b>Product substitution</b>
12	Maintain a social licence to operate	Government bureaucracy	<b>Unable to meet production demands</b>
13	Mine rehabilitation	Compliance to environmental legislation	<b>Stranded assets</b>
14	Inability to adequately calculate financial provision for environmental closure	Maintain a social licence to operate	<b>Fraud and corruption</b>
15	Labour unrest	Inability to accurately calculate financial provision for environmental closure	<b>Compliance to environmental legislation</b>

Examining top risks over the past three years, not only for Exxaro but also those facing the mining sector as a whole, there have been no major changes to the top 15 risks. Priorities or rankings may have changed due to certain external and internal changes that trigger these unwanted events.

### Controlling the risks

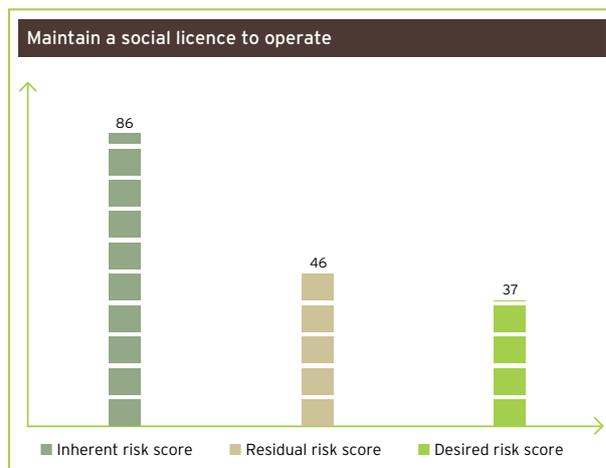
On the following pages, we illustrate how we are controlling our key risks. In each chart, the first bar indicates the severity and likelihood of occurrence of the risk, the second how we are mitigating the impact and the third the acceptable level of risk in future. Our top 10 risks do not completely dovetail with our material issues, given the interrelated nature and overlap of risks. Collectively, however, they illustrate key controls in place to address our material issues.



▲ Current controls (selective)	● Future treatment plans (selective)
Established a rehabilitation trust fund	Engagement with Eskom and AMSA
Engagement with Eskom and AMSA	
Broadening local and international customer base	



▲ Current controls (selective)	● Future treatment plans (selective)
Focus on sustainable cost-reduction programmes/business improvement initiatives and awareness	Optimise operating model and avoid duplicated activities
Create strategic joint-ventures to optimise economies of scale	Improve effectiveness of some or all controls
Focus on business-unit controllable efficiencies	
Investigate and divest non-core assets	
Continuously optimise capital in projects	



▲ Current controls (selective)	● Future treatment plans (selective)
Proactive involvement in sustainable socio-economic development initiatives	Improve effectiveness of some or all controls
Compliance to requirements of mining charter	
Pursue identified initiatives to progressively improve Exxaro's BEE rating	
Regular engagement with government	



▲ Current controls (selective)	● Future treatment plans (selective)
Disciplined execution of value engineering study review	Improve effectiveness of some or all controls
Establish robust governance structure, including role and responsibility clarification	Implement lessons learnt from previous project failures and successes
Implement an effective risk management and assurance process	
Monitor and track the progress of capital projects	



▲ Current controls (selective)	● Future treatment plans (selective)
Compliance and awareness training with weekly inspections through VFL (Visible Felt Leadership)	Improve effectiveness of some or all controls
Conduct internal inspections and external audits by authorities	
Implement a Combined Assurance Model and conduct risk-based audits	
Training on policies and procedures for all employees/visitors and contractors	
Implement a compliance programme (compliance and risk function with plans and audits)	