## Risks and opportunities, assurance and controls

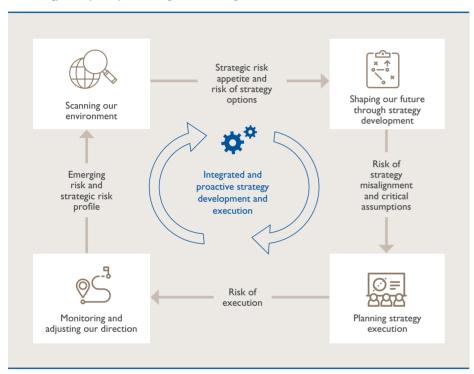
Whereas risk in general speaks to the effect of uncertainty on achieving objectives, strategic risks are those which are most significant to our ability to achieve our strategic objectives, thereby impacting value creation and sustainability. Effective risk mitigation strategies have been identified as a key enabler to the successful execution of our strategy, particularly mitigating the risk of lower than budgeted

## **Enterprise risk management process**

Our Board, through the Audit and Risk Committee (ARC), manages our risk and resilience in order to provide greater security for our employees, our customers and other stakeholders. They assess the risk landscape to determine the strategic and business risk profiles of the organisation. This occurs through both a top-down process for strategic risks, and a bottom-up process for business or operational risks.



Our strategy development process integrates risk management, as shown below:



## Strategic risks

Strategic risks are identified through risk and resilience workshops with Exco and Board, supported by a bottom-up review by divisions and the involvement of key subject matter experts in the business. These interventions are supported by regular environmental scanning that monitors changes in our broader operating environment.

Strategic risks are often very integrated in nature. having holistic implications and consequences.

#### **Business risks**

The identification of business risks is driven by line management, focusing on the key risks that may affect the achievement of divisional business plans. Business risks fall into four different priority levels, with Priority I risks at the highest level, and

Priority IV risks at the lowest level. The levels are determined through the use of a combination of consequence criteria - that range from financial to reputational, safety and environmental outcomes or impacts – and likelihood criteria.

The accountability and responsibility to treat business risks rests with line management, although Priority I risks are reported to Exco and ARC for oversight. As a Level 2 assurance provider, the Enterprise Risk Management function develops guidance around Eskom's risk management policy, and ensures that such guidance is adhered to.

The business risks faced by our subsidiary in Uganda are not markedly different from those facing our South African operations.

#### Disaster risks

Disaster risks are those inherent to our operations that would have a significant consequence should they materialise. Generally, those are not listed as Priority I risks on the risk register because of their perceived low likelihood, coupled with the perceived adequacy of the controls. They are generally managed through our resilience initiatives.

The disaster risks have remained relatively unchanged over the past year. They are:

- National blackout
- Severe power system constraint
- Nuclear incident

- · Cyber-attack or catastrophic IT failure
- National drought

Although South Africa experienced a severe drought over the past year, as a strategic water user, we were less severely affected.

## Our strategic risks

The following table details the strategic risks and provides the associated risk rating on the Eskom Risk Matrix, the impact on value creation and the associated timeframe, as well as the treatment strategy.

	St	rategic risk/opportunity	Rating	Impact on value creation	Timeframe of impact	Treatment strategy
<b>≥</b> °	I.	Impact of energy policy and IRP allocations with unclear industry structure, impacting or altering our energy mix and flexibility to balance the system	6D	Could be positive or negative	Short, medium and long term	Regulatory strategy Stakeholder engagement
	2.	Energy policy and price path misalignment, which could result in delays in migrating to prices reflecting prudent and efficient costs, thereby impacting financial sustainability, energy mix and emissions	6D	Negative	Short, medium and long term	Regulatory strategy Stakeholder engagement
	3.	Declining long-term profitability, requiring higher tariffs, cost cutting or increased borrowings to fund the shortfall	6E	Negative	Medium to long term	Financial strategy Optimisation of opex and capex
	4.	Impact of the following on the ability to borrow: credit ratings downgrades; loss or exhaustion of Government guarantees; country-level fiscal crisis; inadequate electricity prices; regulatory uncertainty	5D	Negative	Medium to long term	Funding strategy
	5.	Escalating municipal debt and revenue shortfalls, leading to financial and liquidity constraints	5E	Negative	Short to medium term	Debt management strategy Installation of split, smart and prepaid meters
<b>©</b>	6.	With decreasing local sales volumes coupled with surplus capacity, the inability to sell surplus capacity into the region may lead to stranded assets	5D	Negative	Medium to long term	Sales growth strategy Asset management strategy
ి	7.	Changing load profile and impact of adding IPP capacity, leading to base-load plant being operated as mid-merit, with the knock-on effect on plant health	5D	Mainly negative	Short, medium and long term	Generation Sustainability Strategy Asset management strategy
<b>1</b> 10	8.	Inability to build transmission lines fast enough to connect IPPs and the region	4D	Negative	Medium to long term	Integrated project management
<b>®</b>	9.	Inability to meet climate change mitigation targets (e.g. carbon budgets) and failure to implement climate change adaptation measures	6E	Negative	Medium to long term	Climate change strategy
***	10	). Lack of adequate, available and affordable skills	4D	Negative	Medium to long term	Human resources strategy Succession planning Skills development and training

These risks relate to our ability to sustain our operations and financial performance over the medium to long term.

28 Integrated report | 31 March 2017 Eskom Holdings SOC Ltd 29

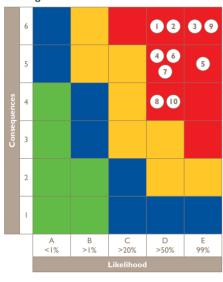


## Risks and opportunities, assurance and controls

continued

The diagram below sets out the risk ratings of the strategic risks identified on the Eskom Risk Matrix.

## Strategic risks at 31 March 2017



## Identifying and prioritising opportunities

Globally, the electricity landscape is changing rapidly. Eskom is not immune to this change and we are facing threats on multiple fronts: within the South African electricity market, and within the broader global energy context. With a wave of change in customer, supplier and competitor behaviour, we are facing a constrained electricity sales path.

Potential sources of revenue growth range from those that are close to our current capabilities to those that are entirely new. By exploiting both regulated and unregulated opportunities, we have an opportunity to deliver significant revenue impact.

We will do this by unlocking opportunities, focusing on local demand stimulation, cross-border sales and unregulated opportunities. A clear distinction exists between the business of today and the Eskom of tomorrow, necessitating a focused and structured approach, which will ensure the right level of focus and drive for each identified opportunity.

We apply a structured stage-gate process to identify, develop and prioritise opportunities through to commercial application. Opportunities are sourced from within Eskom and externally. These ideas are then assessed and filtered through an opportunity



Noteworthy emerging opportunities include:

- Investigating opportunities associated with storage options in both diversifying the business and retaining
  customers in the medium term. Storage technologies have matured enough to enable large-scale implementation
  within reasonable risk parameters. We are identifying areas where battery storage can be deployed, with a view
  to applying these technologies at scale across the grid in the next three years
- Leveraging clean fossil fuel and transmission-based opportunities in the region through our integrated Africa strategy
- Exploring water usage and potential partnerships as a revenue-generating business



#### Assurance and controls

## Systems, policies and procedures

Systems underpin every aspect of our operations, from the efficiency of our power stations to the experience of our customers to the safety of our workforce. Standardised processes, policies and procedures have been developed for all aspects of the business; these are updated regularly to ensure good governance and efficiency improvements. We track a number of KPIs to measure business performance, most notably those determined by the shareholder in our annual shareholder compact.

We have achieved ISO 9001:2008 certification. Furthermore, we have implemented ISO 14001:2004, OHSAS 18001:2007, ISO 31000:2009 and AA 1000 in specific divisions or business units, to regulate environmental management, occupational health and safety, risk management and stakeholder engagement respectively.

### Risk management and internal controls

The Board, through ARC, ensures that an effective risk management process is in place and that internal controls are effective and adequately assessed for auditing and regulatory purposes. The combined assurance model provides ARC with an overview of significant risks, as well as the effectiveness of critical controls to treat those risks.

The Assurance and Forensic Department (A&F) performs quarterly assessments on the design, implementation and effectiveness of the risk management process, as well as internal financial, IT and operational controls. The outcome of the assessments, based on the results of audit work planned and completed by both internal and external assurance providers, concluded the following:



# Risk management process

A risk management system for identifying, managing, and reporting on risk is in place and adequate

There has been notable progress with regard to the operational effectiveness of risk management



# Internal financial controls

Nothing significant has come to the attention of A&F causing it to believe that the internal financial controls do not form a reasonable basis for the preparation of reliable financial

statements



## IT governance

Group IT has maintained substantial alignment to the IT governance principles in King III



## IT controls

Nothing significant has come to the attention of A&F causing it to believe that the IT controls do not form a reasonable basis for the preparation of reliable financial statements



# Operational controls

cant Internal controls
ne are considered
&F partially effective,
ellieve as there are
ntrols underlying
weaknesses in
certain areas of
ation operations

Certain control deficiencies were identified, with a moderate likelihood of affecting the achievement of control objectives

Interventions designed to address and improve the control environment are continuing and benefits are expected to be realised in the medium to long term. Improvements have been seen in most areas where these have been implemented.

## IT governance

The Board has delegated its IT governance oversight and responsibility to ARC and Exco respectively.

A&F includes reports on IT audits in its quarterly submissions to Exco and ARC which provide assurance on Group IT's compliance with relevant legal and regulatory requirements. Governance, risk and compliance reports which include IT performance are also submitted to ARC on a quarterly basis.

Group IT performs self-assessments to review compliance with standards in line with best practice and legislation. Areas of non-compliance identified are remediated and monitored accordingly. Group IT is confident that adequate compensating controls are in place where needed.

Group IT remains ISO 9001:2008 certified, and maintains substantial alignment to the IT governance principles in King III; any outstanding principles will continue to be addressed and covered through a King IV gap analysis which is currently under way.

30 Integrated report | 31 March 2017 Eskom Holdings SOC Ltd 31