

Achieving sustained success

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## NAVIGATION ICONS

The following navigation icons are used to link our strategy and resources to material matters, strategic risks, key performance indicators and performance:

-  Our finances (financial capital)
-  Our infrastructure (manufactured capital)
-  Our interaction with the environment (natural capital)
-  Our people (human capital)
-  Our role in communities (social and relationship capital)
-  Our know-how (intellectual capital)




### Request for feedback

We want to ensure that our report continues to provide relevant information to stakeholders. We welcome your feedback on ways in which we could improve our report in future. Please send your suggestions to [IRfeedback@eskom.co.za](mailto:IRfeedback@eskom.co.za)

-  Information block or case study
-  Additional information in the integrated report
-  Supplementary information provided in a fact sheet
-  Information available online

A list of abbreviations and glossary of terms are available at the back of this report on pages 127 to 129

Throughout this integrated report, performance against target is indicated as follows:

-  Actual performance met or exceeded target
-  Actual performance almost met target (within a 5% threshold)
-  Actual performance did not meet target

<sup>sc</sup> Indicates that a key performance indicator is included in the shareholder compact

## PERFORMANCE HIGHLIGHTS FOR THE YEAR

 **New Board**  
appointed in  
January 2018

 **Excellent Transmission**  
performance

 **R20bn**  
facility signed to  
improve liquidity

 **27 IPP**  
contracts signed

 **Significant Cost**  
**containment**  
efforts

 **Environmental**  
performance and  
**LTIR** improved  
significantly

 **3 new**  
**build units**  
commissioned

 **215 519**  
electrification  
connections

## OUR VALUES

 Zero Harm

 Sinobuntu (Caring)

 Integrity

 Customer Satisfaction

 Innovation

 Excellence



**Board responsibility and approval**

The Board is accountable for the integrity and completeness of the integrated report and any supplementary information, and is assisted by the Audit and Risk Committee and the Social, Ethics and Sustainability Committee.

The Board has applied its collective mind to the preparation and presentation of the integrated report and has concluded that it is presented in accordance with the International <IR> Framework. Considering the completeness of the material items dealt with and the reliability of information presented, based on the combined assurance process followed, the Board approved the 2018 integrated report, annual financial statements and supplementary information on 2 July 2018.

Mr Jabu Mabuza  
Chairman

Ms Sindi Mabaso-Koyana  
Chairman: Audit and Risk Committee

Prof. Malegapuru Makgoba  
Chairman: Social, Ethics and Sustainability Committee

**Reporting boundary and frameworks**

This integrated report reviews our financial, operational, environmental, social and governance performance for the year from 1 April 2017 to 31 March 2018, and follows our 2017 integrated report. Material events up to the date of approval have been included. The integrated report should be read in conjunction with our full set of group annual financial statements for a comprehensive overview of our financial performance.

We aim to address mainly material matters, both positive and negative, in this integrated report. Based on feedback received on the 2017 report, we have strived to improve on the disclosure of governance-related information and outcomes, as well as the conciseness of the report by a greater focus on material matters. However, there were a number of significant issues which had to be addressed, which may have negatively impacted conciseness.

The content is guided by legal and regulatory requirements, such as the Companies Act, 2008 and the King IV Report on Corporate Governance for South Africa, 2016 (King IV™), as well as global best practice.

**Assurance approach**

Our combined assurance model relies on three lines of defence, namely review by management, as well as internal and external assurance. The Audit and Risk Committee and the Board rely on combined assurance in assessing the adequacy of our risk management and internal controls.

The results of the internal and external assurance of our suite of reports is set out on page 46

Our Assurance and Forensic Department provided reasonable assurance on certain aspects of the report. The sustainability KPIs contained in the shareholder compact were subject to external assurance; all but two have received reasonable assurance.

The independent sustainability assurance report is included on pages 130 to 133

The consolidated annual financial statements have been audited by the group's independent auditors, SizweNtsalubaGobodo Inc. who issued a qualified opinion relating to the completeness of amounts disclosed in terms of the PFMA. Except for this qualification, the consolidated annual financial statements are fairly presented in terms of IFRS.

Refer to the annual financial statements for the independent audit opinion

Our group annual financial statements are available at [www.eskom.co.za/IR2018](http://www.eskom.co.za/IR2018)

The report examines our performance in relation to our strategy and the six capitals. Unless otherwise indicated, the information presented is comparable to that of prior years, with no significant restatements. The information in this report refers to the performance of the group, which includes the business of Eskom Holdings SOC Ltd, operating in South Africa, and its major operating subsidiaries, unless otherwise stated.

Our value creation process is depicted in our business model on pages 12 to 13

**Basis of preparation**

Our integrated report is based on the principles contained in the International <IR> Framework, published by the International Integrated Reporting Council (IIRC). The report seeks to provide a balanced and transparent account of how we create value through our use of and impact on the various capitals. It considers both qualitative and quantitative matters, material to our operations and strategic objectives, which may influence stakeholders' decision-making. Our strategic risks are considered as part of this process.

The determination of material matters is set out on pages 37 to 39, while our strategic risks are discussed on pages 41 to 42

Although this is our primary report to stakeholders, aimed at providers of financial capital, it provides information of interest to all stakeholders.

OUR BUSINESS AND STRATEGY

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Strategy review due by September 2018



Clear mandate and support from new Minister



Permanent Group Chief Executive appointed in June 2018



Significant progress on cost containment initiatives





**JABU MABUZA**  
Chairman



No-one can deny that Eskom has experienced a tumultuous year. This was not due to operational issues – our generation plant and network produced solid performance, and the new build programme delivered another three units at Medupi and Kusile, with another two units expected in the near future, while electrification of households continued at a brisk pace.

However, a number of factors posed a serious threat to Eskom's ability to obtain funding for its capital expansion programme, thereby putting a significant strain on liquidity. Firstly, the prior year's audit report contained a qualification relating to the completeness of irregular expenditure information disclosed in the annual financial statements, as the auditors could not place reliance on certain of the processes supporting the information in question. Secondly, serious allegations of financial mismanagement were levelled against a number of senior executives.

Progress on the improvement process to address the audit qualification on irregular expenditure is discussed under "Ethical leadership" on page 18



These all contributed to several credit ratings downgrades due to Eskom's deteriorating liquidity position and profitability, combined with a highly-gearred balance sheet, ineffective governance processes and internal controls, as well as Government's perceived inability to provide sufficient and timely support. The downgrades further hampered our efforts to obtain funding and consequently, raised serious concerns around Eskom's long-term viability and status as a going concern.

In addition, the effective 2.2% price increase granted by NERSA for 2017/18 put further pressure on Eskom's financial position, resulting in a weakening of the majority of financial ratios over the past year, despite a stringent focus on cost savings in order to manage liquidity. The much lower than expected price increase, coupled with the liquidity issues, led to the external auditors reporting an emphasis of matter related to going concern on our interim results.

**Governance**

It was against this backdrop that the new Board was appointed in January 2018, with a clear mandate to stabilise and restore Eskom. Four of the directors appointed to the interim Board in 2017 were retained. An Interim Group Chief Executive was appointed at the same time, to bring stability to an organisation which had witnessed a seemingly endless parade of individuals heading the organisation over the past few years. These appointments constituted the first step towards improving governance and restoring confidence in the company, ultimately aimed at assisting with the execution of funding initiatives, improving Eskom's financial position and restoring its operational performance.

Our immediate priorities when we took over in January were to address the liquidity challenges, tackle governance issues and release the interim results on a going concern basis.

We spent the first two months, which falls within the year under review, inculcating a culture of effective and transparent governance, to ensure that those engaged in corrupt and irregular activities are brought to account. This process has since led to the departure of seven members of senior management as a result of serious allegations of misconduct. The finalisation of investigations into suspended executives remains our key priority, while we continue to focus on improving corporate governance in Eskom.



Investigations into allegations of corruption and misconduct are discussed under "Ethical leadership" on page 19

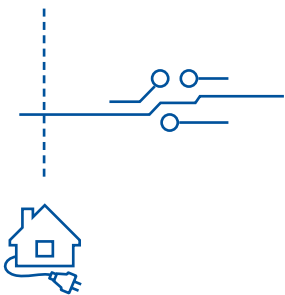
I believe that the action taken within a relatively short space of time against those who played a key role in some of the critical governance lapses over the past few years demonstrates how serious we are about rooting out corruption and irregular practices. I view this as only the first step in combating corruption, but it is by no means the end of the road – we will continue to pursue those engaged in wrongdoing and take corrective action within the South African legal framework.

We are determined to clear the company of corruption in all its forms, with about 250 cases reported through Eskom's whistle-blowing channels currently under investigation. Disciplinary action is taken where warranted. We are also in the process of conducting mandatory lifestyle audits on all top executives and senior managers. These actions are part of a collective effort to improve trust and restore investor confidence, to enable Eskom to re-establish its credibility so as to access financial markets.

We acknowledge the Board's responsibility for the implementation of King IV™. However, due to the lapses in governance in recent years, not all of the principles have yet been implemented effectively, although many of the required practices are in place, and have been for many years.

Nevertheless, we are committed to driving the implementation of King IV™, together with an overall improvement in governance and ethics, to ultimately ensure that Eskom returns to its values, a process which has already begun.

For more information on our assessment of the level of effectiveness of Eskom's implementation of the King IV™ principles, refer to pages 20 to 23 under "Ethical leadership"





**Strategy**

Given recent challenges, we have refined our strategy to respond appropriately. We aim to clean up governance issues, stop the bleeding and stabilise the business by continuing to do what we do, and doing it well, and thereafter re-energise the business in order to set a firm foundation for growth. At the same time, we will continue implementing initiatives identified in the prior year, by focusing on strengthening our financial position through demand stimulation, cost containment and efficiencies, while striving to achieve a cost-reflective price of electricity.

Under the leadership of our newly appointed Group Chief Executive, we are undertaking a strategy review in support of our mandate of being South Africa's trusted and reliable electricity provider. We plan to develop a new ambition for the period to 2035, focused on implementation and disciplined execution of actions to ensure the sustainability of Eskom. This review is expected to be completed by September 2018. The main areas of focus are:

- Strengthening Eskom's financial position and its balance sheet
- Reviewing the business model, which could lead to restructuring if warranted to respond to global changes in the energy industry
- Growing the business in existing markets, expanding into new markets and delivering new products across these markets

**Looking ahead**

Eskom has suffered an absence of ethical leadership at the highest level for some time, but we aim to rectify that as a matter of urgency. We also need to focus on addressing executive vacancies, although this is partly dependent on the final structure of the organisation, after completing the strategy review. We need to have the right people in the right places doing the right things, to stabilise Eskom and set it up for sustained success, while fulfilling both its commercial and developmental mandate.

Over our three-year term, we intend focusing on the following:

- Improving liquidity and solidifying Eskom's status as going concern, which will require a focus mainly on costs, given the recent price increases. Given that primary energy and employee benefit costs are our biggest categories of operating expenditure, we have to focus our attention on those, as well as robust management of capital expenditure. This will require a significant improvement in financial and business discipline
- Instilling transparent and effective governance to support a culture of ethical behaviour by returning to our values

- Prioritising financial sustainability and strengthening the balance sheet, while minimising reliance on debt and Government guarantees
- Influencing energy policy and the regulatory environment to support the organisation's turnaround, by working with DPE, DoE, the DEA, National Treasury and NERSA. Issues include electricity tariffs, the long-awaited IRP and future IPP allocations, as well as dealing with municipal arrear debt

If we succeed at all of these priorities, we expect that it will positively impact Eskom's credit ratings, and thereby its ability to secure funding in both domestic and international markets. However, executing the turnaround will require difficult decisions. There is no doubt that the next few years will be challenging, but the turnaround has already begun, with positive progress since the appointment of the new Board. The start of restoration of investor confidence is evidenced by the R20 billion bridge-to-bond facility signed in February 2018, with great strides being made towards improving governance and rooting out financial mismanagement and malfeasance.

As expected from a responsible corporate citizen, Eskom must comply with the Constitution, applicable laws and regulations, as well as our own policies and procedures, and act in accordance with our mandate, vision and strategy. We also have a developmental responsibility – through building new capacity, executing DoE's electrification programme, and supporting skills development and job creation – and play a pivotal role in the country's economy. In executing our mandate, Eskom provides the basis for growth in South Africa and SADC, and as a result, transforms lives.

**In order to improve trust and restore investor confidence in Eskom, it is crucial that we improve our integrity and thereby our credibility. If not, we will not be able to access financial markets to fund our build programme.**

**Concluding remarks**

My congratulations go to Mr Phakamani Hadebe on his recent appointment, approved by Cabinet, as Group Chief Executive. This is a reflection of the excellent work he has done while acting in the position since January this year. His appointment is an important step towards stabilising Eskom. Phakamani has a strong reputation of turning around organisations and, in light of Eskom's current financial challenges, we are lucky to have someone with his financial expertise to steer Eskom towards achieving our vision for the future.



I am grateful to our new Minister, the Honourable Mr Pravin Gordhan, for his unwavering support and guidance on this difficult journey, which has only just begun. I wish to extend a particular word of thanks to those executives who had the courage to denounce the corruption they witnessed in this once-great organisation. I also wish to thank Mr Mark Lamberti for his selfless contribution and commitment to rebuilding Eskom. Lastly, but most importantly, to the more than 48 000 Eskom Guardians who are committed to keeping the lights on to power our great nation, thank you for your resilience and professional outlook in the face of adversity.

I believe that Eskom's newly appointed Board, supported by a capable and committed executive team, has the necessary skills, strength, courage and enthusiasm to deliver on Eskom's mandate, by making the difficult decisions required in the best interests of Eskom and the country.

As President Cyril Ramaphosa once said, "Eskom is a jewel of our democracy".

We must never forget that the success of Eskom means the success of South Africa – if we fail, the country fails. We cannot let the nation down. Government, business, customers and investors all have great and justifiable expectations of Eskom. We all need to take responsibility for our part on the road to rebuilding Eskom and regaining the nation's trust, which is sure to require a change in mindset and a great deal of sacrifice. I trust that we will all accede to the call for renewal.

*Jabu Mabyaza*  
Chairman

## OUR BUSINESS MODEL

### Our mandate, vision and mission

Eskom Holdings SOC Ltd is a state-owned company (SOC) as defined in the Companies Act, 2008. We are wholly owned by the South African Government, through our shareholder ministry, the Department of Public Enterprises (DPE). We also answer to the Department of Energy (DoE), as the ministry which sets energy policy, and National Treasury, which provides financial oversight.

We are South Africa's primary electricity supplier, generating approximately 90% of the electricity used in South Africa, and about 40% of the electricity used in Africa.

As a public entity, we are subject to the Public Finance Management Act (PFMA), 1999. We are also bound by the provisions of our Memorandum of Incorporation (MOI).

### Mandate

Our mandate is defined in DPE's Strategic Intent Statement, which is periodically set by the Minister of Public Enterprises (the Minister).

We proudly fulfil our mandate of providing a stable electricity supply in a sustainable and efficient manner, in order to assist in lowering the cost of doing business in South Africa and enabling economic growth.

We also acknowledge that we have a developmental role, by supporting transformation, broad-based black economic empowerment, job creation, economic and skills development, and other national initiatives.

We have to carefully balance three roles while delivering on our primary mandate, namely supporting socio-economic development, ensuring regulatory compliance and maintaining commercial viability.

We prepare an annual Corporate Plan to give effect to our mandate and set out our medium- to long-term strategic objectives. The annual shareholder compact agreed with DPE outlines the key performance indicators (KPIs) which support our mandate and strategic objectives.



Performance against the 2017/18 shareholder compact is set out in the directors' report in the annual financial statements, which are available online.

The 2018/19 Corporate Plan, which is aligned to the 2018/19 shareholder compact (which does not yet account for the impact of the 5.23% revenue decision for 2018/19), covers the five-year period from 2018/19 to 2022/23 and builds on the aspirations of the previous Corporate Plan. Due to their short tenure when finalising the Corporate Plan in March 2018, the Board approved only the first year of the plan, while supporting 2019/20 and 2020/21. The key focus areas in the Corporate Plan are to strengthen our

financial position through demand stimulation, cost containment initiatives, improving efficiencies through limiting capital expenditure, and attaining a cost-reflective price of electricity.

Throughout the report, shareholder compact KPIs are indicated using <sup>SC</sup>. These KPIs are also included in the statistical tables, available as a fact sheet at the back of this report



### Vision and mission

Our mission remains to provide sustainable electricity solutions to promote economic growth and social prosperity in South Africa and the region. This supports our vision of "Sustainable power for a better future".

We are undertaking a strategy review, which is expected to be completed by September 2018. We want to ensure an integrated strategy which addresses not only current challenges, but also ensures a clear future direction which focuses on the sustainability of the business, part of which includes a review of the operating model. The Board's key focus is the development of a turnaround plan to shift performance, thereby accelerating a return to financial and operational sustainability.

### Our business model and the value we create

We create value by transforming inputs from the natural environment – coal, nuclear and liquid fuels, while also using significant amounts of water in the process – into electricity, which is used to power homes and businesses, thereby supporting economic growth and prosperity. A key element of the process is effectively and efficiently balancing electricity supply and demand in real time, by maintaining the frequency of the power system at 50Hz.

The core operations in our value chain include the generation, transmission, distribution and sale of electricity, as well as the construction of new power stations and network infrastructure. These are backed by support functions in the form of finance, human resources, procurement, risk and sustainability, information technology, telecommunications, stakeholder management and corporate communications.

### South Africa's electricity supply industry

The country's electricity supply industry covers the generation, transmission, distribution and sale of electricity, as well as the import and export thereof.

We operate most of the base-load and peaking capacity, although the role played by independent power producers (IPPs) is expanding.

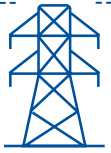
Capacity added and energy supplied by IPPs are discussed further on page 94



We operate

# 30 POWER STATIONS

## Total nominal capacity of 45 561MW



37 868MW  
of coal-fired  
stations

Base-load stations

1 860MW  
of nuclear  
power

2 724MW  
pumped  
storage

Mid-merit/peaking stations

600MW  
hydro  
stations

2 409MW  
of gas-fired  
stations

100MW  
Sere Wind  
Farm

Self-dispatching

Our network consists of

## 381 594km

of high-, medium- and low-voltage power lines

## 285 737MVA

Cumulative  
substation capacity



The electricity industry is regulated by NERSA in terms of the Electricity Regulation Act, 2006 and the National Energy Regulatory Act, 2004. NERSA not only provides licences, regulatory rules, guidelines and codes, but also determines our revenue requirement based on the requirements of the Electricity Pricing Policy. We will shortly submit the fourth multi-year price determination revenue application, MYPD 4, which will cover the three-year period from 1 April 2019 to 31 March 2022.



Our revenue applications are discussed further under "Financial review – Our finances" on pages 70 to 82

Our nuclear power station, Koeberg, is regulated by the National Nuclear Regulator (NNR), to ensure that Koeberg complies with nuclear safety standards, so that individuals, society and the environment are adequately protected against radiological hazards associated with the use of nuclear technology.

### Nature of our business and customer base

Our business is vertically integrated across a value chain that supplies electricity to South Africa and the Southern African Development Community (SADC) region, with a strategy to expand our transmission network further into the region in order to increase sales into Africa. To do this, we are reliant on SADC members to ensure adequate transmission grids within their borders; we are engaging these utilities to this end. An integrated grid connects the Southern African Power Pool (SAPP), which comprises South Africa, Botswana, Lesotho, Mozambique, Namibia, Swaziland, Zambia and Zimbabwe.

Under our new build programme, which aims to meet South Africa's growing energy demand and strengthen our transmission grid, three units at Medupi Power Station and one at Kusile have already been commissioned and are supplying power to the grid; a further unit at each station has been synchronised to the grid and both are expected to achieve commissioning status during the coming year.

	Target to 2022/23	Delivered since 2005
Generating capacity	17 384MW	10 750MW
High-voltage transmission lines	9 756km	7 469km
Substation capacity	42 470MVA	36 900MVA

Detailed information on our power stations, power lines and substation capacities is available as a fact sheet at the back of this report



# OUR BUSINESS MODEL

continued

## Eskom's energy wheel

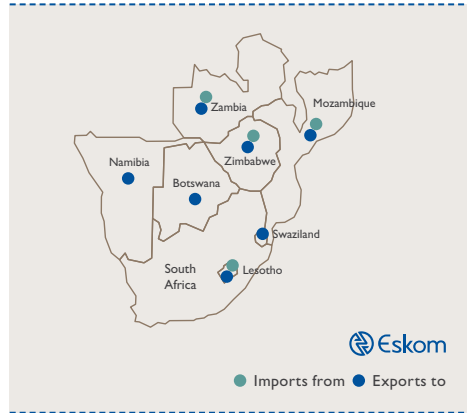
The energy wheel, or energy flow diagram, indicates the electricity which flowed from Eskom's power stations, as well as IPPs and cross-border suppliers, to Eskom's supply points to local and export customers, and also accounts for energy losses incurred.

Electricity available for distribution	GWh	Electricity demand	GWh
Generation of electricity	221 936	Local sales	196 922
Less: Used for pumping by pumped storage stations	(6 031)	International sales	15 268
Net sent out by Eskom	215 905	Total external sales	212 190
IPP purchases	9 584	Technical and other losses	21 086
International purchases	7 731	Internal use	440
Wheeling <sup>1</sup>	2 266	Wheeling <sup>1</sup>	2 266
		Unaccounted	(496)
Total available for distribution	235 486	Total energy demand	235 486

1. Wheeling refers to the movement of electricity between international customers through our network, without the power being available to customers on the South African grid.

The electricity which we generate, together with imports and that produced by IPPs, is supplied in bulk to distributors, both metros and municipalities, as well as distributed to industrial, commercial, residential and other customers in our licensed areas of supply.

We also supply a number of international customers, including electricity utilities, in the SADC region. Furthermore, we import electricity from some neighbouring countries.



Energy of 221 936GWh was generated by Eskom from the following primary energy sources:

Source	GWh
Coal-fired stations	202 106
Nuclear power	14 193
Pumped storage stations	4 479
Hydro stations	709
Wind	331
Open-cycle gas turbines (OCGTs)	118
Total	221 936

We sold 212 190GWh of electricity to a total of 6 258 616 customers.

The number of customers by segment, as well as electricity sales volumes and revenue by customer segment are set out in the fact sheet at the back of this report

### Our impact on the capitals

The six capitals identified in the International <IR> Framework all play a role in our business, some as inputs and others in the form of outcomes, although the capitals are interrelated in the way that they affect our value creation process.

In order to operate, our business requires financial capital, which consists of equity in the form of equity invested by the shareholder, retained earnings and debt funding, some of which is supported by Government guarantees. Our own credit rating, as well as that of the Sovereign, has deteriorated over the past year, impacting our ability to secure external funding. Our financial capital increases or decreases based on our financial performance and the execution of our funding plan.

Our equity at 31 March 2018 totalled R170.3 billion, consisting of R83 billion in share capital and the balance in retained earnings, with debt securities and borrowings of R388.7 billion provided by lenders and investors (bond holders). We presently do not pay dividends to our shareholder, with any funds generated being reinvested in the business. Lenders and investors earn a return in the form of interest paid, coupled with the repayment of debt.

The various elements of our financial capital, and our financial performance, are discussed under "Our finances" on pages 70 to 82

Natural capital, in the form of coal, liquid fuels, nuclear fuel and water, are the primary energy sources used as inputs by our power stations in the process of generating electricity. This process results in waste, such as gaseous and particulate emissions, ash and nuclear waste, which negatively impacts natural capital. In an effort to reduce our impact on the environment, we are gradually transitioning to a cleaner energy mix, including renewable energy, mainly provided by IPPs, clean coal technologies and eventually, nuclear energy. The highly anticipated update to DoE's Integrated Resource Plan (IRP) will provide a view of the country's desired energy mix and Eskom's future role.

Our usage of natural resources in the form of primary energy, and the impact of our operations on the environment, is discussed under "Our interaction with the environment" on pages 98 to 107

Our manufactured capital consists of our power stations, together with our transmission and distribution networks. Our manufactured capital base is eroded in the process of generating, transmitting and distributing electricity, while it is restored through maintenance and major refurbishment.

The performance of our existing plant and new build programme, as well as capacity provided by IPPs, is discussed under "Our infrastructure" on pages 89 to 97

Our human capital comprises our employees and contractors, and their competencies, capabilities and experience. Human capital is enhanced by the development of learners as part of our skills pipeline, and through training. We strive for racial, gender and disability transformation of our employee base, while being cognisant of optimising our workforce to be efficient and productive, in order to manage one of our most significant cost elements.

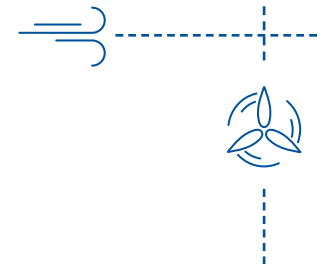
Our workforce, employment equity and safety is discussed under "Our people" on pages 108 to 116

Our social and relationship capital includes our relationships with customers, suppliers, communities and the public in general. This is positively impacted by our activities enabling economic growth, as well as our contribution to job creation, skills development, supplier transformation and broad-based black economic empowerment. In addition, our corporate social investment (CSI) activities improve the lives of many less fortunate South Africans. Furthermore, our electrification programme has seen close to six million households electrified within our licensed areas of supply since 1991, significantly enhancing the lives of those affected. Strong stakeholder relationships are critical to our ability to create value.

Our interaction with customers, suppliers and the public, as well as our CSI activities and electrification programme, are discussed under "Our role in communities" on pages 117 to 122

Our intellectual capital consists of technology, which is a key enabler of our business and includes telecommunications, information technology, as well as research and innovation; the latter focuses on industrialising future technologies such as battery storage and the improvement of current operations. Intellectual capital also includes organisational knowledge, systems, policies and procedures.

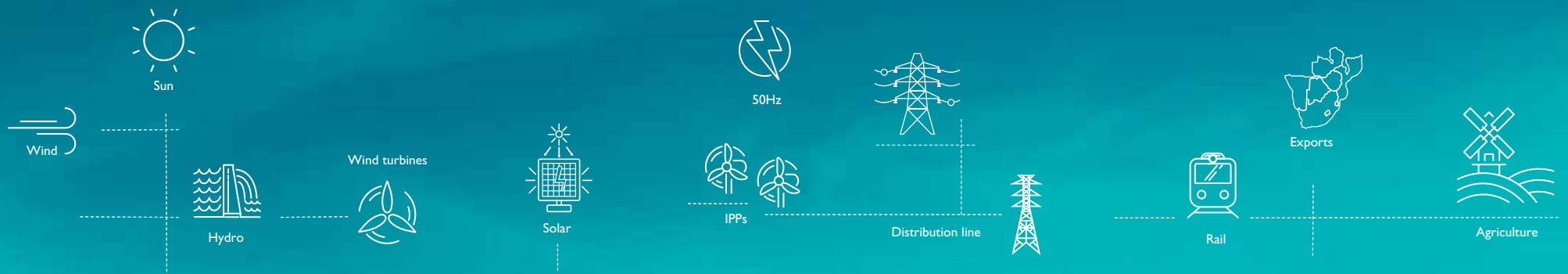
Our intellectual capital is discussed under "Our know-how" on pages 123 to 125



# OUR BUSINESS MODEL



## RENEWABLE



## PRIMARY ENERGY

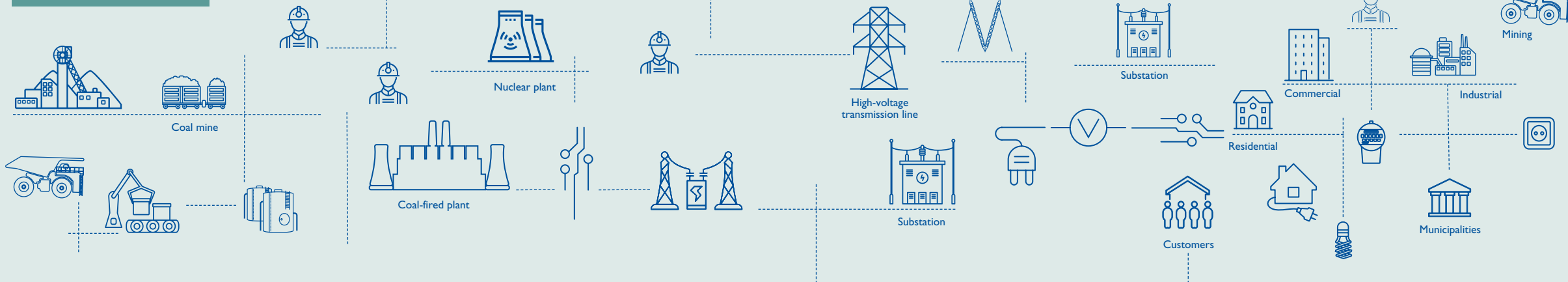
## POWER GENERATION

## TRANSMISSION

## DISTRIBUTION

## CUSTOMERS

## NON-RENEWABLE



### INPUTS

- FC Capital expenditure **R48 billion**
- NC **115.49Mt** coal burnt
- NC **276 335Mℓ** raw water used
- MC **45 561MW** installed capacity at 30 stations
- HC **48 628** Group employees
- SRC **235 486GWh** Total energy demand

### PERFORMANCE

- NC **28 days** Normalised coal stock
- MC Energy availability (EAF) **78%**
- MC Planned maintenance (PCLF) **10.35%**
- MC Unplanned maintenance (UCLF) **10.18%**
- MC IPP purchases **9 584GWh**
- HC **0.23** Group LTIR
- SRC **2.09** System minutes lost <1
- SRC System interruption frequency (SAIFI) **18.7 events**
- SRC System interruption duration (SAIDI) **38.8 hours**
- SRC **9.15%** Total energy losses

### OUTPUTS

- FC Electricity revenue **R175 billion**
- NC **31.65Mt** Ash produced
- NC **205.5Mt** CO<sub>2</sub> emissions
- NC **57.13kt** Particulate emissions
- SRC **215 905GWh** Electricity sent out by Eskom

SRC **212 190GWh** Total sales

- 41%** Municipalities
- 22.6%** Industrial
- 14.2%** Mining
- 7.2%** International
- 5.8%** Residential
- 5%** Commercial
- 2.7%** Agriculture
- 1.5%** Rail

FC Municipal anar debt **R13.6 billion**

### OUTCOMES FOR ESKOM

- FC EBITDA **R45.4 billion**
- FC EBITDA margin **25.91%**
- FC Average electricity price **85.06c/kWh**
- FC Free funds from operations after interest paid **R9.1 billion**
- FC External funding raised **R57.5 billion**
- FC Debt/equity ratio **2.52**
- FC Cash and cash equivalents **R15.8 billion**
- FC BPP cost savings **R20.73 billion**
- MC Maintenance expense **R14 billion**
- MC Depreciation expense **R23.1 billion**
- MC 2 units at Medupi and 1 at Kusile **commissioned**
- MC **722.3km** Transmission lines installed

### OUTCOMES FOR OTHERS

- FC Cash interest cover **1.22**
- FC Debt service cover **0.87**
- NC Relative particulate emissions **0.27kg/MWhSO**
- NC Specific water consumption **1.30ℓ/kWhSO**
- HC Employee benefit costs **R29.5 billion**
- HC **4 176** Total learner pipeline
- HC **15** Employee and contractor fatalities
- HC Racial equity in senior management **68.31%**
- HC Gender equity in senior management **38.20%**
- HC **1 441** Group employees with disabilities
- SRC Eskom KeyCare index **105.9**
- SRC Electrification **215 519** households connected
- SRC CSI committed spend **R192 million**
- SRC **80.25%** B-BBEE compliant spend

For a discussion of the performance of the abovementioned KPIs against target, refer to "Financial review" and "Operating performance"



## OUR BUSINESS MODEL

continued

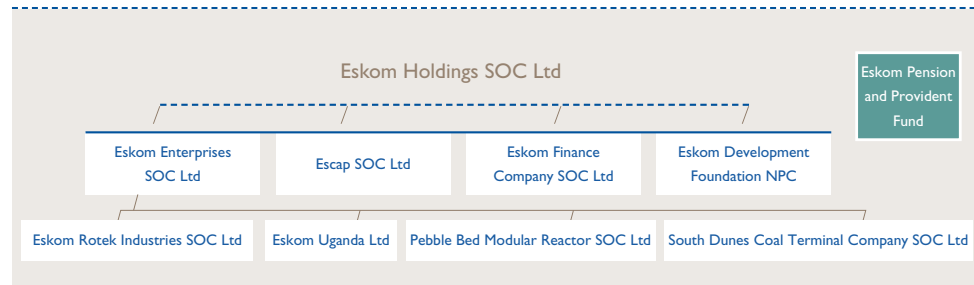
### Legal and operating structure

There have been no significant changes to our group structure during the year. Our head office remains based in Johannesburg, with operations across South Africa, including administrative offices in most major centres.



The geographic location of our power stations and major transmission lines is set out in the map on page 147

### Legal structure (noting only major subsidiaries)



Note that Eskom Holdings SOC Ltd is the main operating company, which houses the electricity business and also holds investments in subsidiaries. The Eskom group comprises the operating company and its subsidiaries and joint ventures.

The main function of our subsidiaries is to provide strategic services to Eskom and its employees.

Eskom Enterprises SOC Ltd (EE) functions as an investment holding company. Through its subsidiary, Eskom Rotek Industries SOC Ltd (ERI), it provides lifecycle and technical support, plant maintenance and support for the capacity expansion programme to Eskom's line divisions.

Eskom Uganda Limited, a subsidiary of Eskom Enterprises SOC Ltd (EE), operates and maintains two hydroelectric power stations at Nalubaale and Kiira under a 20-year concession arrangement, now in its fifteenth year.

Pebble Bed Modular Reactor SOC Ltd (PBMR) created intellectual property (IP) over the period of its operation. PBMR remains in a state of care and maintenance in order to preserve the IP created.

EE holds an effective 69% interest in South Dunes Coal Terminal Company SOC Ltd (SDCT), both directly and indirectly through Golang Coal SOC Ltd (not shown). SDCT participated in the Phase V expansion of the Richards Bay Coal Terminal (RBCT), which entitles it to the right to export coal.

EE's remaining dormant subsidiaries (not reflected above) are still in the process of being wound up or liquidated.

Escap SOC Ltd is Eskom's wholly owned insurance captive company, and manages and insures the business risk of Eskom and our subsidiaries, excluding nuclear and aviation liabilities.

Although the disposal of Eskom Finance Company SOC Ltd (EFC) has been delayed, we remain committed to the disposal, as mandated by our shareholder.

The activities of the Eskom Development Foundation NPC (the Foundation) were absorbed into Eskom from 1 April 2017, although the Foundation started operating as a subsidiary again from 1 April 2018, following the shareholder's advice to delay the Foundation's dissolution, pending completion of a review of our operating model.

The Eskom Pension and Provident Fund is a hybrid defined benefit and defined contribution pension fund, registered as a self-administered pension fund in terms of the Pension Funds Act, 1956. It is an independent legal entity, governed by a board of trustees, and is the second-largest pension fund in the country, with assets well in excess of R100 billion.

Full details of Eskom's equity-accounted investees and subsidiaries at 31 March 2018 are set out in notes 11 and 12 of our annual financial statements

### Operating structure

Eskom is made up of line divisions that operate the electricity value chain, service functions which support those operations and strategic functions to develop the organisation. Members of our executive committee (Exco) are assigned to take accountability for the various areas.



Line divisions	Service functions	Strategic functions
Generation Transmission Distribution Customer Services Group Capital (new build)	Primary Energy Group Finance Group Human Resources Group Procurement Group IT Group Security	Risk and Sustainability Strategy Support Legal and Compliance Corporate Affairs Assurance and Forensic (reports directly to the Board)

### Contribution to financial performance

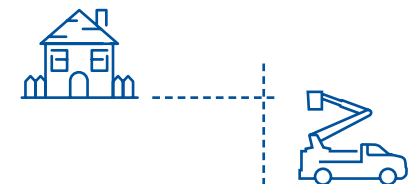
The contribution by the main companies to the group's financial performance and position is shown below. The Eskom business remains the most significant.

R million	Eskom company	EE group	Escap	EFC	Foundation	Eliminations and other	Eskom group
Revenue	177 424	9 429	3 376	861	–	(13 666)	177 424
EBITDA <sup>1</sup>	43 428	797	1 210	139	–	(215)	45 359
Net (loss)/profit after tax	(4 608)	465	1 497	107	–	202	(2 337)
Total assets	729 011	7 771	12 587	8 927	6	(19 186)	739 116
Total liabilities	570 936	2 462	5 975	7 888	6	(18 487)	568 780
Capital expenditure <sup>2</sup>	50 623	490	–	–	–	(383)	50 730

1. EBITDA excludes fair value adjustments on financial instruments and embedded derivatives.

2. The company and group figures include DoE funded capital expenditure of R3.4 billion and assets transferred from customers.

For detailed segment disclosure, refer to note 7 in the consolidated annual financial statements



### Eskom celebrates 95 years of powering the nation

Eskom turned 95 years old on 1 March 2018, and the organisation celebrated this occasion with 100 380 households that have connected to the national grid over the past six months.

Through a successful electrification programme, more than five million households within Eskom's licensed areas of supply have been electrified since 1990. According to Statistics South Africa, over 90% of South Africans have access to electricity, with the majority of new customers now being electrified in more remote and deep rural areas.

National Treasury has allocated R17.3 billion to Eskom and the municipalities to electrify a further 640 000 households over the next three years. South Africa hopes to achieve universal access to electricity by 2025.

Commenting on Eskom's journey of contributing to the growth and development of the people of South Africa and its economy, Eskom's then Interim Group Chief

Executive, Phakamani Hadebe said: "Turning 95 years is a great milestone for our organisation and provides motivation as we manoeuvre through the liquidity and governance challenges that we are currently grappling with. What is more striking about Eskom's proud heritage is that people have and will always remain at the heart of this business whose history is deeply embedded in the history and the development of South Africa."

He added that: "Together with the Board, we are busy formulating a strategic framework that will ensure that this institution survives another 100 years."



One of the essential components of a governance framework is role clarity between the shareholder, the Board of Directors (the Board) and management, as provided by the Strategic Intent Statement. Our Board is responsible for providing strategic direction to the organisation, while Exco is responsible for implementing that strategy, by exercising executive control in managing the day-to-day operations.

The majority of directors are independent non-executives, with only the Group Chief Executive and the Chief Financial Officer being executive directors. The shareholder appoints directors with the approval of Cabinet; non-executive directors are reviewed annually at the annual general meeting. The People and Governance Committee, a Board subcommittee, assists the shareholder by identifying the necessary skills, qualifications and experience required by the Board to achieve our objectives.



Refer to "Our governance" on pages 48 to 54 for detail on the Board and Exco composition, as well as activities of the Board and its committees

Our governance approach is focused on providing effective corporate governance that enables the Board and Exco to exercise their fiduciary duties, by driving optimal and quality decision-making that considers risks and appropriate mitigation, while providing oversight of all our operations. The Board is the focal point for corporate governance, and is responsible to the company itself for survival and prosperity, and also to the shareholder and other stakeholders for our performance, by meeting financial, operational and other business expectations.

*Not only is effective governance a key enabler of the successful execution of our strategy, but the absence thereof has a powerful impact on our reputation, as evidenced by our experience over the past year.*

Good corporate governance is displayed through the exercise of ethical and effective leadership, to achieve a number of required governance outcomes, namely an ethical culture, satisfactory performance, effective control and legitimacy.

King IV™ stipulates that the governing body's primary roles and responsibilities include:

- Steering the organisation and setting the strategic direction, which in our case is aligned to DPE's Strategic Intent Statement and other shareholder objectives
- Approving policies and plans which give effect to the strategy
- Overseeing strategy implementation and execution by management, by monitoring performance
- Ensuring accountability for performance through reporting and disclosure

The Board demonstrates ethical leadership when it displays integrity, competence, fairness, transparency, accountability and responsibility, and makes an effort to minimise the negative effects of the organisation's activities on society and the six capitals. The Board should also be effective, not losing sight of strategic objectives, and focus on achieving results.

Furthermore, the Board ensures that Eskom and its subsidiaries comply with the requirements of the Companies Act, 2008; PFMA, 1999; section 29 of the National Treasury regulations; as well as any other applicable legislation, regulations and guidelines.



The Minister of Public Enterprises recently set out his expectations of all SOC boards, in the spirit of Thuma Mina. He expects boards to:

- Undertake their duties diligently, with due regard to their fiduciary responsibilities
- Restore an ethical culture at state-owned enterprises
- Ensure that good governance, accountability and transparency are restored
- Maintain the necessary independence from management to enable effective oversight, whilst simultaneously having a thorough knowledge of the activities at the company
- Investigate any allegations of corruption and, where there is evidence of malfeasance, act decisively to hold the relevant individuals to account and recover any funds that were misappropriated
- Review the financial status and ensure financial sustainability of the company
- Ensure that the company delivers effectively, efficiently and financially sustainably on its core mandate, whilst simultaneously contributing to the transformation and industrialisation of the economy
- Put in place a stable and competent executive management team that will lead the institution with integrity
- Ensure adequate controls and oversight over procurement are in place, and that conflicts of interest are correctly managed
- Rebuild the credibility and confidence of South Africans, employees and lenders in state-owned enterprises
- Reposition state-owned enterprises as assets that serve South Africa and improve the wellbeing of all its citizens

**Ethics based on our values**

Eskom is a signatory to the United Nations Global Compact, which includes an anti-corruption clause, as well as the World Economic Forum's "Partnership Against Corruption" initiative. Fraud prevention and whistle-blowing policies set out our zero tolerance approach towards dishonesty and fraud, as well as principles which enable all employees to report unlawful or irregular conduct, in good faith and in a proper manner. The reporting system is managed by an independent service provider to ensure the integrity and confidentiality of the process.

Eskom's Board is accountable for managing ethics within the organisation; this is delegated to the People and Governance Committee. The approved Code of Ethics is underpinned by our core values, which are intended to promote an ethical culture and inform all of our practices, policies, procedures and behaviour, including areas of HR, procurement, health, safety and the environment.



Our values are set out on page 1

Operational responsibility for the management of ethics lies with Exco. The Group Chief Executive is assisted by the Ethics Office in setting the framework, rules, standards and boundaries for ethical behaviour. Additionally, an ethics management programme has been established to manage ethics effectively. Reporting of unethical behaviour takes place at all levels across the business, while the implementation of our ethics policies and programmes is consistently monitored.

The Code of Ethics is supplemented by a conflict of interest policy, which sets out the obligations of employees and directors when dealing with conflicts of interest and declaring private work, supplier relations and the receiving and offering of gifts. Employees are required to perform an annual declaration of interest, or as soon as any circumstances, which may affect their declaration, change. Conflicts of interest declared by directors and Exco members are minuted for the record.

Furthermore, no Eskom official is allowed to do business with Eskom while being an employee of Eskom or its subsidiaries. Through an audit process, 36 employees were identified during the past two years as having business interests in suppliers doing business with Eskom. Remedial action has commenced, and sanctions of only three remain outstanding.

All transactions need to be approved in terms of an approved Delegation of Authority (DOA) framework. Changes have been proposed to the current DOA; these changes have been subject to internal and external reviews. The revised DOA is expected to be implemented from 1 April 2019.

A fraud and corruption hotline, which encourages whistle-blowing, is operated by an independent service provider. We also maintain an Ethics Helpline to assist employees with queries around ethical conduct.

We are currently investigating almost 250 cases reported through whistle-blowing channels. By the end of March 2018, about a third of the investigations were completed, of which about half resulted in a disciplinary process.

*We are determined to clear the company of corruption in all its forms.*

**Governance challenges**

In September 2017, Parliament's Public Enterprises Committee started an inquiry into alleged state capture at three of South Africa's state-owned companies, with Eskom being one. The focus of the inquiry includes an investigation into SOCs' governance practices. The inquiry has indirectly resulted in a number of executive level resignations at Eskom, due to the new Board acting on allegations surfacing during the inquiry.

We have also been under scrutiny from lenders, civil and governmental organisations, as well as the media, for poor governance. This has resulted in a loss of trust and confidence in our governance processes, thereby negatively impacting our reputation. A number of issues have led to investigations into our governance practices, including allegations of impropriety, liquidity concerns and the prior year qualified audit opinion on the completeness of irregular expenditure. Evidence of governance contraventions has resulted in legal proceedings that are still under way.

In January 2018, the Government announced a number of measures to strengthen governance in Eskom, including the appointment of nine new Board members and stabilising management.

*The appointment of the new Board was well received by both the public and the investor community, and was seen as a step in the right direction to return Eskom to financial and operational stability.*

We now need to focus on restoring stakeholder confidence – lenders, ratings agencies and the public in general. The perceived maladministration has had a significant impact on the availability of funding, placing severe pressure on our liquidity position. We acknowledge the need for a comprehensive review across governance processes, specifically quality of information, governance structures and ethics. We are implementing a five-point plan to transform governance:

- Strengthening our internal ethics and fraud framework, and focusing on consequence management
- Implementing independent lifestyle and conflict of interest audits on senior management and other levels, as deemed necessary
- Terminating all irregular supplier contracts and work
- Enhancing our commercial governance process to ensure robust scrutiny, and strengthening the delegation of authority framework
- Instituting disciplinary charges and taking legal action, if required

The McKinsey contract has been terminated and the contract with Impulse International suspended. There are no dealings, contractually or otherwise, with Trillian. We are in the process of reversing administrative decisions through the High Court for recovery of about R1.6 billion (including VAT).

These actions are part of a collective effort to further improve trust and restore investor confidence to enable Eskom to re-establish our credibility in order to access financial markets. We will continue to practice a zero tolerance approach to fraud, corruption and other forms of economic crime or dishonest activity.

**Improvement process to address irregular expenditure**

Eskom received a qualified audit opinion for the financial year ended 31 March 2017, as the external auditors could not rely on the processes in place to ensure the completeness of irregular expenditure reported. We established and implemented an improvement process to address shortcomings identified, by ensuring adequate systems and processes to monitor and report all irregular expenditure, as well as taking the necessary corrective actions to address the audit qualification.

The Audit and Risk Committee oversees the progress of the recovery plan. At year end, we had reviewed about 98% of 205 contracts over R1 billion and 91% of 6 998 contracts under R1 billion awarded over a period of three years, to ensure compliance to procurement and other relevant legislation, as well as various internal policies and procedures.

The contract review originally included all contracts awarded since 1 April 2015. We have now included all contracts since December 2012 in the scope, as that was when Eskom's earlier exemption from the relevant regulations ceased. The review of the remaining contracts is in process.

As a result of this process, irregular expenditure reported has increased significantly. The auditors have again qualified the completeness of information disclosed in terms of the PFMA relating to irregular expenditure, fruitless and wasteful expenditure and losses due to criminal conduct in the 2018 annual financial statements.



For further information, refer to the directors' report in the consolidated annual financial statements

To avoid a recurrence of instances of non-compliance, monitoring and compliance controls have been enhanced. We have also revised our procedure on supply chain management, which has been approved by the Board and reviewed by National Treasury. The revised procedure is being implemented.



The PFMA defines irregular expenditure as "expenditure, other than unauthorised expenditure, incurred in contravention of or that is not in accordance with a requirement of any applicable legislation". This should be very clearly distinguished from fruitless and wasteful expenditure, which means "expenditure which was made in vain and would have been avoided had reasonable care been exercised".

Therefore, the definition is very broad, as it includes all transgressions of any statute. It doesn't matter whether the breaches were deliberate or accidental, or whether they happened unknowingly or in good faith. Furthermore, as opposed to fruitless and wasteful expenditure, the fact that Eskom received something of value (an asset or service) in return for the expenditure is not relevant.

It should further be noted that the reason for incurring the expenditure is not the cause for the irregular classification, but that the irregularity arises from lack of compliance with legislation and/or processes. One of the main reasons for classifying items as irregular expenditure is that they were incorrectly treated as emergency procurement, effectively bypassing the normal procurement process. Another reason is that the PPPFA requires all suppliers to submit tax clearance certificates, but foreign suppliers are unable to do so, as they are not registered South African taxpayers. Eskom also applied the PPPFA limits exclusive of VAT, as we are able to claim the input VAT. However, the limits should be applied inclusive of VAT.

An irregularity can also be condoned, by an internal governance structure, the relevant government department or National Treasury. Once the breach is condoned, the expenditure is no longer deemed to be irregular, although it is still disclosed as part of the cumulative total.

The improvement in the reporting of PFMA matters following the first phase of the improvement process is evident in the significant increase in the numbers reported, even though challenges are still being experienced in the reporting process. The second phase of the improvements, to address remaining concerns and shortcomings, will be rolled out in the coming financial year.

Disclosure of irregular expenditure required in terms of the PFMA is set out in note 51 in the annual financial statements



**Allegations of corruption and misconduct**

While the Board continues to focus on corporate governance improvements, the finalisation of investigations into suspended executives remains a key priority for the Board. The prioritisation of this process has since led to the departure of seven senior managers, including executives, based on serious allegations of misconduct. A further two executives remain on suspension; their disciplinary hearings commenced in May 2018, but have yet to be concluded.

The following executives departed as a result of the process:

- Anoj Singh, Chief Financial Officer
- Matshela Koko, Group Executive: Generation
- Sean Maritz, Chief Information Officer
- Prish Govender, General Manager: Capital Projects
- Frans Hlakudi, Senior Manager: Capital Contracts
- Charles Kalima, General Manager: Supply Chain
- Edwin Mabelane, Senior General Manager: Group Technology

In many instances, the problem was not a failure of our internal controls, but management override of those controls.

**Major investigations**

Eskom has been supporting three major investigations related to allegations of corruption or misconduct.

**National Treasury**

National Treasury is investigating the procurement and contract management of the Tegeta contract with Eskom. The objective is to determine whether proper process and procedures were followed in awarding the contract to Tegeta. National Treasury procured the services of a forensic firm to conduct the investigation on its behalf. We have been supporting the investigation by providing the required information, documents and witnesses, including previous audit and investigation reports related to this transaction.

The impact of fraud and corruption on coal cost is being investigated. With respect to the Tegeta contract, investigations into procurement and contract management at Hendrina Power Station were completed. Procurement irregularities include non-declaration of interests and the conclusion of the contract while documents were still outstanding. Issues emanating from the Hendrina contract management investigation included failures in coal sampling by Eskom employees, payment for coal not received, as well as changes to contract terms in Tegeta's favour without following the proper governance process. The implicated employees were suspended and they have subsequently resigned.

**Directorate for Priority Crime Investigation (Hawks)**

The Hawks are investigating all suspected cases of criminality, fraud and corruption relating to various contracts in Eskom which have been in the public domain recently. The investigations are pursued by the Hawks on behalf of Eskom. We have been assisting the Hawks with relevant documentation, as well as audit and investigation reports implicating various current and former executives.

**Special Investigating Unit**

The President signed Proclamation No 41561 on 6 April 2018, mandating the Special Investigating Unit (SIU) to investigate Eskom, Transnet and Denel. The scope of the investigation includes maladministration that occurred from 1 January 2010 until the publication date of the Proclamation, which does not have an end date. We are assisting the SIU in their investigation, by providing relevant documentation, as well as audit and investigation reports.

Rooting out financial mismanagement, malfeasance and maladministration, coupled with entrenching sound financial and business discipline in order to rebuild investor confidence in Eskom, remain the Board's non-negotiable obligation.

**Audit reportable irregularities**

The external auditors have raised a number of reportable irregularities (RIs) in terms of section 45 of the Auditing Profession Act (APA), 2005.



In terms of the APA, a reportable irregularity is any unlawful act or omission committed by any person responsible for the management of an entity, which:

- (a) has caused or is likely to cause material financial loss to the entity or to any partner, member, shareholder, creditor or investor of the entity in respect of his, her or its dealings with that entity; or
- (b) is fraudulent or amounts to theft; or
- (c) represents a material breach of any fiduciary duty owed by such person to the entity or any partner, member, shareholder, creditor or investor of the entity under any law applying to the entity or the conduct or management thereof.

The external auditors are required to first report any RI to the Independent Regulatory Board for Auditors (IRBA), and only then report the matter to management, at the same time affording management an opportunity to respond and/or rectify the matter.

A number of RIs were reported during the audit for the year ended 31 March 2017, as well as the independent review of the six months ended 30 September 2017 and the audit for the year ended 31 March 2018. The Board is in the process of closing out all reported irregularities, although the finalisation of some RIs depends on external investigations and the outcome of court cases.

Details of the RIs reported, as well as the action taken and status of the respective matters, are discussed in the directors' report in the annual financial statements



**Application of King IV™ principles**

The principles of King IV™ encapsulate the aspirations on the journey towards good corporate governance. They provide guidance on what organisations should strive to achieve through the application of suggested governance practices.

In order to give effect to the principles, practices are recommended at the level of leading practice. Those associated with a particular principle should be applied so that they support and give effect to the aspiration expressed in the principle.

Based on an internal assessment by senior managers accountable for the various areas, supported by a

King IV™ gap analysis by our Assurance and Forensic Department, we assess our overall level of effectiveness of implementation of the King IV™ principles as partially effective. We have numerous policies, procedures, standards and controls in place, and these are generally deemed to be adequate, but do not necessarily function effectively, as is evidenced by the governance failures reported. Given that we have only just started applying King IV™, we also do not imagine that we can claim to be fully compliant with all the requirements in any given area.

The table below sets out the 16 principles, with some additional context.

King IV™ principle	Governance context
<p><b>Principle 1: Leadership</b> The governing body should lead ethically and effectively</p>	<p>Eskom's Board exercises effective leadership, adhering to the duties of directors. Directors have the necessary competence and act ethically in discharging their responsibility to provide strategic direction and control of the company as provided for in the Board Charter and Eskom's MOI. However, this cannot be said to have been the case throughout the past year, as evidenced by allegations of corruption, irregularities and state capture.</p> <p>The new Board is committed to setting Eskom's strategic direction, based on an ethical foundation, to support a sustainable business, while acting in the best interests of the organisation, as well as taking into account Eskom's short- and long-term impact on the economy, society, environment and our stakeholders. The Board considers risks and oversees and monitors strategy implementation and execution by management, ensuring accountability for the company's performance.</p> <p>Although the Board delegates duties to various committees and management, accountability remains vested in the Board.</p> <p>Eskom's current leadership is placing much greater focus on governance-related matters, and there is a clear migration towards restoring Eskom's ethical culture and good governance practices.</p>
<p><b>Principle 2: Organisational ethics</b> The governing body should govern the ethics of the organisation in a way that supports the establishment of an ethical culture</p>	<p>The Board, with the assistance of the People and Governance Committee, oversees the management of ethics, and monitors the organisation's activities to ensure that they are in line with Eskom's ethics management programme, policies and procedures.</p> <p>Policies and procedures are applicable to both employees and contractors, and adherence to policies and procedures forms part of our contractual arrangements with suppliers. Our values are set out in the Code of Ethics.</p>
<p><b>Principle 3: Responsible corporate citizenship</b> The governing body should ensure that the organisation is and is seen to be a responsible corporate citizen</p>	<p>DPE's Strategic Intent Statement and Eskom's Corporate Plan embody our strategic direction and our interaction with stakeholders in line with relevant legislative requirements.</p> <p>Furthermore, the Board sets the direction for good corporate citizenship, including compliance with the Constitution, relevant laws and regulations, as well as our own standards, policies and procedures, all while remaining aligned to our mandate, purpose and strategic direction.</p> <p>Performance is measured against the shareholder compact, and a quarterly report is submitted to DPE, detailing our performance against the shareholder compact, as well as providing an overview of financial and operational performance, and any other relevant matters.</p> <p>When considering performance, we consider all aspects, such as financial performance, our societal and environmental impacts, as well as the wellbeing of our people. As set out in this report, our performance is aligned to the six capitals. Refer to the sections on "Our finances", "Our infrastructure", "Our interaction with the environment", "Our people", "Our role in communities" and "Our know-how".</p>



King IV™ principle	Governance context
<p><b>Principle 4: Strategy and performance</b> The governing body should appreciate that the organisation's core purpose, its risks and opportunities, strategy, business model, performance and sustainable development are all inseparable elements of the value creation process</p>	<p>The Board maintains oversight of Eskom's core purpose, its risks and opportunities, strategy, business model, performance and sustainable development through an integrated strategy development process, Corporate Plan and results management process, which includes monitoring performance against the shareholder compact.</p> <p>This process is integrated and incorporates various feedback mechanisms to ensure that strategic risk and sustainable development principles inform our strategic direction and business model, and that implementation of the Corporate Plan is monitored, and that non-performance or any change in context is highlighted and acted upon.</p> <p>This is achieved through the use of integrated tools, various governance and oversight bodies at operational and Board levels, and a combined assurance process.</p>
<p><b>Principle 5: Reporting</b> The governing body should ensure that reports issued by the organisation enable stakeholders to make informed assessments of the organisation's performance, and its short, medium and long-term prospects</p>	<p>Eskom prepares its annual and interim financial statements in terms of International Financial Reporting Standards (IFRS), the PFMA, 1999 and Companies Act, 2008. The Audit and Risk Committee reviews these externally published reports and recommends approval thereof to the Board. The external auditors review the interim financial statements and audit the annual financial statements in line with International Auditing Standards, as well as the PFMA and Companies Act.</p> <p>The integrated report is prepared based on the principles contained in the International &lt;IR&gt; Framework. The Audit and Risk Committee and Social, Ethics and Sustainability Committee review the integrated report, which is approved by the Board.</p> <p>While we make every effort to ensure that reports issued to stakeholders are useful for decision-making, we acknowledge that there is always room for improvement.</p>
<p><b>Principle 6: Primary roles and responsibilities of the governing body</b> The governing body should serve as the focal point and custodian of corporate governance in the organisation</p>	<p>The recently appointed Board recognises that good corporate governance is key to the successful execution of our strategy.</p> <p>The approved Board Charter is reviewed annually. It sets out the Board's roles, responsibilities, membership requirements and procedural conduct.</p> <p>The Board has constituted various committees which assist the Board with its oversight role.</p> <p>The Board or any Board committee may obtain independent, external professional advice concerning matters within the scope of their duties.</p> <p>The company exercises its rights and is involved in the decision-making of its subsidiaries on material matters. Subsidiaries have adopted the Subsidiary Governance Framework and have aligned it to their MOIs and shareholder compacts.</p>
<p><b>Principle 7: Composition of the governing body</b> The governing body should comprise the appropriate balance of knowledge, skills, experience, diversity and independence for it to discharge its governance role and responsibilities objectively and effectively</p>	<p>The Government is the sole shareholder of Eskom and is represented by the Minister of Public Enterprises. All directors are appointed at the discretion of the shareholder. The shareholder takes into consideration diversity across race, gender, age, independence and skills when appointing Board members.</p>
<p><b>Principle 8: Committees of the governing body</b> The governing body should ensure that its arrangements for delegation within its own structures promote independent judgement, and assist with balance of power and the effective discharge of its duties</p>	<p>Committees have been established to assist the Board in discharging its responsibilities. The committees report to the Board on how they have discharged their duties. Formal terms of reference are established and approved for each committee; these are reviewed annually.</p> <p>All members of the Board may attend any meeting of the Board committees.</p> <p>In some instance, evidence of committees reporting to the Board was not always available, or minutes were not signed timeously.</p> <p>The various committees, their roles and responsibilities and key activities, as well as statements on their conduct, are disclosed in "Our governance".</p>
<p><b>Principle 9: Evaluation of the performance of the governing body</b> The governing body should ensure that the evaluation of its own performance and that of its committees, its chair and its individual members, support continued improvement in its performance and effectiveness</p>	<p>A Board evaluation is meant to be conducted annually by an independent party, the outcomes of which are considered by the Board. The concerns and areas of improvement raised should be consistently monitored.</p> <p>An external assessment was conducted in May 2017, covering the year ended 31 March 2017. Areas for improvement identified included a shortage of accounting skills among Board members, separating the Audit and Risk Committee into two separate committees as required by King IV™, the leadership instability in Eskom, alignment with the principles of King IV™ and concerns around the ethics policy. Some of these issues have already been addressed through the appointment of a new Board, and its actions since being appointed.</p> <p>Due to numerous changes to the Board over recent years, a performance evaluation was not always performed annually. However, a performance evaluation of the new Board is planned before the end of the coming financial year.</p>



King IV™ principle	Governance context
<p><b>Principle 10: Appointment and delegation to management</b> The governing body should ensure that the appointment of, and delegation to, management contribute to role clarity and effective exercise of authority and responsibilities</p>	<p>Eskom operates in accordance with an approved DOA framework that sets out the powers and authorities delegated by the Board. It sets out the scope, conditions and parameters within which the powers can be exercised by directors, employees and/or committees.</p> <p>Performance of the Group Chief Executive is evaluated in terms of the targets set by the Board, while the GCE sets the targets for Exco members. Performance against these is also considered by the Board when deciding on short-term and long-term incentives to be awarded to Exco.</p> <p>Although the Board has delegated authority to employees and committees, it has reserved specific matters for its own deliberation and conclusion. These matters are recorded in the MOI.</p> <p>Succession planning at executive level is expected to be addressed in future.</p>
<p><b>Principle 11: Risk governance</b> The governing body should govern risk in a way that supports the organisation in setting and achieving its strategic objectives</p>	<p>The Board, supported by the Audit and Risk Committee, provides oversight of Eskom's strategic and business risks as well as opportunities, by delegating this responsibility to management through the Risk and Resilience Management policy and plan.</p>
<p><b>Principle 12: Technology and information governance</b> The governing body should govern technology and information in a way that supports the organisation setting and achieving its strategic objectives</p>	<p>The Chief Information Officer (CIO) is a member of Exco and is responsible for implementing and executing effective information technology (IT) management. Governance structures are in place to oversee and monitor effective use of technology and information, and identify opportunities where appropriate.</p> <p>A quarterly report is submitted to the Audit and Risk Committee to provide assurance that Eskom's technology and information management systems are secure and available.</p> <p>Further information is set out under "Risks and opportunities, assurance and controls – Governance of technology and information" on pages 44 to 45.</p>
<p><b>Principle 13: Compliance governance</b> The governing body should govern compliance with applicable laws and adopted, non-binding rules, codes and standards in a way that supports the organisation being ethical and a good corporate citizen</p>	<p>In terms of the Compliance Charter, the Board is ultimately accountable for the group's compliance with regulatory requirements; this is effected through the Audit and Risk Committee. The overall responsibility for the implementation and execution of compliance management has been delegated to Exco.</p> <p>Eskom adopted a compliance philosophy to respect the rule of law. This is supported by a policy that it will, in all material respects, ensure compliance with the letter and spirit of legal and regulatory requirements in general.</p> <p>Overall compliance maturity is assessed based on the extent of understanding the compliance universe, the related controls as well as subsequent routine monitoring.</p>
<p><b>Principle 14: Remuneration governance</b> The governing body should ensure that the organisation remunerates fairly, responsibly and transparently so as to promote the achievement of strategic objectives and positive outcomes in the short, medium and long term</p>	<p>We have an approved remuneration philosophy for employees and executives. We are aligning the executive remuneration practice with the Guidelines for the Remuneration and Incentives for State-Owned Companies issued by DPE in February 2018. These guidelines specifically address the remuneration of executive directors, prescribed officers and non-executive directors, and compel Eskom to develop a policy to align its executive remuneration practice with the Guidelines.</p> <p>This will improve governance and ensure that remuneration is fair, responsible and transparent, and that it balances performance measures with value creation.</p> <p>Information on executive remuneration is set out under "Our governance – Executive remuneration and benefits on pages 54 to 58, while remuneration of staff is covered under "Our people – Remuneration and benefits" on pages 112 to 113.</p>



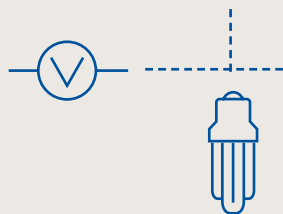
King IV™ principle	Governance context
<p><b>Principle 15: Assurance</b> The governing body should ensure that assurance services and functions enable an effective control environment, and that these support the integrity of information for internal decision-making and of the organisation's external reports</p>	<p>The Audit and Risk Committee (ARC) provides independent oversight of the effectiveness of the organisation's assurance functions and services, with particular focus on combined assurance arrangements, including external assurance service providers, internal audit, risk management and the finance function.</p> <p>Under its terms of reference, ARC is responsible for providing independent oversight of the integrity of the annual financial statements and disclosure of sustainability issues in the integrated report, to ensure that they are reliable and in line with the financial information.</p> <p>ARC's conclusions on the matters above are set out in their report in the annual financial statements.</p> <p>Furthermore, the Senior General Manager, Assurance and Forensics has concluded that Eskom's systems of internal control and risk management are considered adequate, based on a review of our systems of internal control and risk management, including the design, implementation and effectiveness of internal financial controls through a formal documented process during the year ended 31 March 2018. His conclusion also considers information and explanations provided by management, and discussions with the external auditors on the results of the external audit.</p>
<p><b>Principle 16: Stakeholders</b> In the execution of its governance roles and responsibilities, the governing body should adopt a stakeholder-inclusive approach that balances the needs, interests and expectations of material stakeholders in the best interests of the organisation over time</p>	<p>We are committed to an inclusive stakeholder approach, and acknowledge our obligation for the execution of stakeholder relationship management. Underscoring our stakeholder management and value creation is our commitment to maintaining the highest level of integrity, accountability and responsiveness to stakeholders.</p> <p>Engaging with stakeholders in a structured and well-managed way enables the proactive cultivation of relationships that can serve as a valuable resource during challenging times. Collaboration and regular interaction with all stakeholder groups is essential to our long-term resilience and to build trusting relationships.</p> <p>A report on stakeholder engagement is submitted to Exco and the Board for oversight, and informs members of challenges that could impact on Eskom's licence to operate.</p> <p>Our interaction with stakeholders is discussed under "Stakeholder engagement and material matters – Our interaction with stakeholders" on pages 36 to 37.</p> <p>Our interaction with customers is set out in "Our role in communities – Customer service performance" on page 118 and our reputation is discussed in "Our role in communities – Our reputation" on page 119.</p>



The Board acknowledges that not all the principles contained in King IV™ have yet been implemented effectively, and that the recent lapses in governance are of grave concern to the shareholder, investors and the public alike. Appointing ethical leadership and building a culture of compliance are important enablers to ensure that our governance is restored to credible levels. Several steps have been taken to improve governance. The appointment of a new Eskom Board in January 2018 has already improved our credibility with external organisations. A permanent Group Chief Executive was announced in May 2018, with the appointment of a permanent Chief Financial Officer (CFO) expected soon.

The Board, through its subcommittees, is committed to driving an overall improvement in governance and ethics, and effective implementation of King IV™ during the coming year.





**MR JABU MABUZA (60)**  
Chairman  
Effective Leadership Program (Pennsylvania University)  
Executive Development Program (University of California)

C



**DR ROD CROMPTON (65)**  
Independent non-executive director  
BA Hons (University of Natal)  
PhD Humanities (University of Natal)

●



**MR SIFISO DABENGWA (59)**  
Independent non-executive director  
B Sc Engineering (University of Zimbabwe)  
Executive Program (University of Michigan)

●



**MR MARK LAMBERTI (67)**  
Independent non-executive director  
B Com (Unisa)  
Presidents Program in Leadership (Harvard)

C



**MS SINDI MABASO-KOYANA (48)**  
Independent non-executive director  
B Com (University of KwaZulu-Natal)  
Chartered Accountant (SA)  
Diploma in Introduction to Mining (University of Witwatersrand)

C



**MS NELISIWE MAGUBANE (52)**  
Independent non-executive director  
B Sc Electrical Engineering – Heavy Current (University of Natal)  
Postgraduate Diploma in Business Administration (University of West London)

●



**PROF. MALEGAPURU MAKGOBA (65)**  
Independent non-executive director  
MB ChB (University of Natal)  
DPhil (University of Oxford)  
Fellowship of the Royal College of Physicians of London

C

●



**DR BANOTHILE MAKHUBELA (33)**  
Independent non-executive director  
M Sc (University of Cape Town)  
PhD (University of Cape Town)

●



**MS BUSISIWE MAVUSO (39)**  
Independent non-executive director  
B Compt (Unisa)  
Master of Business Leadership (Unisa)  
Association of Chartered Certified Accountants (ACCA)

●

●



**MS JACKY MOLISANE (43)**  
Non-executive director  
BA Hons Economics (Unisa)  
Diploma in Financial Markets and Instruments (Academy of Financial Markets)

●



**DR PULANE MOLOKWANE (41)**  
Independent non-executive director  
Postgraduate Diploma in Applied Radiation Science and Technology (University of North West)  
M Sc (University of North West)  
PhD (University of Pretoria)

C



**PROF. TSHEPO MONGALO (44)**  
Independent non-executive director  
LLM Commercial Law (University of Cambridge)  
PhD Commercial Law (University of Cape Town)

●

●



**MR GEORGE SEBELELA (47)**  
Independent non-executive director  
BA (Com) (University of Fort Hare)  
Advanced Management Program (INSEAD)

●

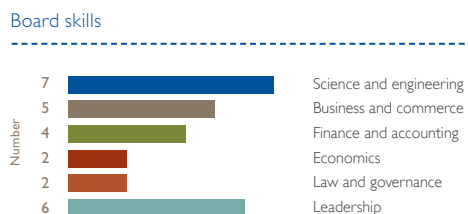


**MR PHAKAMANI HADEBE (51)**  
Interim Group Chief Executive  
MA Economics (University of Durban-Westville)  
MA Rural Development (Sussex University)



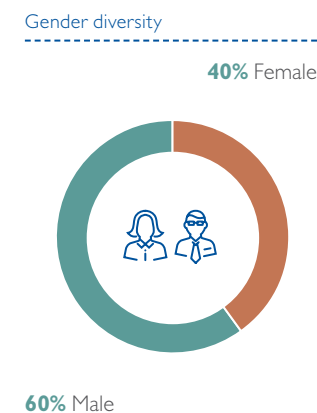
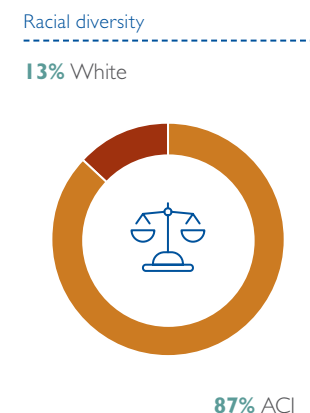
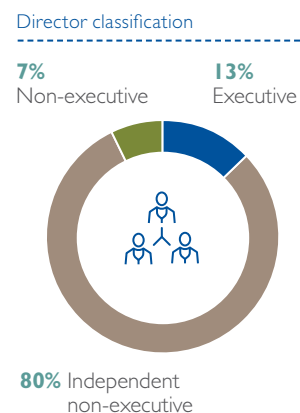
**MR CALIB CASSIM (46)**  
Acting Chief Financial Officer  
B Accounting Sciences (Unisa)  
Chartered Accountant (SA)  
Master of Business Leadership (Unisa)

- Membership of Board committees**
- Audit and Risk Committee
  - Investment and Finance Committee
  - People and Governance Committee
  - Social, Ethics and Sustainability Committee
  - Board Tender Committee
  - C Denotes chairmanship of a committee



**2 CAs**  
on the Board

Qualifications listed above are not exhaustive. Refer to pages 134 to 135 for full details of directors' qualifications and active directorships



Ages are shown at 31 March 2018.  
Mr Phakamani Hadebe was appointed permanently, effective 1 June 2018.  
Mr Mark Lamberti resigned as director on 6 April 2018.

# EXECUTIVE MANAGEMENT COMMITTEE

at 31 March 2018



**MR PHAKAMANI HADEBE (51)**  
**Interim Group Chief Executive**  
 Appointed to Exco in January 2018  
 <1 year in Eskom  
 MA Economics (University of Durban-Westville)  
 MA Rural Development (Sussex University)



**MR CALIB CASSIM (46)**  
**Acting Chief Financial Officer**  
 Appointed to Exco in July 2017  
 16 years in Eskom  
 B Accounting Sciences (Unisa)  
 Chartered Accountant (SA)  
 Master of Business Leadership (Unisa)



**MR THAVA GOVENDER (50)**  
**Group Executive: Generation**  
**Acting Group Executive: Risk and Sustainability**  
 Appointed to Exco in September 2010  
 27 years in Eskom  
 B Sc Hons Energy Studies – Nuclear and Fossil (Rand Afrikaans University)  
 Advanced Management Program (Harvard Business School)



**MR WILLY MAJOLA (52)**  
**Acting Group Executive: Transmission**  
 Appointed to Exco in January 2017  
 24 years in Eskom  
 B Sc Engineering (University of Witwatersrand)  
 Registered Professional Engineer (ECSA)



**MS AYANDA NOAH (51)**  
**Group Executive: Customer Services**  
 Appointed to Exco in June 2007  
 26 years in Eskom  
 B Sc Electrical Engineering (University of Cape Town)  
 Advanced Management Program (Harvard Business School)



**MR MONGEZI NTSOKOLO (57)**  
**Group Executive: Distribution**  
 Appointed to Exco in October 2003  
 27 years in Eskom  
 B Sc Electrical Engineering (University of Witwatersrand)  
 Executive Development Program (City University of New York)



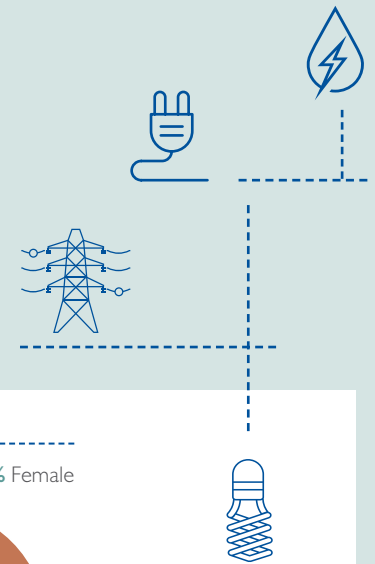
**MS ELSIE PULE (50)**  
**Group Executive: Human Resources**  
 Appointed to Exco in November 2014  
 24 years in Eskom  
 BA Hons Psychology (University of Pretoria)  
 M Sc Business Engineering (Warwick University)



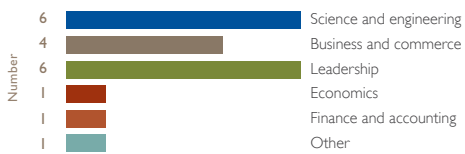
**MR KOBUS STEYN (55)**  
**Acting Group Executive: Group Capital**  
 Appointed to Exco in January 2018  
 32 years in Eskom  
 B Eng (University of Pretoria)  
 Master of Business Leadership (Unisa)



**MS NONDUMISO ZIBI (42)**  
**Acting Chief Information Officer**  
 Appointed to Exco in January 2018  
 18 years in Eskom  
 B Tech Engineering (Durban University of Technology)  
 Master of Business Leadership (Unisa)

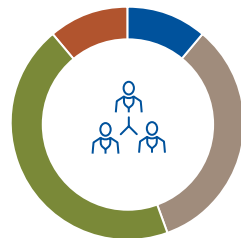


## Exco skills



## Years service

█ >30 years    █ <1 year



4 21-30 years    3 11-20 years

## Racial diversity

█ 11% White



89% ACI

## Gender diversity

█ 33% Female



67% Male



Qualifications listed above are not exhaustive. Refer to page 136 for full details of Exco members' qualifications and active directorships

Ages are shown at 31 March 2018.  
 Mr Phakamani Hadebe was appointed permanently, effective 1 June 2018.  
 Mr Abram Masango was suspended at 31 March 2018, and is not shown above.

We need to consider the macroeconomic climate and utility sector context in which we operate, as these directly influence our strategy, also posing a number of risks to which we need to respond. Despite the challenges, opportunities exist which we can capitalise on to strengthen and grow the organisation.

Utilities around the world are all being affected by unprecedented levels of change. The change spans technological, social, political and environmental areas, thereby impacting the entire value chain. Market and customer needs and choices are also shifting, as the way in which electricity is produced, transmitted, stored and used is evolving. This means that business models, related policy frameworks, as well as market structures and rules need to adapt.

We are undertaking the largest capital investment programme in the country and the continent, to ensure adequate electricity capacity for growth and replacement of existing capacity nearing the end of its useful life. This is done in an environment characterised by low economic growth, sub-optimal tariff allocations and a DoE policy requirement to sign long-term power purchase agreements (PPAs) with IPPs. This has detracted from Eskom pursuing cost-reflective tariffs.

**External factors affecting our strategy**

Several market and demand trends have reshaped the global energy sector landscape over the past few years, with disruptive technologies having an impact on the market as a whole. South Africa and Eskom will not escape the changes – it is clear that we need to prepare to operate in a world in which traditional utility business models will come under pressure, and in which we will need to evolve our business model to continue to meet client needs.

-  **Macroeconomic climate**
-  **Market trends**
-  **Demand outlook**
-  **Supply outlook**
-  **Policy and regulatory environment**

Key to fulfilling our mandate is the challenge of effectively and efficiently balancing supply with demand, by ensuring that the power system is stable at 50Hz.

**Macroeconomic climate**

The global upswing in economic activity is gaining momentum, with global growth projected to rise to 3.7% in both 2018 and 2019, although growth in many developing countries remains weak. Despite inflation being under control in most advanced economies, developing nations still experience higher inflation. Commodity exporters such as South Africa can expect rising demand for their products, although with fierce competition. As a result, electricity consumption could increase in industries that benefit from the global commodity price upswing; Eskom should position itself to stimulate and capitalise on increased demand. However, the commodity upswing could also pose a serious risk to Eskom, as countries like India and China import low-quality coal from South Africa, typically used by Eskom, and they are prepared to pay in excess of current market rates.

The slowdown in the growth of economies in sub-Saharan Africa is easing, although the lack of integrated infrastructure across the region constrains the potential for growth. Furthermore, rising public debt could impede infrastructure development in the region, limiting the amount of electricity we are able to export.

South Africa's economy is forecast to grow by approximately 2.5% year-on-year. However, growth is projected to remain subdued, despite more favourable commodity export prices and strong agricultural production, as investors await positive results from the recent changes in political leadership.

Lower than expected growth will have a negative impact on electricity demand.

The gross national debt is anticipated to increase to R3.4 trillion or 60% of gross domestic product (GDP) by 2020, as Government is forced to borrow to fund policy implementation. This trend, coupled with recent ratings downgrades and the view by ratings agencies that SOCs are a risk to the Sovereign, could negatively impact our ability to secure funds backed by Government guarantees.

**Market trends**

As part of our strategy design process, we have to consider trends in the broader power, manufacturing and mining industry. Globally, the last five years have been challenging for traditional power utilities, which have suffered significant declines in market share and profitability, often leading to the so-called "utility death spiral" scenario.

**The utility death spiral**

Traditional utility business models around the world are under threat due to a number of transformational changes and energy disrupters. As new technology allows self-generation to become increasingly price competitive for the consumer, a utility's sales decline. The utility, having invested in long-term assets with a large proportion of fixed operational costs, requires an ever-increasing tariff to generate the required revenue from declining sales. These price increases add to customers' incentive to move off-grid, further decreasing the customer base.

Renewable electricity production and technologies have grown rapidly in recent years. This has resulted in greater competition for electricity supply, increased client choice and changing consumption patterns from grid-based services. Utilities need to understand client preferences in order to retain clients and survive.

A collaborative effort with Government, industry players, clients and interest groups is crucial to ensure that the consumer and the economy are not disadvantaged by paying for stranded assets.

**Demand outlook**

The rapid evolution of technology developments in the sector, exacerbated by electricity shortages and above-inflation price increases that have manifested over the last decade, coupled with climate shifts to more moderate winters, have culminated in a declining sales trend. In South Africa, power consumption has declined by about 0.5% a year on average since 2006. The decline was highest in large power users due to a wide range of factors, including low economic growth, commodity market volatility – particularly in gold, platinum and ferrochrome – and increasing electricity costs, which have had an impact on the ability of our clients to maintain their electricity consumption or to grow their demand. Nevertheless, with a few commodities experiencing improved prices over the last year, opportunities still exist to collaborate with the mining sector to capitalise on the current global commodity upturn.

The National Development Plan (NDP) sets the direction for economic growth, which will be hampered without sustainable and sufficient electricity capacity. We are chiefly responsible for enabling GDP growth as the base-load electricity supplier in the market.

Higher expected future demand requires increased capacity, and we continue to commission new capacity at Medupi and Kusile Power Stations to ensure that the country's future energy needs are met.

GDP growth and Eskom's sales growth have generally trended negatively over the past three years, with the outlook remaining relatively neutral in the years ahead. Electricity sales growth could be flat over the next few years, although we are pursuing options to increase sales by slightly more than 1% per year over the medium term.

At a regional level, while cross-border sales growth increased during the prior financial year, attributed largely to the drought in sub-Saharan Africa, the drought seems to have ended, and hydroelectric plant in the region is returning to optimal capacity, negating the need for higher electricity imports by neighbouring countries. Nonetheless, our intent is still to rigorously pursue demand growth, especially in the region.

**Supply outlook**

Given the market trends and demand outlook, we need to match capacity requirements with production and sales. Whilst we are delivering on the new build programme, with another 7GW to be delivered over the next three to five years, IPPs are also expected to increase capacity, from 4GW to 6GW. Our internal operating surplus capacity situation is worsened as we are required to sign contracts with IPPs on a take-or-pay basis, while we are in a position where we are experiencing an operating surplus at times. However, peak network demand is only anticipated to grow by about 2GW over the same timeframe. Our energy contribution to the grid is expected to decrease from about 91% to just over 88% over the next five years, largely due to the displacement resulting from capacity growth from IPPs.

As plant availability and capacity increases, the energy utilisation factor (EUF) of generation plant, which reached 93% in recent years, decreases. Based on the current sales forecast, combined with displacement of capacity from IPPs, EUF from coal-fired plant is anticipated to reduce to 68% in the next five years. This means that we are likely to be left with stranded assets which cannot be optimally utilised. A long-term strategy is required to deal with the operating surplus capacity, while minimising the impact on our workforce, suppliers and the community at large.

The timing of these strategic decisions is of paramount importance, as premature closure and decommissioning of stations could lead to a shortage of capacity.





The commissioning of IPP capacity will further constrain the optimal deployment of our plant, which has a marginal cost of production much lower than the incremental cost of IPPs; this is contrary to NERSA's requirement of using the least-cost merit order of dispatching plant. Furthermore, the timing of renewable energy supply is not always matched to demand, and storage solutions are not yet available on the grid. Therefore, we will need to ensure that we have capacity available to dispatch at short notice to ensure system stability and to meet demand requirements. This has to be achieved within an environment of lower than required tariffs and liquidity constraints that threaten to negatively affect our going concern status.

We further have to ensure that there is sufficient backup capacity available to cater for the unpredictable behaviour of renewable technologies such as wind, or that we have alternative strategies available to ensure balancing of the system, such as the ability to interrupt customers at short notice through demand response initiatives. We also have to strengthen the transmission and distribution networks to allow for network access by IPPs. Additionally, IPPs may be situated in areas of low demand, and our network has to be capable of evacuating the power from these IPPs and transporting it to areas of higher demand.

**All of this comes at a cost.**

The declining long-term EUF and slow increase in capacity in a slow-growing economic environment present significant challenges. Our goal to increase the efficiency of our fleet and optimise the least-cost dispatch of plant has resulted in reduced usage of older and less efficient stations. The fate of these older, less efficient stations is being addressed during the strategy review.

**Policy and regulatory environment**

Decisions about what or when to build new capacity are not up to Eskom. Policy decisions around new capacity, energy mix – such as lower carbon-emitting energy sources – and the types of technologies to be deployed are set out in DoE's IRP, which also provides Eskom an allocation, as well as specifying the capacity to be catered for by IPPs.

Current investment decisions are based on the 2010 version of the IRP, which assumes far higher demand and materially different technology costs than is currently the case.

Therefore, although we are aware of the shifts in the electricity industry and emerging technology disrupters, we cannot respond until instructed to do so by DoE.

The IRP should have been updated in 2013, but did not materialise. Another update was proposed in 2016, but this has not yet been approved, although it was expected to have been done during the past year. Not only does the IRP affect future new build decisions, but also decisions which impact generation plant life extension or closure. In order for Eskom to plan properly and be adequately prepared for the long-term challenges in the electricity industry, it is critical that the updated IRP be approved as soon as possible.



Finalisation of the IRP would restore policy certainty in the electricity sector. The signing of 27 renewable energy IPP agreements in April 2018 is seen as an indication of Government's resolve to deliver the certainty required by investors.

DoE recently indicated that the updated IRP is undergoing a final set of processes and consultations, as stipulated by Cabinet in December 2017, before being published in the Government Gazette.

The MYPD 3 period from 1 April 2013 to 31 March 2018 has now concluded. NERSA granted an 8% standard tariff average price increase for the five years, resulting in a revenue shortfall of R225 billion over the period. In response, we had to undertake various initiatives to contain costs, such as the Business Productivity Programme (BPP), prioritisation of capital expenditure and the Design-to-Cost strategy introduced a few years ago. Despite these efforts, the average standard tariff price increases have not enabled a migration towards cost-reflective tariffs as envisaged in the Electricity Pricing Policy, which gives broad guidelines to NERSA on approving prices and tariffs for the electricity supply industry.

Cost containment initiatives alone will not restore Eskom's financial sustainability, and therefore the price of electricity must migrate to cost reflectivity over time.



**Internal factors to be considered**

A number of internal factors also affect how we do business. These include:

- Governance challenges and the negative impact on our reputation
- Challenges in our procurement processes, as evidenced by the prior year audit qualification related to reporting on the completeness of irregular expenditure
- The unsustainable gap between our allowed revenue and committed costs, coupled with varying levels of success on cost savings initiatives introduced in recent years
- Escalating municipal and Soweto arrear debt
- Significant debt funding required for our new build programme
- The cost of debt funding can only be recovered over the life of plant of more than 30 years, although it has to be repaid over an average of about eight years
- Numerous credit ratings downgrades, which affect our ability to secure or draw down on funding
- Difficulty attaining economic and workforce transformation targets given conflicting priorities and cost constraints

These challenges will be discussed in more detail in the relevant sections of the report.

**Strengths, weaknesses, opportunities and threats**

To ensure successful implementation of our strategy, we need to leverage strengths and address weaknesses, so that we can capitalise on opportunities to support the achievement of our objectives. In addition, we need to create contingency plans to cater for threats which could derail our strategies.

Eskom's strengths in terms of market position and experience mean that we are capable of confronting the challenges presented by our current circumstances. We have a wealth of experience with an excellent pool of resources to tackle the task at hand, with a strong ethos of individual training and personal development. However, we have not fully exploited our bargaining position in terms of spend in order to reduce costs. An inflexible asset base, which is hard-pressed to deal with changing demand and a declining market, poses further challenges. Furthermore, we have been plagued by issues of leadership, governance and purported corruption.

However, our networks within South Africa and the SAPP, along with the growth of new technologies such as battery storage, provide opportunities to expand the business and improve our financial position. These can be explored, as long we pay attention to the threats posed by declining sales, deterioration of our credit rating, and misaligned policy and regulatory environments, which restrict us from fully meeting the objectives set by our shareholder.

## STRATEGY AND OUTLOOK

### Strategic context

We face numerous challenges along the path to achieving our goals, as set out in the DPE Strategic Intent Statement (SIS). However, we are not alone – as discussed earlier, traditional utility business models around the world are under threat due to a number of transformational changes and energy industry disrupters. Driven by the SIS objectives, we will continue to focus on our mandate, while also focusing on remaining relevant in a changing energy landscape.

To achieve our mandate, we need to balance three roles: supporting socio-economic improvements, ensuring regulatory compliance and maintaining commercial viability.

As a major employer in the economy, our actions have an impact on the wider community, therefore any decisions must be made with this in mind. Added to this is the safety of our workforce, the community and our assets. We are committed to upholding our value of Zero Harm at all times. In order to continue delivering on our mandate, we need to remain commercially viable and financially and operationally sustainable.

### Strategy overview

In recent years, we embarked on the Design-to-Cost strategy, which entailed short-term initiatives to respond to our financial sustainability challenges. Our key strategic objectives were to:

- Enable growth and transformation in South Africa and SADC
- Lay the foundation for the Eskom of tomorrow
- Achieve an investment-grade credit rating, by reducing Government guarantees by R105 billion, while maintaining a moderate electricity price path over time

Given recent challenges, we have refined our strategy to respond appropriately. We aim to clean up governance issues, stop the bleeding and re-energise the business in order to set a firm foundation for growth. At the same time, we will continue implementing cost savings initiatives, while focusing on strengthening our financial position through demand stimulation, cost containment and efficiencies, while striving to achieve a cost-reflective price of electricity.

This is all aimed at improving liquidity over the next two years, as well as improving the EBITDA margin to above 35%. Our goal remains achieving a standalone investment-grade credit rating within the next five to seven years by reducing our reliance on debt financing.

This is in response to recent credit ratings downgrades and various governance issues which have constrained access to funding, requiring clear trade-offs on capital and operating expenditure.

To do this, the strategy is divided into immediate focus areas, the current business and the future business. The framework for this strategy (as shown in the exhibit alongside) promotes stabilisation, re-energisation and growth of the business going forward, and links strategic objectives, initiatives and timelines for execution.

Our strategy remains aligned to the key areas set out in DPE's Strategic Intent Statement, which are also aligned to the six capitals, namely:

- Providing reliable and predictable electricity in line with regulatory methodology, while striving for cost containment and improved operational efficiencies
- Ensuring and maintaining a financially viable and sustainable company
- Reducing Eskom's impact on the environment through identifying, implementing or supporting options for low carbon-emitting generation and transportation opportunities
- Consolidating our socio-economic contribution to ensure alignment to national transformation imperatives to unlock growth, drive industrialisation, create employment and support skills development

### Immediate focus: Clean up, stop the bleeding and stabilise the business

Firstly, a comprehensive clean-up has been initiated. This includes the correction of previous audit findings, implementation of a renewed focus on ethics and governance, and ensuring sufficient liquidity. Once attained, these actions will be maintained as they provide a solid foundation on which to build.

Secondly, a "stop-the-bleeding" phase has been introduced to stabilise the business. This phase will focus on disciplined execution of the following priorities set in the prior year:

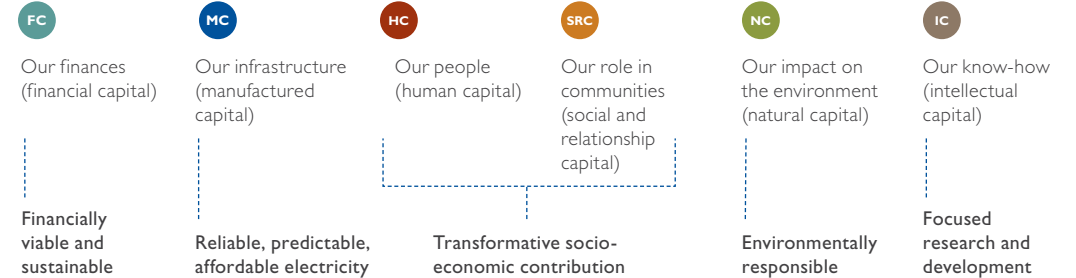
- Growing local and exports sales
- Improving primary energy cost efficiencies
- Driving workforce optimisation
- Implementing advanced analytics
- Optimising capital spend while completing the new build programme

## ESKOM MANDATE

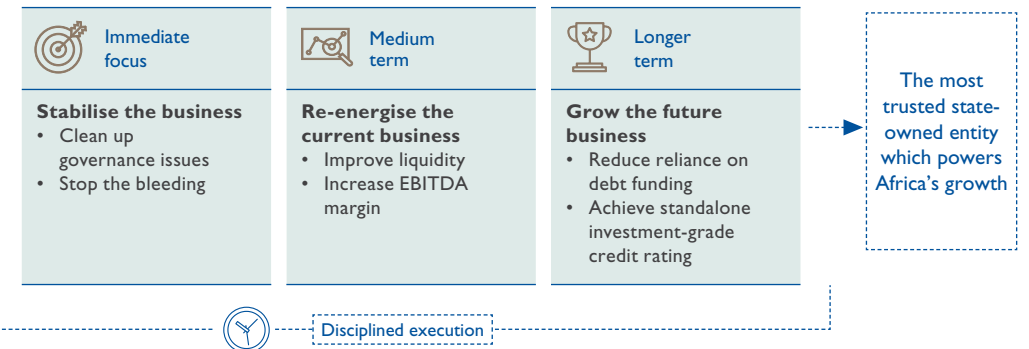
To provide electricity in an efficient and sustainable manner, including its generation, transmission, distribution and retail. We also have a developmental role and will promote transformation, economic development and broad-based black economic empowerment.



## STRATEGIC OBJECTIVES



## IMPLEMENTATION TIMELINE



## BUSINESS PRIORITIES



## STRATEGY AND OUTLOOK

continued

Cost efficiencies will be focused mainly on optimisation of coal, human resources and capital spend. These make up the majority of Eskom's cost base, so provide the greatest opportunity for efficiency improvements. In addition, we will focus on other cost-saving initiatives such as reducing municipal debt, proper contract management to avoid penalties and cost overruns, as well as the completion of adequate maintenance to enable efficient servicing of demand.

**We require greater emphasis on disciplined execution and achievement of targets within prudent budgets and agreed timelines. Tracking and reporting will be key elements contributing to the success of initiatives.**

### Re-energise the current business

Thirdly, the re-energise phase will be implemented. This includes a focus on improving staff productivity and financial ratios, ensuring environmental compliance and selling non-core assets. This phase is focused on continuing to do what we do, well.

We will drive operational excellence and reliability efforts across our generation fleet and network through a combination of effective maintenance, performance improvements and management. The new build programme will remain a core focus area – efforts will continue to complete Medupi and Kusile within revised schedules and approved costs.

Further savings of more than R50 billion on coal spend compared to the previous Corporate Plan are targeted, and our capital portfolio has been limited to a maximum level of R45 billion per year for at least the next three years, in support of our intent to move towards investment-grade ratios.

We will prioritise grid connections to provide new clients with access to electricity, while radically improving client experience across key touch points will be paramount. We will also strive to improve recovery of revenue from non-paying clients through effective credit management, and where necessary, through stakeholder engagement.

Due to the operational capacity outlook expected over the next five years and assuming plant availability of 80%, the production plan requires three of the more expensive stations to be placed in cold reserve or extended cold reserve, with possible closure as a last resort. We will drive this process in a way that optimises coal, people and capital costs across the fleet, and minimises negative environmental and socio-economic impacts. We may be faced with some difficult and unpalatable decisions in the future.

**We must ensure that the company structure is responsive to the changing energy landscape, including scenario-based planning based on price elasticity and demand elasticity for different client groups. Recommendations arising from the review of Eskom's operating model will be implemented in the coming year.**

### Grow the future business

Lastly, the growth phase will be introduced through initiatives to support our priorities and sow the seeds for the Eskom of tomorrow, to set us on a path to becoming a market-centric, technologically excellent and energy-related service company with diversified revenue streams by 2035.

To establish the business over the medium to longer term and prepare for the future, a transition to a diversified portfolio of products and services is imperative. We plan to drive new products into new and existing markets – this will be managed through a set of targets matched to our risk appetite, building on our core competencies.

In parallel, we are developing a new ambition for 2035, with a focus on implementation and disciplined execution of actions. This new strategy, which is expected to be finalised by September 2018, will focus on making Eskom the most trusted state-owned entity which powers Africa's growth. As the strategy unfolds during the coming year, we will start implementing the outcomes.

**By 2035 Eskom will be a market centric, technologically excellent, energy and related services company with a diversified revenue portfolio focusing on South Africa and the rest of Africa.**

### Executing the strategy

In the prior year, we indicated that we would focus on five critical targets over the next five years:

1. Stimulating industrial production in South Africa and SADC by achieving average annual growth of 2.1% in local demand and 8% in cross-border demand over the medium term
2. Transforming the South African coal sector by reducing primary energy spend by R43 billion over the next five years, through greater efficiencies and industry restructuring to ensure sustainability of the coal sector
3. Optimising planned capex spend by R25 billion over the next five years, while meeting regulatory and licensing requirements
4. Establishing world-class capabilities in digital and advanced analytics to deliver R6 billion improvement in EBITDA
5. Reducing the burden on the fiscus by releasing R105 billion in Government guarantees, while maintaining a moderate price path over time

Growth and innovation performance is below the target set due to lower local and international electricity demand. The decline in local sales is related to lacklustre economic conditions, while international sales have been affected by the change in drought conditions as well as increased competition in regional supply. We have been engaging with NERSA in pursuit of a short-term pricing framework to enable incentivising additional sales. Further efforts are also being made to accelerate client connections.

Primary energy cash savings exceeded the target due to lower than expected volumes, even though the price was marginally higher than target on short- and medium-term contracts. Even so, the average increase in the purchase cost per ton was contained to 3.8% for the year. Recovery plans are being put in place to improve productivity at cost-plus mines, together with continued efforts to drive least-cost dispatch of stations and optimise coal logistics.

Capital savings for the year exceeded R10 billion. Most of the savings were achieved through project deferrals and some level of optimisation. We will continue to prioritise capex spend in line with our mandate. Workforce optimisation met target, although headcount reduction and overtime management remain areas of concern.

Advanced analytics, an area new to Eskom, identified initiatives worth potential savings of R2.3 billion, although initiatives are in the very early stages.

Due to the funding and liquidity challenges experienced over the past year, we have not yet been able to release any Government guarantees. It is not foreseen that we will be able to do so in the foreseeable future.

An analysis of risks has consistently found that the majority of risks will have an adverse impact on the growth and innovation and capital optimisation objectives. The ultimate consequence will be on Eskom's financial and operational sustainability, with impacts felt across the entire Eskom value chain.

### Outlook

A number of issues have the potential to derail our strategy. Our assumptions during the planning process are set out below.

Issue	Strategic assumption
Structure of the industry and Eskom's role	The current structure of the electricity supply industry will remain unchanged over the medium term
Electricity price path	Eskom's price for electricity is not yet at a stage where it recovers efficient and prudent costs. This has been further exacerbated by sub-inflation increases for the past two years. The business will develop contingencies to respond to lower than requested tariff increases. More stringent levers including structural changes may be required
Eskom's role in further new build	New build options will be allocated to Eskom in future by means of the revised IRP
Ability to fund all new investments and successfully market in Africa	Partnerships and private sector participation will be increasingly pursued
Impact of self-generation technologies on customer retention	Electricity sales are projected to increase by around 1% per year. Eskom will respond to declining sales due to emerging technologies through the marketing strategy
Level of reliance on imports	Imports will not exceed 15% of total capacity
Cost containment initiatives	Costs have been reduced across the company, including restricting the increase in primary energy costs, with all cost elements being targeted to increase by no more than CPI on an annual basis. Cost increases beyond those assumed will further exacerbate financial pressures
Ability of our fleet to operate in order to balance the system	As the proportion of non-dispatchable capacity on the system increases, dispatchable capacity will need to be more flexible, and more mid-merit plant will be required
Ability to negotiate a carbon budget to suit our fleet composition and electricity output required	Eskom will renegotiate its next five-year carbon budget in 2019, for the cycle to 2025. After 2020, non-compliance with the budget will result in penalties
Ability to comply with existing environmental commitments and the impact on our licence to operate	The Department of Environmental Affairs (DEA) will consider postponement of the requirement to meet minimum emission standards, five years at a time, at which time we will request further postponements. The requirement to install flue gas desulphurisation (FGD) on older plant will be extended beyond 2025, due to the exorbitant cost involved, as long as we comply with existing commitments
Extent of municipal arrear debt	Municipal arrear debt has increased at an alarming rate over the last three years. It is assumed that municipal arrear debt will continue to increase due to poor cash flow positions of municipalities. Eskom will engage relevant parties to have appropriate policies and legislation revised in order to recover amounts due

# STAKEHOLDER ENGAGEMENT AND MATERIAL MATTERS

Stakeholder engagement is an enabler of our strategy and therefore a high priority, as our reputation depends on and is influenced by stakeholder perceptions, which in return affect our performance. The Board has delegated the management of stakeholder relationships to Exco, with oversight by the Social, Ethics and Sustainability Committee (SESC).

Stakeholder inclusivity requires ongoing conversations in order to understand and adequately respond to stakeholder needs, interests and expectations. Responsible lobbying and shareholder activism form an important part of stakeholder engagement. Our engagements with stakeholders are carefully planned in terms of scope and the engagement approach, with clear expectations of the intended outcome of the interaction.

### Our interaction with stakeholders

We require effective stakeholder management to enable the successful execution of our strategy, and support our ability to create value. We also need to educate stakeholders on the challenges and conflicting priorities we face, and the trade-offs required to respond effectively to those challenges.

### Our stakeholder engagement strategy

Our stakeholder engagement strategy sets the context for future engagements, to ensure that we improve relationships by increasing both the quality and quantity of conversations. Our stakeholder engagement strategy is aimed at a better understanding of the vision and values of our stakeholder groups, which ultimately support the achievement of our objectives.

**Eskom is mandated to support South Africa's growth and developmental aspirations, with a significant role in the country's socio-economic development. Continued validity of our social licence to operate relies heavily on our willingness to be inclusive in decisions that impact on sustainability.**

Our stakeholder engagement objectives are as follows:

- Identify, influence and educate key stakeholders on our strategic priorities
- Involve and engage key stakeholders as an opportunity to improve our position within and contribute to society, by pursuing and reporting our achievements
- Provide leadership with timely and relevant information, allowing them to understand societal and stakeholder expectations and relationship dynamics

In support of our strategic goals, the stakeholder engagement approach consists of interactive, two-way engagements and responsive relationships, ensuring transparency and continuous engagement.

### Stakeholder groups

We operate within a complex landscape which involves many different stakeholders with diverging objectives, who are engaged through several engagement channels and touch points. Although Exco assumes ultimate responsibility for the effectiveness of stakeholder engagements, the engagements with different stakeholder groups are the responsibility of various functions within Eskom.

The following graphic provides an overview of our key stakeholder groups; it includes only the most notable stakeholders per area. Stakeholders have been classified as authorisers, influencers, enforcers or partners.



As a state-owned entity, we must implement government policy and strategy. It is therefore important to ensure alignment with the shareholder to facilitate the best possible outcome for the organisation.

### Quality of relationships

Our poor reputation was not caused by a single event, although the downward spiral over the past few years has been constant, brutal and destructive. The decline has been accelerated by the perceived lack of decision-making by our leadership, continuous issues of poor governance and a rapid decline in liquidity and financial sustainability. Regrettably, these issues have remained unresolved for an inordinately long period of time, although we are now taking bold steps to shift our reputation in a positive direction.

Refer to "Our role in communities – Our reputation" on page 119 for more information

**We assure our stakeholders that we remain committed to achieving our mandate and that we will place special focus on strengthening corporate governance and ethics going forward, to restore confidence and stability in the company.**

Exco has and will continue to meet with critical stakeholders, including employees, to share and obtain support for our strategic and operational plans.

### Issues raised by stakeholders

Issues raised by different groups include the following:

Stakeholder group	Issues raised
Government	Performance against the shareholder compact, new build programme, electrification programme, job creation, debt management, governance and leadership issues
Parliament	Governance and leadership issues, municipal debt management, financial sustainability, procurement processes, policy compliance, environmental compliance, performance against the shareholder compact, business continuity planning
NERSA	Revenue increase, credit ratings, contract management, Government guarantees, nuclear programme, tariff increases, cost containment initiatives
Investors	Loan agreements, declining credit ratings, funding plans, cash projections, governance and leadership issues, rising debt, cost containment initiatives, cleaner technology adoption
Customers	Inaccurate accounts, quality and reliability of supply, electricity pricing, customer connections, electrification grants, service levels
Business and industry	Business opportunities, affordable electricity, governance and leadership issues, infrastructure management, improvement of procurement processes, and operational status updates
Employees and organised labour	Job security, employee benefits, perceived lack of consultation and decisiveness, governance and leadership issues, electricity pricing, economic impact, business performance
Suppliers	Governance and leadership issues, financial and operational performance, health and safety, skills development programmes, supplier development and localisation, job creation, progress on the new build programme and workforce demobilisation
Civil society	Responding to climate change, renewable energy and nuclear programmes, cost management, governance and leadership issues, international reputation, perceived financial mismanagement, corruption, innovation projects
International institutions	Renewable energy, collaboration and investment opportunities, skills development programmes, cross-border collaboration opportunities, grid expansion into Africa

### Material matters

A matter is considered material if it influences or is likely to influence the decisions, actions and behaviour of either stakeholders or Eskom, or affect our ability to create value in the short, medium and long term.

### Materiality determination process

On an annual basis, we consider those matters which may influence decision-making or affect our ability to create value; particular attention is given to changes in the strategic and operating environment since the previous review. We consider topics discussed at Board level, risk management outcomes and issues raised by various stakeholder groups through

numerous platforms – these include lenders and investors, key customers, customer surveys, matters raised by the media and in Parliament, and more generally via the Stakeholder Relations Department.

Issues are ranked as being of high, medium, or low materiality by considering the level of impact the issue has or could have on our ability to achieve our strategy and thereby create value, the level of concern to stakeholders and the degree to which we can control and influence the issue. Those deemed to be material matters are covered in detail in our integrated report, while other matters are dealt with using other platforms.

# STAKEHOLDER ENGAGEMENT AND MATERIAL MATTERS

continued

## Current year material matters

The material matters reported in our previous integrated report remain applicable, although the level of importance may have changed. Two matters which have become significantly more prominent are those dealing with governance, leadership and corruption, and liquidity and financial sustainability.

The following have been identified as material matters in this report.

Material matter	Associated strategic risk	Current impact on value creation	Timeframe of impact
<p>HC SRC</p> <p>Poor governance and leadership instability, coupled with possible corruption and the prior year audit qualification on irregular expenditure</p>	<p>Breakdown in relations with recognised organised labour</p> <p>Further deterioration of Eskom's reputation, caused by acts of unethical behaviour by Eskom leadership and senior management, which will impact Eskom on multiple levels</p>	Negative	Short to medium term
<p>FC</p> <p>Liquidity and funding, including credit ratings downgrades</p>	Eskom saturating its borrowing capacity, coupled with credit ratings downgrades	Both positive and negative	Short, medium and long term
<p>FC</p> <p>Lack of policy and regulatory certainty, including the electricity price path and treatment of RCAs, as well as the long-delayed revised IRP</p>	Market rules and long-term industry structure are unclear, coupled with the impact of revised IRP (or no) allocations, which may impact or alter our energy mix and flexibility	Negative	Short, medium and long term
<p>FC</p> <p>Financial sustainability and going concern, considering revenue adequacy and cost containment efforts</p>	Declining levels of long-term profitability due to declining sales or limited ability to implement the growth strategy, inadequate price increases and unsuccessful cost containment initiatives	Negative	Short, medium and long term
<p>FC</p> <p>Declining or stagnant sales (utility death spiral), and pursuing opportunities for growth</p>	<p>Reduced demand for Eskom's electricity, coupled with increasing competition for end users, leading to revenue shortfall</p> <p>Declining levels of long-term profitability due to declining sales or limited ability to implement the growth strategy, inadequate price increases and unsuccessful cost containment initiatives</p>	Negative	Short, medium and long term
<p>FC</p> <p>Escalating municipal and Soweto arrear debt</p>	Unreliable supply or increasing municipal debt driving away customers looking for reliable alternatives, thereby decreasing sales	Negative	Short to medium term
<p>MC</p> <p>Ensuring security of supply through satisfactory plant performance, which would reduce the possibility of load shedding</p>	<p>Reduced demand for Eskom's electricity, coupled with increasing competition for end users, leading to revenue shortfall</p> <p>Unreliable supply or increasing municipal debt driving away customers looking for reliable alternatives, thereby decreasing sales</p>	Positive	Medium to long term
<p>MC</p> <p>Coal and water security to ensure continued availability of power stations</p>	Unreliable supply or increasing municipal debt driving away customers looking for reliable alternatives, thereby decreasing sales	Positive or negative	Short, medium and long term
<p>MC</p> <p>Environmental performance and compliance, including emissions and greenhouse gas reporting</p>	<p>Inability to meet climate change mitigation targets impacting our licence to operate</p> <p>Failure to implement climate change adaptation measures, which could affect plant performance</p>	Positive or negative	Short, medium and long term
<p>MC</p> <p>Climate change, including energy mix and complying with carbon budgets</p>	<p>Inability to meet climate change mitigation targets impacting our licence to operate</p> <p>Failure to implement climate change adaptation measures, which could affect plant performance</p>	Positive or negative	Medium to long term
<p>MC</p> <p>Ensuring adequate skills to execute our strategy and ensure optimal business performance, while transforming the workforce</p>	<p>Breakdown in relations with recognised organised labour</p> <p>Lack of adequate, available and affordable skills</p>	Positive	Medium to long term

Material matter	Associated strategic risk	Current impact on value creation	Timeframe of impact
<p>FC</p> <p>Decommissioning stations or placing units/stations into cold reserve, a problem which is exacerbated by the impact of IPPs. Decommissioning will also affect our workforce, suppliers and the communities in which we operate</p>	<p>Reduced demand for Eskom's electricity, coupled with increasing competition for end users, leading to revenue shortfall</p> <p>Inability to sell in the region in the long term, partly due to an inability to build transmission lines fast enough to support the capacity increase, leading to stranded assets in South Africa and over-investment in transmission assets in the region</p> <p>Breakdown in relations with recognised organised labour</p>	Both positive and negative	Medium to long term
<p>FC</p> <p>Strategy review and turnaround plan</p>	<p>Inability to sell in the region in the long term leading to stranded assets in South Africa and over-investment in transmission assets in the region</p> <p>Breakdown in relations with recognised organised labour</p> <p>Eskom saturating its borrowing capacity, coupled with credit ratings downgrades</p> <p>Declining levels of long-term profitability due to declining sales or limited ability to implement the growth strategy, inadequate price increases and unsuccessful cost containment initiatives</p> <p>Further deterioration of Eskom's reputation, caused by acts of unethical behaviour by Eskom leadership and senior management, which will impact Eskom on multiple levels</p>	Expected to be both positive and negative	Medium to long term



Our strategic risks, which are largely aligned to the material matters, are set out on pages 41 to 42 with the impact and associated timeframe

## Outlook

The past year in the energy sector has been challenging, although there is cause for optimism for future improvement. It is reasonable to assume that the majority of stakeholder groups will participate in conversations to bring new perspectives, business and service delivery models to achieve mutually beneficial outcomes.

We plan to change the stakeholder experience by building stronger, more enduring and trusting relationships with stakeholders. This requires thorough research and planning to set the scene for critical conversations, partly to control elements that pose a threat to our reputation and also to deepen our understanding of material stakeholder issues.

The stakeholder engagement strategy will set the direction for much-needed conversations to resolve issues and create opportunities for cooperative partnerships.



**Enterprise risk management process**

In line with King IV™, the Board has oversight of the management of risks and opportunities in Eskom. The Board has delegated this responsibility to management, through the Risk and Resilience Management Policy and Plan, in support of the organisation achieving its strategic objectives.

Eskom follows both a bottom-up and top-down approach to risk management. Divisions are responsible for identifying and managing business risks, as well as strategic risks allocated to them. Strategic risks are those which are most significant to our ability to achieving our strategic objectives. All risks, including emerging risks, are considered by the Board, through the Audit and Risk Committee (ARC).

Our risk management process has not changed significantly in the past year. We still perform periodic scans of the environment to assess risks, and tailor our response within our risk appetite and tolerance levels. Outcomes are monitored regularly, and our direction adjusted when required. The aim is to have a strategy development function which is integrated and proactive, thereby assisting in adequate strategy execution.

Our approved Risk Appetite and Tolerance Framework sets out the levels of risk that Eskom is willing to tolerate in pursuit of our business objectives; this is governed by the Board through the enterprise risk and resilience function.

The Risk Appetite and Risk Tolerance Framework is aligned to internal risk and resilience management policies, and takes into consideration the principles outlined in King IV™, ISO 31000 on risk management and the COSO internal control framework.

**Strategic risks**

The assessment of strategic risks, which cut across the organisation, is performed by our Enterprise Risk and Resilience Department, and clarified in workshops with Exco and Board, with input from divisions and the involvement of key subject matter experts. Regular environmental scanning monitors changes in our broader operating environment. Strategic risks and associated treatment plans are reviewed regularly, with input from Exco and ARC.

**Business risks**

Line management is responsible for the identification of business risks, which may affect the achievement of divisional business plans. The accountability and responsibility to treat business risks also rests with line management, although Priority I business risks – those with the greatest potential impact on the organisation – are reported to Exco and ARC for oversight. Risk levels are based on a combination of likelihood and consequence criteria; the latter ranges from financial to reputational, safety and environmental outcomes or impacts.

**Disaster risks**

Risks inherent to our operations, that would have a significant consequence should they materialise, are deemed disaster risks. Those are generally managed through our resilience initiatives, given their apparent low likelihood, coupled with the perceived adequacy of the controls.

Priority I disasters are those related to our core operations, which would have a major impact on the country. Priority 2 disasters are external items which could impact our operations, and in so doing, potentially lead to a Priority I disaster. Our identified disaster risks remain as follows:

**Priority 1**

- Nuclear incident
- National blackout
- Severe power system constraint

**Priority 2**

- National industrial action
- Cyber-attack or catastrophic IT system failure
- Solar or geomagnetic storm
- National liquid fuels crisis
- National drought
- Worldwide pandemic of infectious disease
- Terrorism or political instability
- Economic or financial collapse



A national blackout remains a low-likelihood, high-consequence disaster scenario given the various system barriers in place to prevent its occurrence. However, given the severe impact of a national blackout should it occur, and the lack of disaster preparedness for such an incident across the country, risk causes that increase the likelihood of a blackout need to be avoided or rapidly treated should these occur, including implementation of load shedding when required.

The automatic under-frequency system (comprising seven stages of load reduction) is the final defence against a system blackout. The last incident that resulted in the automatic under-frequency system being triggered was on 14 September 2015.

A system blackout differs substantially from manual load shedding as experienced in 2008 and 2015. A blackout is an uncontrolled incident, which could affect the whole of the power system or a part thereof; it could take days to weeks to recover from such an incident. Load shedding is a highly controlled process, with the points at which supply is interrupted being determined by the System Operator.

**Our strategic risks**

Strategic risks are categorised across five dimensions, namely:

- Market and competition, both local and regional
- People
- Finance
- Sustainability
- Governance

The strategic risk landscape continues to be affected by a number of key concerns, namely the continued impact of the NERSA determination on our financial sustainability; credit ratings downgrades; persistent high levels of municipal arrear debt; continued low or declining sales growth; and slow improvement in governance and action with regard to corruption.

Emerging strategic risks include low employee morale due to cost saving initiatives, which may result in a loss of jobs, as well as productivity concerns and skills availability due to staff turnover. Declining levels of required asset management or maintenance, due to capital constraints, are also likely.

In some instances, we are being exposed to risk that exceeds our risk appetite and tolerance levels. Furthermore, our integrated risk analysis raises a concern that we may be moving towards the limit of our strategic risk bearing capacity, and levers used in the past to address strategic risks, pertaining to finance specifically, may no longer be available. For example, Government guarantees for SOCs are beginning to reach their limits, and fiscal constraints make further equity injections highly unlikely. Customers are also beginning to switch to lower cost energy options where feasible, making price increases less effective and in fact, further deepening the utility death spiral referred to earlier.

If the limit of the strategic risk bearing capacity is reached and the risks materialise, but may no longer be treated, it means that explicit trade-offs will have to be made. This will require innovative approaches and will be a key feature of the upcoming strategy review.

Our strategic risks are noted below.

Strategic risk	Associated material matter	Likely impact on value creation	Timeframe of impact
<b>Market and competition</b>			
<p>Reduced demand for Eskom's electricity, coupled with increasing competition for end users, leading to revenue shortfall</p>	<p>Declining or stagnant sales (utility death spiral), and pursuing opportunities for growth</p> <p>Ensuring security of supply through satisfactory plant performance, which would reduce the possibility of load shedding</p> <p>Decommissioning stations or placing units/stations into cold reserve</p>	Negative	Short, medium and long term
<p>Unreliable supply or increasing municipal debt driving away customers looking for reliable alternatives, thereby decreasing sales</p>	<p>Escalating municipal and Soweto arrear debt</p> <p>Ensuring security of supply through satisfactory plant performance, which would reduce the possibility of load shedding</p> <p>Coal and water security to ensure continued availability of power stations</p>	Negative	Short, medium and long term
<p>Inability to sell in the region in the long term, partly due to an inability to build transmission lines fast enough to support the capacity increase, leading to stranded assets in South Africa and over-investment in transmission assets in the region</p>	<p>Decommissioning stations or placing units/stations into cold reserve</p> <p>Strategy review and turnaround plan</p>	Negative	Short, medium and long term
<b>People</b>			
<p>Breakdown in relations with recognised organised labour</p>	<p>Poor governance and leadership instability, coupled with possible corruption and the prior year audit qualification on irregular expenditure</p> <p>Ensuring adequate skills to execute our strategy and ensure optimal business performance, while transforming the workforce</p> <p>Decommissioning stations or placing units/stations into cold reserve</p> <p>Strategy review and turnaround plan</p>	Negative	Short, medium and long term
<p>Lack of adequate, available and affordable skills</p>	<p>Ensuring adequate skills to execute our strategy and ensure optimal business performance, while transforming the workforce</p>	Negative	Medium to long term

# RISKS AND OPPORTUNITIES, ASSURANCE AND CONTROLS

continued

Strategic risk	Associated material matter	Likely impact on value creation	Timeframe of impact
<b>Finance</b>			
<p><b>FC</b> Eskom saturating its borrowing capacity, coupled with credit ratings downgrades</p>	Liquidity and funding, including credit ratings downgrades Strategy review and turnaround plan	Negative	Short, medium and long term
<p><b>FC</b> Declining levels of long-term profitability due to declining sales or limited ability to implement the growth strategy, inadequate price increases and unsuccessful cost containment initiatives</p> <p><b>MC</b></p> <p><b>HC</b></p> <p><b>SRC</b></p>	Financial sustainability and going concern, considering revenue adequacy and cost containment efforts  Declining or stagnant sales (utility death spiral), and pursuing opportunities for growth Strategy review and turnaround plan	Negative	Medium to long term
<b>Sustainability</b>			
<p><b>FC</b> Market rules and long-term industry structure are unclear, coupled with the impact of revised IRP (or no) allocations, which may impact or alter our energy mix and flexibility</p> <p><b>MC</b></p> <p><b>NC</b></p>	Lack of policy and regulatory certainty, including the electricity price path and treatment of RCAs, as well as the long-delayed revised IRP	Most likely negative	Short, medium and long term
<p><b>NC</b> Inability to meet climate change mitigation targets impacting our licence to operate</p> <p><b>SRC</b></p>	Environmental performance and compliance, including emissions and greenhouse gas reporting Climate change, including energy mix and complying with carbon budgets	Negative	Medium to long term
<p><b>MC</b> Failure to implement climate change adaptation measures, which could affect plant performance</p> <p><b>NC</b></p>	Environmental performance and compliance, including emissions and greenhouse gas reporting Climate change, including energy mix and complying with carbon budgets	Negative	Medium to long term
<b>Governance, ethics and fraud</b>			
<p><b>FC</b> Further deterioration of Eskom's reputation, caused by acts of unethical behaviour by Eskom leadership and senior management, which will impact Eskom on multiple levels</p> <p><b>MC</b></p> <p><b>HC</b></p> <p><b>SRC</b></p>	Poor governance and leadership instability, coupled with possible corruption and the prior year audit qualification on irregular expenditure Strategy review and turnaround plan	Negative	Short, medium and long term

Eskom's challenges have not improved over the past five years, but instead have become even more severe. As part of the strategy review being undertaken, some tough decision-making will be required to manage the risks to achieving our current objectives, such as:

- Developing a comprehensive and innovative human resources strategy to reduce staff numbers, as natural attrition will not be adequate
- Possibly closing power stations that are contributing to the high cost base
- Preparing a comprehensive plan to address liquidity challenges apart from borrowing, such as new ways to increase revenue and implementing more extreme measures to assist in debt recovery
- Implementing far-reaching steps to reduce capital and operational expenditure, by reducing waste and addressing corruption
- Reviewing the current operating model

Risks and issues out of Eskom's control, or those that we can only partially influence, will need to be addressed through a national dialogue that includes issues such as the industry structure, the future role of Eskom and the national energy mix.

## Enterprise resilience

Our enterprise resilience programme aims to ensure compliance with the Disaster Management Act, 2002. This is supported by our implementation of the international business continuity management standard, ISO 33201; compliance with key performance areas and enablers in the National Disaster Management Framework; and implementation of the incident command system which is based on a joint initiative between the Federal Emergency Management Agency (FEMA) and South Africa.

Whilst we are addressing our disaster management obligations in terms of the Disaster Management Act, concerns remain about the country-level planning for a major electricity-related incident, such as a national blackout. We have raised this concern formally with the National Disaster Management Centre (NDMC) for the past two years. Whilst legal accountability in terms of the Act rests with DoE, the NDMC has confirmed that, given the scale of a national blackout, it will coordinate this planning through a national technical committee.

We have various disaster management structures in place, which are activated based on the level of response required. When a functional response is required in a given division, our Tactical Command Centre structures are activated, while our strategic Emergency Response Command Centre is activated when the response involves the entire organisation at a national level. When a coordinated response is required across several divisions in a particular province, our Provincial Joint Command Centres (PJCCs) are activated.

**i** On 31 January 2018, a severe storm damaged both Eskom 132kV supplies to Sibanye-Stillwater's Beatrix Mine, leaving 950 miners trapped underground when the mine's emergency backup generators failed.

The Free State PJCC was activated from 1 to 2 February 2018, and the incident was the first of its nature to be managed using the new incident command system on which the team had been trained only two weeks earlier. Through a coordinated response between Eskom and the mine, power was successfully restored and no injuries were sustained. Sibanye-Stillwater's leadership lauded Eskom for its handling of the incident.

Our annual national simulation exercise was successfully executed on 3 October 2017. The scenario simulated was that of a national blackout, triggered by a cyber-attack on Eskom's distribution system. This was a live exercise, and the first time that our new incident command system was tested.

The objectives of the exercise were to assess the efficacy of divisional and provincial blackout plans; assess the integration of divisional, provincial and national planning; assess our emergency response maturity; evaluate the effectiveness of crisis communications; identify enhancements that will support planning for extreme incidents; and compare the observations of this exercise to those of the previous exercise conducted in March 2016. The outcome of the exercise was satisfactory, and lessons learnt are being addressed.

Furthermore, all nine provinces underwent surprise simulation exercises during the past year.

## Identifying and prioritising opportunities for growth

Eskom Enterprises was mandated to establish a Growth Office to expand existing capabilities into new markets. Existing knowledge of nuclear operations, as well as transmission and distribution operations, could be sold as intellectual property. Diversification into new markets with new products is envisaged to be a longer term aspiration, albeit with short-term actions required to enable growth at a later date, particularly where we have existing skills.

In existing markets with existing products, we have to consider new generation investments carefully. Firstly, we have to consider the timing to avoid stranded assets as a result of the utility death spiral and secondly, we should explore smaller, incremental responses to reduce the investment risk. Development of new generation capacity in new markets in the sub-Saharan region is a longer term option that will consider local and regional market dynamics and appropriate technologies.

Revenue growth in existing markets through existing, modified or new products will prioritise disruptive products, such as renewables through rooftop PV, battery storage, electric vehicles and smart technologies. This will allow us to offset lost sales and continue meeting changing client needs. For Eskom to be successful, we will have to approach our entire service and product offering in an agile way so as to reduce risk, while gaining maximum benefits.

During the development of the growth focus, over 250 opportunities for growth and diversification were identified. These include growth into new markets using existing skills and assets of the Eskom group, as well as diversification into the products and industries by leveraging intellectual property development and skills from within the group. For the upcoming period, our predominant focus will be on the following key projects:

- Commercialisation of Eskom's spare fibre optic capacity
- Conversion of Eskom Rotek Industries' transformer maintenance facility into an assembly facility
- Investigation into the viability of a desalination project in Cape Town, following the success of the desalination plant at Koeberg
- Development of a business case for the viability of the manufacturing of pebble bed modular reactor fuel, as well as nuclear consulting
- Supporting the implementation of Eskom's integrated Africa strategy
- Investigation into viable micro- and mini-grid solutions

One of the areas we are targeting is the sale of ash. Promulgation of the revised National Environmental Management: Waste Act, 2008 will relax the conditions on ash being deemed a hazardous material. This will address the challenges experienced in the past to sell ash to stimulate small business, and will thereby enhance our drive to increase localisation opportunities.

## Assurance and controls

ARC is responsible for setting the direction for risk management, internal controls and combined assurance. ARC further sets the direction for Assurance and Forensic (A&F), our internal audit department, through the approval of its annual charter, a risk-based audit plan and a resource plan to ensure that the internal audit function has adequate resources to address the complexity of the risks faced by the organisation. ARC also ensures A&F's independence, as A&F reports functionally to ARC.

## RISKS AND OPPORTUNITIES, ASSURANCE AND CONTROLS

continued

### Systems, policies and procedures

All aspects of our operations – from the construction of a transmission line, the generation of electricity, to the payment of creditors – are supported, controlled and guided by systems, policies and procedures. 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, as well as additional KPIs set out in our Corporate Plan.

We are ISO 9001:2008 certified, although we are in the process of transitioning to ISO 9001:2015, with certification expected during the coming financial year. Furthermore, in specific divisions or business units, we have implemented ISO 14001:2004,

OHSAS 18001:2007, ISO 31000:2009 and AA 1000, 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 both adequate and effective. The combined assurance model provides ARC with an overview of significant risks, as well as the effectiveness of critical controls to treat those risks.

A&F performs assessments on the governance, design, implementation and effectiveness of risk management, as well as 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:

Governance	Risk management	Controls
<p>Eskom's new Board has prioritised cleaning up all governance issues, thereby demonstrating a high ethical standard. With this tone at the top, it is clear that there is a migration towards restoring Eskom's ethical culture and sound governance practices, which should ultimately result in the achievement of an ethical culture, satisfactory performance, effective control and legitimacy, as anticipated by King IV™</p>	<p>A system for identifying, managing and reporting on risk is in place and considered adequate. The majority of divisions are compliant with the risk management process. There is commitment that all divisions will migrate to full compliance</p>	<p>Although internal financial controls are operating effectively, efforts are being made to improve certain operational controls. Control deficiencies have, however, been identified in the compliance environment. Management interventions are under way to bring the organisation to full compliance, with particular reference to PFMA requirements</p>

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

### Governance of technology and information

The Board has delegated its governance oversight and responsibility for technology and information to ARC and Exco respectively. The Group IT business plan, which is aligned to the Corporate Plan, outlines how technology and information will be approached and addressed in the organisation. Where appropriate, opportunities and emerging trends are identified and included in IT plans. The CIO is responsible to implement and execute effective technology and information management.

A&F includes reports on information and technology audits in its submissions to Exco and ARC, thereby providing assurance on Group IT's compliance with legal and regulatory requirements.

An IT charter and policies have been implemented and are reviewed on a regular basis to ensure the confidentiality, integrity and availability of information. The Information Risk and Compliance Committee ensures that information and technology risks are logged in the risk management system. Risks and treatment plans are also incorporated in the integrated risk report submitted to ARC.

Group IT governance structures are in place to oversee and monitor effective use of information technology and to prevent, detect and respond appropriately to cyber-attacks. Processes are in place to evaluate and monitor technology projects throughout their lifecycles. Our disposal policy governs the responsible disposal of obsolete technology, considering both environmental impacts and information security. We are finalising a policy for the responsible use of technology and information.

Group IT reviews compliance with applicable laws, as well as compliance with standards in line with best

practice and legislation. Identified areas of non-compliance are remedied and monitored accordingly. We are confident that adequate compensating controls are in place where needed. Furthermore, disaster recovery plans are tested regularly.

Group IT remains ISO 9001:2008 certified, although ISO 9001:2015 certification is in progress. ISO 27001 provides the framework for Eskom's information security management system, which includes security policies, standards, risk treatment plans, as well as controls and procedures, and also ensures confidentiality, integrity and availability of information, as well as requirements relating to the protection of personal information (POPI).

Group IT continues to align its objectives with Eskom's cost control initiatives, mainly through the implementation and support of advanced analytics. The following key initiatives are being targeted:

- Advanced analytics to assist in realising cost savings, primarily across predictive maintenance, fraud detection and improved customer interaction
- Automation of the primary energy value chain from pit to plant
- Transition to hybrid technologies, such as digital and cloud solutions
- Smart metering of customers' consumption

### Compliance

We have adopted a compliance philosophy to respect the rule of law and to comply with all regulatory requirements that impact Eskom. As stated in our Compliance Charter, the Board is accountable for compliance with regulatory requirements, which is effected through ARC. The implementation and execution of compliance management has been delegated to Exco. Our focus is on improving our overall compliance maturity, and understanding both the obligations incurred as well as the rights and protections that compliance affords. Any penalties arising from non-compliance are reported via the PFMA process.

A review is being conducted of Eskom's overall compliance status at 31 March 2018. It is based on a per-act assessment and focuses on the following:

- The extent to which specific controls have been linked to individual obligations
- The extent of monitoring of implementation of the linked controls

The assessment, to be completed in the coming financial year, will provide an indication of the overall compliance risk faced by the organisation.

### Our combined assurance model

Operations management and specialised review functions		
<b>LEVEL 1</b>	<p>Assurance over the adequacy of operational risk management, effective adherence to control processes and delivery against business operational and sustainability objectives</p>	<p>Line management is responsible for managing risk and performance</p> <p>Oversight by group executives</p>
<b>LEVEL 2</b>	<p>Risk, resilience and compliance management</p> <p>Assurance over the implementation of risk, resilience and compliance management policies and processes</p>	<p>Specialised control functions</p> <p>Development and maintenance of internal control frameworks and policies, reviewing their suitability and monitoring their application</p> <p>Management is supported in executing its duties; provides a layer of control over risk management</p> <p>Oversight by Exco, ARC and SESC</p>
<b>LEVEL 3</b>	<p>Internal audit</p> <p>Assurance over the adequacy and effectiveness of the network of risk management, control and governance processes, including key financial controls as represented by management</p>	<p>External audit</p> <p>Independent reasonable assurance that the financial statements are free from material misstatement and are prepared, in all material respects, in accordance with IFRS. Provides business insights on internal financial controls and financial reporting</p> <p>Independent of management</p> <p>Final oversight by ARC</p>

Combined assurance



# RISKS AND OPPORTUNITIES, ASSURANCE AND CONTROLS

continued

## Combined assurance

Combined assurance offers benefits extending beyond mere compliance. It includes maximising risk and governance oversight; optimising overall assurance activities; improved reporting to the Board and other committees; coordinated and relevant assurance, with an emphasis on key risks faced by the organisation; as well as enhanced control efficiencies and a possible reduction in assurance costs. The combined assurance model includes a combination of line function oversight, risk and resilience management and compliance functions, as well as other specialist assurance services.

The combined assurance model assists the Board and ARC in forming their view of the adequacy of risk management and internal controls in the organisation. ARC is ultimately accountable for providing oversight of the combined assurance activities in terms of

the combined assurance framework. Operational responsibility for combined assurance has been delegated to A&F, which performs our internal audit function, facilitates and coordinates the execution of combined assurance activities and reports back to the committee. ARC receives reports on the status of governance, risk management, compliance and the adequacy of preventative and corrective controls from the various levels of assurance.

With the introduction of King IV™, combined assurance reporting was expanded to Board subcommittees, enhancing oversight of operational responses to issues raised. This facilitates greater value add, strategic risk discussion and widens the Board oversight function beyond ARC.

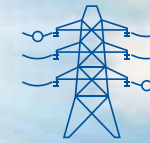
The internal and external assurance of our year-end reports and the results thereof are set out below:

Report	Framework(s) applied	Internal assurance	External assurance	Outcome
Integrated report	International <IR> Framework	Reviewed by divisional management, group executives and acting CFO  Reviewed and recommended for approval by Exco, Audit and Risk Committee (ARC) and Social, Ethics and Sustainability Committee (SESC)  Approved by Board  A&F provided reasonable assurance on certain aspects of the report	Sustainability KPIs contained in the shareholder compact were externally assured by SizweNtsalubaGobodo Inc. (SNG)	Reasonable assurance by A&F of figures and associated narrative in the following sections: <ul style="list-style-type: none"> <li>• Governance</li> <li>• Finance review</li> <li>• Operational performance</li> <li>• Supplementary information</li> </ul> Reasonable assurance provided by SNG on all but two KPIs  SNG also reviewed the integrated report for consistency with the annual financial statements
Annual financial statements	IFRS Companies Act, 2008 PFMA, 1999	Reviewed by finance management and acting CFO  Reviewed and recommended for approval by Exco and ARC  Approved by Board	Audited by SNG, our independent external auditors	Qualified audit opinion relating to the completeness of amounts disclosed in terms of the PFMA  Except for the qualification, the consolidated annual financial statements are fairly presented in terms of IFRS



ARC has concluded, based on the information and explanations provided by management and A&F, as well as through discussions with the external auditors, that the systems and processes of risk management and compliance are adequate, and that the internal accounting controls are adequate to ensure that the financial records may be relied upon for the preparation of reliable financial statements and to maintain accountability for assets and liabilities. Furthermore, ARC concluded that A&F is operated effectively, and has adequate expertise, resources and experience.

Refer to the report of the Audit and Risk Committee in the annual financial statements for the full assessment of Eskom's internal control environment



## OUR GOVERNANCE

- 48 Governance framework
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New Board is dealing decisively with corruption



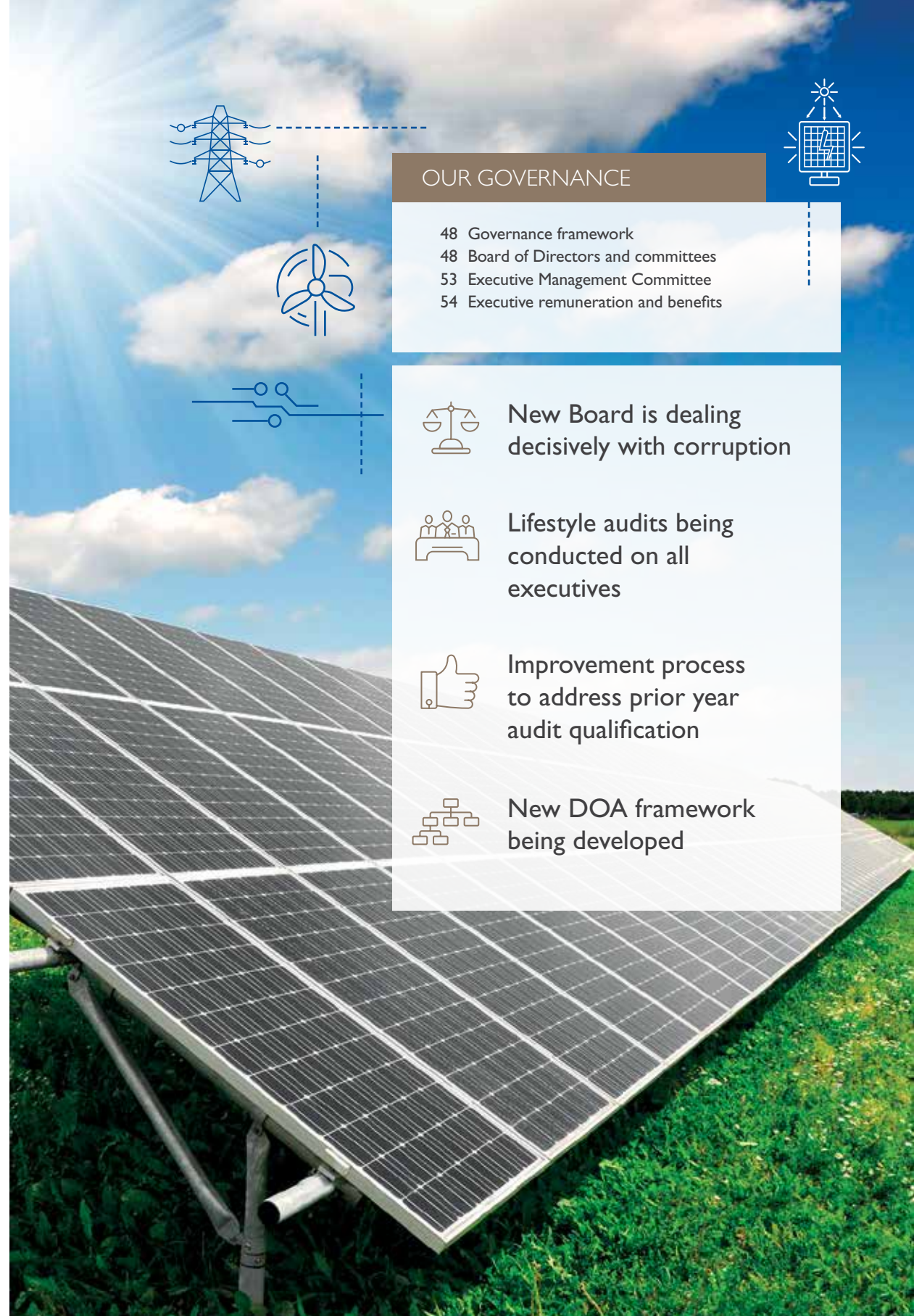
Lifestyle audits being conducted on all executives



Improvement process to address prior year audit qualification



New DOA framework being developed



**Governance framework**

As a state-owned company, our purpose is to deliver on the strategic intent as set out by our shareholder. We also adhere to the statutory responsibilities set out in the Companies Act, 2008 and the Public Finance Management Act, 1999.

As noted earlier, ethical leadership forms the foundation of effective corporate governance. Given the governance issues that we have faced in the recent past, we are in the process of re-establishing a culture of ethical behaviour and ethical leadership at Eskom. Integrating sustainability concerns with decision-making in an effective manner is of utmost importance to Eskom.

Executive authority over the company is vested in the Minister of Public Enterprises, the Honourable Mr Pravin Gordhan, MP.

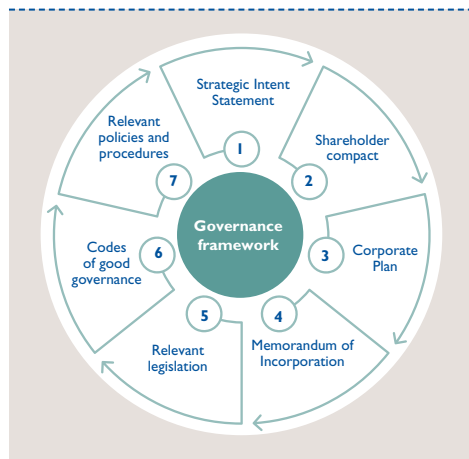
The Board guides the group's strategic direction which is set out in our Corporate Plan, and monitors Exco's progress in implementing and executing the strategy.

Our governance framework requires clarity of roles between the shareholder, the Board and the management of Eskom, as set out in the Strategic Intent Statement and our shareholder compact with DPE. Our MOI also regulates the company and our relationship with our shareholder. The new Minister and new Board have reconfirmed their working relationship.



The responsibilities of the Board have been discussed under "Ethical leadership" on page 16

The following diagram depicts the elements of our governance framework.



The materiality framework sets out the requirements for those matters which require approval in terms of the PFMA and, together with our DOA framework, guides the referral of matters from executive-level committees to Board and also to DPE and National Treasury, where applicable.

**Legislation and regulations**

We are subject to numerous laws and regulations which govern our operations, including conditions relating to tariffs, expansion activities, environmental compliance, as well as regulatory and licence conditions, such as water usage and atmospheric emissions.

**Our licensing conditions place strict limits on plant emissions to reduce the country's current and future environmental footprint.**

Legislation that influences our governance includes the Electricity Regulation Act, 2006; Companies Act, 2008; Public Finance Management Act (PFMA), 1999; National Environmental Management Act, 1998; National Water Act, 1998; Preferential Procurement Policy Framework Act (PPPFA), 2000; Promotion of Access to Information Act (PAIA), 2000; Promotion of Administrative Justice Act (PAJA), 2000; Occupational Health and Safety Act, 1993; and Employment Equity Act, 1998. The King IV™ Report on Corporate Governance for South Africa, 2016; the Protocol on Corporate Governance in the Public Sector; the JSE Listings Requirements; and various international guidelines direct us regarding best practice in governance and reporting.

Comprehensive disclosure in the integrated report is restricted by the nature, volume and complexity of PAIA requests, together with the percentage of refusals. The information is available on request

**Board of Directors and committees**

Governance of the group and the responsibility for driving good corporate citizenship is vested in a unitary board, supported by several Board committees and the group company secretary.

In the last three years, we have seen a lapse in governance, with the previous Board requiring all decisions to be elevated to the Board. The new Board is committed to strengthening governance and will review all mandates and delegations of committees.

The Board believes that a three-person top team, comprising a Group Chief Executive, a Chief Financial Officer and a Chief Operating Officer, is warranted. Mr Phakamani Hadebe was appointed as Group Chief Executive with effect from 1 June 2018, and the Board is in the process of appointing a Chief Financial Officer and Chief Operating Officer. Key executive vacancies were also filled through permanent appointments.

**Board Charter**

The Board Charter, which is reviewed annually, was updated in July 2017. In it, the Board acknowledges the need to align with King IV™ and sees it as an opportunity for directors to agree on the structures, processes, roles and responsibilities of the Board to enhance the effectiveness and efficiency of the Board.

The Board is to carry out its role and responsibilities, and exercise its authority as determined by the Companies Act, 2008, read with the PFMA, 1999, Eskom's delegation of authority and its Memorandum

of Incorporation, the shareholder compact and any other applicable legislation or policy or procedure as determined by the shareholder, known collectively as the governance framework. If there is a conflict between the Board Charter and the governance framework, the framework will take precedence.

Directors, in exercising their duties, shall apply the relevant principles of King IV™, and explain the application of these principles. The roles and responsibilities of the Chairman and the Group Chief Executive are detailed.

The Charter sets out the Board's responsibilities with regard to setting the strategic direction for the organisation, approval of policy and planning, overseeing and monitoring strategy execution and ensuring accountability.

**Board constitution and appointments**

In accordance with our MOI, the Board must consist of a minimum of three and a maximum of 15 directors, the majority of which must be non-executive directors.

Non-executive directors are appointed to the Board by the shareholder for a period of three years, reviewable annually, and may not serve more than three consecutive terms. The People and Governance Committee assists the shareholder by identifying the necessary skills, qualifications and experience required by the Board to achieve our objectives.



Refer to pages 24 to 25 for the profiles and committee memberships of the Board, as well as an indication of the racial and gender equity balance of the Board, together with the mix of skills

No racial or gender targets have been set, and are not currently considered necessary, given the profile of the Board. Furthermore, as all directors are newly appointed, succession planning has not yet been addressed. Both of these issues will be considered in due course, in consultation with the shareholder.

As the Chairman is an independent non-executive director, the Board does not consider it necessary to appoint a lead independent director.



Qualifications of directors and active directorships are set out in the fact sheet on pages 134 to 135

**Changes in Board composition**

In January 2018, the Government announced the appointment of a new Board, with 13 non-executive directors, four of whom were existing directors, and two executive directors, one of whom was an existing director. Twelve of the non-executive directors are regarded as independent. Ms Jacky Molisane is a DPE employee and considered a shareholder representative, and therefore not deemed independent.

The removal of the previous Board members was in response to critical governance lapses over the past few years.

The Board encompasses an adequate mix of diverse skills and experience in the fields of science, engineering, law, finance, economics, accounting and auditing, governance as well as business and enterprise risk management.

At the date of approval of this integrated report, there are two executive directors and 12 non-executive directors, of whom 11, including the Chairman, are independent. Mr Mark Lamberti, an independent non-executive director, tendered his resignation effective 6 April 2018, due to personal reasons.

The composition of the Board at 31 March 2018 and the dates of appointment are indicated below, as well as details of previous directors who served on the Board during the year.

**Current independent non-executive directors**

- Mr Jabu Mabuza (Chairman), appointed 19 January 2018
- Dr Rod Crompton, appointed 19 January 2018
- Mr Sifiso Dabengwa, appointed 19 January 2018
- Mr Mark Lamberti, appointed 19 January 2018, resigned 6 April 2018
- Ms Sindi Mabaso-Koyana, appointed 19 January 2018
- Ms Nelisiwe Magubane, appointed 19 January 2018
- Prof. Malegapuru Makgoba, appointed 8 December 2017
- Dr Banothile Makhubela, appointed 26 June 2017
- Ms Busisiwe Mavuso, appointed 19 January 2018
- Dr Pulane Molokwane, appointed 23 June 2017
- Prof. Tshepo Mongalo, appointed 8 December 2017
- Mr George Sebelele, appointed 19 January 2018

**Current non-executive director**

- Ms Jacky Molisane, appointed 19 January 2018

**Current executive directors**

- Mr Phakamani Hadebe, appointed 22 January 2018
- Mr Calib Cassim, appointed 28 July 2017

**Previous non-executive directors**

- Mr Simphiwe Dinga, appointed 26 June 2017, resigned 19 January 2018
- Mr Sathiaseelan Gounden, appointed 26 June 2017, resigned 19 January 2018
- Mr Zethembe Khoza, resigned 19 January 2018
- Ms Venete Klein, resigned 12 May 2017
- Mr Giovanni Leonardi, resigned 19 January 2018
- Ms Chwayita Mabude, resigned 23 June 2017
- Dr Pat Naidoo, resigned 19 January 2018
- Dr Baldwin Ngubane, resigned 12 June 2017

**Previous executive directors**

- Mr Johnny Dladla, appointed 22 June 2017, resigned 6 October 2017
- Mr Sean Maritz, appointed 6 October 2017, resigned 22 January 2018
- Mr Anoj Singh, resigned 22 January 2018

**Group company secretary**

The group company secretary is an official with a central role in the governance and administration of the organisation's affairs and is vital to the efficient and effective functioning of the Board, providing advice and support to directors.

The group company secretary, Ms Suzanne Daniels, was suspended on 2 October 2017 and remains on suspension pending disciplinary action. In her absence, the company secretary statement in the annual financial statements is signed by Mr Wynand van Wyngaardt, the acting company secretary.

**Director induction and training**

A director onboarding plan is in place, comprising a formal induction and site visits to familiarise directors with Eskom's operations. To ensure that all directors remain informed about pertinent matters, continuous training and updates are provided on a regular basis. Time is set aside at each scheduled Board meeting to address the training needs of the Board or individual directors, and to brief directors on any new legislation or regulations.

All new Board members have undergone an induction process. No other planned training took place during the year.

**Board evaluation**

A formal Board evaluation of the previous Board was conducted during May 2017 and the results tabled at the AGM in June 2017. A number of areas for improvement were identified, some of which have already been addressed through the appointment of the new Board.

For further information, refer to Principle 9 under "Ethical leadership – Application of King IV™ principles" on page 21

No evaluation has yet been conducted for the year to 31 March 2018 due to the appointment of the new Board, which makes an evaluation of the previous Board's effectiveness redundant. A full independent Board evaluation will be conducted one year after appointment of the majority of the new Board members. Preparations for this evaluation are under way.

**Board meetings**

A total of 27 Board meetings, including special and in-committee meetings, were held during the year. Four of these meetings, including special and in-committee meetings, were convened by the new Board.

Board	26 meetings held during the year
Purpose	<ul style="list-style-type: none"> <li>Setting our strategic direction, aligned with DPE's Strategic Intent Statement, and accepting that strategy, risk, performance and sustainability are inseparable</li> <li>Providing oversight through an effective compliance framework and processes; ensuring that risks are recognised and managed through the establishment of effective internal controls; internal audit is risk-based; and by promoting integrity in financial reporting</li> <li>Ensuring Eskom is a responsible corporate citizen (ethically, socially and environmentally) and promoting an ethical culture</li> </ul>
Invitees	No external advisors were invited to Board meetings during the year
Key activities and decisions by the new Board include	<ul style="list-style-type: none"> <li>Approved the revised Board Charter and Board committees' terms of reference</li> <li>Approved the integrated report and annual financial statements</li> <li>Approved submission of the 19.9% revenue application for 2018/19 to NERSA</li> <li>Considered progress on the improvement process to address and remedy the prior year audit qualification</li> <li>Modified the value limit for probity checks by A&amp;F</li> <li>Approved the tariff suite for energy-intensive industry customers</li> <li>Approved the Eskom private sector participation policy</li> <li>Approved the contract and procurement strategy for the Tutuka low NO<sub>x</sub> burner refurbishment project</li> <li>Approved the conclusion of the power purchase agreements with IPPs relating to bid windows 3.5 and 4</li> <li>Resolved that no separation packages will be offered to any executive who is requested to resign or faces disciplinary action as a result of any fraudulent or irregular activities committed by them in the course of their duties</li> <li>Resolved that any Eskom employee who has any interest in any company that was doing business with Eskom will have one week within which to extricate themselves from that business or they must resign from Eskom. Any employee caught conducting business with Eskom after this amnesty will face severe disciplinary action and where applicable, criminal charges</li> <li>Noted the feedback on disciplinary cases and suspended executives, and supported the efforts of the Chairman and the Interim GCE</li> <li>Approved the transfer of the coal supply agreement from Anglo American Inyosi Coal (Pty) Ltd to Seriti Coal (Pty) Ltd</li> <li>Approved the negotiation of a bridge-to-bond loan facility for an amount up to R20 billion</li> </ul>
Conclusion	The Board has adopted an appropriate formal terms of reference as its Board Charter, has regulated its affairs in compliance with this Charter and has discharged all its responsibilities contained therein. Furthermore, the Board is satisfied that it comprises the appropriate balance of knowledge, skills, experience, diversity and independence, and is satisfied with the reasons for removal or resignation of previous directors

**Board committees**

The effectiveness of the Board is enhanced by subcommittees to which it delegates authority without diluting its own accountability. The Board appoints members to the various committees, with due consideration of the necessary skills and experience required.

Appointments to ARC are made by the shareholder in terms of our MOI. ARC and SESC are both statutory committees as prescribed by the Companies Act, 2008.

All Board committees are chaired by an independent non-executive director and consist of a majority of independent non-executive directors.

Committees exercise their authority in accordance with Board-approved terms of reference, which define their composition, mandate, roles and responsibilities. These terms of reference are aligned with the delegation of authority policy, legislative requirements and best practice, and are reviewed each year.

Deliberations of the committees do not reduce the individual and collective responsibilities of directors regarding their fiduciary duties and responsibilities. Directors are required to exercise due care and judgement in accordance with their statutory obligations.

The tables below set out the membership, purpose and key activities of the various Board committees, as well as the number of meetings held during the year. References to sections of the integrated report relevant to the duties and activities of the committees are also provided.

Audit and Risk Committee	15 meetings held during the year
Membership (at year end)	Ms Sindisiwe Mabaso-Koyana (Chairman), Dr Rod Crompton, Prof. Malegapuru Makgoba, Mr George Sebelela
Invitees	No external advisors were invited to committee meetings during the year The acting Chief Financial Officer and Senior General Manager: Assurance and Forensics are invited to attend all ARC meetings
Purpose	Oversight of financial reporting and disclosure, risk management and internal control systems, as well as internal and external audit functions
Key activities	<ul style="list-style-type: none"> <li>Recommended the approval of the 2017 year end and interim group financial statements and integrated reports to the Board</li> <li>Reviewed the MOI, governance and ethics report, declarations of interest and delegation of authority</li> <li>Accepted an external controls and governance framework review report and approved the implementation plan</li> <li>Approved the subsidiary governance framework policy and procedure</li> <li>Oversight of the improvement process to remedy the prior year audit qualification on irregular expenditure</li> <li>Monitored financial performance and liquidity; IT governance, risk, security and compliance; ethics; nuclear assurance; enterprise risk and resilience; litigation and new legislation; compliance management</li> </ul>
References	<ul style="list-style-type: none"> <li>Refer to the report of the Audit and Risk Committee in the annual financial statements</li> <li>Refer to "Risks and opportunities, assurance and controls"</li> </ul>
Conclusion	The committee fulfilled all its statutory duties in terms of section 94(7)(f) of the Companies Act, 2008. The committee has adopted an appropriate formal terms of reference as its charter, has regulated its affairs in compliance with this charter and has discharged all its responsibilities contained therein

Investment and Finance Committee	8 meetings held during the year
Membership (at year end)	Mr Mark Lamberti (Chairman), Ms Jacky Molisane, Prof. Tshupo Mongalo Subsequent to Mr Lamberti's resignation as a director on 6 April 2018, Mr Sifiso Dabengwa was appointed as chairman
Invitees	No external advisors were invited to committee meetings during the year
Purpose	Investment and financial decision-making
Key activities include	<ul style="list-style-type: none"> <li>Monitored progress on municipality and Soweto payments, and approved the write-off of bad debt</li> <li>Approved mandates to secure funding, and various capital and refurbishment projects</li> <li>Concluded firm power sales agreements with a number of SADC countries</li> <li>Approved the update on the disposal of Eskom Finance Company</li> <li>Approved the borrowing programme for the 2018/19 financial year</li> </ul>
References	<ul style="list-style-type: none"> <li>Refer to "Our infrastructure"</li> <li>Refer to "Our finances"</li> </ul>
Conclusion	The committee has adopted an appropriate formal terms of reference, has regulated its affairs in compliance with its terms of reference and has discharged all its responsibilities contained therein

<b>People and Governance Committee</b>	6 meetings held during the year
Membership (at year end)	Mr Jabu Mabuza (Chairman), Ms Busisiwe Mavuso, Prof. Tshepo Mongalo
Invitees	No external advisors were invited to committee meetings during the year
Purpose	Nomination and remuneration of directors and senior executives; human resources strategies and policies; custodian of corporate governance
Key activities include	<ul style="list-style-type: none"> <li>Reviewed the governance and ethics report, the declarations of interest, delegation of authority, governance and ethics review, MOI</li> <li>Approved the remuneration framework for executives</li> <li>Considered mentorship and succession plans for executives</li> <li>Noted and reviewed reports on industrial relations, employment equity, ethics, and employee engagement survey feedback</li> </ul>
References	<ul style="list-style-type: none"> <li>Refer to "Board constitution and appointments" earlier in this section</li> <li>Refer to "Executive remuneration" later in this section</li> <li>Refer to "Our people"</li> </ul>
Conclusion	The committee has adopted an appropriate formal terms of reference, has regulated its affairs in compliance with its terms of reference and has discharged all its responsibilities contained therein

<b>Social, Ethics and Sustainability Committee</b>	3 meetings held during the year
Membership (at year end)	Prof. Malegapuru Makgoba (Chairman), Dr Banothile Makhubela, Ms Busisiwe Mavuso
Invitees	No external advisors were invited to committee meetings during the year
Purpose	Oversight of Eskom's social and economic development role, good corporate citizenship, environment, health and public safety programmes, nuclear oversight, operational sustainability index and sustainability audit
Key activities include	<ul style="list-style-type: none"> <li>Reviewed ethics report and state of ethics in Eskom</li> <li>Considered sustainability audit and the recovery plan</li> <li>Noted the strategy to manage the older power stations, as well as pollution prevention and atmospheric emissions plans</li> <li>Provided nuclear oversight, including safety and new build</li> <li>Noted and reviewed a number of reports, including occupational health and safety; industrial and employee relations; skills development; stakeholder engagement; environmental management; climate change; operational sustainability; and electrification</li> </ul>
References	<ul style="list-style-type: none"> <li>Refer to "Our infrastructure"</li> <li>Refer to "Our Interaction with the environment"</li> </ul>
Conclusion	The committee fulfilled all its statutory duties as set out in Regulation 43 of the Companies Act, 2008. The committee reports that it has adopted an appropriate formal terms of reference, has regulated its affairs in compliance with its terms of reference and has discharged all its responsibilities contained therein

<b>Board Tender Committee</b>	14 meetings held during the year
Membership (at year end)	Dr Pulane Molokwane (Chairman), Mr Sifiso Dabengwa, Ms Nelisiwe Magubane
Invitees	No external advisors were invited to committee meetings during the year
Purpose	Ensure that the procurement system is equitable, transparent, competitive and cost effective to support commercial decision-making. The committee evaluates tenders over R750 million, as required by the approval limits set out in Eskom's DOA, in line with the requirements of the PFMA, 1999
Key activities include	<ul style="list-style-type: none"> <li>Tenders approved include short-term coal supply agreements; power purchase agreements with IPPs and municipal generators; various capital and refurbishment projects; and supply of petrol, diesel and fuel oil to the coal-fired power stations</li> <li>Approved the procurement strategy for spent fuel storage at Koeberg Nuclear Power Station</li> <li>Approved the National Treasury Procurement plan for 2018/19</li> </ul>
References	<ul style="list-style-type: none"> <li>Refer to "Our infrastructure"</li> <li>Refer to "Our interaction with the environment"</li> <li>Refer to "Our role in communities"</li> </ul>
Conclusion	The committee has adopted an appropriate formal terms of reference, has regulated its affairs in compliance with its terms of reference and has discharged all its responsibilities contained therein

The acquisition of goods and services by Eskom is a cornerstone activity which enables the generation, transmission and distribution of electricity. The Board Tender Committee provides the Board with meaningful oversight of these procurement activities, and assists the Board in discharging its responsibilities as they relate to procurement activities, internal controls, relevant codes of practice and external regulations, as well as ensuring ethical practices and behaviour. The committee will be reconstituted during the coming year and, as part of this process, independent technical experts will be appointed to assist the committee in fulfilling its mandate. Furthermore, a more appropriate name will be adopted, to replace the misleading term "Board Tender Committee".

**Meeting attendance**

Meetings of the Board and its committees are scheduled annually in advance. Special meetings are convened as and when required to address specific issues of importance.

Attendance of Board and subcommittee meetings is available in the fact sheet on page 137

**Executive Management Committee**

Exco is established by the Group Chief Executive (GCE), and assists the GCE in executing the strategy set by the Board, as well as exercising executive control over day-to-day operations.

The shareholder appoints the GCE. The shareholder may request the Board to identify, nominate and evaluate potential candidates. However, the shareholder's appointment of the GCE binds the company to the exclusion of the Board.

The Chief Financial Officer is appointed by the Board, subject to approval by the shareholder. Group executives are recommended by the GCE and appointed by the People and Governance Committee; they are full-time employees of the company, subject to Eskom's conditions of service.

Refer to page 136 for the profiles and areas of responsibility of Exco members, including their appointment dates, qualifications and directorships, if any

**Changes in Exco during the year**

The following changes in Exco composition took place during the year in approximate chronological sequence:

- Mr Matshela Koko was appointed Interim Group Chief Executive effective 1 December 2016 until 22 June 2017. He was suspended effective 2 August 2017. He returned to work on 2 January 2018, but was again suspended on 28 January 2018. He resigned on 16 February 2018
- Mr Johnny Dladla was appointed as Interim Group Chief Executive, from 22 June 2017 until 6 October 2017, when he returned to his previous position as Chief Executive Officer of Eskom Rotek Industries

- Mr Willy Majola became the acting Group Executive: Generation on 2 August 2017. He was appointed as acting Group Executive: Transmission effective 26 March 2018
- Mr Anoj Singh, the previous Chief Financial Officer was placed on special leave on 28 July 2017, and then suspended on 28 September 2017. He resigned effective 22 January 2018
- Mr Calib Cassim was appointed as acting Chief Financial Officer and executive director, effective 28 July 2017
- Mr Sean Maritz was appointed as Interim Group Chief Executive, effective 6 October 2017 until 22 January 2018, when he returned to his previous position as Chief Information Officer. He was suspended on 26 January 2018, and resigned on 28 February 2018
- Ms Nondumiso Zibi was acting Chief Information Officer from 6 October 2017 until 10 January 2018. She was again appointed acting Chief Information Officer, effective 1 March 2018
- Mr Prish Govender was appointed acting Group Executive: Group Capital effective 22 March 2017. He was suspended from 3 October to 28 December 2017. He returned to his previous position as general manager in Group Capital on 29 December 2017. He resigned effective 31 January 2018
- Mr Abram Masango, Group Executive: Office of the GCE, was suspended effective 15 November 2017. His suspension was lifted on 24 April 2018 and he returned as Group Executive: Group Capital
- Mr Peter Sebola was appointed acting Group Executive: Group Capital effective 12 October 2017 until 29 December 2017, when he returned to his previous position as general manager in Group Capital
- Mr Kobus Steyn was appointed acting Group Executive: Group Capital, effective 11 January 2018. He returned to his previous position as general manager in Group Capital once Mr Abram Masango returned to work
- Mr Phakamani Hadebe was appointed as Interim Group Executive and executive director, effective 22 January 2018. He was permanently appointed with effect from 1 June 2018
- Mr Thava Govender was transferred from Group Executive: Transmission and appointed Group Executive: Generation, effective 26 March 2018. He remains acting Group Executive: Sustainability and Risk

For further information on executives suspensions and terminations, refer to "Ethical leadership – Allegations of corruption and misconduct" on page 19

**Exco subcommittees**

Exco held 16 meetings during the year.

Attendance of Exco meetings is shown in the fact sheet on page 138



The following subcommittees assist Exco in the execution of their duties:

Subcommittee	Purpose/key activities
Capital Committee	Investment decisions to support Eskom's strategy Decisions about the commercial process Considers the impact of decisions on the funding plan, equity and key financial ratios
Exco Tender Committee	Ensures that the procurement system is fair, equitable, transparent, competitive and cost effective as required by the PFMA
Finance Committee	Decisions on financial strategy and budgets Integration of Treasury and business activities Monitors funding pipeline, cash flow position and financial risk management
Nuclear Management Committee	Management of Eskom's nuclear objectives, both existing plant and new build Interfaces with regulatory bodies and deals with licensing matters Risk management for nuclear operations
Operating Committee	Key operational decisions in Generation, Transmission, Distribution and new build programme Risk evaluation and mitigation approach to technical and operational health performance
People Committee	Human resources decisions, issues, processes and procedures Talent management and staffing Strategic workforce planning
Regulation, Policy and Economics Committee	Reviews impact of regulatory and economic policies, as well as long-term energy policy Development of regulatory response strategy and tariff outlook Oversight of Eskom's regulated licences Recommends regulatory submissions for approval Approach to environmental policies and Eskom's economic impact
Risk and Sustainability Committee	Consolidation and monitoring of overall business risks and processes Monitors operational risk within compliance guidelines Considers safety, health, environmental and quality compliance Reputational risk management



#### Update on Mr Brian Molefe's pension pay-out

Mr Brian Molefe, Eskom's then Group Chief Executive, reportedly went on early retirement from Eskom effective 31 December 2016 and he received a pension pay-out. On 2 May 2017, the Board rescinded their decision approving Mr Molefe's early retirement, and he returned as GCE on 15 May 2017. However, on 2 June 2017, the Board rescinded the subsequent decision and Mr Molefe was asked to step down as GCE. Mr Molefe approached the Labour Court on the basis that overturning his reappointment was unlawful. On 6 June 2017, the High Court ruled that Mr Molefe may not return to work until such time as the Labour Court has ruled.

Three High Court applications by the DA, EFF and Solidarity regarding Mr Molefe were heard before a full bench of the North Gauteng High Court, which ruled on 25 January 2018 that Mr Molefe had indeed resigned, ordering him to pay back the R11 million received as part of his pension pay-out. The High Court ruling was upheld in an appeal hearing in April 2018. Mr Molefe has appealed the ruling.

#### Executive remuneration and benefits

##### Our approach to remuneration

The People and Governance Committee (PGC) is mandated by the Board to oversee all aspects of remuneration in a fair, transparent, responsible and equitable manner, and to ensure that the Board is fully apprised of developments regarding the remuneration of executives and employees.

During the past year, the PGC complied with all relevant regulatory and legal requirements pertaining to the remuneration of employees across our organisation. The PGC also notes that there was compliance with Eskom's executive remuneration philosophy throughout the year, and no deviations were noted.

King IV™ has a specific focus on remuneration in Principle 14. In particular, it emphasises that remuneration practices should be equitable, responsible and transparent, linked to Eskom's strategy, and should result in continued shareholder value creation. In this regard, the PGC aims to ensure that remuneration is commensurate with the roles and responsibilities of executives and also linked to the achievement of our strategic objectives, to promote Eskom's long-term sustainability.

It is important that Eskom is able to attract and retain key leadership skills, especially over the longer term. In order to achieve this objective, we believe it is important to appropriately remunerate our executives and employees. This is achieved by reviewing the guaranteed remuneration of each executive on an annual basis in the light of market trends. Eskom links executive remuneration to the performance of both the organisation and the executive. Eskom's aim is to remunerate at the median of the market.

To meet shareholder expectations and other challenges, it follows that Eskom can ill afford to remunerate its workforce for merely showing up for work. Hence, Eskom's philosophy rests on the following three fundamental premises, namely to:

- Attract and retain talent
- Reward good performance
- Compete in the commercial labour market on a fair and equitable basis

DPE issued new guidelines for the remuneration and incentives of employees of state-owned companies in February 2018; it replaces the 2007 DPE remuneration guidelines approved by Cabinet. The revised guidelines specifically address the remuneration of executive directors, prescribed officers and non-executive directors. Adherence to the guidelines will improve governance and ensure that remuneration is fair, responsible and transparent, and that it aligns performance measures with value creation.

Executive remuneration is being reviewed for alignment with DPE's remuneration guidelines and best practice.

Eskom is the largest state-owned company in South Africa and is comparable to the largest companies listed on the JSE in terms of revenue, local asset value and number of employees. Given the complexity of Eskom's business and the fact that we have to participate in an extremely competitive labour market, Eskom must attract and remunerate key talent comparable with that of large commercial organisations. Accordingly, it is of the utmost importance that suitable remuneration assumptions and benchmarking be applied. To this end, a suite of benchmark companies are used to determine the best fit in the market. We also include an evaluation to ensure that jobs of similar size and complexity are compared. Levels of remuneration are established to attract, retain and motivate executives of the quality required to successfully run the organisation.

The committee can utilise the services of external consultants as and when required. External survey companies were used to obtain benchmarking data and provide independent market trends.

Eskom participates in three external executive remuneration surveys annually to ensure an objective and independent view of executive remuneration is considered. Results are analysed per quartile, position and survey companies.

##### Key areas of focus

The PGC is focused on the following:

- Acting in the best interest of the organisation
- Implementing DPE's guidelines for the remuneration and incentives of employees of state-owned companies
- Adopting the principles of King IV™ on the remuneration of directors and senior executives
- Ensuring that executive directors, prescribed officers and non-executive directors are remunerated fairly, responsibly and transparently, to promote the achievement of strategic objectives and positive outcomes in the short, medium and long term as required by Principle 14 of King IV™
- Establishing that the remuneration and incentive philosophy is aligned to the shareholder compact, as well as organisational and individual performance

Eskom and its shareholder have identified inequality as a collective national challenge and accordingly, it is vital that Eskom and the Board operate in alignment with the DPE policy of fiscal prudence, as well as in the best interests of the people of South Africa, when deciding on remuneration policies.

We will continue to fulfil our mandate and support the lives of all South Africans. However, we are facing significant financial and business sustainability challenges, as well as operational, structural, and strategic difficulties that require both immediate action and the development and implementation of a longer-term strategy. As noted earlier, we are undertaking a strategy review, which is expected to be completed by September 2018. The remuneration philosophy must align with the new strategy to ensure that responsible remuneration practices support Eskom's sustainability in the longer term.

##### Remuneration philosophy

The PGC assists the Board in approving, guiding and influencing key human resources policies and initiatives in accordance with shareholder requirements, social expectations and legislation, such as the Employment Equity Act, 1998. These duties are carried out in accordance with the committee's approved terms of reference that are reviewed and approved annually.

The PGC is solely responsible for determining executive remuneration, rewards or other benefits; executives are not involved in the approval process. The PGC also retains an oversight right to adjust, withhold or veto any remuneration payable to executives.

The PGC makes recommendations regarding the remuneration of the GCE for the Board's consideration. The Board then recommends the remuneration to the shareholder for approval. Moreover, the PGC approves the remuneration of other group executives in line with a framework approved by the shareholder. Factors that influence the remuneration of Exco members include their level of skill, experience, contribution to organisational performance and success of the group. Incentives are linked to the performance of the organisation and an individual's own contribution.

The PGC has adopted the following principles and guidelines to ensure that business performance is optimised:

- Remuneration policies are designed in a way that demonstrates a clear relationship between executive performance and remuneration. This assists in succession planning and identification of executives for senior positions
- Executives and management are motivated to pursue the long-term growth and success of Eskom within an appropriate risk management control framework
- Every effort is made to promote an ethical culture that supports responsible corporate citizenship, with appropriate short- and long-term incentives that are fair and achievable
- Variable executive remuneration is linked to individual and organisational performance through financial and non-financial targets set upfront for KPIs, subject to achieving financial and/or technical gatekeepers. This serves to align the interests of executives with those of the shareholder

- Gatekeepers form a critical part of the short-term incentive framework. A gatekeeper must first be achieved for employees to qualify for a bonus. Employees will only qualify for a bonus once all identified gatekeepers have been met

Executive remuneration includes a guaranteed package, other payments (such as personal security, fleet card and telephone costs), as well as short- and long-term incentives. The PGC reviews the structure of these packages annually to ensure an appropriate balance between fixed and variable remuneration.

Group executives have permanent employment contracts based on Eskom's standard employment conditions. The contract contains matters such as the employee's powers and duties, confidentiality, remuneration including variable remuneration, appropriate provisions of company policies and procedures, intellectual property rights, retirement benefits and more.

The newly appointed GCE has a five-year term contract. However, term contracts create a discrepancy with the standard employment conditions, as term contract employees do not qualify for benefits such as pension fund, medical aid and the like.

#### Structure of remuneration elements

Remuneration of executive management is set out below.

The remuneration of managerial and bargaining unit employees is discussed under "Our people – Remuneration and benefits" on pages 112 to 113



Remuneration element	Executive management	Link to strategic intent
Guaranteed remuneration	The PGC approves the annual remuneration increases for executives in April of each year; these are approved by the shareholder. Group executives receive a guaranteed package. The guaranteed amount is fixed and includes compulsory benefits such as medical aid, pension, group life and death benefit. The guaranteed amount is reviewed annually to keep remuneration in line with market trends based on an appropriate comparison group	To ensure that talented individuals are attracted and retained
Other benefits	Cell phone allowance, fleet card and personal security	To provide support to employees to perform their role efficiently
Short-term incentives	The short-term incentive scheme rewards the achievement of predetermined performance objectives and targets linked to the shareholder compact, subject to the achievement of defined gatekeepers. Performance objectives and targets are determined by the GCE in individual performance contracts for each financial year. The GCE's objectives and targets are approved by the PGC	To manage and facilitate the performance of executives through a results-driven approach that is collaborative, transparent and fair
Long-term incentives	The long-term incentive scheme is designed to attract, retain and reward Exco members for meeting organisational objectives determined by the shareholder over a three-year period. The final vesting percentage is at the discretion of the PGC	To ensure the long-term sustainability of the organisation
Termination or separation benefits	Terminations are managed within Eskom's conditions of employment	Not applicable

#### Short-term incentive scheme

Executive performance compacts incorporate the following main features:

##### Gatekeeper or hurdle conditions

No bonuses are paid if the following conditions are not achieved:

- Net profit above R500 million, thus self-funding
- An unqualified audit opinion
- 80% achievement of shareholder compact targets

These conditions also apply to the short-term incentive scheme for staff.

##### Key performance areas

KPAs established for each group and division have a future focus and comprise the following:

- High-priority initiatives
- Operational performance
- Human capital performance
- Quality, safety and environmental performance

High-priority initiatives constitute 45% of the individual compact; specific KPAs per group ensure that key areas defined by Exco are addressed. Operational performance constitutes 30% of the compact, human capital performance 10% and quality, safety and environmental performance 5%. The final 10% is allocated at the discretion of the GCE.

The calculation of short-term incentive (STI) pay-outs is based on an individual's guaranteed remuneration. However, individuals will only be able to benefit from the scheme if the gatekeepers are achieved. The bonus for on-target performance is set at 35% of an individual's guaranteed package and capped at 42%.

Set performance conditions were attached to the GCE's interim appointment. If satisfactorily achieved, these would entitle him to a performance incentive, subject to the Minister's approval. However, the GCE has decided to forgo any payment in light of our current financial situation.

#### Long-term incentives

Performance shares are awarded to senior executives. These awards are made on an annual cycle on 1 April of each year, and have a three-year vesting period. The value of the performance shares is deemed to be R1 at grant date and is escalated at a money market rate to determine the value at reporting date. The PGC retains full discretion whether an award for a year will be made or not.

Operational performance is evaluated primarily against the targets in the shareholder compact; the Minister of Public Enterprises is provided with quarterly reports on the progress towards achieving these targets. The achievement of Eskom's Corporate Plan requires disciplined execution and cascading of performance indicators and targets into the performance compacts of both business units and individual employees.

Performance conditions and targets in terms of the long-term incentive scheme have been determined by the Board over a three-year period, in line with the Corporate Plan and shareholder compact with a weighting for each category. Conditions include financial and non-financial targets in areas such as ensuring business sustainability and reliability of electricity supply, providing for future power needs through the new build programme, and supporting South Africa's developmental objectives.

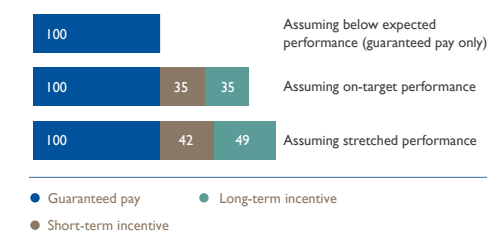
Awards only vest if, and to the extent that, these targets are met. Potential vesting percentages range from 0% to 70% of pensionable earnings; on-target vesting is set at 50% of pensionable earnings. Pensionable earnings equal 70% of guaranteed pay. Threshold and stretch targets are set for each measure.

The vesting period for award performance shares is three years from the date of grant. The PGC decides at the end of that period on the amounts to be paid in line with the:

- Percentage of award performance shares which vest based on the performance conditions achieved
- Value of the award performance shares based on the grant value, escalated at the money market rate

The vesting of the awarded performance shares is dependent on the scheme participant remaining in Eskom's employment throughout the vesting period. The award lapses if employment ceases during the vesting period (other than for permitted reasons such as retirement or death).

#### Illustration of potential earnings for executive management on single total figure basis



No short-term or long-term incentives will be awarded to executives for the 2017/18 financial year.

**Fees paid to non-executive directors**

Remuneration of non-executive directors is benchmarked against the norms for companies of similar stature to Eskom and is in line with the guidelines issued by DPE. The PGC submits proposals on non-executive director remuneration to the Board, which then makes recommendations regarding non-executives' remuneration to the shareholder for approval.

Non-executive directors are paid a fixed monthly fee.

The current Chairman did not earn any director's fee for the year.

**Implementation of remuneration principles and policies**

During the current financial year, certain changes have been made to the reporting practice for executive remuneration in the interests of improved clarity and transparency and to align with the reporting requirements of King IV™. In the tables in the annual financial statements, two perspectives are provided: the first being a single total figure of remuneration that reflects earnings attributable to performance delivered during the relevant cycle; the second perspective is earnings received by each incumbent during the cycle.



Refer to note 49 in the annual financial statements for detailed remuneration information as required by King IV™

In previous remuneration reports, only the short-term cash bonus was reported on an accrued basis with long-term incentives being reported in the year that they were paid to the participant. In the current report, both the short-term cash incentive and long-term incentives are reported on an accrued basis in the single total figure of remuneration, once the performance conditions attached to the award element are met, in line with the requirements of King IV™. To determine cash earnings in the cycle, the accruals are removed, and accruals from previous cycles are added back. This has required the restatement of executive remuneration for the 2016/17 financial year to aid comparison.

**Total remuneration earned by directors and group executives**

Category, R 000	2017/18	2016/17
Non-executive directors	6 026	6 439
Executive directors	10 932	16 335
Other group executives	35 207	41 489
Total remuneration	52 155	64 263

**Payment for termination of office**

Included in the executive directors' remuneration earned, is a notice payment of R2 564 000 paid to Mr Anoj Singh, the former Chief Financial Officer, who resigned on 22 January 2018. The notice payment is in terms of his contractual agreement.

**Short-term incentives**

No short-term incentives will be paid, as the gatekeepers were not achieved.

**Long-term incentives**

Performance shares (award performance shares) were awarded to Exco members on 1 April 2014, 2015 and 2016. The Board resolved that no awards will be made for 2017.

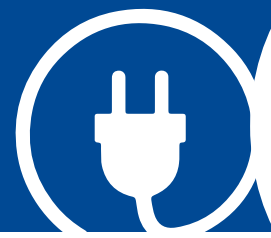
Performance shares awarded on 1 April 2015 vested on 31 March 2018, with a vesting rate over the three-year period of 38.73%. However, the Board applied its discretion and resolved that the grant will vest at 0%. There will therefore be no vested shares payable in June 2018. Shares awarded on 1 April 2014 were redeemed during 2017.

**Conclusion**

The People and Governance Committee is satisfied that Eskom has complied with its remuneration philosophy throughout the 2017/18 year, and no deviations have been noted.



# Safety tips that save lives



## Safety tips for the Agricultural Sector

## Eskom cares about your safety

**Is electrical safety an issue in the farming sector?**



Yes, the tendency to think that people only hurt themselves by using electricity unsafely in their homes is wrong. There are quite a few electrical safety issues occurring on farms that Eskom needs to make owners and their employees aware of.

**Have there been any incidents on farms recently?**



There have been two incidents in the Northern Cape where an owner and his employee tried to cut down branches close to powerlines. Both were killed when the branches made contact with the lines. Cutting down branches near powerlines is very dangerous and should never be attempted by members of the public.

**What should they have done?**



Eskom does patrol all lines on a regular basis but it would be most helpful if farmers and their workers could also check for tree branches growing too close to a powerline. If you encounter a tree branch growing too close to a power line, please contact Eskom immediately and we will send out a team to cut the branches.



### Here are some safety tips for the agricultural sector

1. Look up, look out! Identify all powerlines on the farm – underground and overhead powerlines. Make sure that farm workers know where they all are, especially the underground power cables if there are any.
2. Make sure that people and equipment stay at least three metres away from any powerline to prevent an incident. Electricity can electrocute you and damage your equipment if you're too close to a powerline.
3. Look out for broken or damaged powerlines. If you see one, stay at least 10 metres away. Report the fallen powerline to Eskom or your municipality immediately.
4. Beware of the height of your equipment. Weather conditions can impact powerlines causing them to drop to a lower level.
5. If you're involved in a collision with a powerline, stay in the vehicle, call the emergency number, your municipality or Eskom on 08600 37 566, and make sure everyone else on the site, including emergency first responders, stay at least 10 metres back until the power has been shut off.
6. Work gloves and rubber boots offer no protection against contact with a power cable. The best protection is proper gloves that electricians use.
7. The safest way to move a ladder, pole, pipe or rod from one location to another is to have two people carrying it. Carry these horizontally or flat to avoid contact with overhead wires.
8. Make sure that all family members and farm employees know where and how to disconnect power in case of an electrical emergency.
9. Make sure that your farm's entire electrical system is properly grounded and conduct regular visual inspections of electrical boxes, wiring and extension cords to identify any damage. Ensure that extension cords are only used as a temporary measure.
10. Ensure the wiring in your barns and outbuildings meet the local Electrical Safety Code by having a qualified electrician check the system and review the wiring when a new installation is made. A new certificate of compliance must be completed by the electrician.

## FINANCIAL REVIEW

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**Adverse decision by NERSA on outstanding RCAs**



**Revised funding plan executed due to renewed positive sentiment**



**Improved EBITDA and EBITDA margin, despite price increase of only 2.2%**



**Coal purchase cost increase limited to 3.8%**

## CHIEF FINANCIAL OFFICER'S REPORT



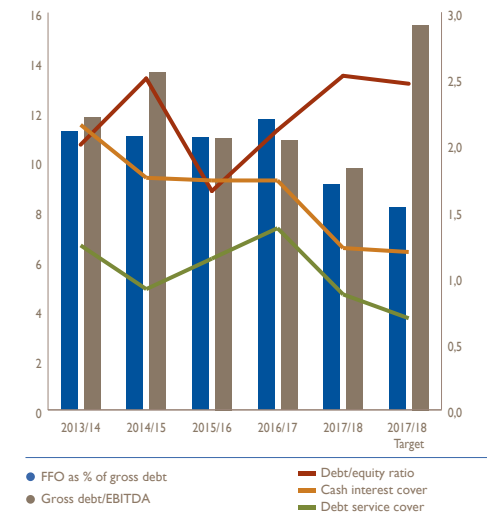
**CALIB CASSIM**  
Acting Chief Financial Officer

Eskom's financial health has deteriorated over recent years as a result of lower demand, above-inflationary cost increases, especially in coal and employee benefit costs, and an electricity price that is not cost reflective. In addition, we embarked on an ambitious capital expansion programme to provide much-needed generation capacity and extension of our transmission network. These factors had an adverse impact on our balance sheet and liquidity position. All major financial ratios have deteriorated, and ratings agencies have downgraded Eskom to sub-investment grade.

During the first half of the financial year, we experienced unprecedented challenges with the execution of our borrowing programme. This was mainly as a result of governance concerns raised by the State of Capture Report released by the Public Protector, followed by the release of a number of other investigative reports, as well as the commencement of the Parliamentary inquiry into Eskom during the same period. The audit qualification related to the completeness of irregular expenditure disclosed in terms of the PFMA, and the subsequent emphasis of matter related to going concern raised by the auditors during their review of our half-year results negatively affected the market appetite for Eskom debt. This was further compounded by poor governance and large-scale allegations of corruption that resulted in a loss of confidence in Eskom, negatively impacting our reputation.

The most recent NERSA determination granted Eskom another below-inflation tariff increase of 5.23% for the 2018/19 financial year – about 3% of this is reserved for IPPs, with the balance to cover growth in Eskom's costs. This resulted in tough financial

constraints, building on the previous 2.2% increase granted by NERSA for the 2017/18 financial year; this amounts to consumers receiving an effective decrease in electricity prices in real terms in a situation where costs to produce electricity are increasing. This negatively affected our financial health, which has been exacerbated by lower than expected demand and upward cost pressures, combined with the capital requirements of the new build programme and an increase in debt servicing costs. These factors have had an adverse impact on Eskom's balance sheet and liquidity position.





Furthermore, all three ratings agencies downgraded our credit ratings on a number of occasions over the past year. Common reasons for the downgrades centred on concerns around our liquidity position, perceived insufficient Government support and limited visibility of our plans for placing our longer term business and financial position on a sustainable footing; this is affected by the uncertain regulatory environment in which we operate.

Our standalone credit rating is deemed highly speculative within the sub-investment grade rating matrices. As an SOC, our credit rating enjoys a substantial uplift because of implicit and explicit Government support, which also means our rating is linked to that of the Sovereign. While evidencing strong support, Government has stopped short of providing further direct support, such as through additional capital injections, to shore up our financial profile. Ratings agencies believe that further tangible Government support may be required, as the recent NERSA tariff announcement has introduced further funding uncertainty over the medium term.

The execution of a large portion of the planned funding initiatives for the year had to be postponed, and is now planned for the first half of the coming financial year. Given this, our original funding requirement of R72 billion was revised to R57 billion, necessitating further drastic cost savings efforts and limitation of capital expenditure.

As a result, liquidity levels were severely affected, especially in comparison to previous years, where liquidity had been maintained at levels above R20 billion.

However, since the appointment of the new Board, we have seen steady progress in the stabilisation of the organisation, together with focused efforts to restore good governance, which has started restoring our credibility with the financial markets. We have also made good progress in resolving the issues that led to the prior year audit qualification.

Refer to the discussion under "Ethical leadership – Governance challenges" on pages 17 to 19 for further information

There is an increased appetite for Eskom bonds, and we have seen a discernible positive change in investor sentiment in both the domestic and international markets. The most notable achievement is the R20 billion bridge-to-bond facility provided by a consortium of banks in February 2018, significantly bolstering our liquidity. While it is still early to celebrate, we are encouraged by these sentiments.

Fitch Ratings, in its recent announcement of the decision to maintain our credit ratings, noted the positive measures that have been implemented by the new Board and management to turn the company around in their short tenure at Eskom. We believe that this is a sign of things to come.

The appointment of a permanent Group Chief Executive at the end of May is expected to further improve investor confidence, with the appointment of a permanent Chief Financial Officer expected soon. Potential investors are also expecting to see whether our turnaround plan will address current liquidity issues, leading to a sustainable financial position.

**Overview of performance**

In terms of the Electricity Regulation Act, 2006, the allowed revenue as determined by NERSA must enable an efficient licensee to recover the full cost of its licensed activities, including a reasonable margin or return. In developing the MYPD methodology, NERSA also adopted the following objectives:

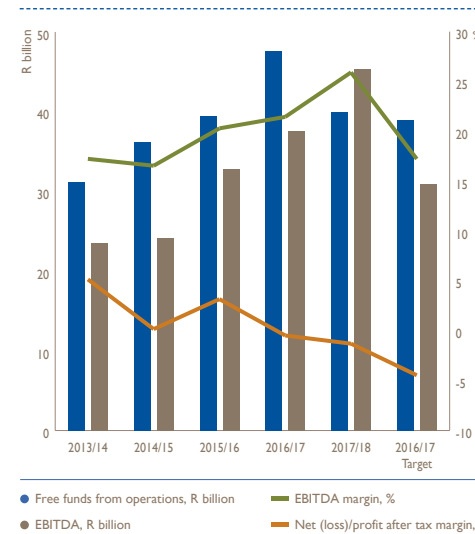
- Ensuring Eskom's sustainability as a business while also limiting the risk of excess or inadequate returns, and providing incentives for new investment
- Enabling reasonable tariff stability and smoothed changes over time, consistent with Government's socio-economic objectives

We remain of the view that NERSA's decision on the 2018/19 revenue application was not made in accordance with the Act or the MYPD methodology. Furthermore, we believe the impact of this decision will also have far-reaching consequences for our sustainability, going concern status and ability to settle debt commitments. It will also hinder our ability to secure further funding. We are proceeding with a court review to set aside NERSA's decision. NERSA's revenue decision for 2018/19 contained numerous mistakes and inconsistencies and did not comply with the MYPD methodology, neither is it cost-reflective.

We also note with dismay NERSA's decision to grant less than half of the RCA balance for the preceding three years, by allowing only R32.7 billion out of R66.7 billion applied for, given that we had applied the MYPD methodology and principles set out by NERSA during previous RCA decisions. We are considering our options in this regard.

We continue robust engagements with NERSA to advance the stability, credibility and maturity of the regulatory framework in South Africa, in order to progress towards the achievement of cost-reflective tariffs in the electricity supply industry.

Nevertheless, EBITDA and the EBITDA margin improved, mainly as a result of significant cost containment initiatives to compensate for the below-inflation price increase of the past year. We have saved close to R70 billion in operating and capital expenses over the past five years, through the BPP programme that evolved into the Design-to-Cost strategy. While strict cost containment measures remain in place to minimise the increase in controllable expenses, above-inflationary price increases are required to strengthen our financial position. However, despite various initiatives to stimulate demand, overall sales levels remain stagnant, limiting our ability to improve profitability.



Nonetheless, the managing of arrear debt remains a significant challenge, with invoiced municipal arrear debt escalating to R13.6 billion (including interest) at year end (March 2017: R9.4 billion). We continue to engage with Government and affected municipalities to find a solution, as the current position is wholly unsustainable.

While operational performance, as measured by cash from operations, has improved over the past five years, cash required for debt servicing costs – both capital and interest – has increased substantially, while cash required for capital expenditure has remained constant at close to R60 billion per year. Over the past year, cash raised from funding activities was not sufficient to fund capital expenditure, thereby reducing cash resources.

Eskom's Board is responsible for assessing our status as a going concern and satisfying the external auditors that we remain a going concern. In order to do so, the Board relies on projected cash flows. For the coming year, there is a high level of certainty regarding the cash flow projections and our ability to continue as a going concern. After that, the position is less certain as a result of the uncertainty around the future tariff path. However, there is sufficient time for the strategy review being undertaken to show a firm response to the associated risk.

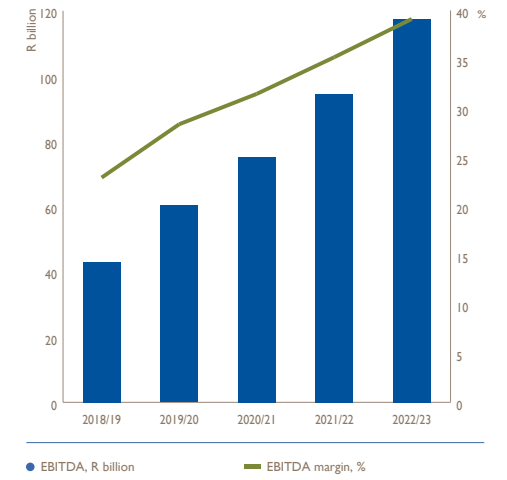
This combination of factors and options allows the Board to express confidence in the fact that there is no risk to our going concern status, despite expectations of reduced cash flow. Furthermore, the Board continues to critically examine the group's activities and costs in order to balance its cash flow requirements. There is a focus on initiatives to identify cost savings and efficiency opportunities, while also ensuring that funding options are more firm.

The Board has resolved that Eskom's financial sustainability, liquidity and status as a going concern will not be compromised in support of operational sustainability and balancing supply and demand.

In their report, the external auditors have highlighted that material uncertainty exists, which may cast doubt on our ability to continue as a going concern.

**Strategy and outlook**

Crucial to the improvement of our financial position is increasing the EBITDA margin, through a combination of delivering on cost savings initiatives and efficiencies, stimulating demand to increase sales, and attaining a cost-reflective price of electricity. We are targeting an increase in EBITDA to at least 35% over the medium term, as this will ensure that most financial ratios will improve over the longer term. It is imperative that the regulatory environment is seen to be predictable, compared to the existing challenging regulatory environment with uncertainties around our future financial trajectory linked to tariff setting due to NERSA's inconsistent application of the MYPD methodology.



Of note is the expected increase in IPP costs over the medium term. Expenditure is expected to increase to R42.8 billion by 2022/23, while energy supplied will increase to 19 883GWh, at an average price of 226c/kWh. This will place a significant burden on our primary energy costs, requiring more stringent management of costs under our control. Furthermore, the cost of IPPs exceeds our short-run marginal cost, and any replacement of our plant by IPPs will affect the electricity price.

Our current Corporate Plan does not include any specific costs or impacts of the decommissioning of power stations, although it does include cost reductions associated with the extended cold reserve strategy. The premature closure of stations would result in an acceleration of depreciation, which would negatively impact net income.

Managing liquidity will also require major attention to ensure our status as a going concern, particularly over the next three years. A key initiative to solving the issues of liquidity and other financial health challenges is restricting Eskom-funded capital expenditure to R45 billion per year for at least the next three years; thereafter it can be increased should our financial position improve. However, we will continue to focus on the completion of the capacity expansion programme and pursue compliance to environmental requirements within the prevailing capital constraints. Another area requiring urgent attention is the collection of specifically municipal and Soweto arrear debt, which would unlock significant improvements in liquidity.

We will continue to manage liquidity through the following levers:

- **Revenue:** The migration of the price of electricity to prudent cost-reflectivity is critical, as the current price is not cost-reflective. It is envisaged that above-inflationary price increases will be required to achieve cost-reflectivity. Furthermore, we are focusing on increasing sales to energy-intensive electricity consumers, including offering short-term incentivised tariffs
- **Cost containment:** The drive to contain operating costs equal to or below inflation will be accelerated, with the emphasis on primary energy costs,

employee benefit costs, maintenance and third-party spend. This will be done without negatively affecting operating performance

- **Borrowings:** The approved borrowings programme will be managed through various financial instruments including utilising Government guarantees
- **Debt collection:** A strategy will be implemented to deal with municipal arrear debt, including curtailing supply to defaulting municipalities. The rollout of the Soweto split metering project and conversion of customers from post-paid to prepaid should also assist in managing arrear debt. Normal credit control procedures will be applied to remaining customers
- **Restricting capital expenditure:** This will be restricted based on affordability; this amounts to R45 billion per year for at least the next three years
- **Implementation of the recovery of RCA balances:** Once the outstanding RCA applications are processed by NERSA, any recovery thereof will improve liquidity. It is likely that, once liquidity has stabilised, RCA amounts will be applied to settling existing debt
- **Balance sheet optimisation:** This will be achieved through working capital management and the sale of non-core assets

The funding strategy over the medium term aims to maintain a sufficient liquidity buffer and increasing committed funding facilities. Nevertheless, we need to increase cash from operations to such an extent it can fund the cash required for debt servicing, as well as a portion of capital expenditure required to maintain operations, such as Generation outages, refurbishment of plant and replacement of components. Borrowings should only fund capacity expansion. Cash from operations will improve if the EBITDA margin improves.

Goal	Improve liquidity	Increase profitability	Reduce debt reliance
Timeframe	Short term	Medium term	Long term
Description	Liquidity, with reasonable debt exposure, is crucial to maintaining going concern status. Profitability may need to be sacrificed in the short term, as operating and capital expenditure is re-baselined	Profit margins need to increase to offset the increase in depreciation and finance cost due to new plant being brought online. This will in turn strengthen the balance sheet through improved levels of equity	We want to be in a position where our operational cash surplus is sufficient to service debt requirements and capital expenditure to maintain operations. Debt should be settled, and new debt kept to a minimum
Key metrics	Debt service cover Cash interest cover Cash balance	EBITDA margin Net profit before tax Gross debt/EBITDA ratio	Debt/equity ratio (gearing) FFO as percentage of gross debt

Our ultimate goal is to achieve a standalone investment-grade credit rating within the next five to seven years by migrating towards prudent cost-reflective electricity prices, effectively reducing our reliance on debt financing, which should allow us to optimise our balance sheet.

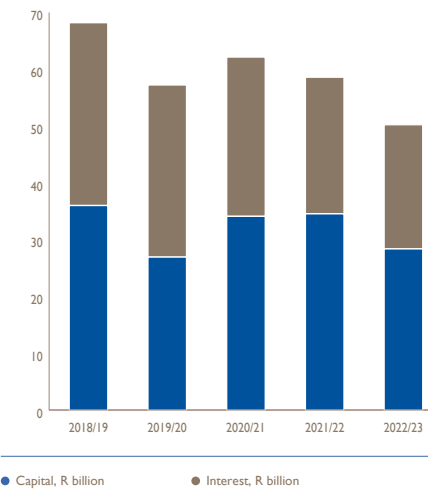
The DFIs and ECAs, together with other lenders that were beneficiaries of the ECA insurance cover, continued to support Eskom throughout the past year, and have expressed interest in providing further support going forward, in line with the new rules that

the financiers have adopted of financing non-coal-related technologies. The positive investor sentiment is beginning to show in the increased appetite for and enquiries on the domestic bond front.

The same can be expected in the international bond market, considering the yields that the emerging market issuers provide to the international investors. The international bond market still provides sizeable funding opportunities with a relatively short lead-time. Although the cost of issuance in this market is higher than other instruments, the international market remains a significant source of liquidity. The plan is to access this market every 12 to 18 months, when

a suitable opportunity arises. We plan to pursue a foreign issuance in the coming months to raise between R15 billion and R20 billion.

The debt repayment profile, based on existing debt only, is relatively pressured over both the short and long term, with interest payments of approximately R215 billion and debt repayments of R228 billion over the next five years, and maturities currently extending to 2043. The weighted average term to maturity of debt securities and borrowings is just over seven years. Our funding strategy will continue to prioritise longer term funding to support short-term debt maturities and alleviate repayment risk. Ideally, the term of our debt should match the useful life of the assets being financed, to align to the methodology applied by NERSA when calculating the required rate of return.



In order to deliver on our financial strategy, we require support from multiple stakeholders. Furthermore, a number of risks could impede the execution of our strategy, such as:

- Possible further credit ratings downgrades
- Adverse decisions on the recovery of the RCA balance and the upcoming MYPD 4 application, failing to result in cost-reflective tariffs
- Further escalation particularly in municipal arrear debt
- An inability to restructure our cost base due to external pressures

**Conclusion**

The Board and various stakeholders are engaged in considering the role Eskom should play in the next five to 10 years to ensure it contributes positively to the economy while remaining financially stable. The continuous drive to improve governance and achieve efficiencies in the business will improve financial and operational performance, which

should create sufficient investor appetite and depth in the market for successful implementation of our borrowing programme. We will also manage the risks surrounding our credit ratings, as well as general investor and lender concerns.

I greatly appreciate the support we've received so far from our new Board, who have acted swiftly to start rooting out corruption and thereby improving our reputation. I also wish to congratulate our newly appointed Group Chief Executive, Phakamani Hadebe – the road ahead is challenging, but I believe he is up to the task of steering us back onto a course of sustainability and prosperity. In addition, our Treasury Department has worked tirelessly under the leadership of our treasurer, André Pillay, to secure much-needed funding under extremely trying circumstances. I appreciate their monumental efforts, as well as that of every single Guardian who does their bit every day to contain costs in an effort to live within our means. It isn't always easy, but it is necessary, and it will remain so going forward. We all agree that things can no longer continue as if everything is normal.

I also need to acknowledge the strong partnerships we have with DFIs that have supported Eskom through this difficult period, as well as other lenders and investors, particularly the consortium of banks which provided the short-term facility in February 2018. We would not have gotten through the worst without them.

Looking ahead, we expect that most ratios will first weaken before improving – there is no single magical lever that can be used to achieve the goals we've set ourselves. Furthermore, depreciation and net finance cost will increase as units from Medupi and Kusile are commercialised, which will put further pressure on net profit before tax. Therefore, the key to improving profitability is to increase the EBITDA margin to at least 35%. Nonetheless, financial sustainability is achievable in the medium to long term, although it will require sacrifice and dedication to execute the demanding initiatives required.

We've had to undertake various initiatives to contain costs in response to the MYPD 3 determination, such as the Business Productivity Programme, continual prioritisation of capital expenditure and the Design-to-Cost strategy introduced a few years ago. Despite these efforts, the average standard tariff price increases have not enabled a migration towards cost-reflective tariffs as envisaged in the Electricity Pricing Policy.

Cost containment initiatives alone will not restore Eskom's financial sustainability, and therefore the price of electricity must migrate to cost reflectivity over time.

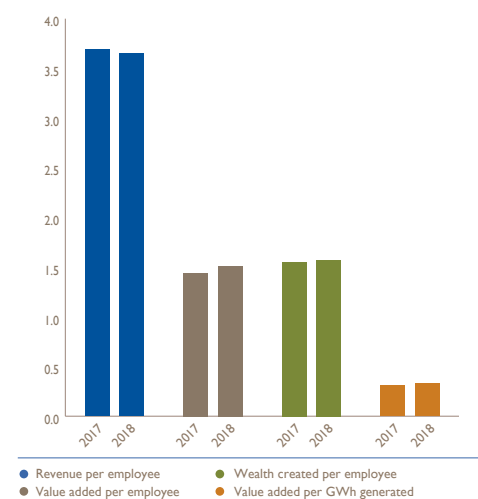
Calib Cassim  
Acting Chief Financial Officer

## VALUE ADDED STATEMENT

### Value added statement for the year ended 31 March 2018

	2018 Rm	2017 Rm
Revenue	177 424	177 136
Other income	1 406	1 608
Less: Primary energy and other operating expenses	(105 578)	(109 529)
<b>Value added</b>	<b>73 252</b>	69 215
Finance income	2 872	5 212
<b>Wealth created</b>	<b>76 124</b>	74 427
<b>Value distributed</b>	<b>75 007</b>	75 947
Benefits to employees	32 655	36 833
Social spending to communities	180	201
Finance costs to lenders	41 508	37 822
Taxation to Government	664	1 091
<b>Value reinvested in the group to maintain and develop operations</b>	<b>1 117</b>	(1 520)
Depreciation and amortisation	23 132	20 300
Borrowing costs capitalised	(15 547)	(18 233)
Employee costs capitalised	(3 201)	(3 655)
Deferred tax	(930)	(820)
Net (loss)/profit	(2 337)	888
<b>Wealth created</b>	<b>76 124</b>	74 427
<b>Value created, R million</b>		
Revenue per employee	3.65	3.72
Value added per employee	1.51	1.45
Wealth created per employee	1.57	1.56
Value added per GWh generated	0.33	0.31
Number of employees and fixed-term contractors	48 628	47 658
GWh generated	221 936	220 166

Average values per unit, R million



## CONDENSED ANNUAL FINANCIAL STATEMENTS

The group and company financial results set out in the condensed financial statements which follow have been extracted from the Eskom Holdings SOC Ltd consolidated annual financial statements for the year ended 31 March 2018, which have been prepared in accordance with International Financial Reporting Standards (IFRS) and in the manner required by the Companies Act, 2008 and PFMA, 1999.

The consolidated annual financial statements have been prepared under the supervision of the acting Chief Financial Officer, Mr Calib Cassim CA(SA), and were duly approved by the Board of Directors on 2 July 2018.

The consolidated annual financial statements have been audited by the group's independent auditors, SizweNtsalubaGobodo Inc. in accordance with the Public Audit Act of South Africa, 2008, the *General Notice* issued in terms thereof and International Standards on Auditing; they issued a qualified opinion relating to the completeness of amounts disclosed in terms of the PFMA. Except for the qualification, the consolidated annual financial statements are fairly presented in terms of IFRS.

The consolidated annual financial statements, which detail the financial performance of the group and company, are available online

The financial statements may also be inspected at Eskom's registered office; limited hard copies are available on request.

Any reference to future performance plans and/or strategies included in the integrated report has not been reviewed or reported on by the group's independent auditors.

### Condensed income statements for the year ended 31 March 2018

	Group		Company	
	2018 Rm	2017 Rm	2018 Rm	2017 Rm
<b>Continuing operations</b>				
Revenue	177 424	177 136	177 424	177 136
Other income	1 372	1 573	1 787	2 094
Primary energy	(85 202)	(82 760)	(85 202)	(82 760)
Employee benefit expense	(29 454)	(33 178)	(24 455)	(27 902)
Net impairment loss	(553)	(1 669)	(528)	(1 629)
Other expenses	(18 228)	(23 570)	(25 598)	(30 950)
Profit before depreciation and amortisation expense and net fair value loss (EBITDA)	45 359	37 532	43 428	35 989
Depreciation and amortisation expense	(23 132)	(20 300)	(23 110)	(20 277)
Net fair value loss on financial instruments, excluding embedded derivatives	(1 898)	(3 342)	(1 998)	(3 203)
Net fair value gain on embedded derivatives	123	1 611	123	1 611
Profit before net finance cost	20 452	15 501	18 443	14 120
Net finance cost	(23 089)	(14 377)	(24 199)	(15 389)
Finance income	2 872	5 212	1 874	4 290
Finance cost	(25 961)	(19 589)	(26 073)	(19 679)
Share of profit of equity-accounted investees after tax	34	35	-	-
<b>(Loss)/profit before tax</b>	<b>(2 603)</b>	1 159	<b>(5 756)</b>	(1 269)
Income tax	266	(271)	1 148	399
<b>(Loss)/profit for the year<sup>1</sup></b>	<b>(2 337)</b>	888	<b>(4 608)</b>	(870)

1. A nominal amount is attributable to the non-controlling interest in the group. The remainder is attributable to the owner of the company.

The statements of comprehensive income and statements of changes in equity can be found in the consolidated annual financial statements

**Condensed statements of financial position  
at 31 March 2018**

	Group		Company	
	2018 Rm	2017 Rm	2018 Rm	2017 Rm
<b>Assets</b>				
<b>Non-current assets</b>	<b>658 068</b>	622 331	<b>658 441</b>	622 683
Property, plant and equipment and intangible assets	634 593	592 848	634 962	593 296
Future fuel supplies	7 157	8 190	7 157	8 190
Investment in equity-accounted investees and subsidiaries	372	364	479	479
Derivatives held for risk management	13 705	16 868	13 705	16 868
Investment in securities	–	1 537	–	1 537
Other non-current assets	2 241	2 524	2 138	2 313
<b>Current assets</b>	<b>72 122</b>	78 879	<b>70 530</b>	78 797
Inventories	24 348	22 359	24 122	22 156
Loans receivable	18	14	6 201	6 187
Derivatives held for risk management	1 873	1 000	1 875	1 000
Trade and other receivables	20 124	19 379	21 428	20 609
Investment in securities	6 839	10 541	–	5 167
Financial trading assets	1 501	2 919	168	1 730
Other current assets	1 596	2 242	1 357	1 984
Cash and cash equivalents	15 823	20 425	15 379	19 964
<b>Non-current assets held-for-sale</b>	<b>8 926</b>	8 799	<b>40</b>	70
<b>Total assets</b>	<b>739 116</b>	710 009	<b>729 011</b>	701 550
<b>Equity</b>				
Capital and reserves attributable to the owner of the company	170 336	175 942	158 075	165 964
<b>Liabilities</b>				
<b>Non-current liabilities</b>	<b>474 353</b>	453 777	<b>473 788</b>	453 275
Debt securities and borrowings	348 112	336 770	348 060	336 690
Embedded derivatives	3 434	4 032	3 434	4 032
Derivatives held for risk management	16 570	6 767	16 570	6 767
Deferred tax	15 846	18 067	15 665	18 090
Employee benefit obligations	13 725	13 790	13 404	13 458
Provisions	44 370	44 021	44 359	43 908
Finance lease payables	9 533	9 819	9 533	9 819
Deferred income	19 796	17 700	19 796	17 700
Other non-current liabilities	2 967	2 811	2 967	2 811
<b>Current liabilities</b>	<b>92 745</b>	78 607	<b>97 148</b>	82 311
Debt securities and borrowings	40 572	18 530	44 525	22 017
Embedded derivatives	1 857	1 382	1 857	1 382
Derivatives held for risk management	4 896	3 826	4 896	3 838
Employee benefit obligations	3 244	7 348	2 992	6 848
Provisions	5 309	9 057	5 194	8 573
Trade and other payables	32 116	31 782	32 944	33 059
Payments received in advance	3 003	3 591	2 996	3 585
Other current liabilities	1 748	3 091	1 744	3 009
<b>Non-current liabilities held-for-sale</b>	<b>1 682</b>	1 683	<b>–</b>	–
<b>Total liabilities</b>	<b>568 780</b>	534 067	<b>570 936</b>	535 586
<b>Total equity and liabilities</b>	<b>739 116</b>	710 009	<b>729 011</b>	701 550

**Condensed statements of cash flows  
for the year ended 31 March 2018**

	Group		Company	
	2018 Rm	2017 Rm	2018 Rm	2017 Rm
<b>Cash flows from operating activities</b>				
(Loss)/profit before tax	(2 603)	1 159	(5 756)	(1 269)
Adjustment for non-cash items	44 710	47 932	46 193	47 985
Changes in working capital	(2 448)	(1 730)	(2 580)	(276)
Cash generated from operations	39 659	47 361	37 857	46 440
Net cash flows (used in)/from derivatives held for risk management	(1 726)	(1 787)	(1 738)	(1 700)
Finance income received	393	1 342	393	1 342
Finance cost paid	(28)	(22)	(28)	(22)
Income taxes paid	(724)	(1 053)	–	–
<b>Net cash from operating activities</b>	<b>37 574</b>	45 841	<b>36 484</b>	46 060
<b>Cash flows from investing activities</b>				
Proceeds from disposal of property, plant and equipment	453	398	448	388
Acquisitions of property, plant and equipment and intangibles	(49 501)	(57 259)	(49 412)	(56 572)
Expenditure on future fuel supplies	(1 618)	(639)	(1 618)	(639)
Increase in payments made in advance	(40)	(99)	(40)	(99)
Expenditure incurred on provisions	(4 788)	(6 890)	(4 788)	(6 890)
Net cash flows (used in)/from derivatives held for risk management	(91)	389	(91)	389
(Increase)/decrease in investment in securities and financial trading assets	(1 492)	496	–	–
Decrease/(increase) in loans receivable and finance lease receivables	31	26	(6)	203
Dividends received	63	71	27	32
Finance income received	1 486	1 221	534	546
<b>Net cash used in investing activities</b>	<b>(55 497)</b>	(62 286)	<b>(54 946)</b>	(62 642)
<b>Cash flows from financing activities</b>				
Debt securities and borrowings raised	53 234	50 994	53 761	51 073
Payments made in advance to secure debt raised	(929)	(1 096)	(929)	(1 096)
Debt securities and borrowings repaid	(12 548)	(7 034)	(12 591)	(7 072)
Net cash flows used in derivatives held for risk management	(1 824)	(7 738)	(1 824)	(7 738)
Net cash flows from/(used in) investment in securities and financial trading assets	8 045	(1 142)	8 045	(1 142)
Net cash flows (used in)/from finance lease payables and financial trading liabilities	(1 487)	343	(1 487)	343
Finance income received	1 034	2 365	1 004	2 328
Finance cost paid	(31 909)	(28 788)	(32 051)	(28 888)
Taxes paid	(69)	(49)	(69)	(49)
<b>Net cash from financing activities</b>	<b>13 547</b>	7 855	<b>13 859</b>	7 759
<b>Net decrease in cash and cash equivalents</b>	<b>(4 376)</b>	(8 590)	<b>(4 603)</b>	(8 823)
Cash and cash equivalents at the beginning of the year	20 425	28 454	19 964	28 136
Foreign currency translation	(25)	(45)	–	–
Effect of movements in exchange rates on cash held	10	647	10	651
Assets and liabilities held-for-sale	(211)	(41)	8	–
<b>Cash and cash equivalents at the end of the year</b>	<b>15 823</b>	20 425	<b>15 379</b>	19 964



**HIGHLIGHTS**

- R20 billion facility signed in February 2018, easing liquidity pressures
- Cost savings exceeded BPP target, and additional savings achieved in response to liquidity challenges
- EBITDA improved to R45.4 billion, and EBITDA margin to 25.91%

**IMPROVEMENTS**

- Liquidity improved since half-year position
- Export sales volumes were maintained
- Increase in the average purchase cost per ton of coal was restricted to 3.8%
- Headcount reduced slightly year-on-year, before accounting for appointments required by the Labour Relations Act, 1995

**CHALLENGES**

- Several credit ratings downgrades over the past year
- Most financial ratios worsened year-on-year and remain well below acceptable levels; substantial improvement is needed to boost credit ratings
- Matching the term of external debt to the life of the plant being financed, with regulatory returns linked to the life of the asset
- Overall sales remain stagnant due to challenging economic conditions
- Expenditure on IPPs account for 23% of primary energy costs, although IPPs supplied only 4% of GWh energy sent out
- Growth in depreciation and net finance cost linked to commissioning of units under the new build programme

**LOWLIGHTS**

- Severe liquidity challenges due to impact on access to funding of prior year audit qualification on irregular expenditure and governance-related issues
- Price increases of 2.2% in 2017/18 and 5.23% for 2018/19 insufficient to sustain current operations
- Only R32.7 billion of the RCAs of R66.7 billion relating to three years of MYPD 3 was approved by NERSA in June 2018
- Considerable escalation in municipal arrear debt

An organisation uses financial capital to fund its operations. Sources of financial capital are either debt or equity, which can be generated from operations or provided by shareholders. In a state-owned enterprise like Eskom, the shareholder does not often provide equity. This, coupled with inadequate profitability, means that we are highly dependent on debt funding. In order to optimise returns, we need to increase revenue and reduce costs. Furthermore, managing liquidity is of the utmost importance.

In pursuing financial sustainability, we strive to move the organisation towards a state where the rate of return on assets is at least equal to the weighted average cost of capital, in order to ensure that we remain a going concern and able to meet short-term liquidity requirements, while also being able to service long-term debt and financial commitments. In order to achieve this, we have to increase the EBITDA margin to at least 35%, by reducing costs, increasing sales volumes and also migrating to a cost-reflective price of electricity. The ideal is to be in a position where we are able to fund total debt service cost and a portion of capital expenditure from operational cash flows. We also have to reduce our reliance on debt funding.

**Looking back on prior year focus areas**

We continued with initiatives to stimulate demand, although overall sales declined further.

Arrear debt remains an area of significant concern. Municipal arrear debt continued to escalate over the year, and there has not been much progress on collecting amounts due directly from customers on behalf of struggling municipalities, although pilot projects have commenced in two areas. Efforts continue to convert customers to prepaid metering.

We were forced to intensify the drive to contain operating costs, focusing on primary energy costs, employee benefit costs, maintenance and third-party spend, as a result of the liquidity challenges experienced during the year. Advanced analytics to achieve cost savings, such as in performing predictive maintenance and optimising coal burn, are in the early stages of implementation. Capital optimisation also continued in order to reduce our funding requirement.

**Managing liquidity**

One of the biggest issues we've had to face this year was managing liquidity. The audit qualification related to the completeness of irregular expenditure in the 2016/17 financial statements, coupled with ongoing governance issues, severely restricted our access to funding in both domestic and foreign markets.

Other issues contributed to our liquidity problems, not least of which being the price increase of only 2.2% granted by NERSA for the 2017/18 financial year, as well as escalating municipal arrear debt. In an effort to manage the problem, we restricted our organisational cash requirements through targeted savings on operating and capital expenditure.

Cash and cash equivalents decreased to R15.8 billion at year end (March 2017: R20.4 billion), boosted by a R20 billion bridge-to-bond facility obtained in February 2018. Liquid assets, which include cash and investments in securities, decreased to R22.7 billion (March 2017: R32.5 billion). An amount of R3.9 billion is however not available as liquid funds, due to being reserved for Escap's insurance solvency requirements.

Net cash inflows from operating activities for the year were R37.6 billion (March 2017: R45.8 billion). The working capital ratio improved to 1.05 (March 2017: 0.85), although the cash interest cover ratio declined significantly to 1.22 (March 2017: 1.73, restated); the debt service cover ratio also declined considerably, to 0.87 (March 2017: 1.37).

Cash flows used in investing activities were R55.5 billion for the year (March 2017: R62.3 billion). Acquisition of property, plant and equipment, intangible assets and future fuel, exclusive of capitalised borrowing costs, amounted to R51.1 billion (March 2017: R57.9 billion), predominantly due to expenditure on the new build programme, Generation outage and technical plan requirements, as well as expenditure on our network infrastructure.

For detail of capital expenditure incurred, refer to the table on page 97

Net cash inflows from financing activities for the year were R13.5 billion (March 2017: R7.9 billion) for the group. Debt securities and borrowings raised amounted to R53.2 billion (March 2017: R51 billion); we also repaid debt of R12.5 billion (March 2017: R7 billion). Interest paid totalled R31.9 billion (March 2017: R28.8 billion).

**Price applications to support revenue requirements**

We requested permission from NERSA to submit a one-year revenue application for 2018/19, given the regulatory uncertainty resulting from the Borbet case reported on last year. We duly submitted a revenue application of R219.5 billion, equating to a 19.9% standard customer tariff increase, of which NERSA approved total allowed revenue of R190.3 billion, corresponding to an average standard tariff price increase of only 5.23% for 2018/19. Of that, IPP increases account for about 3%, with the balance available to cover growth in Eskom's costs.

Together with the 2.2% increase for 2017/18, we received an average increase of 3.72% for the two years, with the average for Eskom being only 2.2%, which is wholly inadequate to ensure the recovery of prudent costs while earning a fair return on assets, as required by the Electricity Pricing Policy. This follows increases of 12.69% and 9.4% for the preceding two years, based on the 8% awarded under MYPD 3, together with the recovery of the regulatory clearing account (RCA) balances awarded in those years.



## OUR FINANCES

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The impact of the decision is expected to have consequences for our financial sustainability, going concern status and ability to settle debt commitments, which also means we will be unable to release Government guarantees. It may also hinder our ability to raise further debt, as investors require price certainty.

We don't believe NERSA's decision on the 2018/19 revenue application was made in accordance with the Electricity Regulation Act, 2006 or the MYPD methodology, both of which require NERSA to make a revenue decision that allows Eskom to recover efficient costs and a fair return. We will approach the court to set aside NERSA's decision.



### Overview of the RCA mechanism

As outlined in the MYPD methodology, the RCA is defined as a risk management control and pass-through mechanism. The methodology states that "the risk of excess or inadequate returns is managed in terms of the RCA. The RCA is an account in which all potential adjustments to Eskom's allowed revenue that has been approved by the Energy Regulator is accumulated."

When a new MYPD revenue application is made, it is forward-looking and based on projected assumptions. Nevertheless, there is a direct link between MYPD decisions and RCA applications as risks are managed in RCA applications. Thus if a significant risk is passed to Eskom at the point of a revenue decision, the impact would materialise in an RCA application. The consumer is therefore protected from the risk at the initial stage during the revenue determination. Variances in RCA applications are linked to two key sources:

- Variances in costs due to a changing environment and assumptions after the MYPD decision
- Assumptions made during the MYPD revenue decision which do not materialise

The RCA is thus a backward-looking reconciliation that determines the variance between the amount awarded by NERSA based on the forecast contained in the MYPD application, and the revenue actually achieved by Eskom. Actual results are based on Eskom's audited financial statements. A variance arises if Eskom either does not achieve or exceeds the awarded revenue, or incurs costs that are higher or lower than those that were taken into account when NERSA computed the allowed revenue under the MYPD.

The RCA balance could be either in favour of Eskom or in favour of the customer, and is subject to a prudence review by NERSA. The timing and method of the recovery of the RCA balance is determined by NERSA, and the methodology allows for the adjustment of future tariffs to address past variances; this may result in an increase or decrease of future electricity prices by adjusting Eskom's allowed revenue.

We also submitted our RCA application of R23.9 billion for the 2016/17 financial year, bringing the total of the three outstanding RCAs for MYPD 3 to R66.7 billion. Written comments on these were due by 23 March 2018, and country-wide public hearings were held during April and May 2018. In response to concerns raised by stakeholders during the public hearings, we have agreed to recovery of the approved RCA balance in a phased manner, likely from 2019/20 onwards.

On 14 June 2018, NERSA announced its decision to allow R32.7 billion in respect of all three RCAs submitted, amounting to less than 50% of the amount applied for, despite Eskom applying the MYPD methodology and the principles followed by NERSA during previous RCA decisions. NERSA has indicated that it will issue its reasons for the decision in due course, and will provide the implementation plan for recovery of the RCA balance by 30 September 2018.

The RCA forecast for 2017/18 is approximately R21 billion, driven by under recovery of revenue of R24.7 billion, reduced by under expenditure of R3.8 billion on primary energy. We envisage making this RCA application after the publication of our 2017/18 annual financial statements. In accordance with the MYPD methodology, we will continue to apply for RCAs on an annual basis.

We are in the process of preparing for a three-year MYPD 4 revenue application, covering 2019/20 to 2021/22. Our submission to NERSA will be made in the second half of the 2018 calendar year in terms of regulatory timelines.

### Controlling expenditure to maintain liquidity Business Productivity Programme

The five-year Business Productivity Programme (BPP) concluded on 31 March 2018. The programme was implemented to close the revenue gap created by the MYPD 3 revenue decision, which granted an increase of 8% per year against 16% per year which we applied for. BPP savings are measured in accordance with the baseline committed to Government as part of its support package provided in 2015/16.

Two major goals were to unlock cash and/or contain expenditure, and to assist the business in delivering sustainable productivity improvements. Value streams were identified where efficiencies could be unlocked or spend could be contained. A systematic approach was followed to develop and define value packages within each of the value streams.

For the year under review, we achieved BPP savings of R20.7 billion against a target of R18.9 billion, largely due to lower spend on primary energy and external costs. The programme achieved overall savings of R69.4 billion over five years, thereby exceeding the target of R61.9 billion by R7.5 billion.

### Performance of the BPP programme per value stream

Value stream, R billion	2013/14	2014/15	2015/16	2016/17	2017/18	Total	Target	Target met?
Revenue	0.1	0.4	1.3	(0.4)	0.1	1.5	4.8	■
Primary energy	–	2.8	6.2	9.4	6.3	24.7	15.6	●
Employee benefit costs	–	0.9	3.5	4.2	5.1	13.7	16.7	■
Repairs and maintenance	–	0.4	0.5	2.1	1.6	4.6	2.3	●
Finance stream	0.1	0.3	0.3	0.5	0.5	1.7	1.0	●
External spend	2.1	3.9	5.7	4.4	7.1	23.2	21.5	●
Total	2.3	8.7	17.5	20.2	20.7	69.4	61.9	●

A significant portion of the savings has been driven by cost containment activities, including the reduction in the baseline budget at the start of BPP in maintenance, employee benefit costs and other general expenses. Efficiencies have been realised via the Tetris maintenance plan through optimisation of time and people. Other savings on operating expenditure include the containment of spend on consulting and other office expenses. However, savings on employee benefit costs have not been fully realised due to higher than anticipated headcount and other levers identified for savings not fully materialising.

Primary energy-related savings are attributable to lower coal costs and lower international purchases. The coal price was favourable compared to budget, particularly for the 2015/16 and 2016/17 financial years.

The remaining savings are due to net improvement in revenue recovery and revenue protection, as well as cash savings due to restructuring and implementation of financial market instruments, such as cross-currency swaps and other swap transactions.

### Other cost savings initiatives

Cost savings initiatives identified in last year's Corporate Plan relating to coal spend and capital expenditure are showing success, although sales growth initiatives are not progressing as well as anticipated due to lacklustre local economic conditions, combined with increased regional competition impacting the selling price of exported electricity. Initiatives to utilise advanced analytics to deliver cost savings are in the very early stages. No Government guarantees have yet been released.

### Key debt management indicators at 31 March 2018

Measure and unit	Target 2022/23	Target 2018/19	Target 2017/18	Actual 2017/18	Actual 2016/17	Actual 2015/16	Target met?
Arrear debt as % of revenue, % <sup>SC</sup>	2.60	1.70	2.17	2.73	2.42	1.14	■
Average debtors days (including Soweto), days <sup>SC</sup>	59.47	78.95	73.38	71.11	57.31	50.05	●
Debtors days – municipalities, average debtors days	95.09	96.27	89.00	76.63	53.25	42.93	●
Debtors days – large power top customers excluding disputes, average debtors days	14.88	14.88	15.40	13.89	15.34	15.51	●
Other large power user debtors days (<100GWh p.a.), average debtors days	16.52	16.66	16.30	16.64	16.78	16.24	▲
Debtors days – small power users excluding Soweto, average debtors days	39.64	46.08	48.20	43.36	48.75	48.24	●

I. Debtors days are based on amounts processed on our billing system, and shown before accounting adjustments relating to uncollectability.

In response to the liquidity challenges experienced during the year, the business was challenged to realise an additional R10 billion in savings on operating costs during the year, approximately half of which was expected to result in cash savings. This was supported by a further R5 billion cash savings targeted on capital expenditure. These targets were largely achieved.

Group funded capital expenditure, excluding electrification connections funded by DoE, amounted to R48 billion for the year (March 2017: R60 billion), mainly due to a reduction in spend in Group Capital and Generation, in accordance with available funds.

### Managing arrear debt

Global and local economic conditions, for instance commodity prices and consumer confidence, are affecting customers' sustainability, thereby impacting the revenue we generate and their ability to pay. In some customer segments, we also have to contend with social issues, such as a culture of non-payment and theft.

Total debtors days declined year-on-year to 71.11 days, mainly due to the deterioration in municipal debtors days, with levels of municipal arrear debt remaining unacceptably high.

We continue to apply the IAS 18 accounting principle of not recognising revenue if it is not considered collectible at the date of sale, although we carry on billing customers based on consumption. As a result, external revenue and debtors of R3.3 billion were not recognised during the year (March 2017: R3.2 billion); the cumulative figure is R8.5 billion.

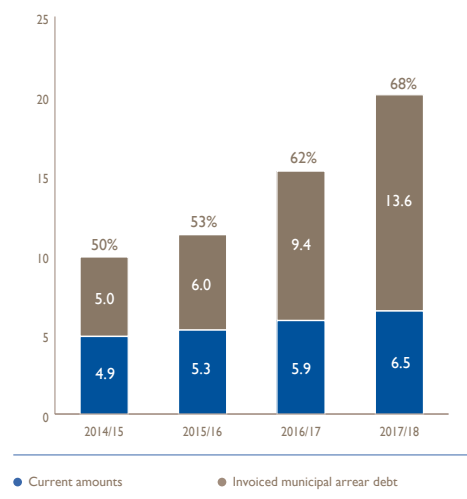
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### Municipal arrear debt

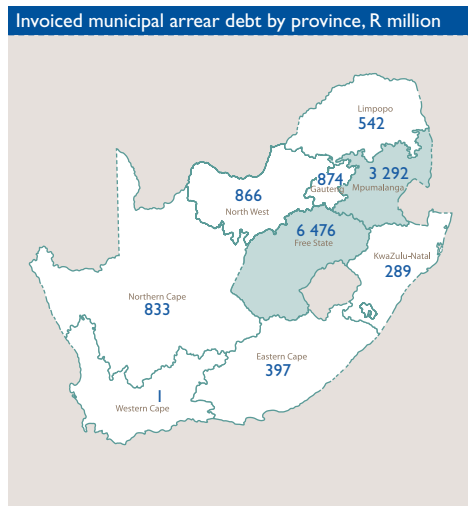
Total invoiced municipal arrear debt increased significantly, to R13.6 billion (including interest) at year end (March 2017: R9.4 billion). The top 20 defaulting municipalities constitute 82% of total invoiced municipal arrear debt (March 2017: 79%), and almost 48% of the arrear debt is owed by Free State municipalities. At year end, there were 23 municipalities with total arrear debt of more than R100 million each (March 2017: 18).

### Invoiced municipal arrear debt (including interest) and arrear debt percentage at 31 March 2018, R billion



At 31 March 2018, a total of 52 active payment agreements were in place with defaulting municipalities (March 2017: 66), including 12 of the top 20 defaulters. However, of these, only 28 were being fully honoured, with only four of the top 20 fully honouring their agreements. Only two of the Free State municipalities were honouring their payment arrangements.

The top three Free State municipalities – Maluti-A-Phofung, Matjhabeng and Ngwathe – account for almost R5.4 billion of the total outstanding debt. Supply interruptions planned for Maluti-A-Phofung were halted through an interdict by a group of customers. Under an interim court ruling, we agreed not to interrupt supply to the customers who brought the application, provided they pay Eskom directly until such time as the final application is heard in court; this was scheduled for June 2018. Matjhabeng submitted a proposed payment plan, while Ngwathe concluded a payment plan in March 2018. However, should the municipalities default on the arrangements, the PAJA process will be restarted.



The top 10 defaulting municipalities, who owed a combined total of R9.5 billion in invoiced arrear debt (or 70% of total invoiced municipal arrear debt) at year end, are:

- Maluti-A-Phofung Municipality, Free State: R2 694 million
- Matjhabeng Municipality, Free State: R1 770 million
- Emalahleni Local Municipality, Mpumalanga: R1 577 million
- Ngwathe Local Municipality, Free State: R915 million
- Emfuleni Local Municipality, Gauteng: R621 million
- Govan Mbeki Municipality, Mpumalanga: R514 million
- Lekwa Local Municipality, Mpumalanga: R479 million
- Thaba Chweu Local Municipality, Mpumalanga: R420 million
- Ditsobotla Local Municipality, North West: R286 million
- Naledi Local Municipality, North West: R271 million

### Revenue collection pilot projects

A pilot project commenced in Phumelela Local Municipality in the Free State during October 2017. The goal is to install prepaid meters and collect revenue on behalf of the municipality. A total of 751 meters had been installed when the project came to a halt due to community protest action. We are negotiating with the municipality to find ways of overcoming the challenges.

A pilot project was initiated in Raymond Mhlaba Local Municipality in the Eastern Cape, with a total of 5 648 meters having been installed by year end. The project is expected to be finalised early in the coming financial year, after which the learnings of the pilot project will be shared.

The aim of these projects is not necessarily to recover overdue debt, but rather to ensure payment of current amounts to prevent the debt increasing.

### Disconnecting defaulting municipalities

Immediately after non-paying municipalities have been advised of their contract breach, the PAJA process is started in order to disconnect or interrupt supply to those municipalities. During the past year, numerous municipalities concluded agreements with Eskom or made suitable arrangements that were supported by their Provincial Treasury. Since September 2017, electricity supply has been interrupted to 16 municipalities. A total of 45 municipalities were removed from the planned interruption list after payment arrangements were concluded, while six municipalities were interrupted in the last quarter of the financial year.

The High Court instructed Eskom to suspend interruption to Maluti-A-Phofung, Emalahleni and Thaba Chweu, all three in the list of top 10 defaulters. We were also interdicted from interrupting supply to Nketoane Municipality. Interruptions are currently planned in three municipalities, although negotiations continue with the relevant municipalities to avert interruption.

An inter-ministerial committee, chaired by the Minister of Public Enterprises, and consisting of DPE, COGTA, National Treasury, Eskom, SALGA, the Portfolio Committee on Co-operative Governance and the Standing Committee on Public Accounts (SCOPA), is investigating constitutional matters which have an impact on electricity supply and reticulation by Eskom and municipalities. Our view is that, unless the root causes identified are addressed, the payment challenges in municipalities will not improve significantly.

The initiatives proposed in the prior year in response to concerns raised by municipalities and SALGA have been implemented. Since July 2017, interest charged on overdue amounts has reduced to prime plus 2.5%, with payments now being applied to settle capital before interest. Furthermore, payment periods for municipalities with bulk supply points only (excluding metropolitan areas) were extended to 30 days, from 15 days previously. The rationalisation of the number of municipal tariffs has not yet been approved by NERSA.

With paying customers of affected municipalities being severely impacted, curtailment of supply remains our last resort. Nevertheless, where municipalities default on payment, we will initiate interruption of supply in line with the PAJA process.

### Residential arrear debt

The impact of municipal arrear debt on Eskom's business is more significant than that of defaulting small power user (SPU) customers, particularly in Soweto, for two reasons. Firstly, municipal debt covers a few hundred municipal customers, whereas Soweto SPU debt relates to tens of thousands of residential customers, making the latter much more difficult to manage and collect. Secondly, municipal arrear debt has grown exponentially over the past few years, whereas Soweto SPU debt is growing at a much lower rate, as the problem is mainly historic. The majority of the growth on Soweto SPU debt relates to interest.

### An overview of the PAJA process

Eskom follows the PAJA process before it can interrupt supply to affected municipalities. This process can be summarised as follows:

The electricity supply agreement between Eskom and municipalities stipulates that the monthly account becomes due as soon as the municipality receives the invoice. However, should the municipality fail to pay the account within 30 days of the due date, Eskom may disconnect supply to the municipality after giving the municipality 14 days' written notice.

Nevertheless, Eskom also has to follow a public consultation process before it can disconnect supply to the municipality; this starts with a written notice of intent being issued to the municipality. Should the municipality fail to correct the breach or make alternative arrangements within this period, we will issue a public notice in local newspapers in two of the official languages spoken in the affected area. The public notice provides details of our intent to disconnect the municipality for non-payment, and invites interested and affected parties to submit comments or reasons as to why we should not continue with the disconnection.

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Total invoiced Soweto SPU debt has increased further to R12 billion (including interest) at year end, of which arrear debt constituted about 98%. Moreover, payment levels of about 15% on Soweto residential accounts remain unacceptably low, and have declined over recent years. The rollout of split meters with conversion to prepaid metering was initiated several

years ago, in an effort to address this problem. However, we have encountered significant community resistance to the project, coupled with frequent vandalism of equipment. We have started switching off transformers when the community refuses the installation of split meters. In future, all new installations will be done in prepaid mode.

### Credit ratings and funding

#### Solvency ratios

Measure and unit	Target 2022/23	Target 2018/19	Target 2017/18	Actual 2017/18	Actual 2016/17	Actual 2015/16	Target met?
<b>Group</b>							
Free funds from operations as % of gross debt, %	18.55	8.98	8.15	<b>9.09</b>	11.69	10.98	●
Cash interest cover, ratio <sup>1</sup>	2.46	1.16	1.19	<b>1.22</b>	1.73	1.73	●
Debt service cover, ratio	1.15	0.56	0.69	<b>0.87</b>	1.37	1.14	●
Gross debt/EBITDA, ratio	5.26	11.97	15.50	<b>9.71</b>	10.84	10.95	●
Debt/equity (including long-term provisions), ratio	3.27	3.18	2.46	<b>2.52</b>	2.11	1.65	▲
Gearing, %	77	76	71	<b>72</b>	68	62	▲

1. The basis for calculating cash interest cover was revised during the year, to exclude interest earned on investing activities. Comparatives have been restated.

Although the majority of solvency ratios performed better than target, they worsened considerably compared to the prior year and remain well below the accepted norm. Credit ratings also remain below investment-grade levels. It is expected that most ratios and the net loss will decline further before improving, once the revised strategy is implemented.

Of concern is the fact that cash from operations and funding activities was not sufficient to meet debt service and capital spend requirements. It is expected that this trend will continue for some time before improving, due to our ongoing new build programme, coupled with electricity tariffs being lower than that required to sustain operations and the persistent issues surrounding municipal arrear debt.

#### Credit ratings

There have been significant changes to the credit ratings of both Eskom and the Sovereign over the past year. The Sovereign was downgraded to sub-investment level, and Eskom, already at sub-investment level, was further downgraded on a number of

occasions by all ratings agencies, thereby impacting our access to unguaranteed funding and increasing the cost of borrowings.

The reasons cited for the downgrades over the year include our deteriorating liquidity position, ongoing governance concerns and Government's perceived inability to provide sufficient and timely support. This was exacerbated by uncertainty about our ability to meet financial obligations in the short term, given the tight liquidity, high gearing and weak interest cover and debt service cover metrics. Furthermore, the national budget announced by the Minister of Finance in February 2018 contained no tangible financial support for Eskom.

Common reasons for the most recent downgrades referred to limited visibility of our plans for placing our financial position and the business on a sustainable footing in the longer term, despite ratings agencies recognising the recent positive actions relating to governance and liquidity.

#### Summary of Eskom's credit ratings at 31 March 2018

Rating	Standard & Poor's	Moody's	Fitch: local currency
Foreign currency	CCC+	B2	n/a
Local currency	CCC+	B2	BB-
Standalone	ccc-	caa2	CCC
Outlook	Negative	Negative	Ratings Watch Negative
Last rating action	Downgrade	Downgrade	Downgrade
Last action date	27 February 2018	28 March 2018	31 January 2018

In May 2018, Fitch affirmed our credit ratings, which remain on Rating Watch Negative, except for the Government-guaranteed debt, which reflects a stable outlook. We view the ratings decision as positive – Fitch acknowledged the positive measures to turn the organisation around, which have been implemented by the new Board during their short tenure, with support from management. Although concerns over liquidity challenges remain the main rationale for retaining the Ratings Watch Negative position on our rating, Fitch conceded that we have made positive strides in addressing liquidity issues in recent months.

#### Funding activities

Our original funding plan of R71.7 billion for the 2017/18 financial year excluded the sale of Eskom Finance Company, which has been further delayed. Furthermore, ongoing governance issues and the audit qualification on the 2016/17 financial statements,

related to the completeness of irregular expenditure disclosed in terms of PFMA requirements, had a significant impact on our ability to borrow in both domestic and foreign markets. In response, we curtailed our organisational cash requirement through savings on capital and operating expenditure, resulting in a revised funding requirement of R57.4 billion for the year.

During the past year, we experienced a lack of demand in the local bond market due to market concerns over corporate governance, future funding requirements and inadequate tariff structures, although we have seen an increase in local and international investor demand for our bonds since January 2018. Most state-owned entities are failing in their attempts to obtain funding in the domestic bond market.

#### Progress on the execution of the 2017/18 and 2018/19 borrowing programmes at 31 March 2018

Potential sources, R billion	2017/18		2018/19	
	Target	Committed to date	Target	Committed to date
DFIs	19.6	<b>18.6</b>	15.3	8.8
ECAs	3.6	<b>3.8</b>	5.8	1.0
International bonds	–	–	20.0	–
Domestic bonds and notes > 1 year	7.3	<b>8.4</b>	13.0	1.5
Domestic bonds and notes < 1 year	4.4	<b>4.2</b>	10.0	–
Structured products	2.5	<b>2.5</b>	8.0	–
Bank funding	20.0	<b>20.0</b>	–	–
<b>Total</b>	<b>57.4</b>	<b>57.5</b>	<b>72.1</b>	<b>11.3</b>

1. Committed sources include funding raised or signed facilities with milestone drawdowns.

Our Treasury Department achieved the reduced funding requirement for the year by securing R57.5 billion; the amount includes a short-term bridge-to-bond facility of R20 billion, which was provided by a consortium of banks in February 2018. The facility is ring-fenced for capital expenditure, and is repayable by 31 August 2018.

The ratings downgrades have increased lenders' requirements for Government guarantees of our debt. At 31 March 2018, R240.5 billion of the Government guarantees has been utilised, relating to loans and bond issuances, both foreign and local, to date. Of the total facility of R350 billion, 79% has been committed, 17% is under negotiation and 4% remains available for future funding. Contrary to earlier expectations, we have not been able to release any Government guarantees, nor will we be in a position to do so in the foreseeable future.

Investors rely heavily on the resolution of governance-related issues and associated investigations before any firm commitments on funding will be made. Furthermore, investors require stability in executive management. Ratings agencies have also indicated their deep concerns regarding governance and leadership at Eskom, and they are closely monitoring leadership

stability and improvement in governance. Any further downgrades would exacerbate the current situation and put the execution of the funding plan at risk.

The recent ratings downgrades have not had an impact on previously signed and committed facilities which have been drawn down. Borrowing costs on new transactions may increase, coupled with the potential for more stringent covenant requirements, while our ability to achieve targeted funding volumes could decrease with any further downgrades in our credit rating. Funding costs have gradually increased and include a blend of fixed and floating rates. Given that fixed finance costs provide better hedging of interest rate exposures, 72% of finance costs are currently fixed.

We plan to secure funding of R72.1 billion during 2018/19, of which R11.3 billion, or 16%, was committed at year end. Funding activities towards the end of the financial year were focused on securing sufficient liquidity to manage short-term demand, and therefore pre-funding for the 2018/19 year was limited. To meet the plan for the coming year, we aim to secure additional funding from DFIs and ECAs, which is currently under negotiation, together with domestic bonds and note issuances, as well as through international bond issuances.



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Given recent events, the risk of default has increased; this could trigger the call-up of Government guarantees and cross-defaults. The risk has been exacerbated by the low electricity tariff increases in recent years, which further threatens our revenue with a material impact on cash flows, coupled with our weak standalone credit rating. However, no events of default have occurred to date.



Eskom automatically makes certain representations and warranties to the lenders, when requesting to draw down on existing loan facilities, and at each interest payment date. These include:

- No event of default is continuing or might reasonably be expected to result from the utilisation
- No other event or circumstance is outstanding which constitutes a default under any other agreement or instrument which is binding on the borrower (Eskom), or to which any of the borrower's assets are subject and which has or is reasonably likely to have a material adverse effect
- No acts of corruption, fraud or anti-competitive practices exist in funded contracts
- Eskom is in compliance with existing laws

Misrepresentation in itself constitutes an event of default.

In order to transact in international markets, we are required to remain within a foreign borrowing limit of R308 billion set by National Treasury. The nominal value of foreign currency debt is monitored on a quarterly basis, and our foreign borrowings remain well within the prescribed limit. We await approval from DPE and National Treasury to increase the foreign borrowing limit, to ensure successful execution of the borrowing programme in future years.

### Future funding requirements

The primary focus of our borrowing programme is to secure funding to match our annual capital spend. Additional objectives include:

- Ensuring that we have adequate liquidity reserves to meet cash flow requirements, by maintaining and managing appropriate cash balances and committed lines of credit
- Diversifying both our sources of funding and investor base, while maximising ECA funding of capital expenditure
- Raising cost-effective funding within acceptable risk levels
- Managing the risk associated with interest rates, foreign exchange fluctuations and liquidity, associated with borrowings

Factors that have the potential to affect our ability to successfully execute the borrowing programme include Government's ability to provide explicit financial support, as well as the credit ratings of both Eskom and the Sovereign. The ratings downgrades discussed earlier are expected to continue to put pressure on both borrowing costs and our access to unguaranteed funding.

We plan to secure funding of R274.4 billion for the five years until 2022/23; this relates to the funding of Eskom Holdings SOC Ltd only and excludes our subsidiaries. It reflects a decrease of R63.3 billion compared to the R337.7 billion targeted for the period 2017/18 to 2021/22, largely due to a reduction in capital requirements in response to the restriction on our ability to borrow.

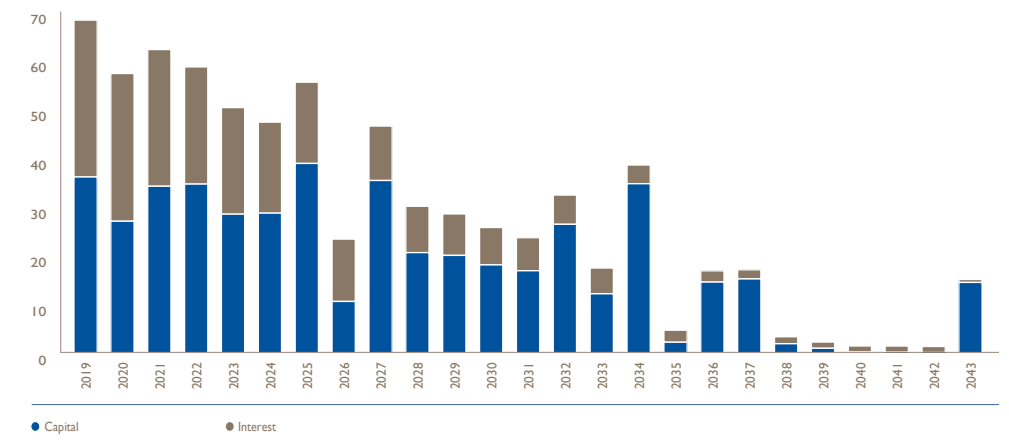
Annual funding requirement	R billion
2018/19	72.1
2019/20	56.5
2020/21	47.2
2021/22	48.5
2022/23	50.1
<b>Total</b>	<b>274.4</b>

The Board has approved the 2018/19 borrowing programme, and supported the plan for 2019/20 and 2020/21.

The borrowing requirement for 2018/19 includes R20 billion required for the repayment of the short-term bridge-to-bond funding. The five-year funding programme also takes into account requirements for future liability management, and as such, not all funding secured will be utilised to meet business requirements. Given this, targeted funding raised to meet business requirements will be capped at around R45 billion per year for at least the next three years. The balance of the funding will be utilised for liability management strategies, as well as to ensure that liquidity reserves are restored to acceptable levels.

With interest payments of approximately R215 billion and debt repayments of R228 billion over the next five years, and maturities currently extending to 2043, our debt repayment profile is relatively pressured over both the short and long term. Our funding strategy will continue to prioritise longer term funding to support short-term debt maturities and alleviate repayment risk. Ideally, the term of our debt should match the useful life of the assets being financed, to align to the methodology applied by NERSA when calculating the required rate of return.

Anticipated capital and interest cash flows (including swaps) of the strategic and trading portfolio at 31 March 2018, R billion



Despite some progress, a number of issues continue to impact our ability to secure funding in both domestic and foreign markets. These include insufficient operational cash flow to service debt, along with the impact of the prior year audit qualification and governance-related issues, as well as markets awaiting the appointment of permanent executive management. The appointment of the new Board in January 2018 provided investors with some level of comfort, resulting in an increased appetite for investment in Eskom. A permanent Group Chief Executive was announced on 23 May 2018, with the appointment of a permanent Chief Financial Officer expected to be completed soon. Potential investors are waiting to see whether our turnaround plan, which is being developed, will address liquidity issues, thereby supporting a sustainable financial position.

Over the short term, we will continue to leverage cost savings initiatives and efficiency improvements to stabilise and manage liquidity levels. However, along with effective governance and stable leadership, adequate tariff increases remain critical to ensure that Eskom is able to improve its balance sheet over the longer term and meet the minimum accepted financial cover ratios to successfully execute the borrowing programme.

### Financial results of operations

The group recorded a net loss after tax of R2.3 billion for the year (March 2017: R0.9 billion profit), and EBITDA of R45.4 billion (March 2017: R37.5 billion). The EBITDA margin improved further to 25.91% (March 2017: 21.44%), primarily due to significant cost containment efforts by the business. No short-term performance bonus provision was raised, as the scheme has to be self-funded.

Refer to the consolidated annual financial statements available online, which detail the financial performance of the group and company

The return on assets, using both historical valuation of assets and the replacement value, remains far below the weighted average cost of capital. This continues the trend discussed in prior years.



Profitability ratios

Measure and unit	Target 2022/23	Target 2018/19	Target 2017/18	Actual 2017/18	Actual 2016/17	Actual 2015/16	Target met?
<b>Company</b>							
Electricity revenue per kWh (including environmental levy), c/kWh	134.50	89.40	84.76	<b>85.06</b>	83.60	76.24	●
Electricity operating costs, R/MWh	829.63	690.79	663.50	<b>634.69</b>	662.98	628.00	●
Value add per employee, R million per full-time employee <sup>1</sup>	2.75	1.90	1.32	<b>1.56</b>	1.44	1.23	●
BPP savings, R million <sup>2</sup>	n/a	n/a	18.93	<b>20.73</b>	20.21	17.45	●
<b>Group</b>							
EBITDA, R million	117 495	42 956	30 942	<b>45 359</b>	37 532	32 811	●
EBITDA margin, %	39.13	22.92	17.22	<b>25.91</b>	21.44	20.29	●
Working capital, ratio	1.59	1.14	0.93	<b>1.05</b>	0.85	0.83	●
Free funds from operations (FFO), R million <sup>2</sup>	114 702	46 189	39 090	<b>40 022</b>	47 571	39 443	●
FFO after net interest paid, R million	65 127	11 156	7 785	<b>9 147</b>	21 148	17 927	●
FFO as % of total capex, % <sup>1,2</sup>	232.74	95.94	61.94	<b>77.84</b>	75.11	66.23	●

1. Value add per employee is calculated according to the shareholder compact definition.  
2. Free funds from operations are calculated before accounting for interest paid for shareholder compact-related ratios.

Although most indicators performed better than target and improved year-on-year, results remain well below levels acceptable to investors. Given the price increase of only 2.2% awarded by NERSA for the year, we did well to contain costs to limit the quantum of the pre-tax loss.

Sales and revenue

Revenue for the group was R177.4 billion (March 2017: R177.1 billion). Electricity revenue of R175 billion (March 2017: R175.1 billion) decreased by R0.1 billion year-on-year. This does not reflect the 2.2% price increase, as the amount was reduced by revenue of R3.3 billion not recognised in terms of IAS 18 (March 2017: R3.2 billion). The revenue per kWh sold of 85.06c/kWh reflects a year-on-year increase of 1.7%.

Revenue related to electricity produced at Medupi and Kusile, after units are synchronised to the grid and producing electricity but prior to those units being placed in commercial operation, is capitalised for accounting purposes under IFRS requirements, even though the power is transmitted into the electricity grid for sale to customers. This further reduced revenue by R2.2 billion (March 2017: R0.7 billion).

Electricity sales of 212 190GWh for the year were 0.9% lower than last year (March 2017: 214 121GWh). Distributors recorded a decline of 2.9% or 2 579GWh, of which 1 507GWh was due to higher self-generation by City Power in Johannesburg. Industrial and mining customers' volumes also declined by close to 1% each.

Although overall customer numbers are growing, this is predominantly due to a growth in residential customers, with some sectors slowly shrinking. This contributed to the decline in sales. The declining trend in sales volumes remains a concern.

Initiatives to increase sales

We launched the "Demand Response Morning Peak Sales" programme in July 2017, which achieved 10.4GWh in incremental sales. Additional sales were derived by incentivising increased usage in the last hour of the morning peak period (i.e. 8:00 to 9:00), by billing additional volumes at a lower rate.

NERSA approved a two-year application for special incentive pricing for silicon smelters, which is expected to lead to increased production at smelters in Polokwane and Emalaheni. Another application, aimed at sustaining silicon carbide production in South Africa, was submitted to NERSA in August 2017 and is in the process of being considered.

We continue to evaluate proposals submitted by customers for support packages, although the DoE framework for short-term negotiated pricing agreements is required, before we can submit any further incentive pricing deals to NERSA.

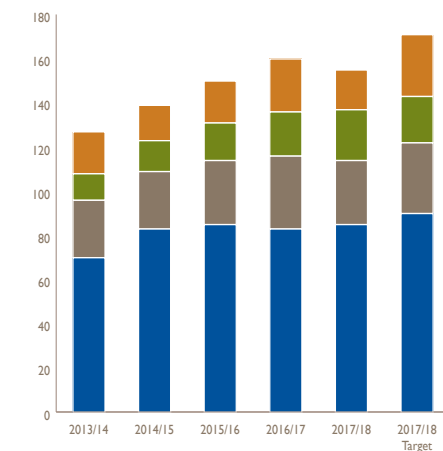
In addition, we have been engaging with key industrial customers to determine the potential to increase demand. We are also working with the dti InvestSA in interactions with new investors, as it contributes directly to additional sales. We have already connected 148 large power customers, generating additional sales of 1 361GWh.



For the number of customers by customer segment, as well as electricity sales by customer category, both volumes and revenue, refer to the fact sheet on pages 153 to 154

Operating costs

Operating expenses, R billion



● Primary energy costs ● Depreciation and amortisation  
● Employee benefit expense ● Other operating expenses

Primary energy

Primary energy cost (including coal, water and liquid fuels) increased marginally to R85.2 billion (March 2017: R82.8 billion). Our own generation costs (excluding the environmental levy) increased by 5.5% to R54.9 billion (March 2017: R52 billion), driven by an increase of 3.8% in the average coal purchase cost per ton. Total coal burn costs (excluding the environmental levy) increased by 5.5% to R53.8 billion (March 2017: R51 billion), with production from coal-fired stations remaining relatively stable. As required by NERSA, we apply the least-cost merit order dispatch of available stations.

Usage of OCGTs was limited, with 118GWh being generated during the year at a cost of R320 million, excluding the environmental levy (March 2017: R340 million spent producing 29GWh). The current year cost includes diesel storage and demurrage charges of R52 million, due to the low utilisation of the OCGT units (March 2017: R280 million).

Expenditure on IPPs amounted to R19.3 billion for the year, adding 9 584GWh to the energy production mix (March 2017: R19.8 billion and 11 529GWh). The amount spent on IPPs was reduced by R2 billion, relating to the accounting charge on the Avon and Dedisa gas peakers, which are treated as arrangements containing a lease under IFRIC 4 (March 2017: R2 billion). The average IPP unit cost (before the lease adjustment) increased to 222c/kWh (March 2017: 188c/kWh), as cheaper IPP options used during the prior year were no longer available.



Refer to "Our infrastructure – Energy supplied by IPPs" on page 94 for further information

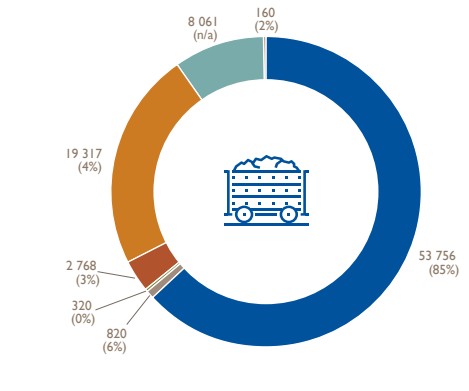
A comparison of the primary energy unit cost of the various generation categories is shown below:

Unit cost, R/MWh	2017/18	2016/17	% change
Coal	<b>309</b>	293	5.46
Nuclear	<b>94</b>	85	10.59
OCGTs	<b>2 313</b>	2 072	11.63
IPPs	<b>2 015</b>	1 714	17.56
International purchases	<b>358</b>	361	(0.83)

The graph sets out the breakdown of primary energy costs, with the contribution to GWh energy produced in brackets.

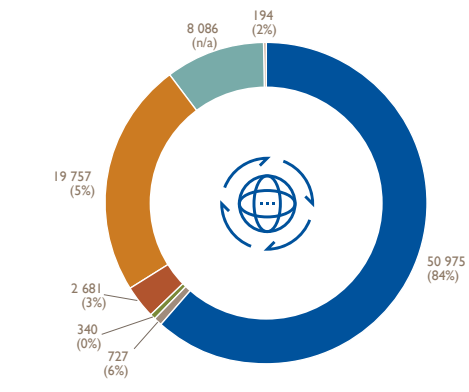
Primary energy breakdown, R million

2017/18



● Coal ● IPPs  
● Nuclear fuel ● Environmental levy  
● OCGT fuel ● Other  
● Electricity imports

2016/17



● Coal ● IPPs  
● Nuclear fuel ● Environmental levy  
● OCGT fuel ● Other  
● Electricity imports

## OUR FINANCES

continued

### Other operating costs

The number of employees in the group (including fixed-term contractors) increased to 48 628 (March 2017: 47 658), with the ERI headcount increasing by 1 594 year-on-year due to the permanent employment of temporary workers required by the Labour Relations Act, 1995. Net employee benefit costs for the year amounted to R29.5 billion, after capitalisation of costs to qualifying assets (March 2017: R33.2 billion). No short-term bonus was provided, as we recorded a loss for the year; this accounts for approximately R3.5 billion of the year-on-year decrease. Overtime cost reduced slightly to R2.1 billion (March 2017: R2.3 billion) due to our efforts to contain costs.

Net impairments recognised amounted to R0.6 billion (March 2017: R1.7 billion), attributable to the uncertainty of collecting amounts due from debtors. The cumulative impairment provision raised at year end for arrear customer debt (excluding interest) was R8.4 billion for all electricity debtors (March 2017: R8.7 billion).

Other operating expenses, including maintenance, amounted to R18.2 billion (March 2017: R23.6 billion). The decrease is mainly due to a reduction in the decommissioning provision because of a change in the treatment of spent nuclear fuel, offset by a provision of R1.5 billion relating to possible forfeiture to the insurer as a result of the contract for the repair of the Duvha Unit 3 boiler being set aside. As mentioned earlier, expenditure was tightly controlled in response to the liquidity challenges, evidenced by the reduction in other operating expenses.

Maintenance expenditure remains a large contributor to operating expenditure. The group's net repairs and maintenance for the year, which includes overhead costs, amounted to R14 billion (March 2017: R14.1 billion), after capitalisation of costs to qualifying projects, but before eliminating intergroup transactions for work done by ERI. Maintenance in Generation Division was lower than the prior year due to system constraints and an effort to contain costs given liquidity constraints, leading to a slight reduction in maintenance expenditure.

Depreciation and amortisation increased to R23.1 billion (March 2017: R20.3 billion), with another two units at Medupi and one at Kusile achieving commercial operation during the year.

### Net fair value loss on financial instruments and embedded derivatives

The net fair value loss for the group on financial instruments, excluding embedded derivatives, was R1.9 billion (March 2017: R3.3 billion), and arose mainly from exchange rate movements.

Changes in the fair value of embedded derivatives continued to impact the group income statement. The net impact for the year was a fair value gain of R0.1 billion (March 2017: R1.6 billion), with the year-on-year variance primarily influenced by a change in the aluminium price curve and unwinding of volumes.

### Net finance cost

Gross finance income for the year was R2.9 billion for the group (March 2017: R5.2 billion), due to lower cash balances than in the prior year. Gross finance cost for the group was R41.5 billion (March 2017: R37.8 billion), due to both higher levels of borrowings and the higher cost thereof. Borrowing costs capitalised to property, plant and equipment amounted to R15.5 billion (March 2017: R18.2 billion); the decline is due to fewer units under construction attracting interest, as units from the new build programme come online. Net finance cost for the group amounted to R23.1 billion (March 2017: R14.4 billion).

### Taxation

The effective tax rate for the year was 10% (March 2017: 23%), due to an increase in non-deductible expenditure.

### Movement in assets and liabilities

Balance sheet movements relating to the increase in net interest-bearing debt was discussed under funding activities. The impact of the capital expansion programme can be seen in the growth in property, plant and equipment. The reduction in liquid assets was discussed under liquidity.

### Future focus areas

- Strengthening Eskom's balance sheet given the highly geared position and growing debt service cost, coupled with lobbying to move the electricity price to levels more reflective of prudent costs
- Managing liquidity to support operations, as well as capital expenditure and debt service requirements
- Pursuing initiatives to improve collection of municipal arrear debt, such as partnering with Government, SALGA and municipalities to find sustainable solutions, and managing electricity supply and revenue collection on behalf of struggling municipalities
- Continuing to secure funding to match our annual capital spend, ideally moving to a position where an operational cash surplus is sufficient to fund both debt servicing and capital expenditure to maintain operations
- Accelerating the drive to contain operating costs through the use of digital and advanced analytics, with the emphasis on primary energy costs, employee benefit costs, maintenance and third-party spend; this will be done without negatively affecting operating performance
- Ongoing balance sheet optimisation to drive a reduction in our debt requirement

## OPERATING PERFORMANCE

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2.09 system minutes lost <1



3 new build units commissioned



Specific water consumption 1.30ℓ/kWhSO



LTIR of 0.23



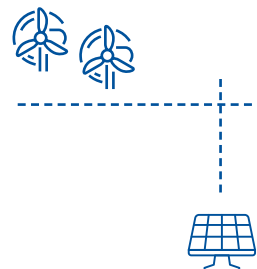
215 519 households connected



**PHAKAMANI HADEBE**  
Group Chief Executive



When I accepted the role of taking the reins to steer the ship in January this year, I was fully aware that Eskom was fraught with many real challenges. I firmly believed, and continue to do so, that Eskom's narrative is not one of doom and gloom, but that our colleagues have what it takes to weather the storm. Three of the immediate challenges we faced at the time were poor governance, liquidity concerns and leadership instability. Nevertheless, the challenges facing Eskom are not insurmountable, and we have already made significant headway in addressing those challenges.



One of our biggest tasks is rooting out the corrupt behaviour of some of our own employees which has threatened Eskom's financial viability, another real challenge that we are managing. As a leadership team, we are committed to eradicating corruption across all levels of the business, and we are taking action against implicated individuals. We appreciate the assistance of Eskom Guardians in helping to expose such behaviour, as without proper corporate governance, institutions die. We need to drive the right organisational culture to help us to build a sustainable and top performing organisation.

**Strategy**

Despite satisfactory progress being maintained on the new build programme, as well as solid operational performance for the current financial year, Eskom continues to face significant challenges in the short to medium term. Revenue levels remain unsatisfactory, and the 5.23% increase for the 2018/19 financial year further compounds the impact of the 2.2% tariff increase awarded in the 2017/18 financial year, and is therefore not expected to lead to much improvement. Levels of arrear debt, especially from municipalities, remain unacceptably high. In the short term, our focus will remain on cost efficiencies to support financial sustainability.

To address Eskom's challenges, the key focus areas in our current Corporate Plan are to strengthen Eskom's financial position through demand stimulation, cost containment and improving efficiencies (through a reduction in capital and operating expenditure), supported by a cost-reflective price of electricity. This will go a long way towards improving liquidity and thereby Eskom's financial sustainability.

We are undertaking a strategy review, expected to be completed by September 2018, to ensure that Eskom has an integrated strategy that addresses not only our current challenges, but also ensures that the future direction is clear and focuses on stabilising the organisation by cleaning up governance issues and stopping the bleeding, and thereafter re-energising and growing the business. A key focus at Board level is the development of a turnaround plan, which will allow for a shift in performance to facilitate a return to financial and operational sustainability.

The following areas are under consideration:

- Improving the EBITDA margin to at least 35% by growing revenue, both regulated and unregulated, and reducing costs. This will assist in improving our levels of equity over the medium term
- Managing liquidity, including the recovery of arrear debt
- Investing in cost-plus mines to benefit from cheaper coal
- Restricting capital expenditure to R45 billion per year for at least the next three years
- Continuing to reduce or contain operating expenditure
- Reducing reliance on debt financing through optimisation of the balance sheet
- Managing possible operating surplus generating capacity through cold reserve or decommissioning stations
- Reviewing the business model and possible restructuring where indicated

**Overview of performance**

Overall, Eskom has delivered solid operational performance over the past year, despite the financial and governance challenges facing the organisation.

Medupi Unit 5 achieved commercial operation on 3 April 2017, after completing performance, reliability and compliance tests. This was followed by Kusile Unit 1 achieving commercial operation on 30 August 2017, and Medupi Unit 4 on 28 November 2017. The three units have added total installed capacity of 2 387MW to the national grid (March 2017: 1 332MW from the four Ingula units).

Furthermore, Kusile Unit 2 and Medupi Unit 3 achieved first synchronisation on 24 March and 8 April 2018 respectively, in support of commercial operation which is expected within six to nine months. We remain confident that the new build programme will be completed by 2022/23, barring delays as a result of contractor performance, industrial action or other issues outside our control.

The construction of transmission lines performed very well, with 722.3km lines constructed against a target of 677km (March 2017: 585.4km), further strengthening our high-voltage network. The target for installing new transformer capacity of 2 010MVA was also exceeded, with 2 510MVA commissioned (March 2017: 2 300MVA).

Plant availability performed slightly better than last year, at 78% for the year (March 2017: 77.30%). Planned maintenance of generation plant decreased to 10.35% (March 2017: 12.14%), due to a delay in outages, partly due to system constraints and deferral of maintenance in response to liquidity challenges. Unplanned maintenance deteriorated to 10.18% for the year (March 2017: 9.90%), partly due to an increase in equipment failures and delays in returning units from planned maintenance, which is then classified as unplanned maintenance.

Eskom purchased 9 584GWh from IPPs at a cost of R21.3 billion during the year (March 2017: 11 529GWh at R21.7 billion), at an average cost of 222c/kWh (March 2017: 188c/kWh). At 31 March 2018, total available IPP capacity of 4 779MW consisted of renewable IPPs of 3 774MW and IPP gas peakers of 1 005MW (March 2017: total of 5 027MW).

During April 2018, we signed power purchase agreements (PPAs) with 27 IPP projects under the DoE's bid windows 3.5 and 4. This translates into greater non-dispatchable capacity being made available to the electricity grid, thereby affecting grid stability and exacerbating operational challenges. The decision to sign the PPAs with IPPs also has significant implications for our financial sustainability, with IPP power – which is more expensive than the current average cost of Eskom power – being purchased ahead of Eskom's offering, thereby creating additional surplus capacity on the Eskom side.

Eskom understands that it must comply once a ministerial determination has been made and all the statutory and contractual obligations have been complied with as envisaged in the relevant legislation. However, Eskom must act as a responsible organ of state and exercise its fiduciary duties on a prudent basis. Accordingly, Eskom initiated a process with government stakeholders to investigate the need for new generation capacity at this stage. This has delayed the signing of IPP contracts over and above those recently requested by the Minister of Energy.

Transmission delivered excellent system minutes lost <1 performance of 2.09 minutes for the year (March 2017: 3.80), setting a new performance record. No major network incidents have occurred and good line fault performance was sustained. Distribution network interruption frequency and duration both performed better than target and prior year.

However, theft of network equipment and illegal connections continue to pose a risk to security to supply to affected areas, as well as negatively impacting public safety.

Normalised coal stock levels (excluding stock at Medupi and Kusile Power Stations, and excess stock at Lethabo) stood at 28 days at year end (March 2017: 38 days) below the target of 37 days, with seven power stations below their minimum stock levels. Recovery efforts have been impacted by low delivery from the

Tegeta mines which are in business rescue; these supply Hendrina, Komati and Majuba Power Stations. However, we have put in place a recovery plan to improve the coal stockpile levels at these stations, based on potential sources identified. We are working with National Treasury on ways to expedite the coal procurement process. Coal security is not considered at risk.

Water supply to our coal-fired stations is not considered to be at risk over the short to medium term due to healthy dam levels. However, the Department of Water and Sanitation is experiencing severe financial constraints, which may affect its ability to manage existing and implement new bulk water infrastructure to ensure water security to Eskom. Water availability in the Vaal River System under drought conditions may become a risk due to a delay beyond 2025 of the construction and commissioning of the Lesotho Highlands Phase 2. The main construction work is expected to start in 2019.

Medupi Power Station's flue gas desulphurisation (FGD) retrofit requires additional water from the Mokolo Crocodile Water Augmentation Project Phase 2A by February 2024, whilst the water delivery date is expected to be January 2024. Failure to commission the FGD plant within the agreed timelines may render Eskom in breach of World Bank loan agreements and our emission licence, which would result in the units not being able to operate. Nonetheless, we remain committed to the retrofit installation of wet FGD technology at Medupi, and we are actively pursuing schedule acceleration to meet committed dates for four units, with potential acceleration of the remaining two units, depending on water availability.

The particulate (ash) emissions performance for the year was 0.27kg/MWhSO, substantially better than the target of 0.34kg/MWhSO (March 2017: 0.30kg/MWhSO). This is largely due to increased opportunities for outages which have improved the condition of the operating plant, as well as the impact of the Grootvlei fabric filter plant retrofits.

Water usage related to power station operations for the year was 1.30ℓ/kWhSO, significantly better than the annual target of 1.37ℓ/kWhSO (March 2017: 1.42ℓ/kWhSO).

Our lenders accepted cancellation of the proposed 100MW Kiwano concentrating solar power (CSP) project, subject to their approval of a suitable alternative solution. In March 2018, the Board approved distributed battery storage with distributed solar PV at sites close to renewable IPP plants and Sere Wind Farm. The lenders have accepted the battery storage project as a suitable alternative, as it is expected to meet the same objectives as the CSP project.

The group headcount increased slightly to 48 628 at year end (March 2017: 47 658), due to the permanent appointment of temporary workers in Eskom Rotek Industries in terms of the Labour Relations Act, 1995. Both learner intake, as well learners at all levels (engineers, technicians and artisans), exceeded target.

At senior management level, the racial equity target was achieved, whilst gender equity continues to improve, although slightly below target. At middle management/professionally qualified level, racial equity is at acceptable levels (although marginally below target), whilst gender equity remains a challenge, although slightly above target. Gender and racial equity have been achieved at supervisory and lower levels. We try to limit promotions to save cost, leading to slower progression against racial and gender equity targets. Disability equity is above target, although a concern remains that the majority of people with disabilities are represented at lower occupational levels. We have to audit our facilities to ensure that they are disability-friendly, and we have to ensure that we provide reasonable accommodation where required to our disabled staff.

Sadly, the group experienced three employee and 12 contractor fatalities during the year (March 2017: four employees and six contractors). However, the group lost-time injury rate (including occupational diseases) has improved significantly to 0.23 (March 2017: 0.39).

*We extend our sincere condolences to the family, friends and colleagues of those who lost their lives in service to Eskom.*

During the year, only the targets for procurement spend with black-owned, black women-owned and black youth-owned suppliers, as well as exempted micro enterprises, have been achieved at group level, largely due to the inclusion of suppliers that are 30% owned by black women when calculating attributable spend. Overall attributable spend, as well as spend with qualifying small enterprises and suppliers owned by black people living with disabilities, performed below target.

We also connected 281 368 new residential customers to the grid during the year, including 215 519 electrification connections (March 2017: 207 436), truly a remarkable achievement in our quest to achieving universal access to electricity.

Corporate social investment spend of R192 million was committed to 264 projects during the year, impacting a total of 1 116 044 beneficiaries (March 2017: R225.3 million spent on 841 845 beneficiaries).

### Looking ahead

*We remain committed to our mandate of decreasing the cost of doing business in South Africa, enabling economic growth and providing a stable and sustainable electricity supply, not only in South Africa, but also in the region.*

We face several challenges in the business environment while working towards this mandate. Some of these challenges fall within Eskom's span of control and others outside.

We have set a target to improve generation plant performance, and we are on course to achieve plant availability of 80% during the next financial year, with 10% planned maintenance and 10% unplanned maintenance. Load shedding this winter is not likely, as we implement plans to manage a shift in plant performance and coal stock levels.

With the growth seen in IPPs and the moderate sales growth expected in the near future, surplus operational capacity may be available. At this stage, we are not intending to renew older stations to extend their useful life. In particular, the older Komati, Hendrina, Grootvlei and Camden Power Stations are not economical to renew and extend beyond their current useful life of 50 years. However, for now they will not be decommissioned, but put into extended cold reserve. We continue to fast-track the build programme, with another 6 382MW to be commissioned at Medupi and Kusile over the next five years. After these stations are fully commissioned, we will reconsider decommissioning older stations.

All nuclear procurement processes were suspended after the Western Cape High Court decision; a new nuclear build programme will only be considered in the broader context of affordability. We will determine the way forward once the long-awaited revised IRP is published, which will provide clarity on the types of technologies to be delivered, and Eskom's role therein.

We continue to focus our efforts on increasing growth in demand for electricity and ensuring sustainable revenue collection, as collection of municipal arrear debt remains one of our key challenges. Nonetheless, we continue with interventions and have enlisted the support of Government to enhance our efforts.

Eskom also faces several operational and strategic risks going forward. Operational risks involve rising primary energy input costs at reducing quality, escalating municipal debt and instability at Eskom sites caused by a disgruntled workforce or members of the community. Strategic risks include the possibility of Eskom saturating its borrowing capacity, declining levels of long-term profitability, a lack of adequate, available and affordable skills, the shifting shape of the load profile and increasing competition for end users.

## CHIEF EXECUTIVE'S REVIEW

continued

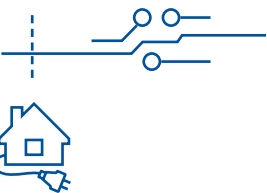
For the current business to endure, plans must include building new capabilities, creating a stable funding plan, driving client-centred operations, implementing meaningful transformation, and ensuring that the company structure is responsive to a changing energy landscape. To establish the future business, however, the transition to a diversified portfolio of products and services will be managed through a set of targets matched with Eskom's risk appetite, building on its core competencies.

Eskom has been given leeway to review its business model and to assess whether all its current activities should remain housed within the organisation. The review should not be seen as privatisation, but is aligned with our ambition to ensure that Eskom remains sustainable.

The next few years will certainly be challenging, particularly regarding the actions required to improve our financial position. We will need to make tough decisions to turn Eskom around, and we will need the support of all our stakeholders to achieve this. Our ultimate ambition is to be Africa's powerhouse by 2035, thereby powering Africa's growth.

### Conclusion

I thank the Honourable Minister of Public Enterprises, Mr Pravin Gordhan and the Cabinet of South Africa for their confidence in appointing me to this role. I must also acknowledge the Eskom Board, especially the Chairman, for the support they have given me since I came aboard in January 2018. We have had to make some tough decisions; I am grateful for their strategic guidance, as well as for the support of the Exco team. And of course, none of our great strides over the past few months would have been possible without the effort and support of our Eskom Guardians, who are the engine of this great organisation.



I have accepted the task of serving both Eskom and our country; it is indeed an honour for me to be entrusted to steer Eskom forward, by guiding Eskom's Guardians as we begin to address our challenges. I am fortunate to have met and worked with passionate and committed people in this organisation, who truly understand that "individually we are one drop; together we are an ocean" and the value of working together as a team, driving our strategic objectives.

I am confident that with like-minded Eskom employees, who believe in and live up to our six values of Zero Harm, Integrity, Innovation, Sinobuntu, Customer Satisfaction and Excellence, we will be able to turn this ship around and reclaim our proud heritage as the pride of South Africa and a shining light in powering Africa's growth. However, if we don't build the culture we want, the culture will build itself.

It is important to remember that what Eskom employees do every day changes the lives of millions of South Africans and also has an impact on the rest of the continent. Eskom plays a critical role in driving the South African economy, and the economic growth and development of the African continent.

Access to water, shelter, food, and infrastructure such as roads would not be possible without Eskom. Eskom enables businesses to create jobs and families to put food on the table; our efforts help to alleviate the scourge of poverty and allow students to do away with studying by candlelight or paraffin lamps.

We may be facing serious challenges, but we are on the right path to turn things around. If we do our job and do it well, we can be the catalyst for growth in Africa. That should be our vision.

Through a collaborative approach and relentless focus, we are on a path to stabilise the organisation and to achieve sustained success. I am so proud of what we do and am very excited about leading Eskom into the future!



Phakamani Hadebe  
Group Chief Executive

## OPERATING PERFORMANCE



### OUR INFRASTRUCTURE

#### HIGHLIGHTS

- Medupi Units 4 and 5 and Kusile Unit 1 achieved commercial operation during the year
- We signed power purchase agreements with 27 RE-IPP projects in April 2018
- Systems minutes performance set a new record

#### IMPROVEMENTS

- Boiler tube failures reduced to 1.37% UCLF (March 2017: 1.66%)
- Partial load losses improved to 3.29% UCLF (March 2017: 3.48%)
- Kusile Unit 2 and Medupi Unit 3 achieved first synchronisation on 24 March and 8 April 2018 respectively
- A number of IPP connection projects have been completed

#### CHALLENGES

- Managing supply and demand during periods of both power shortages or surplus capacity
- Eskom is not intending to renew older stations to extend their useful life
- The weighted average IPP purchase cost amounted to 222c/kWh, compared to our average selling price of 85.06c/kWh
- Socio-economic conditions continue to drive theft and vandalism of network equipment, including conductor theft

#### LOWLIGHTS

- System constraints were experienced in the last quarter of the year due to high levels of maintenance, requiring higher OCGT usage to meet demand

## OUR INFRASTRUCTURE

continued

Our infrastructure constitutes our manufactured capital, which comprises our generation fleet and transmission and distribution networks, together with capacity provided by IPPs. Furthermore, it covers the new power stations and high-voltage transmission lines being constructed as part of our new build programme.

In operating our infrastructure, our focus is on ensuring security of supply, as well as balancing the supply and demand of electricity. We are executing the largest capital expansion programme in Africa, as well as projects to ensure environmental compliance, transmission strengthening, customer and IPP connections, as well as refurbishing existing assets.

### Looking back on prior year focus areas

Given improved plant availability, we are placing some of the older coal-fired units into cold reserve to allow for optimised economic usage of available generation capacity. We continue to optimise maintenance across generation, transmission and distribution plant by realising the benefits of moving from time-based to risk- or condition-based maintenance, as well as using advanced analytics, which improve fault visibility and isolation. Optimisation of transmission and distribution outages is improved by understanding the customer contribution to sales.

Although our aim is to strengthen the transmission backbone to attain N-1 compliance as required by the Grid Code, and strengthen distribution networks to accommodate customer growth and ensure the ability to accommodate power from IPPs, risks around transmission and distribution plant reliability still remain, due to ageing assets and resource constraints.

There is a continual focus on the reduction of non-technical energy losses by conducting regular and targeted meter audits. Unbilled revenue due to tampered or faulty meters, or customers not correctly loaded on the billing system, is being recovered from large and small power users. The conversion of residential customers to split metering continues in Soweto, Midrand and Sandton to secure the revenue stream with the conversion to prepaid meters.

Execution of environmental compliance projects aimed at reducing nitrogen oxides, sulphur dioxide and particulate matter continues. The installation of fabric filter plant at Grootvlei Power Station has reduced particulate emissions very effectively.

The demolition of Duvha Unit 3 is continuing, with completion expected by the second half of 2018.

The dual-fuel conversion of OCGTs at Ankerlig and Gourikwa was completed as planned.

### Managing supply and demand

#### Role of the System Operator

The System Operator performs an integrative function for the operation and risk management of the interconnected power system by balancing supply and demand in real time and ensuring that the network operates at 50Hz, enabling us to supply electricity to

our customers in accordance with our mandate. The various defence systems in place are frequently tested to ensure their effective response capability to prevent a major system event, such as a regional or national blackout.

For the first nine months of the year, the generation plant performed well and very low usage of OCGTs was required to support the power system. However, during the last quarter of the financial year, system constraints were experienced, requiring a higher usage of both Eskom-owned and IPP-owned OCGTs to meet demand during peak periods. The constraints were due to high levels of planned and unplanned maintenance being carried out during the summer months. Despite this, the total OCGT usage for the financial year remained low.

Several coal-fired units were placed into cold reserve during the winter months when there was surplus operating capacity, to allow for optimised economic dispatch of generation capacity. Generators in cold reserve are taken offline, but are available to be called back into service at relatively short notice (typically 12 to 16 hours). During winter, the number of units placed into cold reserve varied from four to six units during week days, and up to 14 units over weekends. Some units at Grootvlei, Hendrina and Komati Power Stations were placed into extended cold reserve for most of the financial year, with a call-back time of five days or more.

Unit 1 at Kusile Power Station and Units 4 and 5 at Medupi Power Station were commissioned during the year, adding 2 387MW installed capacity to the grid, thereby providing the System Operator with greater flexibility. Another unit at each station is already supplying energy to the grid and are expected to be placed in commercial operation during 2018/19. The latest projections show one additional unit from each station being placed in commercial operation per year, resulting in the last Medupi unit becoming commercial in 2020/21 and the last Kusile unit in 2022/23. It is anticipated that we will return to an operating surplus capacity situation where it will not be necessary to utilise all our existing plant to meet demand.

Nevertheless, the increasing renewable energy capacity continues to pose an additional challenge in balancing supply and demand. In addition to daily variations in wind generation, a seasonal variation is becoming apparent, showing higher wind generation during summer months and lower generation during winter months.

Refer to page 125 in "Our know-how" for a discussion of the challenges posed by managing the impact of renewable energy



### Eskom's Thava Govender steps in as President of GO15 Steering Board for 2017/18

Eskom is a member of the GO15, an organisation that comprises 19 of the largest grid operators around the world, representing the backbone connecting electricity producers and consumers. This includes grid operators from Asia, Mexico, Russia, Brazil, Africa, USA, Middle East, Australia and Europe. These operators deliver electricity to over half the world's population which accounts for more than two-thirds of global electricity consumption.

Mr Thava Govender has stepped in as the President of the GO15 Steering Board for 2017/18.

Speaking at GO15's annual meeting in Belgium, he said: "As the new President, I have a personal stake, both emotional and professional, in our success. This is an industry whose success is a catalyst for economic growth in our respective countries. As the only member from Africa, I am mindful of the enormity of this role. We have the potential to strengthen economic ties and socio-economic growth in our countries and for Africa."

The GO15 acknowledged the unprecedented evolution of the power supply system and the substantial investments required in transforming the power industry as we move towards a carbon-free society. The intent is to contribute to reliable and sustainable power grids at an affordable cost.

"This vote of confidence by our members, for Eskom to lead this international organisation in 2017/18, showcases Eskom's leadership and technical ability as a leading industry player and compares it to the best in the world," noted Mr Alain Steven, GO15 Secretary General. "Eskom plays an integral role in our Steering Board that delivers on key projects and provides innovative solutions for the transmission and system operator industry," he concluded.

### Generation performance

We aim to optimally operate and maintain our electricity generating assets for the duration of their economic life. We operate 30 base-load, mid-merit or peaking and renewable power stations, with a total nominal capacity of 45 561MW.



Detailed information on the installed and nominal capacity of each of our power stations, as well as IPP capacity, is set out in the fact sheet on pages 146 to 147



### Relationship between generation plant performance and health KPIs

The four generation plant performance and health indicators (EAF, PCLF, UCLF and OCLF) together add up to 100%, being the energy that could have been produced at full nominal capacity, after accounting for auxiliary power used to operate the station.

EAF (energy availability factor) reflects the plant or unit's availability to produce energy as a percentage of the energy that could have been produced at full capacity for the duration of the reference period. It considers all matters affecting the availability of plant to produce energy.

PCLF (planned capability loss factor) reflects unavailable energy resulting from planned plant repairs, tests or refurbishment activities under the control of plant management. It reflects the effectiveness of planning the execution of plant repairs and refurbishment in maintaining the availability of plant and systems for the safe generation of electricity.

UCLF (unplanned capability loss factor) reflects energy that was not produced during the period due to unplanned plant unavailability as a result of unplanned shutdowns, outage extensions or load reductions, due to causes under plant management's control.

OCLF (other capability loss factor) reflects other unplanned energy losses due to external influences not under plant management's control. It reflects unplanned conditions that caused the failure of supply of resources for electricity generation or the failure of access to the National Grid that prevents the supply of electricity.

EUf (energy utilisation factor) is a measure of the degree to which the available energy capacity of an electricity supply network is utilised. It reflects the ratio of actual energy produced (not availability) against the energy that the full available capacity could have produced. It is an indication of how hard the plant is working.

### Generation 80:10:10 sustainability strategy

We are committed to accomplishing the overarching goal of meeting the country's electricity demand at minimum cost. We will continue to improve the availability and performance of our generation assets and optimise our production plan, to reduce the usage of more expensive coal-fired power stations. We prioritise which stations to operate based on the least-cost merit order dispatch approach, as required by NERSA, and plant availability.

## OUR INFRASTRUCTURE

continued

Our 80:10:10 strategy strives for 80% plant availability, requiring unplanned maintenance to be limited to 10% on average, while performing an average of 10% planned maintenance. The achievement of the strategy is assisted by additional capacity coming online through the new build programme and purchases from IPPs, thereby creating space for more planned maintenance and mid-life refurbishments.

### Managing capacity

Eskom generally has adequate capacity available to meet demand for most of the day. However, the system is constrained during peak hours, especially the evening peak, when there is often not enough available capacity to meet demand without the use of OCGTs. As more new build units (Medupi and Kusile) come online and generation plant availability improves, the situation will improve.

### Technical performance

Measure and unit	Target 2022/23	Target 2018/19	Target 2017/18	Actual 2017/18	Actual 2016/17	Actual 2015/16	Target met?
Energy availability factor (EAF), % <sup>SC</sup>	80.00	80.00	78.00	78.00	77.30	71.07	●
Planned capability loss factor (PCLF), % <sup>SC</sup>	9.00	9.00	10.00	10.35	12.14	12.99	●
Unplanned capability loss factor (UCLF), %	9.90	9.90	10.90	10.18	9.90	14.91	●
Other capability loss factor (OCLF), %	1.10	1.10	1.10	1.47	0.66	1.03	■

1. In accordance with our policy, the performance of Medupi Units 4 and 5 and Kusile Unit 1, still within their first year after commissioning, have not been included in the above KPIs. Medupi Unit 6 has been taken into account since September 2016.

EAF has improved marginally year-on-year and PCLF was slightly better than target. While UCLF has worsened year-on-year, there was an increase in UCLF in the last three months of the year, consistent with seasonal trends. These equipment failures have contributed to the capacity constraints in this period. Nonetheless, both partial load losses and boiler tube failures have reduced over the year. Since December 2017, units in extended cold reserve have been included in OCLF, resulting in an increase in OCLF of about 0.5%.

Plant utilisation (EUF) was 71.64% for the year for all stations (March 2017: 74.95%). Eskom's EUF remains above the international norm, indicating the high levels at which we are operating our plant to maintain security of supply, supporting the strategy of putting units into cold reserve at this stage rather than decommissioning them. Once the EUF drops to acceptable norms, the decision to decommission power stations will be reviewed.

### Koeberg performance

At 31 March 2018, Koeberg Unit 1 was undergoing a refuelling and maintenance outage. The unit experienced two reactor trips in January 2018, which ended the unit's run of continuous operation of 435 days since returning from its previous refuelling outage. Koeberg Unit 2 has been online ever since returning from a refuelling outage in May 2017.

We have identified Hendrina, Grootvlei and Komati as the power stations with the largest cash impact, which includes the coal dispatch cost, as well as the cost of upgrades and significant maintenance required to continue operations. The Board has decided that these stations will be ramped down to zero production and placed in lean preservation in 2019/20 to minimise the operating surplus and optimise generation costs.

This decision is subject to Eskom achieving plant availability of 80%, as well as an impact assessment on affected employees and local communities. Should demand growth be higher than current assumptions, these stations could be recalled to meet demand. The timing of the new build after Medupi and Kusile, and the possible decommissioning of older stations, will be influenced by DoE's updated Integrated Resource Plan (IRP), once it is published.

Regarding the Koeberg Steam Generator Replacement Project, executive-level involvement between Eskom, AREVA Framatome and SENPEC is ongoing, to ensure commitment and adherence to the manufacturing schedule to meet the refuelling outages scheduled for March 2021 and September 2021. Delivery of the two units' new steam generators are planned for September 2020 and January 2021 respectively, in time for installation during refuelling outages.

### Update on Duvha Unit 3 over-pressurisation incident

The main boiler contract for the procurement and fitment of the boiler at Duvha Power Station was awarded on 28 March 2017 to Dongfang of China. Subsequently, a court judgment was handed down on 30 June 2017, wherein Eskom and Dongfang were interdicted from executing the contract, pending the final determination of the review application, which is expected by the second half of 2018, assuming no appeal is lodged. As a result, the project completion date of January 2023 is at risk and we are reviewing our options. Demolition works are, however, continuing, with completion expected during the coming financial year.

### Maintenance plan

In line with industry trends, we apply risk- and condition-based maintenance, where we assess the health and condition of each item of plant, together with the consequence of failure. Using the Tetris planning tool and advanced analytics, we optimised the maintenance plan, as it allows for more informed decision-making regarding the prioritisation of maintenance and rescheduling outages. Outages are executed first on high-risk plant items, even if it is earlier than the prescribed time-based interval, while outages for low-risk plant are deferred.

In accordance with the three-year maintenance plan submitted to National Treasury as part of the Government support framework agreement, 73 outages were on the base plan for 2017/18. At year end, 23 of those have been completed, 31 deferred, seven were being executed and 12 were cancelled. An additional 46 unplanned, mainly short-term outages were also executed during the year.

Of the original 50 backlog outages reported, 44 outages have been completed or are in execution, three will be executed during the coming year, while three have been cancelled as the units were placed in cold reserve. These outages are no longer considered as backlog due to the change in maintenance philosophy mentioned above.

### Benchmarking

#### Coal-fired power stations

Generation Division benchmarks the performance of its coal-fired power stations against those of the members of VGB (Vereinigung der Großkesselbesitzer e.V), a European-based technical association for electricity and heat generation industries. When interpreting the results of the benchmarking study, it must be noted that the operating regimes of other utilities contributing to the VGB database may not be the same as those of Eskom.

The graphs in the fact sheet illustrate the results of the benchmarking for the 2007 to 2016 calendar years (the VGB results for 2017 are not yet available). The Eskom data on the graphs has been plotted to the end of the 2017 calendar year to show the trend. The results indicate that:

- Our coal-fired power stations continue to perform worse than the VGB benchmark plant across all indicators

Measure and unit	Target 2022/23	Target 2018/19	Target 2017/18	Actual 2017/18	Actual 2016/17	Actual 2015/16	Target met?
OCGT production, GWh	1 057	211	211	118	29	3 936	●
OCGT diesel usage, R million <sup>2</sup>	3 883	666	672	320	340	8 690	●

1. The 2022/23 target is the cumulative target over the next five years.

2. The OCGT cost includes diesel storage and demurrage costs of R52 million (March 2017: R280 million) incurred as a result of not utilising the OCGTs.

- The availability of the top-performing stations in the VGB benchmark has historically been consistent, but has shown signs of instability since 2012, when a decline in performance was observed
- Eskom units generally compare favourably with the VGB benchmark with respect to planned maintenance in the median and low quartiles, while planned maintenance of Eskom's best-performing units was significantly better than that of VGB benchmark units
- Since 2012, Eskom's UCLF performance showed a significant deterioration compared to the VGB benchmark on all quartiles
- With respect to the use of available plant (energy utilisation factor or EUF), all Eskom coal-fired units are performing at a level close to, and in many cases above, the VGB best quartile, which is an indication that Eskom is operating its power station units at much higher levels than the VGB benchmark units

### Koeberg Nuclear Power Station

Eskom is affiliated to the World Association of Nuclear Operators (WANO) and the Institute of Nuclear Power Operations (INPO), while South Africa is a member of the International Atomic Energy Agency (IAEA). These affiliations enable us to benchmark performance, conduct periodic safety reviews, define standards, disseminate best practice and train personnel at our nuclear plant, Koeberg. A routine WANO peer review of Koeberg was carried out in February 2017.

Through INPO, we have maintained our accreditation from the National Nuclear Training Academy in the United States for our systematic approach to the training of licensed and non-licensed nuclear operators at Koeberg. We are the only non-US utility to have received such accreditation.

For the review period, Koeberg performance has generally been better than the median for the range of WANO performance indicators.

For graphs relating to the benchmarking of our coal-fired and nuclear power stations, refer to the fact sheet on pages 149 to 152

### Use of open-cycle gas turbines

As mentioned previously, the energy availability of Eskom's generation fleet deteriorated towards the end of the financial year, resulting in OCGTs producing 118GWh for the year, compared to 29GWh in the prior year.



**Energy supplied by IPPs**

DoE's Renewable Energy IPP (RE-IPP) Programme is derived from ministerial determinations for renewable energy from IPPs. The first determination called for 3 725MW of renewable energy to be in commercial operation by the end of 2018. This was supplemented by subsequent determinations for 8 500MW of renewable energy before 2025. The programme currently has 3 774MW operational.

We received PFMA and regulatory approval for the signing of additional PPAs for bid windows 3.5 and 4 of the RE-IPP Programme. In April 2018, we signed agreements with 27 RE-IPP projects totalling 2 405MW. The power purchase agreements take into account changes in foreign exchange spot rates from those at the bid submission dates.

During the year, we commissioned 664MW of renewable IPP capacity, less than the targeted 742MW, due to delays in signing power purchase agreements for new contracts. We expect 200MW to be commissioned during the coming year, representing two concentrated solar projects.

IPP operational capacities by type at 31 March 2018		
MW	Contracted	Operational
Wind	1 995	1 978
Solar PV	1 478	1 474
Gas turbines	1 005	1 005
Concentrating solar power	500	300
Hydro, biomass and landfill	27	22
<b>Total</b>	<b>5 005</b>	<b>4 779</b>

**Energy capacity and purchases**

The following table summarises the IPP capacity available and the actual energy procured under various IPP programmes for the year to 31 March 2018.

Measure and unit	Target 2022/23	Target 2018/19	Target 2017/18	Actual 2017/18	Actual 2016/17	Actual 2015/16	Target met?
Total capacity, MW	7 287	4 981	5 521	4 779	5 027	3 392	■
Total energy purchases, GWh	79 803	11 526	11 217	9 584	11 529	9 033	■
Total spent on energy, R million	180 656	26 659	23 391	21 300	21 721	15 446	●
IFRIC 4 accounting adjustment, R million <sup>2</sup>	(10 346)	(2 019)	(1 999)	(1 983)	(1 964)	(340)	n/a
Total expenditure, R million	170 310	24 640	21 392	19 317	19 757	15 106	●
Weighted average cost, c/kWh <sup>3</sup>	226	226	209	222	188	171	■

- The 2022/23 target is the cumulative target over the next five years.
- For accounting purposes, the capacity charges for the Avon and Dedisa IPP gas peakers are treated as arrangements that contain a lease in terms of IFRIC 4. Refer to note 28 in the annual financial statements for the related accounting policy.
- The weighted average cost has been calculated on the total amount spent on energy, before the IFRIC 4 adjustment.

Renewable IPPs achieved an average load factor of 31.5% during the year (March 2017: 30.7%), while the weighted average cost (before the lease adjustment) amounted to 222c/kWh (March 2017: RE-IPPs and peakers only: 244c/kWh).

**Cross-border sales and purchases of electricity**

The Southern African Power Pool (SAPP) aims to provide reliable and economical electricity supply to each of its members. Access to electricity in all SAPP member states, with the exception of South Africa, is below 45% and as low as 10% in one instance, creating a significant impediment to regional growth. This has been exacerbated by the drought which affected most of the SADC region over the past year or two.

**International sales and purchases**

GWh	Target 2022/23	Target 2018/19	Target 2017/18	Actual 2017/18	Actual 2016/17	Actual 2015/16	Target met?
International sales	81 461	14 987	15 118	15 268	15 093	13 465	●
International purchases	38 974	8 111	9 670	7 731	7 418	9 703	●
Net sales	42 487	6 876	5 448	7 537	7 675	3 762	●

1. The 2022/23 target is the cumulative target over the next five years.

While cross-border sales have increased by 1.2% year-on-year, sales to Botswana are down on last year, as they are now almost self-sufficient. Work continues to conclude further firm sales agreements in the region.

The volume of cross-border purchases was well below target, primarily due to Hidroelèctrica de Cahora Bassa (HCB) reducing its supply as a result of low dam levels due to the continued drought in that area.

The Mozambican power utility, EDM, has indicated a desire to increase its supply from HCB by 200MW, which would require us to relinquish that capacity. However, the majority of HCB's capacity is wheeled through South Africa to Motraco. We met with EDM in March 2018 to discuss the proposal. As South Africa only receives 150MW benefit from HCB's power (supply of 1 100MW less the 950MW wheeled to Motraco), there is in fact not enough available power to meet EDM's request. We suggested selling power to EDM at a reasonable tariff level; EDM may consider our offer should the price be competitive.

**Export growth strategy**

Our export growth strategy is to maximise cross-border electricity sales through existing transmission infrastructure, as well as the construction of additional transmission lines, which require the support of regional partners. Due to a lack of investment in transmission infrastructure in the key electricity

corridors that carry power north of South African borders, there is considerable regional demand that cannot currently be met.

**Integrated demand management**

Integrated demand management (IDM) plays a key role in assisting Eskom to balance power supply and demand during periods of supply constraints. The demand response programme is contingent on the support of customers by means of interruptible load agreements. It enables the System Operator, during times of generation constraint, to request these customers to reduce load or completely switch off on a scheduled day, in order to maintain the system frequency at 50Hz. The demand response programme achieved an average certified capacity of 1 296MW during the year (March 2017: 1 267MW).

Furthermore, IDM's key role is to shift demand from peak to off-peak periods, in order to create space for future sales growth.

**Network performance**

Transmission operates and maintains our transmission assets, which transmit energy from our power stations, while our distribution network relays electricity from the high-voltage transmission network to customers, including municipalities that manage their own distribution networks.

Measure and unit	Target 2022/23	Target 2018/19	Target 2017/18	Actual 2017/18	Actual 2016/17	Actual 2015/16	Target met?
Number of system minutes lost <1 minute, minutes <sup>SC, 1</sup>	3.53	3.53	3.53	2.09	3.80	2.41	●
Number of major incidents >1 minute, number	2	2	2	-	-	1	●
System average interruption duration index (SAIDI), hours <sup>SC</sup>	37.0	38.0	39.0	38.8	38.9	38.6	●
System average interruption frequency index (SAIFI), events <sup>SC</sup>	19.6	19.8	20.0	18.7	18.9	20.5	●
Distribution energy losses, % <sup>SC</sup>	6.91	7.45	7.55	7.73	7.55	6.43	▲

1. One system minute is equivalent to interrupting the whole of South Africa at maximum demand for one minute.

The system minutes performance set a new record for the transmission network. We experienced 24 system interruptions during the year (March 2017: 36), which were primarily caused by plant failures and operation of the related breaker protection systems. However, the impact of these interruptions was limited due

to effective restoration responses. Nevertheless, performance risks still remain, with ageing assets and vulnerabilities due to network unfirmness, which should be addressed as we move towards N-1 compliance.

On average, distribution customers experienced shorter duration outages and fewer network interruptions as measured through SAIDI and SAIFI. Sustaining network performance remains our focus, through safeguarding network reliability and closing the regulatory compliance gap given the available resources.

**Benchmarking**

Transmission participated in a benchmarking exercise with 27 other international transmission companies in 2017/18. The study focused on maintenance and plant reliability performance and identified best international practice for the transmission industry. These studies have been used to identify opportunities for the development of continual improvement initiatives.

**Energy losses**

The impact of IPPs, given their location on the network, has resulted in reducing transmission energy losses to 1.96% (March 2017: 2.22%) and increasing distribution losses to 7.73% (March 2017: 7.55%). Overall Eskom losses have increased to 9.15% (March 2017: 8.85%). This is because IPPs deliver energy directly to the distribution network, which would otherwise have been transported from power stations via the transmission network, thereby reducing the load on transmission lines and therefore transmission losses. Furthermore, IPP production is driven not by demand, but by contractual terms.

Eskom uses targeted meter audits to improve the efficiency of losses detection and resolution. During the year under review, we made the following progress:

- Historically unbilled revenue, amounting to R367.7 million, was billed to large and small power customers (March 2017: R215 million). This relates to meter tampering, faulty or vandalised metering installations, or customers incorrectly loaded on the system
- Tamper fines amounting to R20.8 million were recovered from prepaid customers who had tampered with their electricity meters (March 2017: R24 million)

We continue with initiatives to improve revenue recovery from residential customers, such as:

- Removing illegal connections, conducting meter audits, repairing faulty or tampered meters, and

- limiting ghost vending of prepaid electricity
- Installing split smart and/or prepaid meters within protective enclosures to prevent tampering
- Converting customers from post-paid to prepaid supply

**Equipment theft**

External socio-economic conditions continue to drive theft and vandalism of network equipment, of which conductor theft constitutes the highest number of incidents. Equipment theft severely impacts local network performance and causes loss of revenue, and further leads to loss of life or injury to the public and employees.

Losses due to conductor theft, cabling and related equipment totalled R46 million for the year (March 2017: R70 million), involving 5 152 incidents (March 2017: 5 734 incidents). Actions to combat these losses are managed by the Eskom Network Equipment Crime Committee, in collaboration with other affected state-owned enterprises and the South African Police Service. The combined effort resulted in 216 arrests (March 2017: 235) and recovery of R3 million worth of stolen material (March 2017: R5 million).

We aim to improve the security of the network through the early detection of potential threats using surveillance technology, in conjunction with a national guarding strategy.

**Delivering capacity expansion**

The capacity expansion programme to build new power stations and reinstate mothballed stations, as well as increase high-voltage transmission power lines and transformer capacity, started in 2005 and is expected to be completed by 2022/23. When completed, the programme will have increased installed generation capacity by 17 384MW, transmission lines by 9 756km and transmission substation capacity by 42 470MVA.

Since inception to 31 March 2018, we have increased installed generation capacity by 10 750MW, transmission lines by 7 469km and substation capacity by 36 900MVA. To date, the programme has cost R363.8 billion, excluding capitalised borrowing costs (March 2017: R335.7 billion).

Measure and unit	Target 2022/23	Target 2018/19	Target 2017/18	Actual 2017/18	Actual 2016/17	Actual 2015/16	Target met?
Generation capacity installed and commissioned (commercial operation), MW <sup>SC</sup>	7 182	800	1 460	<b>2 387</b>	1 332	794	●
Transmission lines installed, km <sup>SC</sup>	2 233.0	596.0	677.0	<b>722.3</b>	585.4	345.8	●
Transmission transformer capacity installed and commissioned, MVA <sup>SC</sup>	8 985	1 040	2 010	<b>2 510</b>	2 300	2 435	●

1. The 2022/23 target is the cumulative capacity to be commissioned and/or installed over the next five years.

During the year, Medupi Unit 5 (with an installed capacity of 794MW) attained commercial operation on 3 April 2017, Kusile Unit 1 (799MW) on 30 August 2017 and Medupi Unit 4 (794MW) on 28 November 2017. The original equipment manufacturer value of 800MW for Kusile Unit 1 was revised to 799MW, based on the outcome of performance tests conducted for grid code compliance.

Kusile Unit 2 experienced a gas heater fire in October 2017, which caused some delays to the scheduled synchronisation. Nevertheless, the unit was synchronised on 24 March 2018, and is still expected to go into commercial operation by March 2019, ahead of the revised schedule. Medupi Unit 3 achieved first synchronisation on 8 April 2018, enabling it to feed electricity into the national grid during performance and optimisation tests. We expect it will go into commercial operation in September 2018, ahead of the revised schedule.

At both Medupi and Kusile, the remaining units are progressing well against the revised schedule. The Medupi project is expected to be completed in 2020/21, while the Kusile project is expected to be completed in 2022/23, barring any delays as a result of contractor performance, industrial action or any other unforeseen issues.

We remain committed to the retrofit installation of wet flue gas desulphurisation (FGD) technology at Medupi in accordance with World Bank requirements, and are actively pursuing schedule acceleration to meet committed dates for four of the units, with potential acceleration of the remaining two units, to meet the World Bank requirement of completing the retrofit within six years of commercial operation date, failing which we would not be allowed to operate the units. However, this is dependent on sufficient water being available from the Mokolo Crocodile Water Augmentation Project Phase 2. We are also pursuing viable options to limit the sulphur content of coal to reduce exceedances of sulphur dioxide limits. FGD costs are in line with established benchmarks.

Refer to "Our interaction with the environment – Mokolo Crocodile Water Augmentation Project (MCWAP) Phase 2" on page 101 for further information

The Board will insist on proper project and contract management as well as execution, in order to eliminate time and cost overruns on our mega projects, namely Medupi and Kusile. The Board will ensure that all projects are completed within both budget and the contracted value; modifications or variations will not be tolerated, aside from exceptional circumstances.

**Group funded capital expenditure (excluding capitalised borrowing costs) per division**

Division, R million	Target 2017/18	Actual 2017/18	Actual 2016/17	Actual 2015/16
Group Capital	32 300	<b>29 278</b>	35 458	33 799
Generation	8 444	<b>9 746</b>	14 376	11 440
Transmission	948	<b>807</b>	940	998
Distribution	7 028	<b>1 170</b>	5 220	5 490
Subtotal	48 720	<b>45 001</b>	55 994	51 727
Future fuel	1 599	<b>1 226</b>	114	2 114
Eskom Enterprises	1 549	<b>476</b>	1 107	373
Other areas including intergroup eliminations	3 015	<b>1 300</b>	2 817	3 138
Total Eskom group funded capital expenditure	54 883	<b>48 003</b>	60 032	57 352

1. Capital expenditure includes additions to property, plant and equipment, intangible assets and future fuel, but excludes strategic spares, construction stock and capitalised borrowing costs.

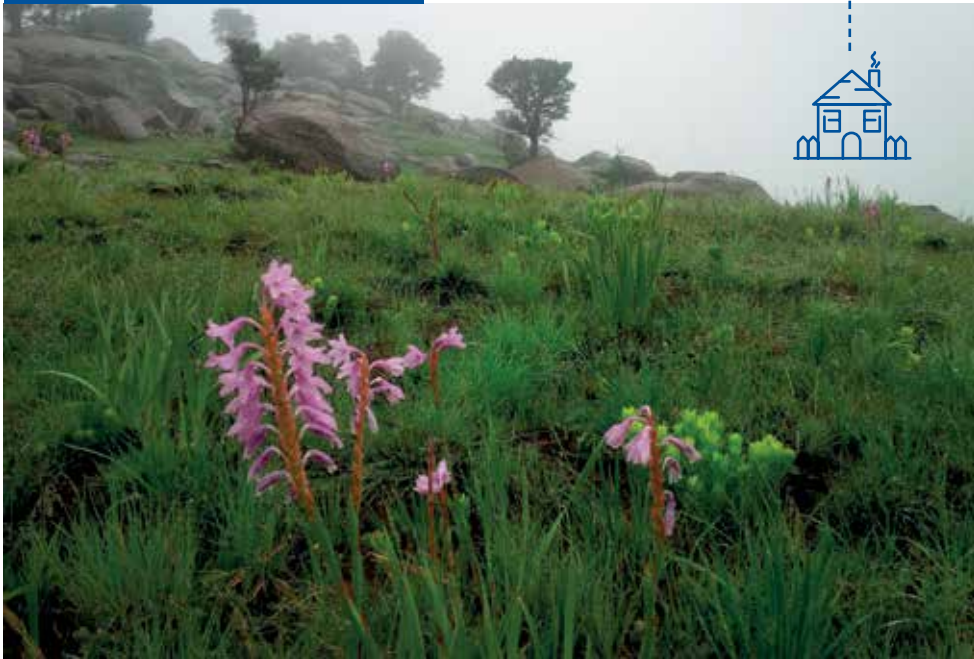
For information on future new build projects, refer to "Our know-how – Investing in appropriate technologies" on pages 123 to 124

**Future focus areas**

- Improving the availability of our generation assets and optimising our production plan based on the least-cost merit order dispatch approach
- Optimising maintenance planning by using advanced analytics and new technologies
- Continuing to evaluate fleet renewal or preservation options
- Strengthening the transmission backbone towards attainment of N-1 compliance, and strengthening distribution networks to accommodate customer growth in support of universal access
- Effectively prioritising investments in system strengthening and renewal

- Rolling out mobility and real-time dispatching tools to improve scheduling, response times and outage resolution to distribution customers
- Using a risk-based approach to prevent revenue losses, especially in the prepaid domain
- Completing the Medupi and Kusile new build projects to deliver the remaining 6 382MW of new generation capacity
- Constructing 2 233km of transmission and other lines and commissioning 8 985MVA of transformer capacity
- Completing refurbishment projects, including Matla, Duvha and low-pressure retrofits
- Executing environmental compliance projects such as nitrogen oxide, sulphur dioxide, fabric filter plants and the Medupi FGD plant

## OPERATING PERFORMANCE



## OUR INTERACTION WITH THE ENVIRONMENT

### HIGHLIGHTS

- Successfully concluded a transformation project with the transfer of ownership of the Anglo cost-plus mines to a new black-empowered entity, Seriti Coal
- Following good summer rains, dam levels in the Vaal River increased to over 100%
- Particulate emissions and water use performance improved significantly
- Proclamation of the Ingula Nature Reserve in KwaZulu-Natal and Free State at the site of the Ingula Pumped Storage Scheme

### IMPROVEMENTS

- Successful testing and burning of low quality coal at all six units of Matla Power Station, allowing access to a cheaper coal resource
- Koeberg Nuclear Power Station installed a groundwater desalination plant in response to the water shortage in the Western Cape
- Started implementing the approved air quality offset programme
- Obtained environmental authorisation for the construction of a nuclear power station at the Duynefontein site in the Western Cape

### CHALLENGES

- Timeously securing new coal contracts and addressing the below-target delivery of coal from existing contracts
- Lack of capital funding for cost-plus mines negatively impacted production and affects the mines' ability to produce coal in the future
- Coal supply to Hendrina, Komati and Majuba Power Stations was affected by Tegeta mines being placed in business rescue
- Coal-related load losses for the year were 22% higher than the previous year
- The drought in the Western Cape still poses a risk to operations at Koeberg Nuclear Power Station
- Potential delays in meeting commitments made in minimum emission standards postponement applications
- Several sites received compliance notices regarding adherence to atmospheric emission licences
- Continued to phase out material containing PCBs, with 26.3 tons of PCB-containing equipment thermally destroyed in 2017/18
- Budget constraints may impact future environmental performance, by delaying required environmental projects and maintenance of equipment

### LOWLIGHTS

- Seven power stations ended the year below minimum required coal stock levels

Our interaction with the environment considers our utilisation of renewable and non-renewable environmental resources that support our ability to create value, by powering our generation fleet – the use of renewable energy is one way in which we try to limit our negative impact on the environment. Furthermore, it considers our impact on the environment through emissions from our power stations, as well as other impacts related to environmental contraventions and biodiversity. Environmental compliance can impact operational sustainability and is critical to maintaining our licence to operate, and supporting security of supply. As such, we remain committed to our principle of Zero Harm to the environment.

### Looking back on prior year focus areas

We maintain focus on our coal procurement strategy, to improve management of coal quality from suppliers to ensure the required coal quality and stock levels at all stations. The procurement process to appoint coal supply contractors for Kusile is expected to be concluded by December 2018. We have signed a long-term contract for the supply of limestone from Upington, Northern Cape for Kusile's FGD plant, which will reduce sulphur dioxide emissions.

We also continued implementation of our emissions reduction and air quality offset plans, coupled with the sale of ash. Our efforts to develop new local and international markets for ash beneficiation also carry on.

We continue to explore drought contingency plans to mitigate the medium-term water supply risk, until Lesotho Highlands Phase 2 is commissioned. Continued focus on station-specific water strategy implementation plans has led to improved water management.

### Securing our resource requirements

We aim to safely and sustainably source, procure and deliver the necessary amounts of primary energy – coal, nuclear fuel, liquid fuels, diesel, gas, water and limestone – of the required quality to our power stations, at the right time and at optimal cost.

### Securing our coal requirements

#### Coal supply strategy

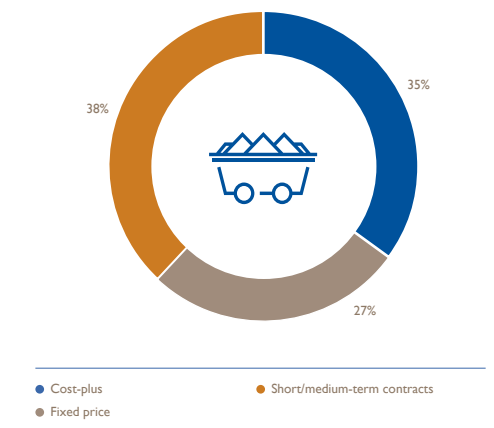
A number of dynamics, including a reduction in the global coal price and environmental factors, have resulted in reduced private investment as well as divestment in the coal mining industry over recent years, and therefore limited the coal supply in the market.

The Board approved our coal supply strategy in the prior year, which targets the following:

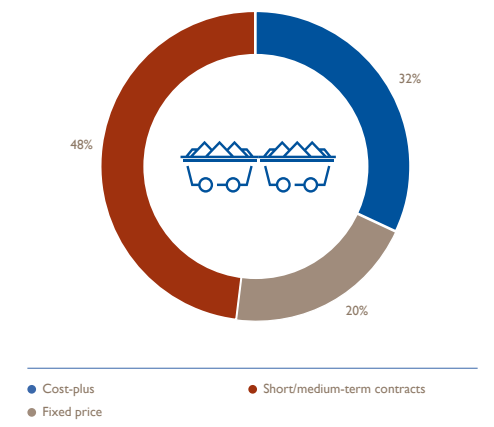
- Achieving an acceptable balance of security of coal supply and risk exposure, by entering into a balanced portfolio of long- and short-term contracts, including cost plus contracts, with built-in flexibility on term, volume, quality and logistics

- Attaining a delivered cost of coal in line with the NERSA determination
- Optimising logistics to drive cost efficiency while delivering the road-to-rail migration programme
- Ensuring the optimal dispatch of coal-fired power stations
- Supporting Government and Eskom's transformation objectives by increasing coal spend on black-owned companies and leveraging Eskom's buying power to shape the coal market

### Composition of coal supply by volume



### Composition of coal supply by value



About 90% of the forecast coal requirement for the next five years has been secured, presuming the investments in cost-plus mines assumed in the Corporate Plan take place as scheduled.

## OUR INTERACTION WITH THE ENVIRONMENT

continued

### Additional information on our top 10 coal suppliers

Supplier	Contract type
Exxaro Coal	Mix of cost-plus and fixed-price
Anglo Operations/Seriti Coal South32	Cost-plus
Universal Coal Development I	Mix of cost-plus and fixed-price
Iyanga Mining	Fixed-price
Tshedza Mining Resources	Fixed-price
Umsimbithi Mining	Fixed-price
Koornfontein Mines	Fixed-price
Keaton Mining	Fixed-price
Wescoal Mining	Fixed-price

### Coal quality

We aim to transfer coal quality risk to the supplier. To this end, newer agreements have more rigorous quality clauses to provide us with greater recourse for the supply of poor quality coal. We continue to evaluate the feasibility of a multitude of cost-effective technologies to improve coal quality, such as de-stoning, washing and screening of coal.

Our long-term goal remains to determine coal quality at the point of delivery. Our research unit is working on the design of real-time processes and systems to sample and analyse coal consignments upon arrival at power stations, prior to offloading, by using coal DNA characterisation.

### Technical performance

Measure and unit	Target 2022/23	Target 2018/19	Target 2017/18	Actual 2017/18	Actual 2016/17	Actual 2015/16	Target met?
Coal burnt, Mt <sup>2</sup>	n/a	n/a	117.44	<b>115.49</b>	113.74	114.81	n/a
Coal purchased, Mt	n/a	n/a	130.32	<b>115.25</b>	120.25	118.70	n/a
Coal purchase R/ton, % increase <sup>3C</sup>	9.0	9.0	12.0	<b>3.8</b>	3.5	19.2	●
Coal stock days	37	37	37	<b>68</b>	74	58	●
Normalised coal stock days	37	37	37	<b>28</b>	38	36	■
Road-to-rail migration (additional tonnage transported on rail), Mt <sup>3C,3</sup>	64.4	12.9	12.9	<b>11.6</b>	13.2	13.6	■

1. Future targets shown as n/a are dependent on system requirements.

2. The 2017/18 coal burnt figure excludes 1 901kt burnt during the commissioning of Medupi Units 5 and 4 and Kusile Unit 1 (2016/17: 623kt for pre-commissioning burn).

3. The 2022/23 road-to-rail target is the cumulative target over the next five years.

Coal stock days remained significantly higher than target largely due to more coal than required being delivered to Lethabo, Medupi and Kusile Power Stations. Lethabo is supplied by a cost-plus mine, where there is no financial benefit in reducing coal production. Due to the delays in the commissioning of units at Medupi and Kusile, coal requirements are lower than originally anticipated, although we continue to take coal in terms of the take-or-pay coal supply contract. It is also not practical to transport coal from Medupi to other stations in Mpumalanga.

### Investment in cost-plus mines

The majority of the cost-plus mines require significant investment or recapitalisation in order to increase production and/or maintain existing production. Lower production should be expected from these mines until the collieries can be recapitalised. Recurring financial constraints have hampered our ability to fund the required capital expenditure, leading to an increase in procuring coal on short- or medium-term contracts, which also incurs additional transport cost, as those collieries are generally not situated close to our power stations.

Recapitalisation will only be considered for those mines where long-term benefits can be demonstrated. Increased volumes of acceptable quality coal will reduce our overall coal spend by limiting the short- and medium-term coal required. We will also consider financing expansion at cost-plus mines to access remaining contracted reserves, to increase production and enable contract extensions.

During the past year, we continued to focus on those improvements at cost-plus mines that didn't require capital investment. Although effective, these improvements are limited, and further capital investment is required. We plan to spend R10.7 billion on financing expansion over the next five years. However, a two- to three-year delay can be expected before the capital investment will result in increased output and productivity levels.

Excluding the above, the normalised coal stock days stood at 28 days, well below the target. This is partly due to a number of stations with coal stock days below required minimum levels.

At the end of June 2018, coal stock levels at the following stations were below the minimum:

- **Arnot:** Dedicated supply contracts to Arnot have expired, and coal contracted for Arnot was moved to stations like Hendrina, whose coal supply was affected by the associated mines being placed under business rescue
- **Camden:** The station was slightly below its minimum stock level due to delays in security short- and medium-term coal
- **Duvha:** Although not below the minimum stock holding at year end, stock levels have subsequently declined, due to coal stock being routed to other stations with low stock levels, coupled with challenges experienced with the coal conveyor
- **Hendrina:** The station's coal stock is at 15 days, following a write-off of approximately 17 days' worth of coal stock. The circumstances of the write-off are the subject of an internal forensic investigation
- **Komati:** Coal stock is at the minimum level. Nonetheless, due to Komati's low burn, coal can easily be rerouted to the station if required
- **Kriel:** The Kriel mine has experienced difficulty supplying due to lack of reserves, as the cost-plus contract has to be extended and a corresponding investment into the mine is required
- **Majuba:** Although deliveries have increased, coal burn was higher than planned, resulting in stock levels declining from 28 days at 31 December 2017 to about 15 days
- **Tutuka:** Mine production was lower than planned, partly due to a mining production incident

A recovery plan – based on potential sources identified for procurement – has been put in place to improve the stock days at these stations. However, recovery efforts have been impacted by low delivery from the Tegeta mines which are in business rescue. We are working with National Treasury on ways to expedite the coal procurement process.

Coal-related load losses for the year were 22% higher than the previous year. Together, Matla (58%) and Tutuka (31%) contributed 89% of all coal quality-related load losses for the past year:

- Matla Power Station's decision to burn poor quality local coal has significantly increased load losses, although it has reduced the need for expensive short-term coal
- At Tutuka, we are working with the colliery to improve underground water controls to limit the moisture impact on the coal supplied. Improved quality control has already led to a reduction in coal-related load losses

The quality assurance process relating to short- and medium-term coal supplies is receiving attention. Contamination controls at cost-plus mines will also be subject to increased focus.

### Implementing coal haulage and the road-to-rail migration plan

The haulage of coal by rail did not meet the annual target due to a number of Transnet Freight Rail infrastructure failures. A decision was also taken to stop the Camden rail service to achieve cost savings.

We regularly engage with local authorities about the large number of trucks transporting coal, as well as their contribution to the deterioration of road conditions in Mpumalanga Province, and the serious threat this poses to road safety. Several public safety awareness campaigns have been carried out at key points on major routes used by coal trucks.

### Securing our water requirements

Our short-term water security risk has improved due to increased dam levels in the Vaal River System. The commissioning by the Department of Water and Sanitation (DWS) of the acid mine drainage project by 2023 and the Lesotho Highlands Water Project Phase 2 will contribute to longer term water security for Eskom. However, the Lesotho project is currently at risk of being delayed beyond 2025.

To assist with water security in Gauteng, we committed last year to use the Drakensberg Pumped Storage Scheme to pump at least 285 million cubic metres of water per year over three years from the Thukela River into the Sterkfontein Dam, which feeds into the Vaal River System.

Deteriorating raw water quality requires collective action by DWS and water users, including Eskom, to protect water resources and deal with polluters. We are implementing treatment plans to manage this risk.

### Mokolo Crocodile Water Augmentation Project (MCWAP) Phase 2

Medupi Power Station's FGD retrofit requires additional water from the MCWAP project by February 2024, whilst the water delivery date has been delayed to January 2024. Failure to commission the FGD plant within the agreed timelines may render Eskom in breach of the World Bank loan agreements and our emission licence, which would mean the affected units would not be permitted to operate.

Refer to "Our infrastructure – Delivering capacity expansion" on page 97 for further information

## OUR INTERACTION WITH THE ENVIRONMENT

continued



### Koeberg responds to water shortages by launching a desalination plant

In February 2018, Eskom's Koeberg Nuclear Power Station launched a mobile groundwater desalination plant, to supply the station's water needs, thereby easing pressure on the City of Cape Town's water supply.

The desalination plant is part of Koeberg's three-pronged water management strategy to address the current water shortages in the Western Cape, to ensure that the plant is able to provide safe and sustainable electricity. The strategy includes reducing the power station's daily water usage, storing adequate water on site and considering alternative water supplies such as ground and sea water.

"When the City of Cape Town called on the people of the Western Cape to address the water issue, we had to respond with a sustainable solution as a responsible corporate citizen. To this end, we have saved approximately 115 000kl since June 2017, compared to previous averages. This equates to the City of Cape Town supplying 10.5kl of water to approximately 11 000 houses for a month. Our water tanks are kept full to cater for emergencies," said Velaphi Ntuli, Koeberg Power Station Manager.

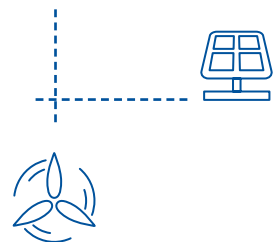
Koeberg can operate for about two weeks without off-site potable water. The desalination solution was therefore very important to ensure continuity of supply. Koeberg already saves about 22 billion litres of fresh water per year, as its condensers are cooled by means of sea water, which is returned to the sea after use.

### Water for future power stations

The development of new power stations beyond our current new build programme will need to consider the quality and availability of water resources, lead times for the development of new water supply infrastructure, as well as climate change impacts.



For a discussion of our water usage performance, refer to "Reducing water consumption" on page 104 in this section



### Securing our nuclear fuel requirements

Existing contracts for the supply of nuclear fuel fabrication services and the delivery of fabricated nuclear fuel to Koeberg Nuclear Power Station are sufficient to cover Koeberg's demand until 2021/22. The existing contracts for enriched uranium, which is used as feed for the abovementioned fuel fabrications, provide for about 40% of our demand until the end of 2020. The commercial process for the supply of enriched uranium is in progress.

See note 10 on future fuel supplies and note 20 on inventories in the annual financial statements for further information on nuclear fuel balances



### Progress on regional gas and hydro projects Mozambican projects

While we remain interested in pursuing hydro, gas and transmission projects in Mozambique, further direction is awaited from Mozambique's Ministry of Mineral Resources and Energy about which projects it wishes to pursue and the role envisaged for South Africa, and Eskom in particular.

### Grand Inga Hydro Project

The Grand Inga project, which would establish a 4 800MW hydroelectric station, of which 2 500MW is allocated to South Africa, was discussed as part of a binational commission between South Africa and the Democratic Republic of the Congo (DRC) held in June 2017. The DRC government advised that they have directed two remaining bidders to prepare one bid and resubmit a combined offer.

DoE also shared the preferred transmission solution for the Southern African power grid with the DRC delegation. This is the subject of an inter-governmental Memorandum of Understanding that is being developed between South Africa, Botswana, Zambia, Zimbabwe and the DRC. Some disagreement regarding the technology solution for evacuating power from the DRC was identified and has to be reconciled. The commission also identified the need for support from intermediary countries.

### Reducing our environmental footprint

We assess our environmental performance in various ways, such as relative particulate emissions, and specific water consumption by all commissioned power stations, as well as the number of environmental legal contraventions.

Refer to the fact sheet on page 139 for information on the environmental implications of using or saving electricity



Measure and unit	Target 2022/23	Target 2018/19	Target 2017/18	Actual 2017/18	Actual 2016/17	Actual 2015/16	Target met?
Relative particulate emissions, kg/MWh sent out <sup>SC-1</sup>	0.18	0.33	0.34	0.27	0.30	0.36	●
Specific water consumption, l/kWh sent out <sup>SC-1</sup>	1.25	1.36	1.37	1.30	1.42	1.44	●
Net raw water consumption, Mℓ	n/a	n/a	n/a	276 335	307 269	314 685	n/a
Environmental legal contraventions in terms of the Operational Health Dashboard, number <sup>2</sup>	1	1	1	2	-	1	■

- The performance of Medupi Units 4 and 5 and Kusile Unit 1, still within their first year after commissioning, has not been included in the performance above. Medupi Unit 6 has been included since September 2016.
- In defined circumstances where the management of an environmental legal contravention indicates specific management issues or failings, it is recorded on the Eskom Operational Health Dashboard.

### Reducing particulate and gaseous emissions

The relative particulate emissions performance for the year was significantly better than target, and showed a marked improvement on the performance achieved in the prior year. The improvement is due to an increased opportunity for outages to address issues relating to emissions, combined with lower load factors which reduced the burden on the emission abatement equipment.



Information on gaseous emissions is available in the technical statistical tables on pages 142 to 143

### Emission standards

Minimum emission standards (MES) were published in 2010, and stipulated emission limits, which had to be complied with by April 2015 for existing plant standards. More stringent limits, applicable to new plant standards, must be complied with by April 2020. Compliance with the new plant standards will require all coal-fired power stations to implement emission reduction technologies, such as fabric filter plant (FFP), low NO<sub>x</sub> burners or FGD.

Eskom has adopted a phased and prioritised approach to reduce emissions, by considering the remaining life of power stations in our fleet and their impact on ambient air quality. In cases where it is not possible for power stations to comply with the MES within the compliance timeframe, or before they are decommissioned, we have submitted an application for postponement.

The Department of Environmental Affairs (DEA) granted Eskom previous postponements, some until 2020 and others until 2025, on condition that we would develop and implement an environmental offset programme to improve ambient air quality in communities close to our power stations. However, there are delays to the implementation schedule committed to in the 2014 postponement application, which are not viewed in a favourable light by the relevant authorities. Furthermore, the potential delay to Medupi's FGD retrofit due to a possible lack of sufficient water supply will render us non-compliant with the conditions of the World Bank loan.

In terms of the National Environmental Management: Air Quality Act, 2004, we must request further and successive postponements in compliance with a prescribed process that includes a rigorous public

participation process, as well as the completion of detailed atmospheric impact assessments. There are delays to the abatement technology implementation schedule committed to in the 2014 postponement application. We are engaging proactively with key stakeholders and have initiated internal processes to mitigate the projected delays.

The following emission reduction projects are being undertaken:

- The FFP retrofit on Units 2, 3 and 4 at Grootvlei Power Station was completed in October 2017. The refurbishment of the electrostatic precipitators (ESP) on four of the six units at Matla Power Station was also completed, resulting in an improving trend in particulate emissions performance
- Lethabo Power Station is busy with the first phase of a particulate emissions reduction solution through the installation of high-frequency power supply on all six units. The second phase is being developed; this will cover the refurbishment of the ESP, upgrading the SO<sub>2</sub> plant and installing an ammonia injection plant
- Planning for the installation of high-frequency transformers to reduce particulate emissions is progressing at Matla and Duvha Power Stations, while Lethabo, Kendal and Matimba are on track for construction from 2021 to 2025
- Development work continues for low NO<sub>x</sub> burner replacement or retrofits at Tutuka, Majuba and Matla. Detailed designs for Majuba Power Station were completed during the year
- Tutuka and Kriel FFP retrofits are behind schedule due to budget constraints, as well as lengthy engineering, project and commercial processes. Tutuka has initiated a postponement and licence variation process to adjust emission limits from April 2019. However, the PFMA application for the Kriel retrofit project was declined by DPE in February 2018, based on "a lack of policy direction on life extension of coal-fired power stations; it would be presumptuous to commence the project in the absence of a revised Integrated Resource Plan from the DoE." Potential delays are predicted in meeting legally binding commitments made in these stations' postponement applications
- The FGD plant is to be retrofitted to the units at Medupi, although this is behind schedule. The units at Kusile are being constructed with the FGD plant included

## OUR INTERACTION WITH THE ENVIRONMENT

continued

Failure to comply with the atmospheric emission licence (AEL) standards, or to meet the commitments in our emission retrofit programme, could result in the withdrawal of licences to operate or not being granted further postponement applications. This would also result in a breach of specific loan covenants, such as the Medupi FGD loan conditions, and in some instances, could be grounds for criminal action against Eskom.

### Offset programmes

As per our MES postponement commitment discussed above, an air quality offset plan to improve ambient air quality – especially particulate matter levels – in communities close to our power stations was approved by DEA and the affected district municipalities in September 2016. The offset plan has a nominal cost in excess of R4 billion over nine years.

The rollout of air quality offset interventions will commence in settlements in KwaZamokuhle and Ezamokuhle in Mpumalanga, as well as the Sharpeville/Vaal area in Gauteng during the coming year, while a baseline study will be conducted in the Marapong area in Limpopo. The interventions will focus on switching households from burning coal and waste to using electricity in combination with liquefied petroleum gas. A separate health assessment is planned in parallel to confirm the improved health status when indoor and ambient air pollution is reduced.

### NEMA section 30 performance

The atmospheric emission licences issued to power stations require unexpectedly high atmospheric emissions to be reported under section 30 of the National Environmental Management Act, 1998 (NEMA). A total of 22 of these incidents occurred during the year, an improvement from 48 reported in the previous year. Power stations have operated under conditions where section 30 is triggered for 0.88% of the time during the year (March 2017: 2.24%).

Sulphur dioxide (SO<sub>2</sub>) emission limits for Medupi and Matimba are being exceeded due to the high sulphur content of coal supplied to these stations. We submitted an application to increase the SO<sub>2</sub> limit in the AEL by means of a postponement application. In response, DEA asked us to submit detailed action plans by the end of August 2018, setting out commitments to bring these power stations into compliance with the MES. Further engagements in this regard are planned.

### Ashing facilities and ash utilisation

Our exemption applications to allow for a period of four to six years after authorisation to install linings at the Majuba, Kendal, Tutuka and Matimba dry-ashing facilities have all been approved.

In terms of our ash utilisation strategy we sold 2 736kt of ash from our power stations (March 2017: 2 760kt). Eskom continues to coordinate and support discussions to further develop new local and international markets for ash beneficiation in line with Operation Phakisa initiatives to create jobs and new skills while continuing to ensure responsible environmental management.

### Reducing water consumption

#### Our strategy

Our comprehensive water strategy for all coal-fired power stations is based on maintaining our strategic user status and complying with applicable water legislation. The strategy supports overall financial, environmental and operational sustainability by working with relevant stakeholders in addressing both the country's and our particular water challenges.

All power stations have developed water strategy implementation plans, focusing on actions to reduce water use and ensure compliance. Progress against plans is monitored and reported, and initial actions have been closed out.

#### Water usage

Specific water use for the generation of electricity for the year was substantially better than the target, and also considerably better than the previous year. Continued focus on station-specific water strategy implementation plans, water data audits, as well as a focus on improving water management, contributed to the improved performance. The reduction in energy generated by older power stations, which are less water efficient, has also reduced specific water use.

### Reducing environmental legal contraventions

There were two Operational Health Dashboard contraventions (as defined earlier) reported during the year. There were, however, 30 environmental legal contravention incidents identified (March 2017: 29, restated). There were 20 water-related incidents, four related to waste, three related to emission licences, and three biodiversity-related.

### Phasing out polychlorinated biphenyls (PCBs)

In terms of the Stockholm Convention, South Africa is required to phase out PCB-contaminated equipment by 2025. In response, we developed a national inventory of PCBs in 2015, together with a plan to dispose of 140 PCB-contaminated pieces of equipment before 2023. To date, 28 pieces of equipment have been phased out. The plan is to phase out another 18 transformers during the coming year and 16 the year after.

Information on the disposal of ash, asbestos, PCB-containing material, as well as nuclear waste and used nuclear fuel is set out in the statistical table on pages 142 to 143

### Provisions for environmental restoration and rehabilitation

We continue to provide for the estimated decommissioning cost of nuclear plant, including rehabilitation of the associated land, as well as the management of spent nuclear fuel assemblies and radioactive waste. Provision is also made for the decommissioning of other generating plant and rehabilitation of the associated land.

Furthermore, where a constructive or contractual obligation exists to pay coal suppliers from cost-plus mines, provision is made for the estimated cost of closure at the end of the life of the mine, together with pollution control and rehabilitation of the land.

The following provisions have been raised in respect of environmental rehabilitation and restoration:

R million	Actual 2017/18	Actual 2016/17	Actual 2015/16
Power station-related environmental restoration – nuclear plant	15 928	17 650	12 677
Power station-related environmental restoration – other power plant	13 375	12 643	8 339
Mine-related closure, pollution control and rehabilitation	12 737	11 706	8 580
<b>Total environmental provisions</b>	<b>42 040</b>	<b>41 999</b>	<b>29 596</b>

Refer to note 29 in the annual financial statements for more information on these provisions

### Biodiversity

The Ingula Nature Reserve was formally declared in Kwa-Zulu Natal in March 2018 and in the Free State in May 2018. The reserve covers some 8 000 hectares and surrounds the Ingula Pumped Storage Scheme. This brings the area of land managed by Eskom, which is formally declared as a nature reserve, to about 18 000 hectares, resulting in the early achievement of the 2025 target.



### Ingula, Eskom's sustainability champion

Eskom's Ingula Pumped Storage Scheme is situated on the boundary of the Free State and KwaZulu-Natal, straddling the escarpment of the lower Drakensberg. Following approval of the environmental impact assessment (EIA) study, Eskom was given authorisation to construct the scheme in December 2002. One of the recommendations of the specialist studies during the EIA was the need to purchase additional land surrounding the scheme in order to secure the biodiversity value of the site.

### Why Ingula as a nature reserve?

The Ingula Partnership was formed between Eskom, BirdLife South Africa and Middelpunt Wetland Trust in 2004, and a steering committee established to ensure that the objectives of the partnership are achieved. These included ensuring that the long-term integrity of the conservation area be formally protected as a nature reserve for all South Africans to enjoy. The partnership is directly involved in the management of the nature reserve, eradication of alien invasive species, control of erosion and the development of social projects.



The magical rolling hills of the Drakensberg, home to Ingula

### What makes Ingula special?

Ingula is located within a high altitude grassland ecosystem, a severely threatened system in South Africa of which less than 2% is formally protected. The reserve is host to several hundred species of birds, reptiles and mammals. Endangered bird species, including the wattled crane, Eurasian bittern, yellow-breasted pipit, southern bald ibis and white-bellied korhaan are visitors to Ingula. In addition, Ingula was thrust into the spotlight with the discovery of one of the rarest birds in the world, the white-winged flufftail, in the upper wetlands.



The elusive white-winged flufftail  
(© Sergey Dereliev, www.dereliev-photography.com)

Visitors to Ingula are hosted at the Visitor Centre, from which guided walks or a tour, including a visit to the underground pumped storage scheme, can be arranged. Now internationally acclaimed, Ingula remains a pioneering example of how the development of industry can be harmoniously integrated with the protection and enhancement of biodiversity.

## OUR INTERACTION WITH THE ENVIRONMENT

continued

During the year, 256 red data bird mortalities were recorded on Eskom's infrastructure, substantially less than the 502 mortalities recorded last year. Although lines and segments within sensitive areas have been identified, proactive mitigation actions to ensure that they are made bird-friendly have been slower than anticipated.

We have been undertaking biological monitoring at the Sere Wind Farm. Results confirmed that the direct impact of turbines on bats (19 mortalities in the year) and birds (11 mortalities) is relatively low. Although the wildlife interaction incidents will be continually monitored and mitigated, there is no immediate concern. We will continue to determine which types of species are being impacted and, in particular, whether any red data species are at risk.

### Investing in renewable energy

We aim to deliver on our commitment to environmental sustainability and reducing our carbon footprint through purchases of renewable energy from IPPs, coupled with our own investment in renewables. Renewable energy sources include wind, solar power, biomass, landfill gas and small hydro technologies.



For capacity provided by renewable IPPs, refer to page 94

Sere Wind Farm contributed 331GWh to the national grid during the year (March 2017: 345GWh), with an average load factor of 36.05% and an average availability factor of 98.77% (March 2017: 37.63% and 99.65% respectively).

The small hydro plants in the Eastern Cape recorded total energy sent out of 11GWh during the financial year (March 2017: 20GWh) due to low rainfall in the catchment areas. The eight rooftop and ground-mounted PV commissioned sites in operation produced total energy sent out of 4.02GWh during the year (March 2017: 4.19GWh).

### Climate change

#### South Africa's pledge

South Africa's pledge to the Paris Agreement requires the country's CO<sub>2</sub> emissions to peak by 2025, plateau for another 10 years and then decline from 2035. Electricity historically accounts for around 42% of national CO<sub>2</sub> emissions. To achieve this target, the country will need to invest in lower or zero-emitting technologies, as and when the current coal-fired electricity generation fleet reaches the end of its life.

A concerted effort is therefore required to focus on greener technologies such as nuclear, cleaner coal technologies, renewables, gas and large hydro imports. The trade-offs between technologies must however be discussed and rationalised to arrive at an appropriate electricity mix. This will be informed by the revised IRP, once it is finalised by DoE.



### Greenhouse gases and climate change

About 70% of the sunlight reaches the earth's surface and is reflected upward in the form of infrared radiation. The heat caused by this radiation is absorbed by greenhouse gases (GHGs), including carbon dioxide, methane, nitrous oxide, sulphur hexafluoride, as well as hydrofluorocarbons and perfluorocarbons. While GHGs only make up about 1% of the earth's atmosphere, they regulate the world's climate by trapping heat, holding it in a kind of warm-air blanket that surrounds the planet – the greenhouse effect. Problems begin when human activities distort and accelerate the natural process by creating more GHGs in the atmosphere. This is known as the enhanced greenhouse gas effect or climate change.

The Intergovernmental Panel on Climate Change (IPCC), which represents a number of world climate change experts, has already released five globally recognised reports. These illustrate that human-induced GHGs are changing the earth's climate in terms of climatic variability, extreme events and long-term climate change. These climatic changes will have a direct impact on the development of countries and their economies, including infrastructure, development planning, as well as food and energy production. Globally, the power generation sector is the largest contributor of GHG emissions.

In realising the urgent need to reduce GHGs, participating countries signed the United Nations Framework Convention on Climate Change (UNFCCC), which governs and drives the negotiating process at international levels, by considering what can be done to reduce or mitigate climate change through GHG reductions, as well as to adapt to and cope with the impacts of climate change.

South Africa signed the UNFCCC in 1998, the Kyoto Protocol in 2002 and the Paris Agreement in 2015. Arising from this is a requirement to submit a national report on climate change activities every four years. National GHG emissions were estimated at around 347Mt in 1990, rising to around 518Mt in 2012, of which Eskom contributed approximately 44%. In Paris, South Africa committed that its national GHG emissions would peak at between 398Mt and 614Mt by 2025, then plateau for a decade, and thereafter decline in absolute terms. The DEA is responsible for managing these commitments.

### Carbon mitigation mechanisms

National Treasury has proposed that a carbon tax be levied on reported GHG emissions, in order to send a price signal to the market to reduce consumption of carbon-intensive products. We are participating in the pilot phase of the carbon budgeting process. Eskom once again achieved better than the pilot carbon budget for 2017. However, until such time as we are allocated additional lower carbon-emitting technologies in terms of the revised IRP, we remain concerned about our ability to reduce the liability in terms of the pending carbon tax.

In 2017, the DEA gazetted the National Greenhouse Gas Emission Reporting Regulations, the Declaration of Greenhouse Gases as Priority Pollutants and the National Pollution Prevention Plans Regulations. The Climate Change Bill was published for public comment on 8 June 2018; this will coordinate all climate change legislation under one Bill. As a major emitter, we will be required to comply with all these regulations.

We support a delay in the implementation of the proposed carbon tax, until such time as the reporting system is well entrenched and the tax can be implemented as a "tax enforces budget" option, as recommended by a World Bank-sponsored study. Under this option, only emissions which exceed the carbon budget allocated by the DEA would attract tax. Eskom also objects to the proposed curtailment of the renewables premium rebate by 31 December 2022, given that the RE-IPP procurement programme contracts extend as far as 2038. Further hearings have been promised.

### Future focus areas

- Meeting future coal cost targets by managing costs within agreed parameters, while maintaining security of supply to the generation fleet, by securing new coal contracts in line with financial targets and contracting for coal at acceptable levels of quality, quantity and cost
- Investing capital in cost-plus mines, to improve production
- Returning coal stock at power stations to expected levels
- Ensuring functioning processes to measure coal deliveries and to test quality on site
- Meeting atmospheric emission licence compliance obligations in a cost-effective way to ensure a sustainable business
- Rolling out a raw water smart metering system across water schemes supplying our power stations
- Confirming that flow meters are calibrated and functioning, to aid in accurate and verified water measurements, billing and payments



## OPERATING PERFORMANCE



### OUR PEOPLE

#### HIGHLIGHTS

- Strong learner pipeline to cater for future skills requirements

#### IMPROVEMENTS

- Eskom's headcount is slowly reducing, although levels have increased year-on-year when including our subsidiary
- First phase of income differentials adjustments for bargaining unit staff has been implemented
- Lost-time injury rate has shown a significant improvement

#### CHALLENGES

- Racial and gender equity, although improving, are well below levels expected by the shareholder
- Achieving disability equity at all levels, and reasonable accommodation of people with disabilities
- Instilling a culture that supports safe behaviour at all times to prevent fatalities and lost-time incidents

#### LOWLIGHTS

- Increase in fatalities of employees, contractors and members of the public



Without our people, we would not be able to execute our strategy or deliver on our mandate. To that end, we need to ensure that we have the right people in the right positions doing the right things. One way of ensuring that is through our learner pipeline, another is through developing and training our people. We also need to make sure that our people are adequately rewarded for their efforts, in order to recruit and retain a skilled workforce.

Furthermore, we strive to foster mindsets and behaviours that express Eskom's values, leadership brand and support transformation efforts. Leaders across the organisation are required to adopt a transformational mindset, take accountability and live by our values and our leadership brand pillars.

Safety continues to be the foundation of all our operations and is critical to our performance. We remain committed to our goal of Zero Harm, on the basis that all incidents are preventable, and we strive to manage activities to eliminate incidents, mitigate occupational hygiene and safety risks and promote excellence in safety performance.



Leadership with a heart of a servant



Leadership that creates a learning organisation



Leadership characterised by good governance



Leadership characterised by disciplined execution

### Looking back on prior year focus areas

The focus on workforce optimisation, increasing employee engagement, and reducing both manpower costs and headcount remains ongoing, as does the drive to prevent incidents and share key safety learnings.

We are making progress in closing the gender equity gap, although this is not expected to be achieved by 2020 as had previously been anticipated, due to financial constraints limiting opportunities to recruit and promote women. We are aware that people living with disabilities are represented mostly at lower levels of the organisation; we are working on initiatives to address this.

### Our workforce

The group headcount at year end was 48 628 (March 2017: 47 658), including permanent staff and fixed-term contractors, consisting of 41 316 Eskom employees and 7 312 Eskom Rotek Industries (ERI) employees (March 2017: 41 940 and 5 718 respectively). Of these, approximately 84% were covered by collective bargaining agreements.

The number of ERI employees increased primarily due to the permanent employment of temporary workers as required by the Labour Relations Act, 1995, while the Eskom headcount showed a slight reduction, in accordance with our drive to optimise our workforce and reduce employee benefit costs.

Staff turnover during the past year was approximately 4.6%. The reconciliation of our headcount is shown below.

Number of employees	2017/18
Headcount at 1 April 2017	47 658
Add: Appointments	3 169
Less: Resignations	(1 114)
Retirements	(740)
Deaths in service	(190)
Dismissals	(123)
Absconded	(4)
Other	(28)
Headcount at 31 March 2018	48 628

Due to the financial constraints we are facing, a reduction in employee benefit costs, as one of the most significant cost elements, is required to ensure sustainability. Headcount reduction through natural attrition is one of the key levers to reduce employee benefit costs. A further reduction could be realised through separations and a reduction in overtime.

For a discussion of employee benefit costs, refer to "Our finances – Other operating costs" on page 82





**Average cost per employee**

Note that total employee benefit costs includes a number of elements, such as overtime, performance bonus, leave, post-employment medical benefits for those who qualify, pension benefits, training and development, as well as the cost of temporary staff. It would therefore be erroneous to try and determine the average cost per employee by dividing the employee benefit cost figure in the income statement by the headcount, without removing non-payroll costs.

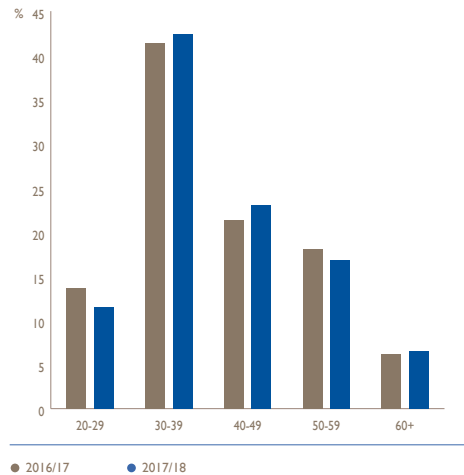
The average cost per employee, calculated based on guaranteed pay, is below R500 000 per employee for the year.



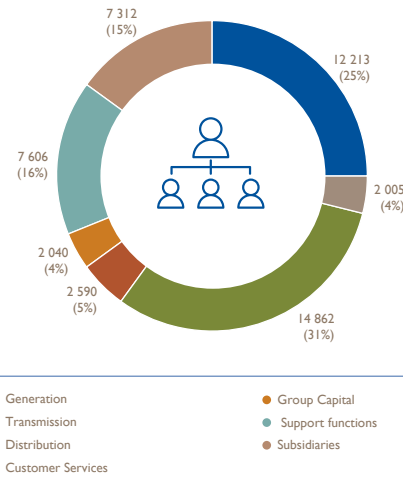
The composition of our employee benefit costs is set out in note 35 of the annual financial statements

Employee benefit costs are the second largest component of operating costs, constituting about 22% of total operating costs. The strategy review being undertaken will explore the reduction of employee benefit costs through workforce optimisation. We are focusing on the retention of core, critical and scarce skills across the business, while reducing non-essential positions.

The breakdown of our workforce at 31 March 2018 based on age is shown below. An area of focus is ensuring knowledge transfer from those employees nearing retirement age.



The divisional breakdown of our workforce at 31 March 2018 is shown below, indicating that about 65% of employees are directly involved in the supply of electricity to customers, with the balance employed in the new build programme, support functions and our subsidiary ERI, which focuses on supporting the electricity business.



For information on the racial and gender breakdown of our workforce, refer to "Improving internal transformation" on pages 114 to 115



**World Bank study into reasonable staffing levels at Eskom**

In August 2016, the World Bank's Energy and Extractives Global Practice Group released a policy research working paper titled "Financial Viability of Electricity Sectors in Sub-Saharan Africa – Quasi-Fiscal Deficits and Hidden Costs". We appreciate the World Bank report as it provides valuable insights into utilities in sub-Saharan Africa. The report provides comprehensive analysis of the viability and sustainability of these utilities, as well as detailed staffing benchmarks against South American utilities.

In virtually all respects the report corroborates the messaging and statements made by Eskom over many years. Most of the media commentary on this report, however, focused on only one aspect of the report, namely "optimum staffing levels". This is unfortunate from two perspectives: firstly that it seems the report's overall messages, observations, conclusions and recommendations are going unnoticed or being ignored, and secondly it appears that the "optimum staffing levels" is the one area of the report where human errors have slipped in – ironically, specifically with regard to the Eskom analysis.

According to the World Bank report, Eskom is overstaffed by 66% and only requires 14 244 employees to operate – of this, 4 648 employees relate to Generation Division, and 9 596 for Transmission and Distribution. The report only used customer numbers per full-time equivalent for Transmission and Distribution staff, and the number of units for Generation operations and maintenance staff, to arrive at the total Eskom staffing requirements. It does not consider other areas within Generation Division, such as engineering or projects; nor support functions across the entire business, such as finance, human resources, commercial, IT, sustainability and risk, legal, stakeholder relations or corporate communications functions; or even staff required for the new build programme. The report also did not take into account either customer density, as end users of municipalities were not considered; or the length of reticulation lines in our network, which constitutes almost 80% of our network; or the difference in the level of automation or outsourcing between the reference utilities and Eskom. Furthermore, it seems that the capacity per employee used to calculate Generation staffing levels was inconsistent with averages for similar utilities, and indeed significantly higher than the average for sub-Saharan Africa.

Moreover, comparing Eskom's staffing levels to those in 2007, on the basis that sales volumes are similar, is also considered simplistic. Electricity generation, transmission and distribution are long-term industries,

for which capacity expansion is required many years ahead of actual anticipated demand growth. Insufficient or late expansion of capacity can result in load shedding and significant economic disruption, which South Africa experienced due to the late start of the new build programme. Using the 2007 sales volume as a denominator ignores the impact of customer and network growth since then.

Irrespective of current sales volumes, the Eskom business has grown over the past decade, in terms of our generation capacity, network size, customer base and staff required for the new build programme. Furthermore, one has to consider that Eskom has to maintain sufficient infrastructure to cater for peak capacity, and cannot simply divest itself of infrastructure and staff to match the average level of sales during the year. Catering for the growth in the business, an average of 11 000 additional employees would be required. Added to the 2006 levels of 30 728, this would have resulted in staff numbers (at a company level) of 41 728 by 31 March 2015.

To address some of the limitations stated above, the World Bank approach was used as a base to determine appropriate staffing levels for the licensed divisions, while other global benchmarks were applied to support functions. This approach ensures a robust yet balanced and fair determination of possible Eskom staffing levels, taking into account South Africa's unique energy sector characteristics, such as Eskom's developmental role and the fact that it is a vertically integrated utility, with the majority of support services provided in-house or by our subsidiary.

Based on the revised approach, an optimal group staffing level of 33 249 was calculated – this consists of 10 107 Generation and related staff, 2 005 for Transmission, 10 508 for Distribution and Customer Services, 1 441 for the new build programme, 1 889 for finance, HR and procurement, 2 135 for other corporate and support functions, and 5 164 for Eskom Rotek Industries. This figure is aligned to our view that we may be up to one-third overstaffed, but is being refined further as part of our strategy review.

The results of the normalised calculations are being validated against other indicators, for example productivity benchmarks, to ensure the accuracy and completeness thereof. We also continue to conduct benchmarking, research and analysis to identify potential areas for efficiency improvements, in response to the dynamic business environment within which we operate.

### Building and retaining strong skills

We seek to deliver transformation through recruitment and retention using a targeted employee value proposition. Essential to this is attracting and retaining critical skills. We also use internal talent boards at managerial and leadership levels to identify employees with high potential and those with development gaps, to aid succession planning for critical workforce segments, and actively manage talent pools and careers to achieve transformation objectives. Through the use of our internal talent pools, we also try to reduce external recruitment in an effort to manage employee benefit costs. Optimisation of our business model will be included in the strategy review, and therefore recruitment has been restricted to critical vacancies only. Nevertheless, we are committed to retaining the right level of skills and to achieving transformation targets.

### Learner pipeline

Measure and unit	Target 2022/23	Target 2018/19	Target 2017/18	Actual 2017/18	Actual 2016/17	Actual 2015/16	Target met?
Engineering learners, number	n/a	n/a	391	1 241	1 480	895	●
Technician learners, number	n/a	n/a	652	838	1 209	415	●
Artisan learners, number	n/a	n/a	1 434	1 815	2 155	1 955	●
Learner intake, number <sup>1,2</sup>	2 500	500	500	726	3 048	1 370	●
Training spend as % of gross employee benefit costs <sup>3C</sup>	5.00	5.00	5.00	5.21	4.89	4.45	●

1. From 2018/19, learner numbers will reflect only new contracts awarded to learners and not the full learner pipeline as is currently presented, hence the significant reduction in numbers.  
2. The 2022/23 target for learner intake is the cumulative figure targeted over the next five years.

Our learner pipeline currently exceeds target, with a total of 4 176 learners in the system, with an additional 282 non-technical learners not reflected above. This is considered adequate to meet our future skills requirements. During the year, 424 learners were appointed into permanent positions, where vacancies and funding allowed. Those who couldn't be accommodated participated in a Career Fair with suppliers, to assist learners with opportunities in the broader labour market.

However, our learner pipeline is being reduced from the original 14% to 6% of total headcount, to align to our available financial resources. Over the next five years, we will only accept 500 new learners per year, in the occupational categories of engineers, artisans, technicians and sector-specific positions. We train learners not only for our own business needs, but also to contribute to the skills development strategy of the country.

### Learning and development

Learning and development focuses on improving the competencies of employees and building skills in future sourcing pools, as well as advancing leadership skills. Our training spend over the past year constituted 5.21% of gross employee benefit costs, totalling R1.44 billion (March 2017: R1.54 billion).

Our human resources strategy also needs to address the requirements of our shareholder, set out in our shareholder compact, and those of Government as a whole. The review of our operating model will ensure optimal skills and capacity levels across the business, and we will conduct a bottom-up skills and remuneration analysis.

Our human resources strategy relies on three main areas:

- Creating a culture of high performance
- Ensuring that we have a productive workforce, efficiently organised and appropriately skilled
- Retaining core and critical skills while ensuring that our workforce is engaged

Where possible, learning and development initiatives are delivered by our Eskom Academy of Learning. Success rates of internally delivered interventions to close competency gaps, based on participant feedback, exceeded 90%.

During the year under review, a total of 361 employees were assessed in terms of the recognition of prior learning process, which considers learning and experience, however obtained, against registered unit standards and qualifications outcomes. Of those, 31 were declared competent, while 330 are closing the competency gaps identified. All but one of these employees work in technical fields.

A total of 1 502 employees are enrolled with various academic institutions to further their studies, 713 of which relate to technical studies, and 789 to non-technical studies. Approximately 56% of those enrolled are women.

### Remuneration and benefits

Our approach to remuneration and benefits is designed to attract and retain skilled, high-performing employees. We aim to remain competitive by providing market-related remuneration structures, benefits and conditions of service, within the guidelines set by the shareholder.

Nevertheless, unjustifiable race and gender based income differentials have been identified and are being addressed, through a payment structure review and standardisation to achieve remuneration equity across races and genders. Income differential adjustments for bargaining unit employees were implemented in December 2017, the first phase in a three-year implementation plan. The implementation of adjustments for managerial employees will commence in the 2018/19 financial year.

Managerial employees receive a guaranteed package, which includes compulsory benefits such as medical aid, pension, dread disease cover, group life and death benefit. The guaranteed amount is reviewed annually, with increases awarded in October each year, to keep remuneration in line with market trends based on an appropriate comparison group. Annual reviews are approved by Exco and ratified by the PGC.

Bargaining unit employees receive a basic salary and benefits, which include pension, medical aid, death benefit, housing allowance, cell phone allowance and a car allowance (subject to qualifying criteria). Basic salaries are reviewed annually, with increases awarded in July, to keep remuneration in line with market trends based on appropriate comparative groups. Annual reviews are approved by Exco and ratified by the PGC.

The short-term incentive scheme rewards the achievement of predetermined objectives and targets (linked to the shareholder compact), subject to the achievement of defined gatekeepers. Individual performance objectives and targets are determined by an employee's line manager and the employee, in agreed performance contracts and covers the financial year. Incentive bonuses are calculated by applying a performance measurement formula. The formula ensures alignment with strategic objectives, and is weighted based on an employee's contribution to individual, team, divisional and organisational objectives.

As the incentive scheme is expected to be self-funding and the net profit target of R500 million was not met, no performance bonus provision was raised.



Executive remuneration is discussed under "Our governance – Executive remuneration and benefits" on pages 54 to 58

### Employee engagement

The Employee Relations Department ensures sound employee relations in the workplace, also engaging with organised labour to achieve high organisational performance. The relationship with organised labour is well regulated, with agreements and formalised processes in place.

Our employee engagement programme, established in 2015, aims to rebuild relationships with employees by helping them to feel more connected to the business and to one another, thereby establishing an emotional

commitment to Eskom and its goals. Furthermore, a number of initiatives are in place to ensure open dialogue, and to provide employees with a platform to supply feedback to Eskom's leadership. These include face-to-face meetings, employee engagement surveys and an ongoing weekly communication to all employees, with all employees being given the opportunity to contribute.

### Health and wellness

The health and wellness of our employees is paramount to a healthier and more productive workforce. Our health and wellness strategy seeks to improve the health and wellbeing of every employee, thereby improving work attendance and individual work capacity, through the prevention of occupational diseases and injuries, early detection of occupational and lifestyle diseases (such as hypertension, diabetes and HIV), medical surveillance, medical fitness for duty assessments and wellness programmes.

Wellness programmes include physical wellness programme using the sports, recreation and cultural programme as a vehicle to promote employee wellbeing. The employee assistance programme (EAP) also offers counselling, financial wellness and various other psychosocial preventative programmes. The EAP utilisation was about 12.6% for the year, exceeding the public sector average of 10.7%. The top four problems presented to the EAP were relationship issues, stress, organisational concerns and trauma. Employees with financial challenges are offered debt counselling and coaching on managing their finances.

Levels of sick leave within the organisation remain a concern. The sick absenteeism frequency rate (SAFR), which measures the number of sickness absences per employee for a 12-month rolling period, of 2.35 (March 2017: 2.38) is much higher than the target of 2.04. However, the gross sick absenteeism rate (GSAR), which reflects the days lost due to sickness as a percentage of total potential work days, of 2.73% (March 2017: 2.72%) remains well within the target of 3.50%. All employees with high SAFR and GSAR rates are referred to Eskom clinics for "fitness for duty" assessments and managed accordingly thereafter. Employees too sick to continue working are advised and assisted to apply for ill-health retirement.

Lifestyle diseases remain the main cause for employees to be approved for ill-health retirement. Targeted wellness programmes were developed to increase awareness of lifestyle diseases, including early and adequate medical management of all chronic conditions. Employees with chronic diseases are encouraged to adhere to treatment offered by their medical aid schemes through allocated chronic disease management companies.

**Industrial relations**

Targets for grievances resolved and disciplinary action with sanctions were exceeded, with close to 80% of grievances resolved and in excess of 90% of disciplinary actions resulting in sanctions, indicating that employees are not subjected to unwarranted disciplinary measures. Slightly less than 90% of disputes referred to external institutions were ruled in Eskom's favour, just missing the target of 90%.



Executive suspensions and dismissals are discussed under "Ethical leadership – Allegations of corruption and misconduct" on page 19 and "Our governance – Executive Management Committee" on page 53

Our recognised trade unions – NUM, NUMSA and Solidarity – lodged a dispute with the Council for Conciliation, Mediation and Arbitration (CCMA), seeking a ruling that Eskom should have a single bargaining unit for all its employees, or alternatively two bargaining units – one for bargaining unit employees and one for managerial employees. The CCMA issued an arbitration award in April 2018, finding that the current bargaining unit should be extended to include certain levels of professionals and middle management employees. We intend to review the arbitration award.

In addition, the trade unions are seeking a CCMA ruling that Eskom is not entitled to use temporary employment service providers or subcontractors. The arbitration was postponed to June 2018.

The Essential Services Committee issued a notice in March 2018, advising that it intended investigating whether the designation declaring the generation, transmission and distribution of power as an essential service should be varied or withdrawn. If the designation is varied or cancelled, everyone employed in the generation, transmission and distribution of power could be entitled to embark on industrial action.

Due to the financial challenges we are facing, we offered a 0% wage increase to the bargaining unit for the coming year. This led to widespread protest action, which resulted in rotational load shedding over three days in June 2018. We have since revised our offer, which includes a three-year agreement; the trade unions are considering the revised offer. Our biggest challenge is funding the increase given our financial challenges, and in light of this, efficiency optimisation is needed.

**Improving internal transformation**

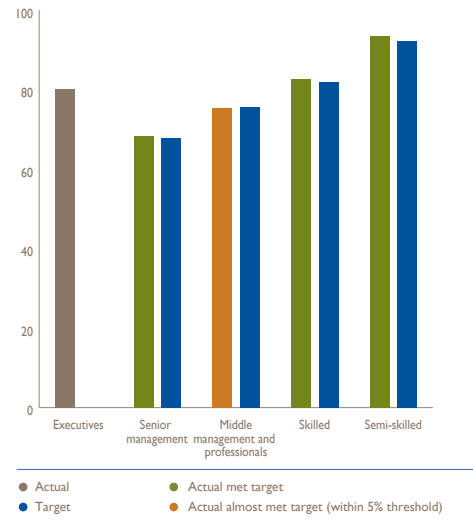
Employment equity remains one of the key processes through which meaningful transformation can be realised. We are making progress in ensuring that the workforce at all occupational levels truly reflects the demographics of the country, although gender and disability equity remain a challenge at some occupational levels. Our Employment Equity Plan aims to transform our workforce profile at all occupational levels.



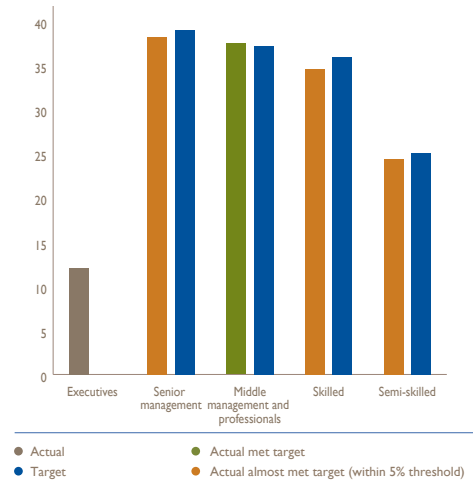
Our group and company employment equity performance at senior management level, as well as at professional and middle management levels, is set out in the non-technical statistical tables on pages 144 to 145

Racial and gender equity at senior management level, as well as middle management/professionally qualified levels, have all improved over the past year, although not all measures have achieved their targets. However, no targets are set at executive level. Limited recruitment and promotion opportunities restricted opportunities to achieve equity targets.

**Racial equity by level of employment**



**Gender equity by level of employment**



At executive level, the organisation is lagging behind on gender equity. It is expected that, through our Gender Equalisation Plan, gender parity at this occupational level will only be achieved by 2020.

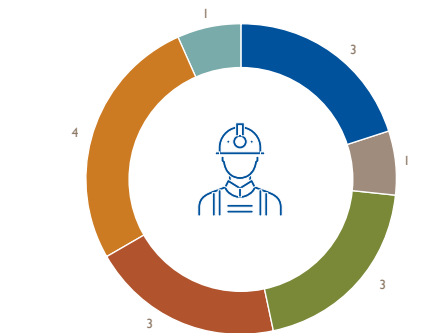
Our total workforce comprises 68% male and 32% female employees at all occupational levels, unchanged from the prior year. Through our Eskom Women Advancement Programme (EWAP), opportunities which arise due to attrition are expected to be targeted and reserved for women. This should lead to approximately 45% female employees by 2022/23, with racial equity expected to reach about 85% over the same period.

Although Eskom has achieved the disability target set by the shareholder, the proportional representation of persons with disabilities remains a concern, as they are overrepresented at lower occupational levels, with inadequate representation at executive, senior management and middle management/professional levels. Managers are encouraged to recruit and promote more employees with disabilities. Similarly to EWAP, we have established a forum focusing on the advancement of people with disabilities. We also have a Disability Office that deals with disability issues in the workplace. Wherever possible, we ensure reasonable accommodation of people with disabilities; an audit will be performed to ensure that all of our premises are disability-friendly. The safety of our staff living with disabilities is an area of focus.

Measure and unit	Target 2022/23	Target 2018/19	Target 2017/18	Actual 2017/18	Actual 2016/17	Actual 2015/16	Target met?
Fatalities (employees and contractors), number	-	-	-	15	10	17	❌
Fatalities (public), number <sup>1</sup>	-	-	-	26	20	27	❌
Lost-time injury rate, index (including occupational diseases) – group	0.34	0.34	0.31	0.23	0.39	0.30	✅
Lost-time injury rate, index (excluding occupational diseases) – group	0.34	0.34	0.31	0.21	0.28	0.27	✅

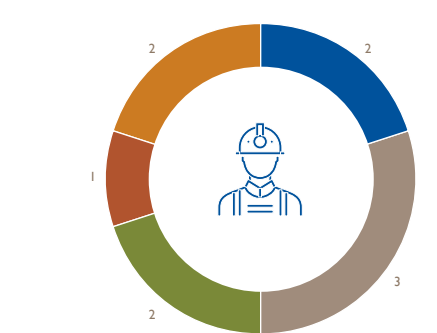
Unfortunately, despite our intense commitment to safety, we suffered three employee fatalities (March 2017: four) and 12 contractor fatalities (March 2017: six) during the year. The causes of fatalities are shown below:

**2017/18**



- Vehicle accidents
- Electrical contact
- Falls from heights
- Struck by/caught between objects
- Crime-related
- Occupational disease

**2016/17**



- Vehicle accidents
- Electrical contact
- Falls from heights
- Contact with heat
- Drowning

The Eskom Women Advancement Programme is a holistic plan aimed at breaking the mould of perceptions about women which perpetuate misrepresentation of women in leadership and technical roles. The 2030 Agenda for Sustainable Development is central to the emancipation of women. The United Nations has committed to positioning gender equality at the centre of the global agenda, and has included gender equality and the empowerment of women and girls as one of its Sustainable Development Goals. This has further been strengthened by the incorporation of gender sensitive targets in a quest to achieve sustainable economic, social and environmental development.

**Focus on safety**

Eskom is subject to legal, regulatory and licence conditions surrounding occupational hygiene, safety and environmental compliance. Our safety performance is assessed in terms of the number of fatalities among employees and contractors, as well as the lost-time injury rate (LTIR), which is a proportional representation of the occurrence of lost-time injuries per 200 000 working hours over a period of 12 months.



**In memoriam**

We extend our heartfelt condolences to the families, friends and colleagues of the following people who lost their lives in the line of duty



Employees	Contractors	
Qedokwakhe Elphas Madonsela	William Kolobe Mabothe	Mthokozisi Mthethwa
Jackson Zwelibanzi Mkhwanazi	Msimelelo Malotana	Jacob Mzizi
Christopher Mogudi	Musa Elliot Maluleke	Sifiso Ncamphalala
	Tebogo Happy Mokgola	Jerome Ngubane
	Tshepo Mokwena	Elliot Thetwa Ngubeni
	Pule Monageng	Smawonda Sekhosana



Similar to the causes of fatalities, the major reasons for lost-time incidents (LTIs) are motor vehicle accidents, falls from heights, incidents related to being struck by or caught between objects, as well as slips, trips and falls.

Twenty occupational diseases have been confirmed for the Eskom group for the year ended 31 March 2018 (March 2017: 20, restated). These incidents relate mainly to noise-induced hearing loss incidents, which accounts for 75% of cases.



Public fatalities and public safety programmes are discussed under "Our role in communities – Public safety" on page 122

**Safety programmes**

With motor vehicle accidents being one of the leading cause of both LTIs and fatalities, we have introduced several initiatives to enhance vehicle and driver safety, namely vehicle safety campaigns, the development of a motor vehicle evidence collection course, the appointment of internal driver competency assessors, and the implementation of vehicle monitoring systems.

Working at heights forms a substantial part of work in Eskom and is regarded as a high-risk activity; as a result, all precautions must be taken to prevent incidents while working at heights. Technical specialists have been appointed to provide advice and support on technical matters related to working at heights.

We have also been conducting surveys assessing perceptions of our safety culture across line divisions; these are intended to establish a knowledge base to assist management in understanding the safety culture within the organisation, and also to identify appropriate plans to improve the culture.

**Contractor management**

Contractor safety management remains a priority, due to the vital role that contractors play in our operations. Contractor fatalities require leadership intervention to provide more focus on at-risk behaviour relating to compliance with stipulated

safety requirements. Furthermore, all contractors conducting critical or high-risk activities are required to have written safe work procedures in place for those activities. Compliance is monitored through inspections and audits in order to improve contractor safety.

Comprehensive analysis of all contractor safety incidents continues on a monthly basis, and results are shared with safety managers. Poor performing contractors are required to develop and submit improvement plans, which will assist in sharing best practice. In addition, new suppliers are assessed for compliance with SHE requirements, before being accepted as registered vendors.

**Future focus areas**

- Supporting headcount reduction initiatives through natural attrition, targeted relocation programmes and an improvement in employee productivity through skills-based assessments
- Reviewing and implementing the new operating model by 2019/20, by rationalising managerial span of control and reducing organisational reporting layers in order to reduce managerial headcount
- Identifying and implementing efficient methods of managing and/or eliminating employee benefit cost drivers such as overtime, ad hoc salary increases and band creep
- Monitoring and improving employee productivity and performance, through employee engagements, improved industrial relations, leadership and operational performance metrics
- Aligning employment equity plans to headcount and cost reduction initiatives
- Ensuring fair representation of people living with disabilities at all levels
- Continuing our focus on incident prevention and sharing key learnings in safety communications, in order to reduce LTIs and fatalities

OPERATING PERFORMANCE



OUR ROLE IN COMMUNITIES

HIGHLIGHTS

- All customer service indicator targets exceeded, with some also improving slightly year-on-year
- Our CSI initiatives benefitted more than 1.1 million beneficiaries during the year
- For the second year running, we electrified more than 200 000 new homes

IMPROVEMENTS

- Reinstated the weekly system status reports available to the public
- Spend with black-owned, black women-owned and black youth-owned suppliers improved since the prior year and exceeded target

CHALLENGES

- B-BBEE attributable spend decreased year-on-year, due to generally lower B-BBEE ratings of suppliers since implementation of the new Codes of Good Practice
- Communities around Kusile are demanding work and business opportunities, which pose strike threats, compounded by the possibility of transport disruptions
- Increasing workforce demobilisation at Medupi leading to unemployment could result in unrest

LOWLIGHTS

- Eskom's reputation, as measured by the RepTrak® score, is at an all-time low
- Spend with suppliers owned by black people living with disabilities is lagging far behind target

## OUR ROLE IN COMMUNITIES

continued

Our role in communities focuses on our relationships with our direct customers, suppliers, communities, beneficiaries of our CSI activities and electrification efforts, as well as the public in general, which includes our indirect customers, with the aim being to work together to improve the wellbeing of Eskom and the communities in which we operate. A crucial factor is our reputation among stakeholders, which is strongly influenced by the level of trust in our organisation.

We strive to become a customer-centric organisation that delivers world-class customer service across all customer segments. Furthermore, we play a critical role in skills development and economic empowerment, as mandated by Government. We aim to transform society through our supplier development and localisation drive, as well as corporate social investment in community education, health and developmental projects. Our most direct contribution to transformation remains through the rollout of Government's electrification programme.

### Looking back on prior year focus areas

We continue to support the transformation of the supplier landscape through our considerable procurement spend, in order to increase the capacity of black and other targeted supplier groups.

Our new build projects carry on implementing CSI initiatives to benefit the surrounding communities and improve the sustainability of projects. The DoE funded electrification programme, which targets universal access by 2020, is ongoing, with great progress achieved during the past year.

We continue to target communities with a high incidence of illegal connections and focus on educating children about unsafe electricity usage in public safety programmes, in order to reduce incidents and fatalities related to public interaction with our infrastructure.

### Customer service performance

We still employ a range of statistical perception and interaction-based customer surveys, conducted by independent research organisations, to measure our customers' satisfaction with our service.

Measure and unit	Target 2022/23	Target 2018/19	Target 2017/18	Actual 2017/18	Actual 2016/17	Actual 2015/16	Target met?
Eskom KeyCare, index	104.0	104.0	104.0	105.9	107.0	104.3	●
Top Customer KeyCare, index	104.0	104.0	104.0	107.5	108.1	107.2	●
Enhanced MaxiCare, index	95.0	95.0	93.7	97.7	95.8	96.5	●
CustomerCare, index	8.2	8.2	8.2	9.9	9.8	8.4	●

Both Eskom KeyCare and Top Customer KeyCare, which measure the satisfaction of our large industrial customers, continue to perform above target, although both have declined slightly year-on-year. Through daily engagements with key customers, we remain close to our key customers and aim to address any queries or concerns with urgency.

Both Enhanced MaxiCare, which measures perception among residential, small and medium-sized customers, and CustomerCare, which measures customer satisfaction on a transactional basis, exceeded target and improved since the prior year, reflecting the commitment to servicing customers of call centre and field staff.

However, customers have raised concerns over the quality and reliability of supply, increasing electricity prices, slow restoration times, pollution caused by coal-fired power stations and the perception of Eskom as an unreliable provider of electricity-related services. We are working on addressing these concerns.

Eskom reached a major milestone during June 2017, when we connected our six millionth customer. This was a significant achievement on the road to achieving universal access to electricity. This accomplishment is the result of all Eskom Guardians working together to ensure that our customers, especially those in rural areas, are able to experience electricity for the first time.

One of Eskom's priorities is to increase demand for electricity; the growth in customer numbers goes a long way to meeting this objective. This, however, must be complemented by a customer-centric approach, which ensures that we deliver an excellent customer experience overall. This is not only the responsibility of customer-facing staff, but of everyone in the organisation. As customer numbers continue to grow, there must be increased focus to ensure that we collect all monies due to us and minimise energy theft.

### Our reputation

Our reputation has been negatively impacted by the challenges facing the organisation since 2008. We conduct a review of our perception by the public on an annual basis, using the South African RepTrak® Pulse reputation study, which measures a company's reputation and demonstrates the strength of the emotional bond between a company and the public. It is based on a number of elements, namely direct experience, a company's communications and word-of-mouth. It is scored along seven dimensions, namely products and services, performance, leadership, citizenship, governance, workplace and innovation. Results of the survey also reflect that an organisation's reputation contributes about 69% to the score, with only 31% influenced by its products.

Based on the 2017 survey, Eskom is ranked 50<sup>th</sup> out of 50 companies surveyed, with a score of 33.2 (in the bottom tier) against an average score of 45.2 for state-owned enterprises. These results show that Eskom's reputation is at an all-time low, with the lowest dimensions being leadership and governance, which is not surprising, given the events of the past year. Financial sustainability remains challenging, with rising tariffs and the perceived burden to the fiscus caused by Government guarantees.

Given our reputational challenges, many organisations are reluctant to continue their association with us. Chief amongst these are financial institutions, that went as far as setting operational conditions to their lending agreements with Eskom.

Changing the perception of all stakeholders requires action from Board and Exco to act on irregularities and poor governance. Our immediate focus is to rebuild and strengthen confidence and trust in Eskom. We strive to improve our RepTrak® score to 60 (a "moderate" score) over the next five years.



### Reinstatement of Eskom system reports aim to rebuild trust through transparency

We have recently relaunched our weekly system status report on our website (at [www.eskom.co.za/Whatwedoing/SupplyStatus/Pages/SupplyStatusT.aspx](http://www.eskom.co.za/Whatwedoing/SupplyStatus/Pages/SupplyStatusT.aspx)), as part of our broader efforts to rebuild trust with South African citizens, who remain sceptical about our ability to keep the lights on. The report provides a weekly view of energy sent out, peak demand, performance of generating units in terms of the energy availability factor, as well as the outlook for the coming three-month horizon. The service was discontinued during Mr Brian Molefe's tenure as Group Chief Executive.

The launch was held at Eskom National Control in Germiston, and was attended by Public Enterprises Minister Pravin Gordhan, Eskom's Chairman, Jabu Mabuza and our newly appointed Group Chief Executive, Phakamani Hadebe. Minister Gordhan said the reintroduction of the reporting service should be seen as part of efforts to increase transparency at the organisation, which had, in recent years, become synonymous with corruption, weak governance and inefficiency. The Minister said transparency was critical not only for rebuilding Eskom's reputation, but also for ensuring accountability, without which malfeasance and bad governance had flourished.

Our System Operator, Bernard Magoro, said the system status report would provide citizens with an up-to-date snapshot of electricity supply and demand, while offering some insight into what was involved in balancing the power system for every second of every day. He said the prognosis for the high-demand winter period was positive and that no load shedding was foreseen, unless there was a catastrophic event. Furthermore, our latest medium-term system adequacy outlook report, published in October 2017, showed that the system has enough generation capacity to meet expected electricity demand over the medium term to 2022.

Publishing the system status report is another way of demonstrating that we are moving towards being a transparent entity whose day-to-day running is public knowledge. It is aligned to international standards, where most power utilities make their operating performance publically available.



## OUR ROLE IN COMMUNITIES

continued

### Our contribution to supplier development

We place particular emphasis on supplier development and localisation to transform our supplier base, whilst developing supply sectors important to the industry.

Eskom-wide, a total of 1 373 new contracts worth R70.4 billion were awarded and commenced during the year under review, of which 87.16% (or R61.3 billion) of the contract value was committed to local content. Of those, 85 contracts worth R1.8 billion were awarded within the new build programme. Of these, the local content committed amounted to R1.6 billion, representing 85.59% of the value contracted in new build projects during the year.

Since inception of the respective new build projects, contracts to the value of R196.2 billion have been awarded, in which suppliers committed to total local content of R125.6 billion, representing 64.02% of the total contract value. The actual cumulative local content spend is R138 billion, which constitutes 70.33% of the local content.

Our target in accordance with the shareholder compact is to achieve a level 4 B-BBEE rating. However, Eskom is rated as level 8 until June 2018, when the current certificate expires. The low rating is because being state-owned is not considered being black-owned under the new B-BBEE Codes of Good Practice.

Total measured procurement spend for the group amounted to R127.4 billion on all active contracts during the year, of which 91.54% was spent with B-BBEE compliant suppliers. The annual targets for procurement spend with black-owned, black women-owned and black youth-owned suppliers were met. Nonetheless, attributable spend with B-BBEE compliant suppliers, those owned by black people with disabilities, qualifying small enterprises and exempted micro enterprises performed below target, with performance generally slightly worse than the previous year. Due to the implementation of the new Codes, certain elements can no longer be claimed when calculating total measured procurement spend. Recovery initiatives are being implemented to address and improve the B-BBEE performance, to comply with the PPPFA requirements.

For an update on the improvement process launched to address the prior year audit qualification on the completeness of irregular expenditure, refer to "Ethical leadership – Improvement process to address irregular expenditure" on page 18



At 31 March 2018, 38 111 people were employed on the capacity expansion programme at the Medupi, Kusile and Ingula new build sites, and on large transmission projects (March 2017: 39 277). The expected demobilisation at these sites has not yet materialised due to delays at these projects.



Our group and company procurement equity performance is set out in the non-technical statistical tables on pages 144 to 145 at the back of the report

### Maximising our socio-economic contribution

Measure and unit	Target 2022/23	Target 2018/19	Target 2017/18	Actual 2017/18	Actual 2016/17	Actual 2015/16	Target met?
Total electrification connections, number <sup>2</sup>	729 914	201 200	201 200	215 519	207 436	158 016	●
Corporate social investment committed, R million <sup>1c</sup>	940.5	175.9	178.0	192.0	225.3	103.6	●
Corporate social investment, number of beneficiaries	3 500 000	500 000	400 000	1 116 044	841 845	302 736	●

1. The 2022/23 target is the cumulative target over the next five years.

2. The reporting boundary for the number of electrification connections was changed in 2017/18 to include farm worker connections. The figures for 2016/17 and 2015/16 have been restated to include 247 and 1 080 farm worker connections respectively.

### Electrification

We continue to connect previously disadvantaged households in our licensed areas of supply through the DoE funded electrification programme. We exceeded the target for the year in all provinces.

Universal access has been reached in terms of clinics and we are only connecting new clinics.

### Skills development through our new build projects

Collaborative efforts with our construction and government partners continue to drive skills development and skills transfer. Through skills committees and audit processes, we are ensuring that no demobilisation is concluded without proof of upskilling the affected workers. This process has proven effective, as the demobilisations that have taken place to date have complied with skills development requirements.

Furthermore, the primary focus of our exit strategies at new build sites is to mitigate the impact of job losses by supporting the towns and local communities surrounding our new build projects. By doing so, we hope to collaborate with other social partners, in particular the local and provincial government structures, in addressing some of the challenges that these communities face.

We also continue to drive the reduction of dependency on foreign nationals and to ensure transfer of skills to South African employees. Contractors have been tasked with expediting the skills transfer programmes to build capacity within the South African workforce.

### Corporate social investment

The Eskom Development Foundation NPC (the Foundation) is responsible for the coordination and execution of our corporate social investment activities in support of our business objectives. CSI initiatives are focused on developing small and medium enterprises, education, health, food security, community development, energy and the environment.

The Foundation was absorbed into Eskom, effective 1 April 2017, although CSI initiatives continued. In September 2017, Exco recommended to the Board Investment and Finance Committee that the Foundation operates as a subsidiary again from 1 April 2018, following the shareholder's advice to delay the dissolution of the Foundation as a subsidiary, pending the review of Eskom's operating model.



### Awards received

The Foundation, with the University of Limpopo, won the Africa Gold Award and Overall Global Thematic Award in Norway, one for entrepreneurship and one for enterprise skills development.

Furthermore, the Eskom Contractor Academy was awarded the Trialogue Strategic CSI award locally.

Eskom also continues to hold a top three position in the Sunday Times Top Brands 2017 survey in the community upliftment category.

During the year, our CSI activities impacted 1 116 044 beneficiaries with a committed spend of R192 million (March 2017: 841 845 beneficiaries and committed spend of R225.3 million). The number of beneficiaries increased due to several interventions with a national footprint. A selection of initiatives is discussed below.

For more information on our CSI initiatives, please refer to the Foundation's report for the 2017/18 year, which is available online



### Empowering entrepreneurs with vital business skills

The Contractor Academy graduation ceremony was held in May 2017, where 150 contractors celebrated the completion of the eight-month programme, which combines both practical and theoretical course work. Since 2008, more than 1 000 graduates have graduated from the Contractor Academy, a 97.7% success rate, with a fair gender representation and a sizeable youth group. Since 2010, Eskom has awarded 629 contracts to the value of R2.7 billion to Academy graduates.

### Helping learners from a disadvantaged school

The Foundation donated school uniforms and teaching aids to Sifundlela Primary School in Sifundlela Trust, Mpumalanga. The donation included uniforms for 41 orphaned learners, as well as teaching aids for Social Sciences.

The rural school, whose learners pay no school fees, was established in 1991 and has 1 026 learners from Grades R to 7. Despite being in a poor rural area, Sifundlela's learners produce good results. The principal said they are already seeing an improvement in the learners' results since receiving our donation. "We don't have an abundance of resources or facilities at our school, but the level of commitment from both our learners and educators is admirable and the teaching aids came in handy. The uniforms donated by Eskom have gone a long way towards giving the orphaned learners their dignity and a sense of belonging. We are all thankful for Eskom's assistance."

### Bringing healthcare to elderly women at 16 Days of Activism event

The Foundation, as part of its national CSI health programme, participated at a 16 Days of Activism for No Violence Against Women and Children event at Emadlangeni, KwaZulu-Natal in December 2017. The event aimed to create awareness about the ongoing fight against violence against women, the plight of child-headed families and the importance of medical screening. The occasion was used to share information about government programmes available to support the most vulnerable groups of society, including women and particularly, elderly women.

## OUR ROLE IN COMMUNITIES

continued

The Foundation implemented the Bophelong Mobile Health Clinic programme with four mobile buses, servicing primary school children in Mpumalanga, Limpopo, KwaZulu-Natal, Free State and Northern Cape. With many in the community of Emadlangeni having little or no access to healthcare facilities, one mobile health clinic was made available during the event, to cater specifically for basic medical checks and needs of the elderly women from the area.

### Providing wheelchairs to people living with disabilities

Majuba Power Station and Group Capital Division partnered to uplift the lives of the people of Dr Pixley Ka Isaka Seme Local Municipality by donating 45 wheelchairs to people living with disabilities. The handover of the wheelchairs took place in February 2018 at Amajuba Memorial Hospital in Volksrust, Mpumalanga.

### Giving happiness to lives of children at orphanage

The Duvha Unit 3 Recovery Project gathered at Madrassa Orphanage Centre in Emalaheni, Mpumalanga to hand over a donation in line with the project's social commitments. Madrassa Orphanage Centre is a home for destitute children; it currently houses about 40 children up to 18 years old. The donation, which amounted to approximately R84 000, included a 5 000ℓ Jojo tank, which was fully integrated into the home's water system, two state-of-the-art washing machines, two microwave ovens, a kettle and 15ℓ urn, three fire extinguishers, as well as a number of consumables. We also pledged to train staff on the use of the fire extinguishers.

### Public safety

We strive to minimise the potential harm to members of the public due to exposure to Eskom's operations, products and/or assets caused by illegal activities and inadequately secured sites and assets. This impacts our ability to lead and partner with members of the public.

There were 26 public fatalities during the year (March 2017: 20), which included 19 incidents due to electrical contact and five vehicle-related incidents. Not included in this figure are five fatalities due to the transport of coal by road to our power stations (March 2017: four).

We remain committed to the principle of Zero Harm, and conduct numerous community visits and forums which highlight how to use electricity safely. In addition, ongoing social media notifications, television advertisements and media statements are used to educate the public about electricity safety.

As part of these efforts, Electricity Safety month was launched in Protea South in Soweto on 1 August 2017. The first event took place at the Protea South Primary School where Eskom, SAPS and Disaster Management teams educated learners on electricity safety and other security matters. The launch was followed by a media tour to Oukasie near Brits, North West, focusing on the dangers of illegal connections.

We were invited by the Department of Basic Education to nominate two members to participate in the school curriculum revision committee, where Eskom will provide input on electrical safety.

### Nuclear safety

The plant design and resultant assessment of risk to the public from Koeberg Nuclear Power Station remain well within licensing limits, and better than the recommended international standards. Operational practices at Koeberg are not challenging the design boundaries or assumptions; there is currently no unacceptable risk due to the design or operation of Koeberg. The interaction between oversight organisations and line management is continually monitored by the relevant governance and nuclear oversight bodies; these organisations are having a positive impact on nuclear safety and our efficiency.

The Koeberg units continue to be operated safely, with solid technical performance demonstrated by long periods of continuous operation.

### Future focus areas

- Managing the relationship with large customers' general managers to improve KeyCare results and improve customer satisfaction
- Prioritising electrification of homes, with more than 700 000 households to be connected over five years
- Providing assistance, mainly to vulnerable members of society, through philanthropic and strategic donations and grants
- Pursuing a 10% reduction in external spend in line with cost savings initiatives
- Providing proactive assurance of procurement transactions to ensure compliance with governance principles
- Continuing public education on safe electricity usage, also participating in the revision and development of a new school curriculum, with particular reference to electrical safety

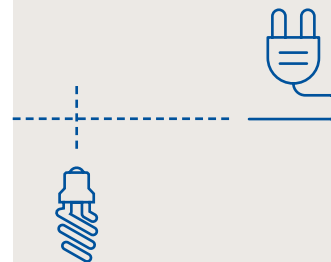
## OPERATING PERFORMANCE



## OUR KNOW-HOW

### IMPROVEMENTS

- All open-cycle gas turbine units at Ankerlig and at Gourikwa have now been converted to dual-fuel capability
- The high-voltage direct current (HVDC) civil engineering at the first test site is due for completion in the near future. The second test site was moved to the Apollo Substation, with civil work due to commence during the coming financial year



Our know-how is the intellectual capital within Eskom. It includes both intellectual property, such as patents, copyrights, software, rights and licences, and also "organisational capital", such as tacit knowledge, systems, procedures and protocols.

### Looking back on prior year focus areas

A project has commenced to consider bulk energy storage solutions.

### Investing in appropriate technologies

#### Future new build

Eskom will determine the way forward on the future new build energy mix once the revised IRP has been published and Eskom given an allocation by DoE. Until then, the project for another coal-fired power station is on hold and no development work is taking place.

#### Nuclear new build

All nuclear procurement processes were suspended after the Western Cape High Court set aside the section 34 determination which formed the basis for nuclear procurement. Based on an earlier environmental impact assessment (EIA), we obtained environmental approval from the DEA in October 2017 for the construction of a nuclear power station and associated infrastructure at the Duynefontein site in the Western Cape. Should it proceed, this is an important milestone in the development of South Africa's nuclear programme.

#### Gas-fired capacity

The scoping report for a greenfield gas-fired station has been approved by the DEA. However, there are discussions regarding the biodiversity of species on identified land which impact the EIA. Once the DEA decides how these matters will be addressed, the EIA application will be submitted.

#### Battery storage

Last year, we reported that the Board had provisionally approved the discontinuation of the Kiwano 100MW concentrating solar power (CSP) project. However, the lenders required an equally transformational renewable project that addressed both the CSP project's objectives and the existing funding conditions.

Subsequently, the lenders accepted the cancellation of the CSP project, subject to their approval of the most suitable alternative solution. After much deliberation, the lenders have accepted the battery storage project as a suitable alternative as it is expected to meet the same objectives. In March 2018, the Board approved distributed battery storage with distributed solar PV at Eskom sites, close to renewable IPP plants and Sere Wind Farm.

#### Current research projects

We spent R445 million, including allocated overhead costs, on Board-approved research projects, testing and development work during the year (March 2017: R441 million).

We are committed to continuing with research in appropriate technologies that will have an impact on customers, coal, as well as distribution and transmission asset management.

Research area	Description
eMobility (electric vehicles)	Develop an electric vehicle programme to drive future sales and revenue from this untapped sector, by collaborating with electric vehicle manufacturers and Government to lower the capital cost of entry for electric vehicles, and to develop innovative pricing models to increase demand
Coal logistics and characterisation	Provide quality assurance that coal procured is of the right quality, as well as a real-time fingerprint (DNA) of each type of coal procured and transported, thereby enabling more effective operational burn decisions
High-voltage direct current (HVDC) test facilities	Deliver knowledge and expertise for HVDC use in future Transmission expansion projects. One site is expected to be ready by June 2018, with a second to be ready by March 2019
Distributed energy resources	Establish an Eskom footprint within the rapidly growing market through development of product offerings to ensure market entry and revenue protection
Energy storage (battery storage)	Develop bulk energy storage solutions that will allow Eskom to deploy energy storage technologies at scale, for grid strengthening and other operational and financial benefits. Also consider small-scale storage solutions for consumers to store their own generated solar power
Robotics and drone inspection and maintenance	Develop an unmanned robotic technology and the use of drones to assist in efficient and effective fault location on transmission and distribution lines to reduce network downtime and inspection and maintenance costs. Civil Aviation requirements for the use of drones will be adhered to
Off-grid smart community	A community has been identified in which we will invest in several off-grid technologies and control systems to assess the ability to provide remote communities with sustainable power solutions. Renewable energy and storage technologies will be part of the mix
Commercialisation of the underground coal gasification demonstration plant	Equity partners are being sought for the project to enable it to bridge the gap from research and demonstration to commercialisation. The focus will be on local supplier development and opportunities found in the local primary energy market. The project is in care and maintenance but has not been stopped. The due date has been extended to June 2021



**Eskom Research Testing and Development wins 2017 Technology Transfer award**

Eskom Research, Testing and Development Department (RT&D) has been honoured with the 2017 Technology Transfer award by the US-based Electric Power Research Institute (EPRI) for research conducted on the 765kV insulator project. The results of the study were implemented in the parameters that guided our choice of polymeric insulators for a section of the Kappa Sterrekus 765kV line in the Western Cape, which is situated in a coastal environment. It is important to get a reliable insulator which matches the expected lifetime of the line.

The EPRI Technology Transfer awards recognise industry leaders and innovators at the vanguard of adopting new technology and spearheading the application of research findings. Those recognised exemplify the initiative, collaboration and leadership that transform research into results.

Sumaya Nassiep, Eskom's RT&D acting General Manager, said, "We are immensely honoured by the recognition of the value realised from our research investment into the insulator space. Our research team has excelled in the application of research and technology in solving an operational challenge of both size and significance. Special congratulations goes to Nishal Mahatho for leading the project and ensuring that Eskom continues to champion technology within the organisation and across the industry, thus driving progress in the electricity sector by providing meaningful benefits for our stakeholders and society. This award is a testament to the immense talent and capability within Eskom in leading technology development and application on a global level."

**Technology transfer**

We acquired intellectual property worth R26.1 million (March 2017: R31 million) during the year, and are exploring opportunities to expand the technology transfer approach to other areas of the business. Particular areas of focus in the current financial year included fabric filter technology, FGD design, engineering standards, as well as turbine technical information.

On-the-job training included boiler design, low-NO<sub>x</sub> emitting burners, FGD plant and risk-based inspection know-how. A total of 63 people benefited from skills development initiatives during the year (March 2017: 54).

**Our systems and process**

Refer to "Risks and opportunities, assurance and controls – Systems, policies and procedures" on page 44 for additional information on our systems and processes



**Managing the effect of renewable generation on the power system**

Renewable generation, including solar photovoltaic (PV), wind, concentrating solar power (CSP), small hydro and biomass generators, are self-dispatching generators which are connected to the power system and provide electrical energy to consumers via the national grid.

Being self-dispatching, the output of these generators is not planned, controlled or dispatched centrally by the System Operator, as is the case for conventional coal, diesel, nuclear or hydro generators. In the case of PV, CSP and wind generators, their output is determined by the degree of solar radiation or the wind strength and speed. As these environmental factors tend to be intermittent over time, the output of these generators tends to vary accordingly. The variability of the renewable energy generators requires the System Operator to adjust the output of the conventional generators in order to compensate for the variability of the renewable generators, thereby balancing supply and demand and ensuring that the frequency of the power system remains stable at 50Hz.

In the past, the System Operator utilised a forecast of customer demand to ensure that sufficient conventional generation was available to meet demand. In recent years, it has become necessary for the System Operator to forecast the output of renewable generators to ensure that sufficient conventional generation is available to compensate for the renewable generation variability. Each renewable generating facility supplies the System Operator with a forecast of their generation output; this is then combined with the demand forecast to determine how much conventional generation should be available over a particular period. In order to cater for uncertainties and inaccuracies in the demand or renewable forecasts, the System Operator makes provision for operating reserves through additional conventional generation and demand response resources. These reserves are available to be utilised in real-time to maintain the supply and demand balance.

However, not all renewable generating plants are connected directly to the transmission system –many of these plants are connected to the lower voltage distribution or municipal networks. All generators with installed capacity above a certain limit, which are connected to the distribution or transmission network, are required to supply real-time data to the National Control or regional centres. This data is available in real-time at the National Control Centre, allowing the System Operator to continuously track renewable generation and adjust the output of the conventional generators accordingly to maintain system stability.

As the amount of renewable generation in South Africa increases, the System Operator will need to enhance forecasting accuracy of renewable generation output and will increasingly require flexible, centrally dispatchable generation resources that can respond quickly in order to compensate for the changes in output of renewable generation.



**The Tetris maintenance planning tool**

Tetris is used to provide a graphical view of available power in relation to scheduled outages of generation units. It is used to assist with planning long-term multiple outages within the set Tetris limit. If outages totalling more than the set limit are undertaken, then load shedding or load curtailment will be required.

The Tetris limit is calculated as [total installed capacity, less expected peak demand, less expected unplanned maintenance] for that period. The limit will vary as the peak demand changes, as it is affected by seasonal changes and time of day.

The power lost to the system when a unit goes on outage is stacked like Tetris blocks, building toward the limit. By knowing the limit and the cumulative capacity lost when units are on outage, long-term planning of outages is possible.

Tetris was developed internally and has been successfully used by Generation since 2015, when it was initially used to avoid load shedding, and is now used for more effective planning of outages.

**Future focus areas**

- Confirming Eskom's role in future new build projects, such as gas, coal and the nuclear new build programme
- Executing the distributed battery storage project





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## ABBREVIATIONS

ARC	Audit and Risk Committee
B-BBEE	Broad-based black economic empowerment
CFO	Chief Financial Officer
COGTA	Department of Cooperative Governance and Traditional Affairs
CSI	Corporate social investment
CSP	Concentrating solar power
DEA	Department of Environmental Affairs
DFI	Development finance institution
DOA	Delegation of Authority
DoE	Department of Energy
DPE	Department of Public Enterprises
DWS	Department of Water and Sanitation
EAF	Energy availability factor (see glossary)
EBITDA	Earnings before interest, taxation, depreciation and amortisation and fair value adjustments
ECA	Export credit agency
ERI	Eskom Rotek Industries SOC Ltd
EU	European Union
EUF	Energy utilisation factor (see glossary)
Exco	Executive Management Committee
FGD	Flue gas desulphurisation
GCE	Group Chief Executive
GDP	Gross domestic product
GE	Group executive
GW	Gigawatt = 1 000 megawatts
GWh	Gigawatt-hour = 1 000MWh
IFRS	International Financial Reporting Standards
IPP	Independent power producer (see glossary)
IRP	Integrated Resource Plan
King IV™	King IV Report on Corporate Governance for South Africa, 2016
kℓ	Kilolitre = 1 000 litres
KPI	Key performance indicator
kt	Kiloton = 1 000 tons
kV	Kilovolt
kWh	Kilowatt-hour = 1 000 watt-hours (see glossary)
kWhSO	Kilowatt-hour sent out

LPU	Large power user
LTIR	Lost-time injury rate (see glossary)
Mℓ	Megalitre = 1 million litres
MOI	Memorandum of Incorporation
mSv	Millisievert
Mt	Million tons
MVA	Megavolt-ampere
MW	Megawatt = 1 million watts
MWh	Megawatt-hour = 1 000kWh
MYPD	Multi-year price determination
NDP	National Development Plan
NERSA	National Energy Regulator of South Africa
NNR	National Nuclear Regulator
OCGT	Open-cycle gas turbine (see glossary)
OCLF	Other capability loss factor
OHS	Occupational health and safety
PCLF	Planned capability loss factor
PAIA	Promotion of Access to Information Act, 2000
PAJA	Promotion of Administrative Justice Act, 2000
PFMA	Public Finance Management Act, 1999
PGC	People and Governance Committee
PPA	Power purchase agreement
PV	(Solar) photovoltaic
RCA	Regulatory Clearing Account
RE-IPP	Renewable independent power producer
SADC	Southern African Development Community
SAIDI	System average interruption duration index
SAIFI	System average interruption frequency index
SALGA	South African Local Government Association
SAPP	Southern African Power Pool
SESC	Social, Ethics and Sustainability Committee
SPU	Small power user
TMPS	Total measured procurement spend
UAGS	Unplanned automatic grid separations
UCLF	Unplanned capability loss factor (see glossary)
USA	United States of America

## GLOSSARY OF TERMS

Base-load plant	Largely coal-fired and nuclear power stations, designed to operate continuously
Cash interest cover (ratio)	Provides a view of the company's ability to satisfy the interest burden on its borrowings by utilising cash generated from operating activities. It is calculated as (net cash from operating activities divided by net interest paid (interest paid on financing activities less interest received from financing activities))
Daily peak	Maximum amount of energy demanded by consumers in one day
Debt/equity including long-term provisions	Net financial assets and liabilities plus non-current retirement benefit obligations and non-current provisions divided by total equity
Debt service cover (ratio)	Cash generated from operations divided by (net interest paid from financing activities plus debt securities and borrowings repaid)
Decommission	To remove a facility (e.g. reactor) from service and either store it safely or dismantle it
Demand side management	Planning, implementing and monitoring activities to encourage consumers to use electricity more efficiently, including both the timing and level of demand
EBITDA margin	EBITDA as a percentage of electricity revenue (excluding electricity revenue not recognised due to uncollectability)
Electricity operating costs per MWh	Electricity-related costs (primary energy costs, employee benefit costs, plus net impairment loss and other operating expenses, less other income) divided by total electricity sales in GWh multiplied by 1 000
Electricity revenue per kWh	Electricity revenue (including electricity revenue not recognised due to uncollectability) divided by total kWh sales multiplied by 100
Embedded derivative	Financial instrument that causes cash flows that would otherwise be required by modifying a contract according to a specified variable such as currency
Energy availability factor (EAF)	Measure of power station availability, taking account of energy losses not under the control of plant management and internal non-engineering constraints
Energy efficiency	Programmes to reduce energy used by specific end-use devices and systems, typically without affecting services provided
Energy utilisation factor (EUF)	Ratio of actual electrical energy produced during a period of time divided by the total available energy capacity. It is a measure of the degree to which the available energy capacity of an electricity supply network is utilised. Available energy capacity refers to the capacity after all unavailable energy (planned and unplanned energy losses) has been taken into account, and represents the net energy capacity made available to the System Operator or national grid
Forced outage	Shutdown of a generating unit, transmission line or other facility for emergency reasons or a condition in which generating equipment is unavailable for load due to unanticipated breakdown
Free basic electricity	Amount of electricity deemed sufficient to provide basic electricity services to a poor household (50kWh per month)
Free funds from operations	Cash generated from operations adjusted for working capital
Gross debt	Debt securities and borrowings plus finance lease liabilities plus the after-tax effect of provisions and employee benefit obligations
Gross debt/EBITDA ratio	Gross debt divided by earnings before interest, taxation, depreciation, amortisation and fair value adjustments
Independent non-executive director	A director who: <ul style="list-style-type: none"> <li>• Is not a full-time salaried employee of the company or its subsidiary</li> <li>• Is not a shareholder representative</li> <li>• Has not been employed by the company and is not a member of the immediate family of an individual who is, or has been in any of the past three financial years, employed by the company in any executive capacity</li> <li>• Is not a professional advisor to the company</li> <li>• Is not a significant supplier or customer of the company</li> <li>• Is not receiving remuneration contingent upon the performance of the company</li> </ul>
Independent power producer (IPP)	Any entity, other than Eskom, that owns or operates, in whole or in part, one or more independent power generation facilities
Kilowatt-hour (kWh)	Basic unit of electric energy equal to one kilowatt of power supplied to or taken from an electric circuit steadily for one hour
Load	Amount of electric power delivered or required on a system at any specific point

Load curtailment	Typically larger industrial customers reduce their demand by a specified percentage for the duration of a power system emergency. Due to the nature of their business, these customers require two hours' notification before they can reduce demand
Load management	Activities to influence the level and shape of demand for electricity so that demand conforms to the present supply situation, long-term objectives and constraints
Load shedding	Scheduled and controlled power cuts that rotate available capacity between all customers when demand is greater than supply in order to avoid blackouts. Distribution or municipal control rooms open breakers and interrupt load according to predefined schedules
Lost-time injury (LTI)	A work injury which arises out of and in the course of employment and which renders the injured employee or contractor unable to perform his/her regular/normal work on one or more full calendar days or shifts other than the day or shift on which the injury occurred. It includes occupational diseases
Lost-time injury rate (LTIR)	Proportional representation of the occurrence of lost-time injuries over 12 months per 200 000 working hours. It includes occupational diseases
Maximum demand	Highest demand of load within a specified period
Off-peak	Period of relatively low system demand
Open-cycle gas turbine (OCGT)	Liquid fuel turbine power station that forms part of peak-load plant and runs on kerosene or diesel. Designed to operate in periods of peak demand
Outage	Period in which a generating unit, transmission line, or other facility is out of service
Peak demand	Maximum power used in a given period, traditionally between 7:00 and 10:00, as well as 18:00 to 20:00, in summer; and 6:00 to 9:00, as well as 17:00 to 19:00, in winter
Peaking capacity	Generating equipment normally operated only during hours of highest daily, weekly or seasonal loads
Peak-load plant	Gas turbines, hydroelectric or a pumped storage scheme used during periods of peak demand
Primary energy	Energy in natural resources, e.g. coal, liquid fuels, sunlight, wind, uranium and water
Pumped storage scheme	A lower and an upper reservoir with a power station/pumping plant between the two. During off-peak periods the reversible pumps/turbines use electricity to pump water from the lower to the upper reservoir. During periods of peak demand, water runs back into the lower reservoir through the turbines, generating electricity
Reserve margin	Difference between net system capability and the system's maximum load requirements (peak load or peak demand)
Return on assets	EBIT divided by the regulated asset base, which is the sum of property, plant and equipment, trade and other receivables, inventory and future fuel, less trade and other payables and deferred income
System minutes	Global benchmark for measuring the severity of interruptions to customers. One system minute is equivalent to the loss of the entire system for one minute at annual peak. A major incident is an interruption with a severity $\geq 1$ system minute
Technical losses	Naturally occurring losses that depend on the power systems used
Unit capability factor (UCF)	Measure of availability of a generating unit, indicating how well it is operated and maintained
Unplanned capability loss factor (UCLF)	Energy losses due to outages are considered unplanned when a power station unit has to be taken out of service and it is not scheduled at least four weeks in advance
Used nuclear fuel	Nuclear fuel irradiated in and permanently removed from a nuclear reactor. Used nuclear fuel is stored on-site in used fuel pools or storage casks
Watt	The watt is the International System of Units' (SI) standard unit of power. It specifies the rate at which electrical energy is dissipated (energy per unit of time)
Working capital ratio	(Inventory plus the current portion of payments made in advance, trade and other receivables and taxation assets) divided by (the current portion of trade and other payables, payments received in advance, provisions, employee benefit obligations and taxation liabilities)

**Independent assurance provider’s reasonable assurance report on selected key performance indicators to the directors of Eskom**

**Introduction**

We have been engaged to perform an independent assurance engagement for Eskom Holdings SOC Ltd (Eskom) on selected key performance indicators (KPIs) reported in Eskom’s integrated report for the year ended 31 March 2018. Our engagement was conducted by a team with relevant experience in sustainability reporting.

**Subject matter**

We are required to provide reasonable assurance on the following selected sustainability key performance indicators to be published in the integrated report, which include the indicators contained in Eskom’s shareholder compact as well as KPIs selected by the directors. The KPIs described below cover only Eskom (company and not group) and have been prepared in accordance with Eskom’s reporting criteria that are available on Eskom’s website, at [www.eskom.co.za/OurCompany/SustainableDevelopment/Pages/Sustainable\\_Development.aspx](http://www.eskom.co.za/OurCompany/SustainableDevelopment/Pages/Sustainable_Development.aspx)



No.	Indicator	Unit of measure	Boundary	Reporting criteria
<b>Focus on safety</b>				
1.	Lost-time injury rate (LTIR) (including occupational diseases) <sup>1</sup>	Index	Eskom	Occupational Health and Safety Act
<b>Improve operations</b>				
2.	Planned capability loss factor (PCLF)	Percentage	Generation	Eskom’s measurement specification
3.	Energy availability factor (EAF)	Percentage	Generation	
4.	System average interruption duration index (SAIDI)	Hours	Distribution	
5.	System average interruption frequency index (SAIFI)	Number	Distribution	
6.	System minutes <1	Minutes	Transmission	
7.	Distribution total energy losses	%	Distribution	
<b>Deliver capital expansion</b>				
8.	Generation capacity installed and commissioned	MW	Generation	Eskom’s measurement specification
9.	Transmission lines installed	Km	Transmission	
10.	Transmission transformer capacity installed and commissioned	MVA	Transmission	
<b>Reduce environmental footprint in existing fleet</b>				
11.	Relative particulate emissions	kg/MWh sent out	Generation	Environmental Act
12.	Specific water usage	ℓ/kWh sent out	Generation	Water Act
13.	Carbon dioxide emissions <sup>2</sup>	kg/kWh	Generation	Eskom’s measurement specification
<b>Implementing coal haulage and the road-to-rail migration plan</b>				
14.	Migration of coal delivery volume from road to rail	Mt	Generation	Eskom’s measurement specification

No.	Indicator	Unit of measure	Boundary	Reporting criteria	
<b>Ensure financial sustainability</b>					
15.	Value add per employee <sup>1</sup>	R million/ full-time employee	Eskom	Eskom’s measurement specification	
16.	Cash interest cover	Ratio	Eskom		
17.	Debt equity ratio including long-term provisions	Ratio	Eskom		
18.	Free funds from operations as percentage of gross debt	%	Eskom		
19.	Business productivity programme savings	R	Eskom		
20.	Free funds from operations as percentage of capital expenditure	%	Eskom		
21.	EBITDA margin <sup>1</sup>	%	Eskom		
22.	Arrear debt as % of electricity revenue <sup>1</sup>	%	Eskom		
23.	Average debtors days for municipalities, top customers, LPU’s and SPU’s (including Soweto) <sup>1</sup>	Days	Eskom		
24.	Coal purchased R/ton, % increase <sup>1</sup>	%	Eskom		
<b>Human capital</b>					
25.	Training spend as % of gross manpower costs	%	Eskom	Eskom’s measurement specification	
26.	Learner intake	Number	Eskom		
27.	Disability equity in total workforce	%	Eskom		
28.	Racial equity in senior management	%	Eskom		
29.	Gender equity in senior management	%	Eskom		
30.	Racial equity in professional and middle management	%	Eskom		
31.	Gender equity in professional and middle management	%	Eskom		
<b>Economic impact</b>					
32.	Percentage of local content contracted in new build	%	Eskom	Eskom’s measurement specification	
33.	Percentage of local content contracted (Eskom-wide)	%	Eskom		
34.	Percentage of B-BBEE attributable spend against total measured procurement spend (TMPS)	%	Eskom	B-BBEE amended Codes of Good Practice	
35.	Percentage of BO attributable spend against TMPS	%	Eskom		
36.	Percentage of BWO attributable spend against TMPS	%	Eskom		
37.	Percentage of BYO attributable spend against TMPS	%	Eskom		
38.	Percentage of BPLwD attributable spend against TMPS	%	Eskom		
39.	Percentage of QSE attributable spend against TMPS	%	Eskom		
40.	Percentage of EME attributable spend against TMPS	%	Eskom		
41.	B-BBEE score level <sup>1</sup>	Number	Eskom		
42.	Technology transfer: acquisition of intellectual property	Number	Eskom		Eskom’s measurement specification
43.	Technology transfer: skills development	Number	Eskom		
<b>Electrification</b>					
44.	Department of Energy funded electrification connections <sup>2</sup>	Number	Eskom	Eskom’s measurement specification	
<b>Socio-economic impact: corporate social investment (CSI)</b>					
45.	CSI committed <sup>1</sup>	R million	Eskom	Eskom’s measurement specification	

1. Not assured in the prior year.  
2. Not included in the shareholder compact.

## Directors' responsibilities

The directors are responsible for the selection, preparation and presentation of the sustainability information in accordance with the Eskom's reporting criteria. This responsibility includes the identification of stakeholders and stakeholder requirements, material issues, commitments with respect to sustainability performance and design, implementation and maintenance of internal control relevant to the preparation of the report that is free from material misstatement, whether due to fraud or error.

## Inherent limitations

Non-financial performance information is subject to more inherent limitations than financial information, given the characteristics of the subject matter and the method used for determining, calculating, sampling and estimating such information. The absence of a significant body of established practice on which to draw allows for the selection of certain different but acceptable measurement techniques, which can result in materially different measurements and can impact comparability. Qualitative interpretations of relevance, materiality and the accuracy of data are subject to individual assumptions and judgements. The precision thereof may change over time. It is important to read the report in the context of the reporting criteria.

In particular, where the information relies on the 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 independence and all other ethical requirements of the Code of Professional Conduct for Registered Auditors issued by the Independent Regulatory Board of Auditors, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

SizweNtsalubaGobodo Inc. applies the International Standard on Quality Control 1 and accordingly maintains 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 express a reasonable assurance conclusion on the selected KPIs based on the procedures we have performed and the evidence we have obtained. We conducted our reasonable assurance engagement in accordance with the

International Standard on Assurance Engagements (ISAE) 3000 (revised), *Assurance Engagements other than Audits or Reviews of Historical Financial Information*, issued by the International Auditing and Assurance Standards Board. That standard requires that we plan and perform our engagement to obtain reasonable assurance about whether the selected KPIs are free from material misstatement.

A reasonable assurance engagement in accordance with ISAE 3000 (revised) involves performing procedures to obtain evidence about the quantification of the selected sustainability information and related disclosures. The nature, timing and extent of procedures selected depend on our judgement, including the assessment of the risks of material misstatement, whether due to fraud or error. In making those risk assessments we considered internal control relevant to Eskom's preparation of the selected KPIs. A reasonable assurance engagement also includes:

- Assessing the suitability in the circumstances of Eskom's use of its reporting criteria as the basis for preparing the selected sustainability information
- Evaluating the appropriateness of quantification methods and reporting policies used, and the reasonableness of estimates made by Eskom
- Evaluating the overall presentation of the selected key performance indicators (KPIs)

## Summary of work performed

Our work included examination, on a test basis, of evidence relevant to the selected sustainability information. It also included an assessment of the significant estimates and judgements made by the directors in the preparation of the selected sustainability information. We planned and performed our work so as to obtain all the information and explanations that we considered necessary in order to provide us with sufficient evidence on which to base our conclusion in respect of the selected sustainability information.

Our procedures included the understanding of risk assessment procedures, internal control, and the procedures performed in response to the assessed risks. The procedures we performed were based on our professional judgement and included inquiries, 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, in performing the procedures listed above we:

- Interviewed management and senior executives to obtain an understanding of the internal control environment, risk assessment process and information systems relevant to the sustainability reporting process
- Inspected documentation to corroborate the statements obtained from management and senior executives in our interviews
- Reviewed the process that Eskom has in place for determining material selected KPIs to be included in the report
- Applied the assurance criteria in evaluating the data generation and reporting processes
- Reviewed the processes and systems to generate, collate, aggregate, monitor and report on the selected KPIs
- Evaluated the reasonableness and appropriateness of significant estimates and judgements made by management in the preparation of the KPIs
- Performed site work at various coal-fired power stations, Transmission operating units and Distribution operating units
- Evaluated whether the selected KPIs presented in the integrated report are consistent with our overall knowledge and experience of sustainability management and performance at Eskom

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusions.

## Basis for qualified conclusion

The validity and accuracy of the Coal migration KPI could not be confirmed as the processes and systems put in place to collate, review and monitor the data that supports the reliable measurement of the KPI are not complied with. The alternative procedures performed confirmed the weaknesses in the environment. Furthermore the completeness of the number reported could not be ascertained.

The validity, accuracy and completeness of the Learner intake KPI could not be validated in spite of performing alternatives audit procedures. This is due to inadequate processes and systems in place to ensure reliable reporting of the KPI. Furthermore, in certain instances, not all evidence was made available for audit purposes, leading to the limitation of audit scope.

## Conclusion

In our opinion, except for the effects of the matters described in the "Basis for qualified conclusion" section of our report, the directors' statement that the KPIs are presented in accordance with Eskom Holdings SOC Ltd's reporting criteria is, in all material respects, fairly stated.

## Other matters

Our report includes the provision of reasonable assurance on selected KPIs, on which we were previously not required to provide assurance, as indicated in the table above. Hence, with regard to these KPIs, the current year information relating to prior reporting periods has not been subject to assurance procedures.

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

## Restriction of liability

Our work has been undertaken to enable us to express the conclusions on the selected KPIs to the directors of Eskom in accordance with the terms of our engagement and for no other purpose. We do not accept or assume liability to any party other than Eskom for our work, for this report, or for the conclusion we have reached.



SizweNtsalubaGobodo Inc.  
Registered auditors

Per BF Zwane  
Chartered Accountant (SA)  
Director

9 July 2018

## LEADERSHIP QUALIFICATIONS AND DIRECTORSHIPS

### Board of Directors

at 31 March 2018

1

#### MR JABU (JA) MABUZA (60)

Chairman

Independent non-executive director

##### Qualifications

Effective Leadership Program (Pennsylvania University)  
Executive Development Program (University of California)

##### Directorships

4 Blueberryfields Knysna (Pty) Ltd  
ABInBev Africa (Pty) Ltd  
Break-Red Dance Trading (Pty) Ltd  
Business Leadership South Africa  
Business Unity South Africa  
Casino Association of South Africa  
Eglin Investments no. 44 (Pty) Ltd  
Emma Mabuza JV (Pty) Ltd  
Eternity Star 242 CC  
Javas Tbos Properties (Pty) Ltd  
Jaxson 653 (RF) (Pty) Ltd  
Lexshell 627 Investments (Pty) Ltd  
Lodge 748, Fancourt (Pty) Ltd  
Kuncedzana Investment Holdings (Pty) Ltd  
Motema Investments (Pty) Ltd  
Oteo Investment Holdings  
Petroport N3 Heidelberg (Pty) Ltd  
Sphere Holdings (Pty) Ltd  
Sumart 005 Property Holdings (Pty) Ltd  
Telkom SA SOC Ltd  
Teza Investments (Pty) Ltd  
The Jabu Mabuza Family Trust  
Zarara Hydro Carbons Trading Limited

2

#### MR PHAKAMANI (PS) HADEBE (51)

Interim Group Chief Executive  
Executive director

##### Qualifications

MA Economics (University of Durban-Westville)  
MA Rural Development (Sussex University)

##### Directorships

GroCapital Holdings

3

#### MR CALIB (C) CASSIM (46)

Acting Chief Financial Officer

Executive director

##### Qualifications

B Com (University of Natal)  
B Accounting Sciences (Unisa)  
Chartered Accountant (SA)  
Master of Business Leadership (Unisa)

##### Directorships

Escap SOC Ltd  
Eskom Enterprises SOC Ltd  
Eskom Finance Company SOC Ltd

4

#### DR ROD (RDB) CROMPTON (65)

Independent non-executive director

##### Qualifications

BA (University of Natal)  
Diploma in Higher Education (University of Natal)  
BA Hons (University of Natal)  
PhD Humanities (University of Natal)

##### Directorships

None

5

#### MR SIFISO (RSN) DABENGWA (59)

Independent non-executive director

##### Qualifications

B Sc Engineering (University of Zimbabwe)  
MBA (University of Witwatersrand)  
Executive Program (University of Michigan)

##### Directorships

Megapro Holdings (Pty) Ltd

6

#### MR MARK (MJ) LAMBERTI (67)

Independent non-executive director

##### Qualifications

B Com (Unisa)  
MBA (University of Witwatersrand)  
Presidents Program in Leadership (Harvard)

##### Directorships

Anjuvid Trust  
Beltimear (Pty) Ltd  
Bermilat (Pty) Ltd  
Business Leadership South Africa  
Imperial Capital Ltd  
Imperial Holdings Ltd  
Imperial Mobility International B.V  
Lamberti Education Trust  
Motus Corporation (Pty) Ltd  
Rambrite (Pty) Ltd  
Ratelimb (Pty) Ltd  
The National Education Collaboration Trust

7

#### MS SINDI (SN) MABASO-KOYANA (48)

Independent non-executive director

##### Qualifications

B Com (University of KwaZulu-Natal)  
Postgraduate Diploma in Accounting (University of KwaZulu-Natal)  
Chartered Accountant (SA)  
Diploma in Introduction to Mining (University of Witwatersrand)

##### Directorships

Adcorp Holdings Ltd  
Advanced Fire Fixed System  
Advanced Fire Suppression Technologies  
Africa Leadership Initiatives South Africa  
AIH Northwind Holdings/AWCA Human Capital  
Astra Aircraft Corporation  
Atos SA  
AWCA Investment Holdings  
Bell Equipment Sales South Africa Ltd  
Betungwa Investment Holdings  
Kenry Fire Protection  
LIPOCET  
Macquarie Equities  
MTN Zakhele Futhi (RF)  
Ogwini Alumini  
Phembani Group  
Toyota South Africa

8

#### MS NELISIWE (NVB) MAGUBANE (52)

Independent non-executive director

##### Qualifications

B Sc Electrical Engineering – Heavy Current (University of Natal)  
Postgraduate Diploma in Business Administration (University of West London)  
MBA (Milpark Business School)

##### Directorships

Enerugi 243 Holdings  
Inani Infrastructure  
Matleng Energy Solutions  
Pro Afrika Group  
Pro Afrika Power  
State Information Technology Agency  
Thebe Energy Resources Advisory Council  
Trakrops 40

9

#### PROF. MALEGAPURU (MW) MAKGOBA (65)

Independent non-executive director

##### Qualifications

MB ChB (University of Natal)  
DPhil (University of Oxford)  
Fellowship of the Royal College of Physicians of London  
Advanced Management Program (INSEAD)

##### Directorships

None

10

#### DR BANOTHILE (BCE) MAKHUBELA (33)

Independent non-executive director

##### Qualifications

B Sc (University of Zululand)  
B Sc Hons (University of Cape Town)  
M Sc (University of Cape Town)  
PhD (University of Cape Town)

##### Directorships

None

11

#### MS BUSISIWE (B) MAVUSO (39)

Independent non-executive director

##### Qualifications

B Compt (Unisa)  
Postgraduate Diploma in Management (GIBS Business School)  
Master of Business Leadership (Unisa)  
Association of Chartered Certified Accountants (ACCA)

##### Directorships

Black Management Forum Investment  
Business Leadership of South Africa

12

#### MS JACKY (MJ) MOLISANE (43)

Non-executive director

##### Qualifications

BA Economics and Political Science (Unisa)  
BA Hons Economics (Unisa)  
Diploma in Financial Markets and Instruments (Academy of Financial Markets)

##### Directorships

None

13

#### DR PULANE (PE) MOLOKWANE (41)

Independent non-executive director

##### Qualifications

B Sc (University of North West)  
Postgraduate Diploma in Applied Radiation Science and Technology (University of North West)  
M Sc (University of North West)  
PhD (University of Pretoria)

##### Directorships

Endulo Resources  
Nzuri  
Oloenviron  
South African Forestry Company  
Thulaganyo  
Tinungu

14

#### PROF. TSHEPO (TH) MONGALO (44)

Independent non-executive director

##### Qualifications

BProc (University of Natal)  
LLB (University of Natal)  
LLM Commercial Law (University of Cambridge)  
PhD Commercial Law (University of Cape Town)

##### Directorships

Hope City Investment (Pty) Ltd  
Tong-Mongalo Corporate Services cc

15

#### MR GEORGE (JG) SEBULELA (47)

Independent non-executive director

##### Qualifications

BA (Com) (University of Fort Hare)  
Diploma in Marketing (Institute of Marketing Management)  
Advanced Management Program (INSEAD)

##### Directorships

Avuke Energy  
Ayo Technologies  
Grey4 Media Group  
Inspur SA  
Mediquip SA  
Sanlam Private Wealth  
Sebvest Capital  
Sebvest Development Africa  
Sebvest Financial Services  
Sebvest Holdings  
Sebtech Technologies  
Skyco Digital Media  
Stryker Security (Pty) Ltd  
Tongzhou Construction

Ages are shown at 31 March 2018.

Only active directorships are reflected.

Mr Phakamani Hadebe was appointed permanently as Group Chief Executive, effective 1 June 2018.

Mr Mark Lamberti resigned as a director, effective 6 April 2018.

Ms Jacky Molisane is an employee of the Department of Public Enterprises, our shareholder ministry. Therefore, she is not regarded as being independent.

## LEADERSHIP QUALIFICATIONS AND DIRECTORSHIPS

continued

### Executive Management Committee

at 31 March 2018

1

#### MR PHAKAMANI HADEBE (51)

Interim Group Chief Executive  
Appointed to Exco in January 2018  
<1 year in Eskom

##### Qualifications

MA Economics (University of Durban Westville)  
MA Rural Development (Sussex University)

##### Directorships

GroCapital Holdings

2

#### MR CALIB CASSIM (46)

Acting Chief Financial Officer

Appointed to Exco in July 2017  
16 years in Eskom

##### Qualifications

B Com (University of Natal)  
B Accounting Services (Unisa)  
Chartered Accountant (SA)  
Master of Business Leadership (Unisa)

##### Directorships

Escap SOC Ltd  
Eskom Enterprises SOC Ltd  
Eskom Finance Company SOC Ltd

3

#### MR THAVA GOVENDER (50)

Group Executive: Generation  
Acting Group Executive: Risk and Sustainability

Appointed to Exco in September 2010  
27 years in Eskom

##### Qualifications

B Sc Chemistry and Biochemistry (University of Durban-Westville)  
B Sc Hons Energy Studies – Nuclear and Fossil (Rand Afrikaans University)  
Management Development Programme (Unisa)  
Advanced Management Program (Harvard Business School)

##### Directorships

Electric Power Research Institute (EPRI)  
Eskom Enterprises SOC Ltd  
Eskom Rotek Industries SOC Ltd  
GO15 Steering Board (President)  
Rosherville Properties SOC Ltd  
SANEA

Ages are shown at 31 March 2018.

Only active directorships are reflected.

Mr Phakamani Hadebe was appointed permanently as Group Chief Executive, effective 1 June 2018.

Mr Abram Masango was reinstated as Group Executive: Group Capital, effective 10 May 2018.

4

#### MR WILLY MAJOLA (52)

Acting Group Executive: Transmission  
Appointed to Exco in January 2017  
24 years in Eskom

##### Qualifications

B Sc Engineering (University of Witwatersrand)  
Registered Professional Engineer (ECSA)

##### Directorships

Motraco Private Company

5

#### MR ABRAM MASANGO (49)

Group Executive: Office of the GCE

Appointed to Exco in October 2015  
21 years in Eskom

##### Qualifications

National Diploma in Mechanical Engineering  
National Higher Diploma Mechanical Engineering (Vaal Triangle Technikon)  
M Sc (cum laude) (Da Vinci Institute for Technology Management)

##### Directorships

Eskom Development Foundation NPC

6

#### MS AYANDA NOAH (51)

Group Executive: Customer Services

Appointed to Exco in June 2007  
26 years in Eskom

##### Qualifications

B Sc Electrical Engineering (University of Cape Town)  
MBA (International Management Centres)  
Executive Development Programme (University of Witwatersrand)  
Advanced Management Program (Harvard Business School)

##### Directorships

Council for Scientific and Industrial Research  
Energy Access Partnerships  
Eskom Rotek Industries SOC Ltd  
SANEA

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#### MR MONGEZI NTSOKOLO (57)

Group Executive: Distribution  
Appointed to Exco in October 2003  
27 years in Eskom

##### Qualifications

B Sc Electrical Engineering (University of Witwatersrand)  
BBA Hons (University of Stellenbosch)  
MBA (University of Stellenbosch)  
Executive Development Program (City University of New York)

##### Directorships

Eskom Enterprises SOC Ltd  
Eskom Rotek Industries SOC Ltd

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#### MS ELSIE PULE (50)

Group Executive: Human Resources

Appointed to Exco in November 2014  
20 years in Eskom

##### Qualifications

BA Social Work (University of the North)  
BA Hons Psychology (University of Pretoria)  
M Sc Business Engineering (Warwick University)

##### Directorships

None

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#### MR KOBUS STEYN (55)

Acting Group Executive: Group Capital

Appointed to Exco in January 2018  
32 years in Eskom

##### Qualifications

B Eng (University of Pretoria)  
B Com (Unisa)  
Master of Business Leadership (Unisa)

##### Directorships

Eskom Rotek Industries SOC Ltd

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#### MS NONDUMISO ZIBI (42)

Acting Chief Information Officer

Appointed to Exco in January 2018  
18 years in Eskom

##### Qualifications

National Diploma Electrical Engineering (Eastern Cape Technicon)  
B Tech Engineering (Durban University of Technology)  
Master of Business Leadership (Unisa)

##### Directorships

None

## BOARD AND EXCO MEETING ATTENDANCE

### Attendance at Board and committee meetings

for the year ended 31 March 2018

Members	Board	Audit and Risk	Investment and Finance	People and Governance	Social, Ethics and Sustainability	Board Tender
Total number of meetings	26	15	8	6	3	14
<b>Current directors</b>						
<b>Non-executive directors</b>						
Mr Jabu Mabuza (Chairman)	4/4*			1/1*		
Dr Rod Crompton	4/4	0/0				
Mr Sifiso Dabengwa	4/4					1/1
Mr Mark Lamberti	4/4		1/1*			
Ms Sindi Mbaso-Koyana	4/4	0/0*				
Ms Nelisiwe Magubane	4/4					1/1
Prof. Malegapuru Makgoba	9/9	2/2			1/1*	
Dr Banohile Makhubela	15/18			4/4	2/2	6/11
Ms Busisiwe Mavuso	4/4			1/1	0/0	
Ms Jacky Molisane	4/4		1/1			
Dr Pulane Molokwane	17/18	11/12	5/5	3/4		12/12*
Prof. Tshepo Mongalo	8/9		1/1	1/1	1/1	
Mr George Sebulela	4/4	0/0				
<b>Executive directors</b>						
Mr Calib Cassim	10/11	<5>	<4>			
Mr Phakamani Hadebe	4/4		<1>			<1>
<b>Previous directors</b>						
<b>Non-executive directors</b>						
Mr Simphiwe Dingaan	14/14	11/12	5/5			11/11
Mr Sathiseelan Gounden	12/14	12/12		4/4	2/2	
Ms Venete Klein	4/4		1/1	1/1		
Mr Zethembe Khoza	22/22		5/7	3/3	1/1	2/2
Mr Giovanni Leonardi	6/22	1/3		1/1	3/3	
Ms Chwayita Mabude	8/8	3/3	2/2	1/1		2/2
Dr Pat Naidoo	19/22	13/14	7/7		3/3	10/13
Dr Baldwin Ngubane	6/6			0/1		
<b>Executive directors</b>						
Mr Johnny Dladla	5/7	<4>			<1>	
Mr Sean Maritz	6/7	<2>			<1>	<1>
Mr Anoj Singh	11/12	<1>	<5>			

Attendance as reflected above refers to directors who were members of that committee during the year to 31 March 2018 and reflects changes in committee composition during the year.

An asterisk denotes the chairmanship of the Board or committee at 31 March 2018.

<> reflects executives attending as officials.

Mr Mark Lamberti resigned as a director, effective 6 April 2018.

## BOARD AND EXCO MEETING ATTENDANCE

continued

### Attendance at Exco meetings

for the year ended 31 March 2018

Members	Divisional responsibility	Number of meetings attended
Total number of meetings		16
Mr Phakamani Hadebe	Interim Group Chief Executive, effective 22 January 2018	1/3
Mr Calib Cassim	Acting Chief Financial Officer, effective 28 July 2017	10/12
Mr Johnny Dladla	Interim Group Chief Executive, from 22 June 2017 until 6 October 2017	3/8
Mr Prish Govender	Acting Group Executive: Group Capital until 3 October 2017	8/8
Mr Thava Govender	Group Executive: Transmission and Sustainability up to 26 March 2018 Group Executive: Generation and Sustainability from 26 March 2018	16/16
Mr Matshele Koko	Interim Group Chief Executive, until May 2017	1/1
Mr Willy Majola	Acting Group Executive: Generation up to 26 March 2018 Acting Group Executive: Transmission from 26 March 2018	14/16
Mr Sean Maritz	Interim Group Chief Executive, from 6 October 2017 to 22 January 2018	10/13
Mr Abram Masango	Group Executive: Office of the GCE until 15 November 2017	6/6
Ms Ayanda Noah	Group Executive: Customer Services	13/16
Mr Mongezi Ntsokolo	Group Executive: Distribution	12/16
Ms Elsie Pule	Group Executive: Human Resources	13/16
Mr Peter Sebola	Acting Group Executive: Group Capital, from 12 October 2017 until 29 December 2017	5/5
Mr Anoj Singh	Chief Financial Officer, until 28 July 2017	5/5
Mr Kobus Steyn	Acting Group Executive: Group Capital, effective 11 January 2018	3/3
Ms Nondumiso Zibi	Acting Chief Information Officer, effective 12 October 2017 until 10 January 2018, and again from 1 March 2018	8/8

## ENVIRONMENTAL IMPLICATIONS OF USING OR SAVING ELECTRICITY

### Factor 1

Figures are calculated based on total electricity sales by Eskom, which is based on the total available for distribution (including purchases), after excluding losses through Transmission and Distribution (technical losses), losses through theft (non-technical losses), our own internal use and wheeling. Thus to calculate CO<sub>2</sub> emissions, divide the quantity of CO<sub>2</sub> emitted by the electricity sales:

$$205.5\text{Mt of CO}_2 \div 212\ 190\text{GWh sales} = 0.97\ \text{tons per MWh}$$

### Factor 2

Figures are calculated based on total electricity generated, which includes coal, nuclear, pumped storage, wind, hydro and gas turbines, but excludes the total consumed by Eskom. Thus the quantity of CO<sub>2</sub> emissions, divided by (electricity generated less Eskom's electricity consumption):

$$205.5\text{Mt of CO}_2 \div (221\ 936\text{GWh generated less } 6\ 031\text{GWh own consumption}) = 0.95\ \text{tons per MWh}$$

Figures represent the 12-month period from 1 April 2017 to 31 March 2018.

	Factor 1 (total energy sold)	Factor 2 (total energy generated)	If electricity consumption is measured in:			
			kWh	MWh	GWh	TWh
Coal use	0.54	0.53	kilogram	ton	thousand tons (kt)	million tons (Mt)
Water use <sup>1</sup>	1.30	1.28	litre	kilolitre	megalitre (Mℓ)	thousand megalitres
Ash produced	149	146	gram	kilogram	ton	thousand tons (kt)
Particulate emissions	0.27	0.26	gram	kilogram	ton	thousand tons (kt)
CO <sub>2</sub> emissions <sup>2</sup>	0.97	0.95	kilogram	ton	thousand tons (kt)	million tons (Mt)
SO <sub>x</sub> emissions <sup>2</sup>	8.49	8.34	gram	kilogram	ton	thousand tons (kt)
NO <sub>x</sub> emissions <sup>3</sup>	4.05	3.98	gram	kilogram	ton	thousand tons (kt)

- Volume of water used at all Eskom power stations.
- Calculated figures based on coal characteristics and power station design parameters. Sulphur dioxide and carbon dioxide emissions are based on coal analysis and using coal burnt tonnages. Figures include coal-fired and gas turbine power stations, as well as oil consumed during power station start-ups and, for carbon dioxide emissions, the underground coal gasification pilot plant.
- NO<sub>x</sub> reported as NO<sub>2</sub> is calculated using average station-specific emission factors, which have been measured intermittently, and tonnages of coal burnt.

Multiply electricity consumption or saving by the relevant factor in the table above to determine the environmental implication.

Example 1: Water consumption	Example 2: CO <sub>2</sub> emissions
<p><b>Using Factor 1</b> Used 90MWh of electricity <math>90 \times 1.30 = 117</math> Therefore 117 kilolitres of water used</p> <p><b>Using Factor 2</b> Used 90MWh of electricity <math>90 \times 1.28 = 115.2</math> Therefore 115.2 kilolitres of water used</p>	<p><b>Using Factor 1</b> Used 90MWh of electricity <math>90 \times 0.97 = 87.3</math> Therefore 87.3 tons CO<sub>2</sub> emitted</p> <p><b>Using Factor 2</b> Used 90MWh of electricity <math>90 \times 0.95 = 85.5</math> Therefore 85.5 tons CO<sub>2</sub> emitted</p>

Further information can be obtained through the Eskom Environmental Helpline. Contact details are available at the back of the integrated report

For CDM-related Eskom grid emission factor information, please go to the following link:  
[www.eskom.co.za/OurCompany/SustainableDevelopment/Pages/CDM\\_Calculations.aspx](http://www.eskom.co.za/OurCompany/SustainableDevelopment/Pages/CDM_Calculations.aspx)  
or via the Eskom website: Our Company > Sustainable Development > CDM calculations



# TEN-YEAR TECHNICAL STATISTICS

Measure and unit	2017/18	2016/17	2015/16	2014/15	2013/14	2012/13	2011/12	2010/11	2009/10	2008/09
<b>Customer statistics</b>										
Arrear debt as % of revenue, %	2.73 <sup>RA</sup>	2.42	1.14	2.17	1.10	0.82	0.53	0.75	0.83	1.54
Debtors days – municipalities, average debtors days	76.6 <sup>RA</sup>	53.3 <sup>RA</sup>	42.9	47.6	32.7	22.4	–	–	–	–
Debtors days – large power top customers excluding disputes, average debtors days	13.9 <sup>RA</sup>	15.3 <sup>RA</sup>	15.5	16.8	14.5	12.3	14.4	15.5	15.4	16.5
Debtors days – other large power users (<100 GWh p.a.), average debtors days	16.6 <sup>RA</sup>	16.8 <sup>RA</sup>	16.2	17.0	16.9	18.3	–	–	–	–
Debtors days – small power users (excluding Soweto), average debtors days	43.4 <sup>RA</sup>	48.8 <sup>RA</sup>	48.2	49.1	50.2	48.2	42.9	45.1	40.5	47.5
Eskom KeyCare, index	105.9	107.0	104.3 <sup>RA</sup>	108.7	108.7	105.8	105.9	101.2	98.1	101.2
Top Customer KeyCare, index	107.5	108.1	107.2	110.5	110.8	107.5	108.0	–	–	–
Enhanced MaxiCare	97.7	95.8	96.5 <sup>RA</sup>	99.8	92.7	93.2	90.7	89.4	93.0	92.8
CustomerCare, index	9.9	9.8	8.4	8.0	8.3	8.4	8.2	8.1	8.2	8.3
<b>Sales and revenue</b>										
Total sales, GWh <sup>1</sup>	212 190	214 121	214 487	216 274	217 903	216 561	224 785	224 446	218 591	214 850
(Reduction)/growth in GWh sales, %	(0.9)	(0.2)	(0.8)	(0.7)	0.6	(3.7)	0.2	2.7	1.7	(4.2)
Electricity revenue, R million	175 041	175 094	161 688	146 268	136 869	126 663	112 999	90 375	69 834	52 996
Growth in revenue, %	(0.0)	8.3	10.5	6.9	8.1	12.1	25.0	29.4	31.8	21.8
<b>Electricity output</b>										
Power sent out by Eskom stations, GWh (net)	221 936	220 166	219 979	226 300	231 129	232 749	237 289	237 430	232 812	228 944
Coal-fired stations, GWh (net)	202 106	200 893	199 888	204 838	209 483	214 807	218 210	220 219	215 940	211 941
Hydroelectric stations, GWh (net)	709	579	688	851	1 036	1 077	1 904	1 960	1 274	1 082
Pumped storage stations, GWh (net)	4 479	3 294	2 919	3 107	2 881	3 006	2 962	2 953	2 742	2 772
Gas turbine stations, GWh (net)	118	29	3 936	3 709	3 621	1 904	709	197	49	143
Wind energy, GWh (net)	331	345	311	1	2	1	2	2	1	2
Nuclear power station, GWh (net)	14 193	15 026	12 237	13 794	14 106	11 954	13 502	12 099	12 806	13 004
IPP purchases, GWh	9 584	11 529	9 033	6 022	3 671	3 516	4 107	1 833	–	–
Wheeling, GWh <sup>2</sup>	2 266	2 910	3 930	3 623	3 353	2 948	3 099	3 423	3 175	–
Energy imports from SADC countries, GWh <sup>2</sup>	7 731	7 418	9 703	10 731	9 425	7 698	9 939	10 190	10 579	12 189
Total electricity available (generated by Eskom and purchased), GWh <sup>1</sup>	241 517	242 023	242 645	246 676	247 578	246 911	254 434	252 876	246 566	241 133
Total consumed by Eskom, GWh <sup>3</sup>	(6 031)	(4 808)	(4 046)	(4 114)	(3 862)	(4 037)	(3 982)	(3 962)	(3 695)	(3 816)
Total available for distribution, GWh	235 486	237 215	238 599	242 562	243 716	242 874	250 452	248 914	242 871	237 317
<b>Supply and demand</b>										
Total Eskom power station capacity – installed, MW	48 039	46 407	45 075	44 281	44 189	44 206	44 115	44 145	44 175	44 193
Total Eskom power station capacity – nominal, MW	45 561	44 134	42 810	42 090	41 995	41 919	41 647	41 194	40 870	40 506
Total IPP power station capacity – nominal, MW	4 779	5 027	3 392	2 606	1 677	1 135	1 008	803	–	–
Peak demand on integrated Eskom system, MW	35 301	34 122	33 345	34 768	34 977	35 525	36 212	36 664	35 850	35 959
Peak demand on integrated Eskom system, including load reductions and non-Eskom generation, MW	35 613	34 913	34 481	36 170	36 002	36 345	37 065	36 970	35 912	36 227
National rotational load shedding	No	No	Yes	Yes	Yes <sup>RA</sup>	No <sup>RA</sup>	No <sup>RA</sup>	No <sup>RA</sup>	No <sup>RA</sup>	Yes
Demand savings, MW	40.2	236.9	214.9	171.5 <sup>RA</sup>	409.6 <sup>RA</sup>	595.0 <sup>RA</sup>	365.0 <sup>RA</sup>	354.1	–	–
Internal energy efficiency, GWh	1.4	6.0	1.7 <sup>RA</sup>	10.4 <sup>RA</sup>	19.4 <sup>RA</sup>	28.9 <sup>RA</sup>	45.0 <sup>RA</sup>	26.2 <sup>RA</sup>	–	–
<b>Asset creation</b>										
Generation capacity installed and commissioned, MW	2 387 <sup>RA</sup>	1 332 <sup>RA</sup>	794 <sup>RA</sup>	100 <sup>RA</sup>	120 <sup>RA</sup>	261 <sup>RA</sup>	535 <sup>RA</sup>	315 <sup>RA</sup>	452 <sup>RA</sup>	1 770
Transmission lines installed, km	722.3 <sup>RA</sup>	585.4 <sup>RA</sup>	345.8 <sup>RA</sup>	318.6 <sup>RA</sup>	810.9 <sup>RA</sup>	787.1 <sup>RA</sup>	631.3 <sup>RA</sup>	443.4 <sup>RA</sup>	600.3 <sup>RA</sup>	418.3
Substation capacity installed and commissioned, MVA	2 510 <sup>RA</sup>	2 300 <sup>RA</sup>	2 435 <sup>RA</sup>	2 090 <sup>RA</sup>	3 790 <sup>RA</sup>	3 580 <sup>RA</sup>	2 525 <sup>RA</sup>	5 940 <sup>RA</sup>	1 630 <sup>RA</sup>	1 375
Total capital expenditure – group (excluding capitalised borrowing costs), R billion	48.0	60.0	57.4	53.1 <sup>RA</sup>	59.8 <sup>RA</sup>	60.1	58.8	47.9	48.7	43.7
<b>Safety</b>										
Employee lost-time injury rate (LTIR) – company, index <sup>4,5</sup>	0.23	0.43	0.29	0.36	0.31 <sup>RA</sup>	0.40 <sup>RA</sup>	0.41 <sup>RA</sup>	0.47 <sup>RA</sup>	0.54 <sup>RA</sup>	0.50
Employee lost-time injury rate (LTIR) – group, index <sup>4,5</sup>	0.23 <sup>RA</sup>	0.39	0.30	0.33	0.32	–	–	–	–	–
Fatalities (employees and contractors), number	15	10	17	10	23 <sup>RA</sup>	19 <sup>RA</sup>	24 <sup>RA</sup>	25 <sup>RA</sup>	17 <sup>RA</sup>	27
Employee fatalities, number	3	4	4	3	5 <sup>RA</sup>	3 <sup>RA</sup>	13 <sup>RA</sup>	7 <sup>RA</sup>	2 <sup>RA</sup>	6
Contractor fatalities, number	12	6	13	7	18 <sup>RA</sup>	16 <sup>RA</sup>	11 <sup>RA</sup>	18 <sup>RA</sup>	15 <sup>RA</sup>	21

1. The difference between electricity available for distribution and electricity sold is due to energy losses.  
2. Prior to 2009/10, wheeling was combined with the total imported for the Eskom system.  
3. Used by Eskom for pumped storage facilities and synchronous condenser mode of operation.  
4. The employee lost-time injury rate (LTIR) includes occupational diseases.  
5. Prior to 2013/14, only company numbers were reported.  
RA Reasonable assurance provided by the independent assurance provider. Refer to pages 130 to 133 of the integrated report.



# TEN-YEAR TECHNICAL STATISTICS

continued

Measure and unit	2017/18	2016/17	2015/16	2014/15	2013/14	2012/13	2011/12	2010/11	2009/10	2008/09
<b>Primary energy</b>										
Coal stock, days	68	74	58	51	44 <sup>RA</sup>	46 <sup>RA</sup>	39 <sup>RA</sup>	41 <sup>RA</sup>	37 <sup>RA</sup>	41
Road-to-rail migration (additional tonnage transported on rail), Mt	11.6 <sup>Q</sup>	13.2 <sup>Q</sup>	13.6 <sup>RA</sup>	12.6 <sup>RA</sup>	11.6 <sup>RA</sup>	10.1 <sup>RA</sup>	8.5	7.1	5.1	4.3
Coal purchased, Mt	115.3	120.3	118.7	121.7	122.0	126.4	124.3	126.2	121.8	132.7
Coal burnt, Mt	115.5	113.7	114.8	119.2	122.4	123.0	125.2	124.7	122.7	121.2
Average calorific value, MJ/kg	19.81	20.05	19.57	19.68	19.77	19.76	19.61	19.45	19.22	19.10
Average ash content, %	30.92	28.62	28.19	27.63	28.56	28.69	28.88	29.03	29.56	29.70
Average sulphur content, %	0.87	0.84	1.07	0.80	0.87	0.88	0.79	0.78	0.81	0.83
Overall thermal efficiency, %	31.2	31.2	31.1	31.4	31.3	32.0	31.4	32.6	33.1	33.4
Diesel and kerosene usage for OCGTs, Mℓ	37.8	10.0	1 247.8	1 178.6	1 148.5 <sup>RA</sup>	609.7 <sup>RA</sup>	225.5 <sup>RA</sup>	63.6 <sup>RA</sup>	16.1 <sup>RA</sup>	28.9
<b>Plant performance</b>										
Unplanned capability loss factor (UCLF), % <sup>1</sup>	10.18	9.90	14.91 <sup>RA</sup>	15.22 <sup>RA</sup>	12.61 <sup>RA</sup>	12.12 <sup>RA</sup>	7.97 <sup>RA</sup>	6.14 <sup>RA</sup>	5.10 <sup>RA</sup>	4.38
Planned capability loss factor (PCLF), % <sup>1</sup>	10.35 <sup>RA</sup>	12.14 <sup>RA</sup>	12.99	9.91 <sup>RA</sup>	10.50 <sup>RA</sup>	9.10	9.07	7.98	9.04	9.54
Energy availability factor (EAF), % <sup>1</sup>	78.00 <sup>RA</sup>	77.30 <sup>RA</sup>	71.07 <sup>RA</sup>	73.73 <sup>RA</sup>	75.13 <sup>RA</sup>	77.65 <sup>RA</sup>	81.99 <sup>RA</sup>	84.59 <sup>RA</sup>	85.21	85.32
Unit capability factor (UCF), % <sup>1</sup>	79.47	78.00	72.10	74.87	76.90 <sup>RA</sup>	78.80 <sup>RA</sup>	83.00 <sup>RA</sup>	85.90 <sup>RA</sup>	85.90	86.10
Generation load factor, % <sup>1</sup>	55.9	57.9	58.8	61.5	62.8	63.6	65.1	66.4	66.2	67.0
OCGT load factor trend, %	0.6	0.1	18.6	17.6	19.3 <sup>RA</sup>	10.4 <sup>RA</sup>	3.9	1.1	0.3	–
Integrated Eskom system load factor (EUF), % <sup>1</sup>	71.6	75.0	82.7	83.4	83.6	81.9	79.4	78.5	77.7	78.6
<b>Network performance</b>										
Total system minutes lost for events <1 minute, minutes	2.09 <sup>RA</sup>	3.80 <sup>RA</sup>	2.41 <sup>RA</sup>	2.85 <sup>RA</sup>	3.05 <sup>RA</sup>	3.52 <sup>RA</sup>	4.73 <sup>RA</sup>	2.63 <sup>RA</sup>	4.09 <sup>RA</sup>	4.21
Major incidents, number	0	1	1	2	0 <sup>RA</sup>	3 <sup>RA</sup>	1 <sup>RA</sup>	0 <sup>RA</sup>	1 <sup>RA</sup>	3
System average interruption frequency index (SAIFI), events	18.7 <sup>RA</sup>	18.9 <sup>RA</sup>	20.5 <sup>RA</sup>	19.7 <sup>RA</sup>	20.2 <sup>RA</sup>	22.2 <sup>RA</sup>	23.7 <sup>RA</sup>	25.3 <sup>RA</sup>	24.7 <sup>RA</sup>	24.2
System average interruption duration index (SAIDI), hours	38.8 <sup>RA</sup>	38.9 <sup>RA</sup>	38.6 <sup>RA</sup>	36.2 <sup>RA</sup>	37.0 <sup>RA</sup>	41.9 <sup>RA</sup>	45.8 <sup>RA</sup>	52.6 <sup>RA</sup>	54.4 <sup>RA</sup>	51.5
Total energy losses, %	9.1	8.9	8.6	8.8	8.9	9.1	8.7	8.3	8.5	7.9
Transmission energy losses, %	2.0	2.2	2.6	2.5	2.3 <sup>RA</sup>	2.8 <sup>RA</sup>	3.1 <sup>RA</sup>	3.3 <sup>RA</sup>	3.3	3.1
Distribution energy losses, %	7.7 <sup>RA</sup>	7.6 <sup>RA</sup>	6.4	6.8	7.1 <sup>RA</sup>	7.1 <sup>RA</sup>	6.3 <sup>RA</sup>	5.7 <sup>RA</sup>	5.9	5.5
<b>Environmental statistics</b>										
<b>Emissions</b>										
Relative particulate emissions, kg/MWh sent out <sup>2</sup>	0.27 <sup>RA</sup>	0.30 <sup>RA</sup>	0.36 <sup>RA</sup>	0.37 <sup>RA</sup>	0.35 <sup>RA</sup>	0.35 <sup>RA</sup>	0.31 <sup>RA</sup>	0.33 <sup>RA</sup>	0.39 <sup>RA</sup>	0.27
Carbon dioxide (CO <sub>2</sub> ), Mt <sup>2</sup>	205.5 <sup>RA</sup>	211.1 <sup>RA</sup>	215.6 <sup>RA</sup>	223.4	233.3 <sup>RA</sup>	227.9 <sup>RA</sup>	231.9 <sup>RA</sup>	230.3 <sup>RA</sup>	224.7 <sup>RA</sup>	221.7
Sulphur dioxide (SO <sub>2</sub> ), kt <sup>2</sup>	1 802	1 766	1 699	1 834	1 975 <sup>RA</sup>	1 843 <sup>RA</sup>	1 849 <sup>RA</sup>	1 810 <sup>RA</sup>	1 856 <sup>RA</sup>	1 874
Nitrous oxide (N <sub>2</sub> O), t <sup>2</sup>	2 642	2 782	2 757	2 919	2 969	2 980	2 967	2 906	2 825	2 801
Nitrogen oxide (NO <sub>x</sub> ) as NO <sub>2</sub> , kt <sup>3</sup>	859	885	893	937	954 <sup>RA</sup>	965 <sup>RA</sup>	977 <sup>RA</sup>	977 <sup>RA</sup>	959 <sup>RA</sup>	957
Particulate emissions, kt	57.13	65.13	78.37	82.34	78.92 <sup>RA</sup>	80.68 <sup>RA</sup>	72.42 <sup>RA</sup>	75.84 <sup>RA</sup>	88.27 <sup>RA</sup>	55.64
<b>Water</b>										
Specific water consumption, ℓ/kWh sent out <sup>1</sup>	1.30 <sup>RA</sup>	1.42 <sup>RA</sup>	1.44 <sup>RA</sup>	1.38 <sup>RA</sup>	1.35 <sup>RA</sup>	1.42 <sup>RA</sup>	1.34 <sup>RA</sup>	1.35 <sup>RA</sup>	1.34 <sup>RA</sup>	1.35
Net raw water consumption, Mℓ <sup>1</sup>	276 335	307 269	314 685	313 078	317 052	334 275	319 772	327 252	316 202	323 190
<b>Waste</b>										
Ash produced, Mt	31.65	32.61	32.59	34.41	34.97 <sup>RA</sup>	35.30 <sup>RA</sup>	36.21 <sup>RA</sup>	36.22 <sup>RA</sup>	36.01 <sup>RA</sup>	36.66
Ash sold, Mt	2.7	2.8	2.7	2.5	2.4	2.4	2.3	2.0	2.0	2.1
Ash (recycled), %	8.6	8.5	8.3	7.3	7.0 <sup>RA</sup>	6.8 <sup>RA</sup>	6.4 <sup>RA</sup>	5.5 <sup>RA</sup>	5.6	5.7
Asbestos disposed, tons	144.9	383.0	274.5	991.0	458.0	374.6	448.1	611.5	321.4	3 590.8
Material containing polychlorinated biphenyls thermally destroyed, tons	26.3	61.9	59.8	0.0	10.2	0.9	14.3	422.9	19.1	505.6
<b>Nuclear</b>										
Public individual radiation exposure due to effluents, mSv <sup>4</sup>	0.0012	0.0005	0.0006	0.0010	0.0012	0.0019	0.0024	0.0043	0.0040	0.0045
Low-level radioactive waste generated, cubic metres	164.2	162.9	176.1	164.1	180.7 <sup>RA</sup>	188.2 <sup>RA</sup>	184.7 <sup>RA</sup>	165.3 <sup>RA</sup>	137.8	140.8
Low-level radioactive waste disposed of, cubic metres	118.8	108.0	213.1	377.6	324.0 <sup>RA</sup>	54.0 <sup>RA</sup>	53.8 <sup>RA</sup>	81.0 <sup>RA</sup>	216.0	189.0
Intermediate-level radioactive waste generated, cubic metres	20.8	11.4	33.4	27.6	28.7 <sup>RA</sup>	35.7 <sup>RA</sup>	25.4 <sup>RA</sup>	39.3 <sup>RA</sup>	47.1	23.9
Intermediate-level radioactive waste disposed of, cubic metres	0	0	0	138	178 <sup>RA</sup>	0 <sup>RA</sup>	128 <sup>RA</sup>	0 <sup>RA</sup>	266	474
Used nuclear fuel, number of elements discharged <sup>5</sup>	116	60	56	112	48	56	60	112	56	56
Used nuclear fuel, number of elements discharged, cumulative figure	2 405	2 289	2 229	2 173	2 061	2 013	1 957	1 897	1 785	1 729
<b>Legal contraventions</b>										
Environmental legal contraventions <sup>6</sup>	30	29	20	20	34 <sup>RA</sup>	48	50	63	55	114
Environmental legal contraventions reported in terms of the Operational Health Dashboard, number <sup>7</sup>	2	0	1	1	2 <sup>RA</sup>	2	5	4	0	12

1. In accordance with our policy, the performance of Medupi Units 4 and 5 and Kusile Unit 1, still within their first year after commissioning, have not been included in the KPIs.  
 2. Calculated figures based on coal characteristics and power station design parameters based on coal analysis and using coal burnt tonnages. Figures include coal-fired and gas turbine power stations, as well as oil consumed during power station start-ups and, for carbon dioxide emissions, includes the underground coal gasification pilot plant.  
 3. NO<sub>x</sub> reported as NO<sub>2</sub>, is calculated using average station-specific emission factors (which are measured intermittently) and tonnages of coal burnt.  
 4. The limit set by the National Nuclear Regulator is <math>\leq 0.25\text{mSv}</math>.  
 5. The gross mass of a nuclear fuel element is approximately 670kg, with UO<sub>2</sub> mass typically between 462kg and 464kg.  
 6. The number of incidents for 2016/17 has changed from 28 to 29, due to an incident in February 2017 being ratified as a legal contravention incident for that year.  
 7. Reported in terms of the 2002 definition of the Operational Health Dashboard. From 2008, repeat legal contraventions are included.  
 RA Reasonable assurance provided by the independent assurance provider. Refer to pages 130 to 133 of the integrated report.  
 Q Qualified by the independent assurance provider. Refer to pages 130 to 133 of the integrated report.

## FIVE-YEAR NON-TECHNICAL STATISTICS

Measure and unit	Company					Group				
	2017/18	2016/17	2015/16	2014/15	2013/14	2017/18	2016/17	2015/16	2014/15	2013/14
<b>Finance<sup>1</sup></b>										
Electricity revenue per kWh (including environmental levy), c/kWh	85.06	83.60	76.24	67.91	62.82					
Electricity operating costs, R/MWh	634.69	662.98	628.00	600.72	535.08	622.41	651.98	617.02	587.97	528.70
EBITDA margin, %	24.81 <sup>RA</sup>	20.55	19.13	16.28	16.15	25.91	21.44	20.29	16.54	17.23
EBITDA, R million	43 428	35 989	30 932	23 811	22 101	45 359	37 532	32 811	24 186	23 586
Cash interest cover, ratio	1.18 <sup>RA</sup>	1.73	1.64	1.62	2.14	1.22	1.73	1.73	1.75	2.15
Debt service cover, ratio	0.84	1.37	1.09	0.82	1.28	0.87	1.37	1.14	0.91	1.24
Working capital ratio	1.06	0.86	0.86	0.82	0.70	1.05	0.85	0.83	0.81	0.71
Gross debt/EBITDA, ratio	10.22	11.39	11.71	13.84	12.59	9.71	10.84	10.95	13.60	11.77
Debt/equity (including long-term provisions), ratio	2.70 <sup>RA</sup>	2.22 <sup>RA</sup>	1.71	2.67	2.12	2.52	2.11	1.65	2.50	2.00
Gearing, %	73	69	63	73	68	72	68	62	71	67
Free funds from operations, R million	39 064	46 336	37 954	36 032	29 528	40 022	47 571	39 443	36 179	31 158
Free funds from operations after net interest paid, R million	8 017	19 776	16 260	20 343	18 455	9 147	21 148	17 927	20 564	20 139
Free funds from operations as % of gross debt, %	8.80 <sup>RA</sup>	11.30 <sup>RA</sup>	10.48 <sup>RA</sup>	10.93	10.61	9.09	11.69	10.98	11.00	11.22
Free funds from operations as % of total capex, %	76.68 <sup>RA</sup>	74.46	64.13	63.83	48.98	77.84	75.11	66.23	65.66	52.10
BPP savings, R billion	20.73 <sup>RA</sup>	20.21 <sup>RA</sup>	17.45 <sup>RA</sup>	8.70	2.30					
<b>Building skills</b>										
Headcount (including fixed-term contractors)	41 316	41 940	42 767	41 787	42 923	48 628	47 658	47 978	46 491	46 919
Training spend as % of gross employee benefit costs	5.21 <sup>RA</sup>	4.89 <sup>RA</sup>	4.45 <sup>RA</sup>	6.18 <sup>RA</sup>	7.87 <sup>RA</sup>					
Total engineering learners in the system, number	1 241	1 480	895	1 315	1 962 <sup>RA</sup>					
Total technician learners in the system, number	838	1 209	415	826	815 <sup>RA</sup>					
Total artisan learners in the system, number	1 815	2 155	1 955	1 752	2 383 <sup>RA</sup>					
Learner intake	726 <sup>Q</sup>	3 048 <sup>Q</sup>	1 370	–	–					
<b>Transformation</b>										
<b>Socio-economic contribution</b>										
Corporate social investment committed, R million						192.0 <sup>RA</sup>	225.3	103.6	115.5	132.9 <sup>RA</sup>
Corporate social investment, number of beneficiaries						1 116 044	841 845	302 736	323 882	357 443 <sup>RA</sup>
Job creation on new build projects, number	38 111	39 277	23 169	25 875	25 181 <sup>RA</sup>					
Total number of electrification connections, number <sup>2</sup>	215 519 <sup>RA</sup>	207 436	158 312	160 933	202 780					
<b>Procurement equity</b>										
Local content contracted (Eskom-wide), %	87.16 <sup>RA</sup>	73.37 <sup>Q</sup>	75.22 <sup>Q</sup>	25.13	40.80					
Local content contracted (new build), %	85.59 <sup>RA</sup>	85.78 <sup>Q</sup>	84.04 <sup>RA</sup>	33.62 <sup>LA</sup>	54.60 <sup>RA</sup>					
B-BBEE attributable expenditure, R billion	97.0	137.3	132.0	120.8	125.4 <sup>RA</sup>	102.3	127.7	125.0	116.0	119.4 <sup>RA</sup>
Black-owned expenditure, R billion	53.5	50.4	51.0	47.5	43.6 <sup>RA</sup>	57.6	53.9	52.9	49.4	45.8 <sup>RA</sup>
Black women-owned expenditure, R billion	19.7	17.3	30.2	8.9	9.6 <sup>RA</sup>	20.9	19.4	30.8	9.3	9.8 <sup>RA</sup>
Black youth-owned expenditure, R billion	3.4	1.7	1.3	0.9	1.3 <sup>RA</sup>	3.9	2.0	1.4	0.9	1.3 <sup>RA</sup>
Procurement from B-BBEE compliant suppliers, %	74.24 <sup>RA</sup>	100.75 <sup>RA</sup>	83.08 <sup>RA</sup>	88.89 <sup>RA</sup>	93.90 <sup>RA</sup>	80.25	98.25	81.65	89.39	91.80 <sup>RA</sup>
Procurement from black-owned (BO) suppliers, %	40.93 <sup>RA</sup>	36.98 <sup>RA</sup>	30.98 <sup>RA</sup>	34.91	32.70 <sup>RA</sup>	45.20	41.49	33.61	34.41	35.30 <sup>RA</sup>
Procurement from black women-owned (BWO) suppliers, %	15.08 <sup>RA</sup>	12.67 <sup>RA</sup>	17.72 <sup>RA</sup>	6.61	7.20 <sup>RA</sup>	16.41	14.92	19.30	6.49	7.50 <sup>RA</sup>
Procurement from black youth-owned (BYO) suppliers, %	2.58 <sup>RA</sup>	1.25 <sup>RA</sup>	0.82 <sup>RA</sup>	0.64 <sup>RA</sup>	1.00 <sup>RA</sup>	3.05	1.52	0.94	0.63	1.00 <sup>RA</sup>
Procurement spend with suppliers owned by black people living with disability (BPLwD), % of TMPS	0.11 <sup>RA</sup>	0.02 <sup>RA</sup>	0.01 <sup>RA</sup>	0.00	0.00	0.20	0.02	0.01	0.00	0.00
Procurement spend with qualifying small enterprises (QSE), % of TMPS	7.80 <sup>RA</sup>	7.67 <sup>RA</sup>	4.03 <sup>RA</sup>	6.74	11.90	8.86	8.91	4.62	6.75	15.09
Procurement spend with exempted micro enterprises (EME), % of TMPS	9.32 <sup>RA</sup>	10.15 <sup>RA</sup>	4.81 <sup>RA</sup>	5.12	–	10.21	11.24	5.89	5.78	–
<b>Technology transfer</b>										
Acquisition of intellectual capital, R million	26 <sup>RA</sup>	31 <sup>RA</sup>	54 <sup>RA</sup>	–	–					
Skills development, number of people	63 <sup>RA</sup>	54 <sup>RA</sup>	29 <sup>RA</sup>	–	–					
<b>Employment equity</b>										
Disabilities, number of employees	1 292	1 263	1 271	1 294	1 283 <sup>RA</sup>	1 441	1 396	1 311	1 325	1 305 <sup>RA</sup>
Employment equity – disability, %	3.13 <sup>RA</sup>	3.01 <sup>RA</sup>	2.97 <sup>RA</sup>	3.12 <sup>RA</sup>	2.99 <sup>RA</sup>	2.96	2.93	2.73	2.89	2.77 <sup>RA</sup>
Racial equity in senior management, % black employees	67.97 <sup>RA</sup>	65.77 <sup>RA</sup>	60.90 <sup>RA</sup>	61.58 <sup>RA</sup>	59.50 <sup>RA</sup>	68.31	65.80	61.06	61.70	59.30 <sup>RA</sup>
Racial equity in professionals and middle management, % black employees	75.35 <sup>RA</sup>	73.60 <sup>RA</sup>	71.98 <sup>RA</sup>	72.28 <sup>RA</sup>	71.20 <sup>RA</sup>	75.27	73.50	71.68	71.77	70.60 <sup>RA</sup>
Gender equity in senior management, % female employees	38.25 <sup>RA</sup>	36.69 <sup>RA</sup>	28.07 <sup>RA</sup>	29.83 <sup>RA</sup>	28.90 <sup>RA</sup>	38.20	36.58	28.13	29.82	28.80 <sup>RA</sup>
Gender equity in professionals and middle management, % female employees	38.06 <sup>RA</sup>	36.65 <sup>RA</sup>	36.01 <sup>RA</sup>	36.10 <sup>RA</sup>	35.80 <sup>RA</sup>	37.47	35.98	35.11	35.29	34.90 <sup>RA</sup>

1. Ratios impacted by the restatements in the annual financial statements were restated where possible.

2. Electrification connections for 2017/18 include farmworker connections. Comparatives for the previous years have been adjusted to include farmworker connections.

RA Reasonable assurance provided by the independent assurance provider. Refer to pages 130 to 133 of the integrated report.

Q Qualified by the independent assurance provider.

LA Limited assurance provided by the independent assurance provider.

# POWER STATION CAPACITIES

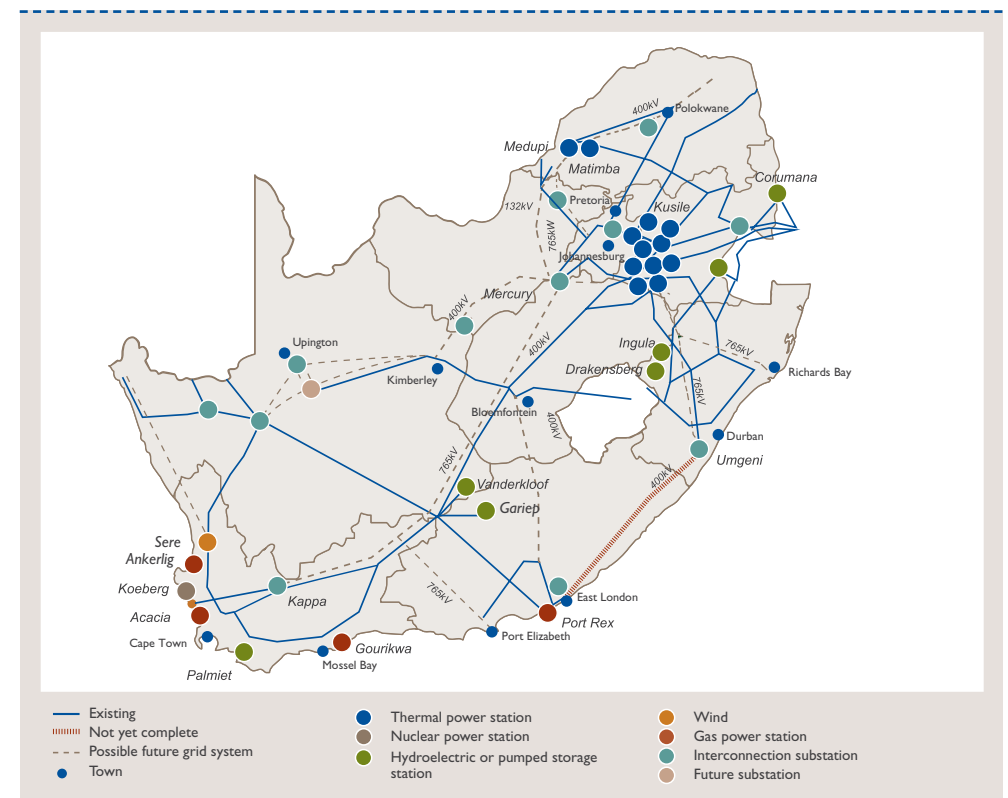
as at 31 March 2018

The difference between installed and nominal capacity reflects auxiliary power consumption and reduced capacity caused by the age of plant.

Name of station	Location	Years commissioned, first to last unit	Number and installed capacity of generator sets, MW	Total installed capacity, MW	Total nominal capacity, MW
<b>Base-load stations</b>				<b>40 180</b>	<b>37 868</b>
<b>Coal-fired (15)</b>					
Arnot	Middelburg	Sep 1971 to Aug 1975	1x370; 1x390; 2x396; 2x400	2 352	2 232
Camden <sup>1,2</sup>	Ermelo	Mar 2005 to Jun 2008	3x200; 1x196; 2x195; 1x190; 1x185	1 561	1 481
Duvha <sup>3</sup>	Emalahleni	Aug 1980 to Feb 1984	5x600	3 000	2 875
Grootvlei <sup>1</sup>	Balfour	Apr 2008 to Mar 2011	4x200; 2x190	1 180	1 120
Hendrina <sup>2,4</sup>	Middelburg	May 1970 to Dec 1976	1x210; 4x200; 2x195; 1x170; 1x168	1 738	1 638
Kendal <sup>5</sup>	Emalahleni	Oct 1988 to Dec 1992	6x686	4 116	3 840
Komati <sup>1,2</sup>	Middelburg	Mar 2009 to Oct 2013	4x100; 4x125; 1x90	990	904
Kriel	Bethal	May 1976 to Mar 1979	6x500	3 000	2 850
Kusile <sup>5,6</sup>	Ogies	Aug 2017	1x799	799	720
		Under construction	5x800		
Lethabo	Vereeniging	Dec 1985 to Dec 1990	6x618	3 708	3 558
Majuba <sup>5</sup>	Volksrust	Apr 1996 to Apr 2001	3x657; 3x713	4 110	3 843
Matimba <sup>5,6</sup>	Lephalale	Dec 1987 to Oct 1991	6x665	3 990	3 690
Matla	Bethal	Sep 1979 to Jul 1983	6x600	3 600	3 450
Medupi <sup>5</sup>	Lephalale	Aug 2015 to Nov 2017	3x794	2 382	2 157
		Under construction	3x794		
Tutuka	Standerton	Jun 1985 to Jun 1990	6x609	3 654	3 510
<b>Nuclear (1)</b>					
Koeberg	Cape Town	Jul 1984 to Nov 1985	2x970	1 940	1 860
<b>Peaking stations</b>					
<b>Gas/liquid fuel turbine stations (4)</b>				<b>2 426</b>	<b>2 409</b>
Acacia	Cape Town	May 1976 to Jul 1976	3x57	171	171
Ankerlig	Atlantis	Mar 2007 to Mar 2009	4x149.2; 5x148.3	1 338	1 327
Gourikwa	Mossel Bay	Jul 2007 to Nov 2008	5x149.2	746	740
Port Rex	East London	Sep 1976 to Oct 1976	3x57	171	171
<b>Pumped storage schemes (3)<sup>7</sup></b>				<b>2 732</b>	<b>2 724</b>
Drakensberg	Bergville	Jun 1981 to Apr 1982	4x250	1 000	1 000
Ingula	Ladysmith	June 2016 to Feb 2017	4x333	1 332	1 324
Palmiet	Grabouw	Apr 1988 to May 1988	2x200	400	400
<b>Hydroelectric stations (2)<sup>8</sup></b>				<b>600</b>	<b>600</b>
Gariep	Norvalspont	Sep 1971 to Mar 1976	4x90	360	360
Vanderkloof	Petrusville	Jan 1977 to Feb 1977	2x120	240	240
<b>Total used for capacity management purposes</b>				<b>47 878</b>	<b>45 461</b>
<b>Renewable energy</b>					
<b>Wind energy (1)<sup>9</sup></b>					
Sere	Vredendal	Mar 2015	46x2.2	100	100
<b>Total capacity including renewable energy</b>				<b>47 978</b>	<b>45 561</b>
<b>Other hydroelectric stations (4)<sup>9</sup></b>				<b>61</b>	<b>-</b>
Colley Wobbles	Mbashe River		3x14	42	-
First Falls	Umtata River		2x3	6	-
Ncora	Ncora River		2x0.4; 1x1.3	2	-
Second Falls	Umtata River		2x5.5	11	-
<b>Total Eskom power station capacities (30)</b>				<b>48 039</b>	<b>45 561</b>
<b>Available nominal capacity – Eskom-owned</b>					<b>94.84%</b>

Name of station	Total nominal capacity MW
<b>Nominal capacity of Eskom-owned power stations</b>	
	<b>45 561</b>
<b>Independent power producers (IPP) capacity</b>	
	<b>4 779</b>
Concentrating solar power	300
Gas/liquid fuel	1 005
Hydroelectric	14
Landfill	8
Solar PV energy	1 474
Wind	1 978
<b>Total nominal capacity available to the grid – Eskom and IPPs</b>	
	<b>50 340</b>

- Former moth-balled power stations that have been returned to service. The original commissioning dates were:
  - Camden was originally commissioned between August 1967 and September 1969.
  - Grootvlei was originally commissioned between June 1969 and November 1977.
  - Komati was originally commissioned between November 1961 and March 1966.
- Due to technical constraints, some coal-fired units at these stations have been de-rated.
- Duvha Unit 3 (600MW installed/575MW nominal capacity) removed from installed/nominal base.
- Hendrina Unit 3 (195MW installed/185MW nominal capacity) removed from installed/nominal base.
- Dry-cooled unit specifications based on design back-pressure and ambient air temperature.
- Medupi Units 5 and 4, and Kusile Unit 1 were commissioned during the year.
- Pumped storage facilities are net users of electricity. Water is pumped during off-peak periods so that electricity can be generated during peak periods.
- Use restricted to periods of peak demand, dependent on the availability of water in the Gariep and Vanderkloof dams.
- Installed and operational, but not included for capacity management purposes.



## POWER LINES AND SUBSTATIONS IN SERVICE

at 31 March 2018

Category	2017/18	2016/17	2015/16	2014/15	2013/14
<b>Power lines</b>					
<b>Transmission power lines, km<sup>1</sup></b>	<b>31 951</b>	32 220	31 957	31 107	29 924
765kV	2 784	2 782	2 608	2 235	2 235
533kV DC (monopolar)	1 035	1 035	1 035	1 035	1 035
400kV <sup>2</sup>	18 804	18 943	18 872	18 377	17 011
275kV <sup>2</sup>	7 218	7 358	7 343	7 361	7 361
220kV	1 221	1 220	1 217	1 217	1 217
132kV	889	882	882	882	1 065
<b>Distribution power lines, km</b>	<b>48 550</b>	48 805	49 210	48 278	46 093
132kV and higher	24 646	25 011	25 528	24 929	22 719
33 to 88kV	23 904	23 794	23 682	23 349	23 374
<b>Reticulation power lines, km</b>					
22kV and lower	293 324	296 188	288 550	281 510	276 027
<b>Underground cables, km</b>	<b>7 769</b>	7 499	7 571	7 436	7 293
132kV and higher	79	75	66	65	65
33 to 88kV	415	215	375	361	364
22kV and lower	7 275	7 209	7 130	7 010	6 864
<b>Total all power lines, km</b>	<b>381 594</b>	384 712	377 287	368 331	359 337
<b>Total transformer capacity, MVA</b>	<b>285 737</b>	276 583	244 637	239 490	232 179
Transmission, MVA <sup>3</sup>	151 105	147 415	143 440	139 610	138 350
Distribution and reticulation, MVA	134 632	129 168	101 197	99 880	93 829
<b>Total transformers, number</b>	<b>383 284</b>	372 995	342 387	335 242	329 314
Transmission, number	442	433	427	423	420
Distribution and reticulation, number	382 842	372 562	341 960	334 819	328 894

1. Transmission power line lengths are included as per distances from the Geographic Information System.
2. The decrease in the km of transmission lines in service as at end March 2018 is due to the decommissioning of a 275kV line in order to build a new 400kV line on the same servitude. In addition, a portion of another 400kV line was temporarily taken out of service in order to commission a new substation and the associated turn-in lines.
3. Base of definition: transformers rated  $\geq 30\text{MVA}$  and primary voltage  $\geq 132\text{kV}$ .

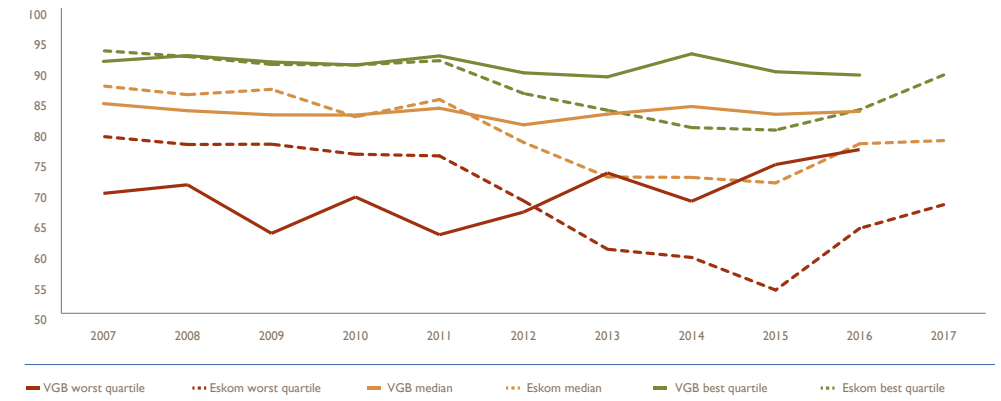
## BENCHMARKING INFORMATION

The fact sheet details the benchmarking exercises undertaken by Generation Division.

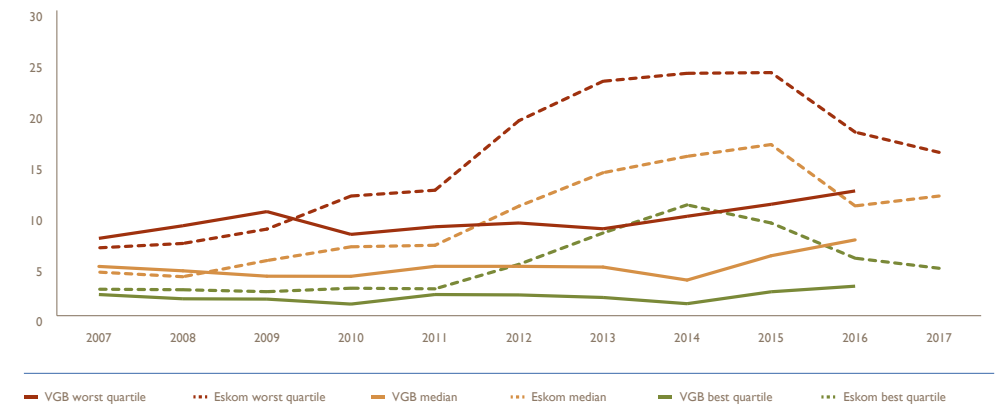
The results of benchmarking of our coal-fired and nuclear stations are set out under "Our infrastructure – Generation performance" on page 93

### Coal-fired stations

Energy availability factor (EAF), all coal sizes (VGB units exclude Eskom units), %



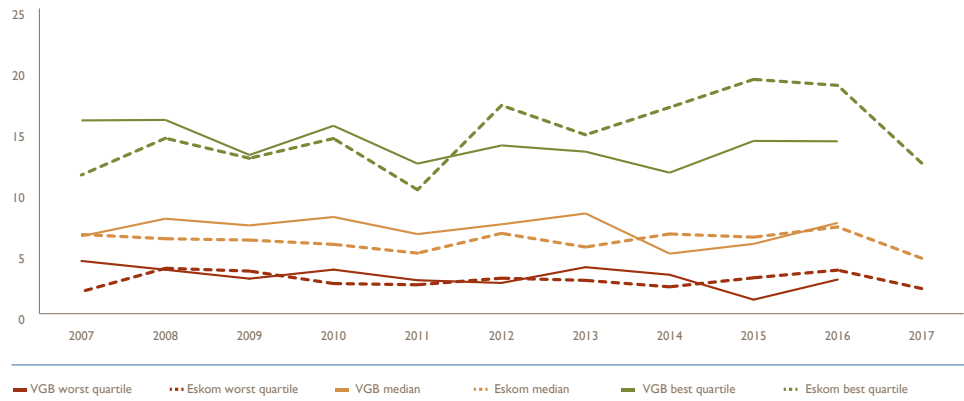
Unplanned capability loss factor (UCLF), all coal sizes (VGB units exclude Eskom units), %



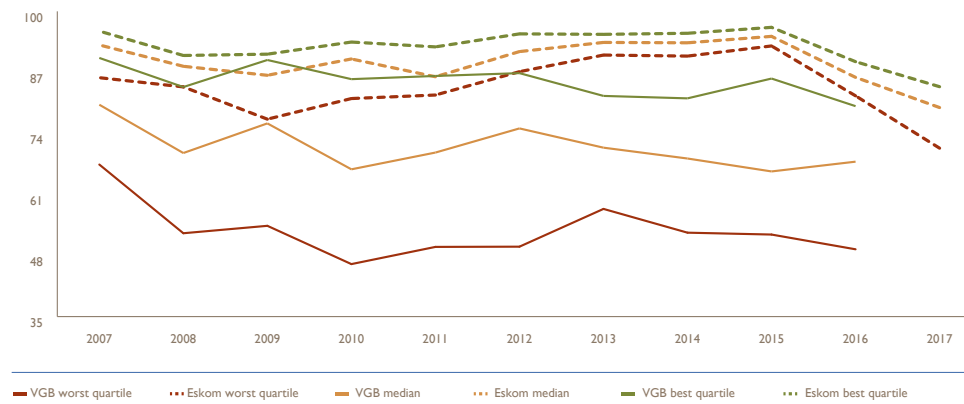
# BENCHMARKING INFORMATION

continued

Planned capability loss factor (PCLF), all coal sizes (VGB units exclude Eskom units), %

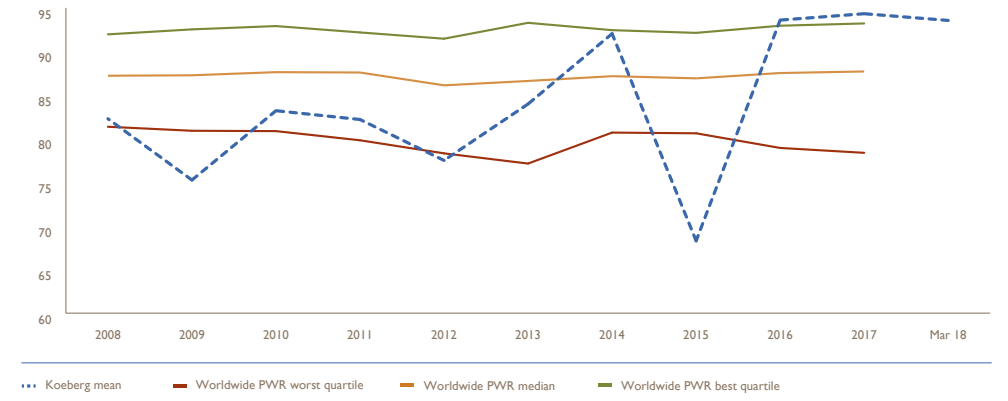


Energy utilisation factor (EUF), all coal sizes (VGB units exclude Eskom units), %

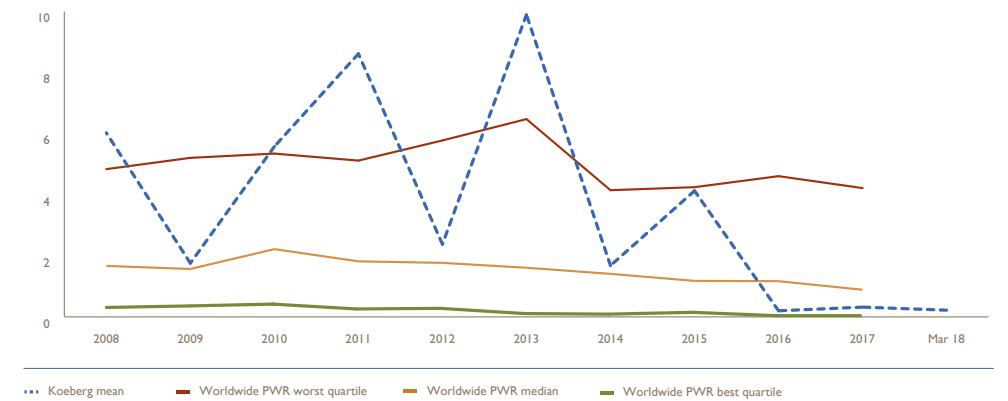


## Koeberg Nuclear Power Station

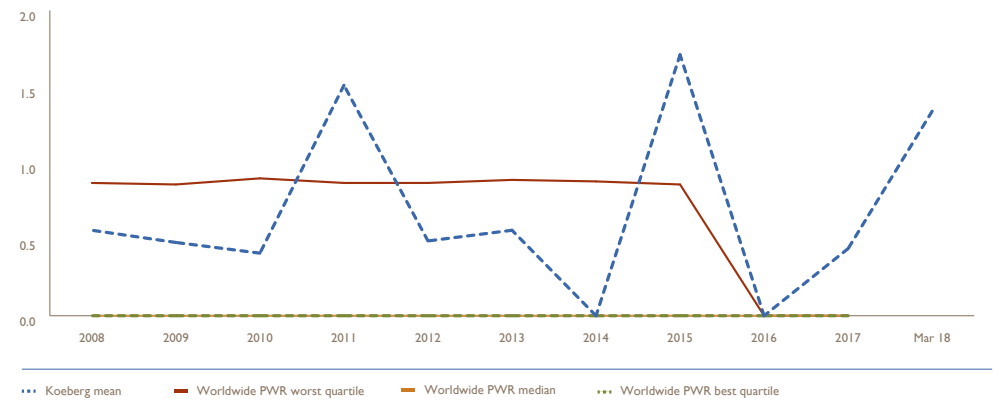
Unit capability factor (UCF) for all pressurised water reactor (PWR) units worldwide, %



Unplanned capability loss factor (UCLF) for all pressurised water reactor (PWR) units worldwide, %



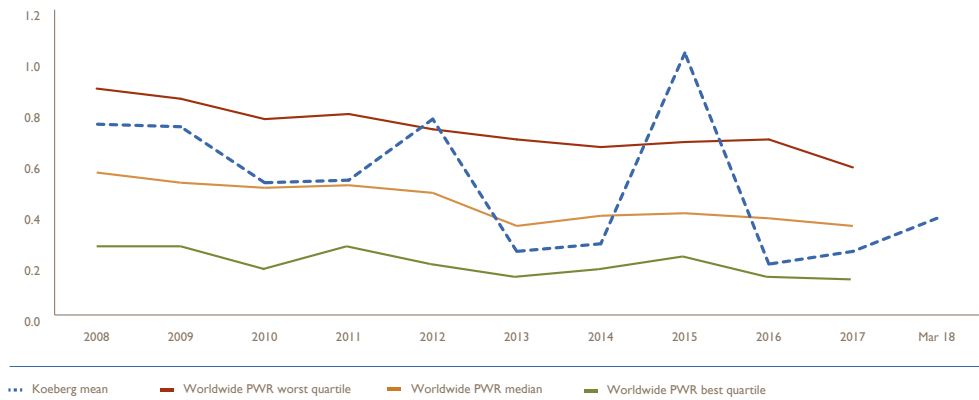
Unplanned automatic scrams for all pressurised water reactor (PWR) units worldwide, UA7 rate per 7 000 hours



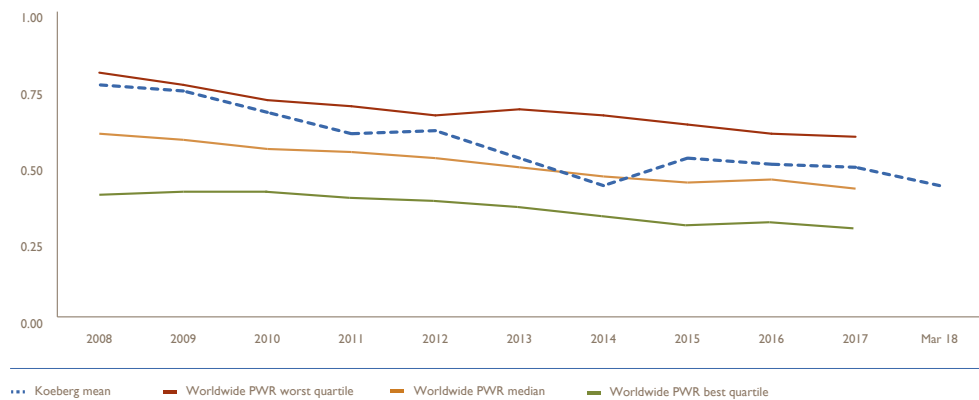
## BENCHMARKING INFORMATION

continued

### 12-month collective radiation exposure (CRE) for all pressurised water reactor (PWR) units worldwide, man-Sieverts per unit

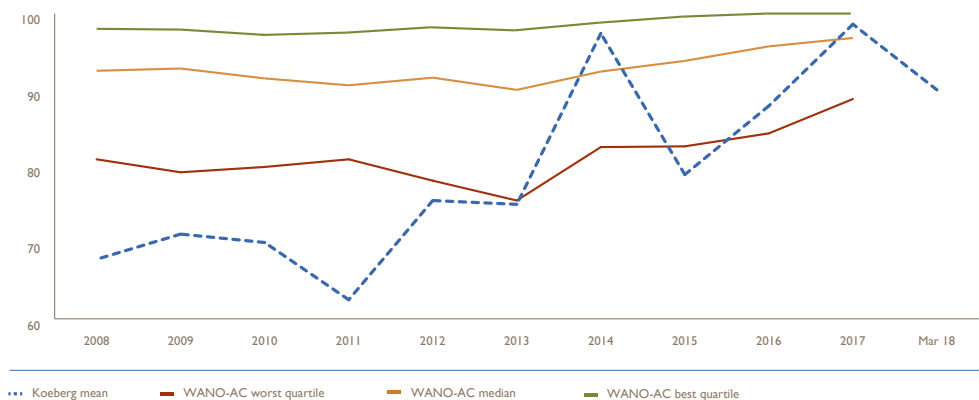


### 36-month collective radiation exposure (CRE) for all pressurised water reactor (PWR) units worldwide, man-Sieverts per unit



The smoothing over a longer period than used in the benchmarks above takes into account the frequency of refuelling outages, of which three occur per two-year moving window.

### WANO index for members of WANO Atlanta Center, various reactor types



## CUSTOMER INFORMATION

Category	2017/18	2016/17	2015/16	2014/15	2013/14
<b>Number of Eskom customers</b>					
<b>Local</b>	<b>6 258 605</b>	5 976 546	5 688 629	5 477 591	5 232 904
Distributors	800	802	801	804	801
Residential <sup>1</sup>	<b>6 120 122</b>	5 838 754	5 550 307	5 338 723	5 093 847
Commercial	<b>51 848</b>	50 956	50 816	50 613	50 425
Industrial	<b>2 703</b>	2 706	2 733	2 773	2 781
Mining	<b>993</b>	1 012	1 013	1 034	1 054
Agricultural	<b>81 638</b>	81 806	82 450	83 136	83 489
Rail	<b>501</b>	510	509	508	507
<b>International</b>	<b>11</b>	11	11	11	11
Utilities	<b>7</b>	7	7	7	7
End users across the border	<b>4</b>	4	4	4	4
	<b>6 258 616</b>	5 976 557	5 688 640	5 477 602	5 232 915

### Electricity sales per customer category, GWh

<b>Local</b>	<b>196 922</b>	199 028	201 022	204 274	205 525
Distributors	<b>87 133</b>	89 718	89 591	91 090	91 262
Residential <sup>1</sup>	<b>12 302</b>	11 863	11 917	11 586	11 017
Commercial	<b>10 539</b>	10 339	10 150	9 644	9 605
Industrial	<b>47 854</b>	48 295	50 150	53 467	54 658
Mining	<b>30 235</b>	30 559	30 629	29 988	30 667
Agricultural	<b>5 711</b>	5 405	5 733	5 401	5 191
Rail	<b>3 148</b>	2 849	2 852	3 098	3 125
<b>International</b>	<b>15 268</b>	15 093	13 465	12 000	12 378
Utilities	<b>6 384</b>	5 750	4 018	2 797	3 401
End users across the border	<b>8 884</b>	9 342	9 447	9 203	8 977
	<b>212 190</b>	214 121	214 487	216 274	217 903

### International sales to countries in southern Africa, GWh

<b>International sales to countries in southern Africa, GWh</b>	<b>15 268</b>	15 093	13 465	12 000	12 378
Botswana	<b>147</b>	984	1 099	1 237	1 608
Lesotho	<b>276</b>	252	205	230	122
Mozambique	<b>8 326</b>	8 120	8 281	8 360	8 314
Namibia	<b>2 147</b>	2 089	1 746	924	1 248
Swaziland	<b>839</b>	986	1 044	882	741
Zambia	<b>362</b>	352	344	16	143
Zimbabwe	<b>2 250</b>	1 743	252	108	154
Short-term energy market <sup>2</sup>	<b>921</b>	567	494	243	48

1. Prepayments and public lighting are included under residential.
2. The short-term energy market consists of all the utilities in the southern African countries that form part of the Southern African Power Pool. Energy is traded on a daily, weekly and monthly basis as there is no long-term bilateral contract.

## CUSTOMER INFORMATION

continued

Category	2017/18	2016/17	2015/16	2014/15	2013/14
<b>Electricity revenue per customer category, R million</b>					
<b>Local</b>	<b>170 530</b>	167 813	154 959	140 074	129 688
Distributors	72 935	73 009	66 396	60 051	55 371
Residential <sup>1</sup>	14 585	14 070	12 884	11 361	10 181
Commercial	11 725	11 279	10 157	8 599	7 940
Industrial	33 505	32 701	31 412	30 377	28 305
Mining	26 277	25 915	23 895	20 848	19 829
Agricultural	8 154	7 659	7 349	6 247	5 645
Rail	3 151	2 990	2 755	2 591	2 417
IPP network charge	198	190	111	–	–
<b>International</b>	<b>9 530</b>	10 682	8 055	6 306	5 887
Utilities	5 696	6 632	4 163	2 988	2 837
End users across the border	3 834	4 050	3 892	3 318	3 050
<b>Gross electricity revenue</b>	<b>180 060</b>	178 495	163 014	146 380	135 575
Environmental levy included in revenue <sup>2</sup>	430	512	513	485	1 322
Less: Revenue capitalised <sup>3</sup>	(2 172)	(717)	(367)	–	(28)
Less: IAS 18 revenue reversal <sup>4</sup>	(3 277)	(3 196)	(1 472)	(597)	–
<b>Electricity revenue per note 32 in the annual financial statements</b>	<b>175 041</b>	175 094	161 688	146 268	136 869





1. Prepayments and public lighting are included under residential.

2. The environmental levy of 2c/kWh tax was effective from 1 July 2009 to 31 March 2011. On 1 April 2011 the levy was raised to 2.5c/kWh. On 1 July 2012 the levy was raised to 3.5c/kWh. The levy is payable for electricity produced from non-renewable sources (coal, nuclear and petroleum). The levy is raised on the total electricity production volumes and is recovered through sales.

3. Revenue from the sale of production, while testing generating plant not yet commissioned, is capitalised to plant.

4. The IAS 18 principle of only recognising revenue if it is deemed collectable at the date of sale, as opposed to recognising the revenue and then impairing the customer debt when conditions change, has been applied since 2015. External revenue to the value of R3 277 million was thus not recognised at 31 March 2018.

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Group company secretary	Company registration number
Office of the Company Secretary PO Box 1091 Johannesburg 2000	Eskom Holdings SOC Ltd 2002/015527/30

## OUR SUITE OF REPORTS

Our 2018 suite of reports consists of the following:



### Integrated report and supplementary information

The integrated report provides an overview of our strategy, governance and performance, and is prepared in accordance with the IIRC's International <IR> Framework, and subject to combined assurance, with verification by our internal audit department and reasonable assurance on some KPIs provided by our external auditors. Supplementary information, which may be of interest to some stakeholders, is available at the back of the report.



### Annual financial statements

The consolidated annual financial statements of Eskom Holdings SOC Ltd have been prepared in accordance with IFRS as well as the requirements of the Public Finance Management Act, 1999 and the Companies Act, 2008, and were audited by our independent auditors, SizweNtsalubaGobodo Inc.



### Foundation report

The Eskom Development Foundation NPC (the Foundation), although now incorporated into Eskom, coordinates and executes our corporate social investment activities which support certain business imperatives. The report details our CSI activities during the 2017/18 year.



All documents are available online at [www.eskom.co.za/IR2018](http://www.eskom.co.za/IR2018)

### Forward-looking statements

Certain statements in this report regarding Eskom's business operations may constitute forward-looking statements. These include all statements other than statements of historical fact, including those regarding the financial position, business strategy, management plans and objectives for future operations. Forward-looking statements constitute our current expectations based on reasonable assumptions, data or methods that may be incorrect or imprecise and that may be incapable of being realised and, as such, are not intended to be a guarantee of future results. Actual results could differ materially from those projected in any forward-looking statements due to various events, risks, uncertainties and other factors. Eskom neither intends to nor assumes any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Eskom is a supporter member of the

