

Integrated Report 2014



Shift performance,
grow sustainably

Integrated Report
2014



In 1994, Eskom and the government were faced with the enormous task of extending electricity access to all South Africans in order to improve their quality of life. At the same time, there was the need to expand the country's generating capacity to support economic growth. This diagram shows Eskom's journey since the start of 1994 to where it is today

Twenty years of powering a democratic South Africa

1994

- Eskom operates and maintains 37 636MW of generating capacity, 238 964km of power lines and 167 413MVA of substation capacity
- Eskom employs 40 128 people
- Eskom has 872 509 customers
- Eskom commits to the Reconstruction and Development Programme (RDP)
- Since the beginning of 1991 Eskom has electrified a total of 384 911 homes
- Eskom forms the Eskom Development Foundation NPC

2000

- RDP for the period 1994 to 2000:
 - 2 391 684 electrification connections are made
 - Real price of electricity reduces by 14.1%
 - Eskom achieves racial equity in management, professional and supervisory staff at 50.7%
 - 2 631 Eskom trainees and bursars complete training
 - Illiteracy in Eskom reduces from 45% to less than 10% as a result of adult basic education training
- The South African efficient lighting initiative is established to promote energy efficiency

2002

- Successful participation in the world summit on sustainable development held in South Africa

2003

- Eskom commissions the Klipheuwel wind farm demonstration facility
- Decision is made to commence the return to service of the mothballed Camden, Grootvlei and Komati power stations

2005

- Eskom spends R10.3 billion on black economic empowerment
- Eskom has electrified a total of 3 210 557 homes since 1994
- Eskom tasked to build 70% of new generation capacity, with the remaining 30% to be built by independent power producers

2006

- Klipheuwel wind farm demonstration facility (3MW) placed into commercial operation

2007

- Construction at Medupi and work at Kusile power stations begin
- Eskom completes the first four units at Ankerlig power station and first three units at Gourikwa power station – liquid-fuel powered (1 044MW of open-cycle gas turbines)

2008

- Eskom implements rotational load shedding between October 2007 and February 2008
- Recovered coal supplies and reliability of supply by April 2008
- 5 368 learners in the pipeline of whom 85% are studying in technical fields

2009

- Final five units at Ankerlig and two units at Gourikwa completed (1 040MW of open-cycle gas turbines)

2011

- Eskom kept the lights on when South Africa hosted a successful 2010 FIFA World Cup™
- Eskom issues a US dollar bond which raised USD 1.75 billion
- Operation Khanyisa launched to combat electricity theft

2013

- Final unit of Camden power station completed (1 571MW total capacity of the station)
- Eskom signs IPP contracts in terms of the Department of Energy's first round of the renewable IPP programme
- Rail coal terminals operating at Camden and Tukuku power stations reduce the size of the road transport fleet, contributing to a 31% year-on-year decrease in public road fatalities involving coal trucks
- MYPD 3 determination of 8%

2014

- Eskom operates and maintains 41 995MW of generating capacity, 359 337km of power lines and 232 179MVA of substation capacity
- Eskom employs 46 919 people and achieves racial equity in middle management and professionals at 70.6%
- Eskom has 5 232 915 customers
- Eskom group spends R119.4 billion with B-BBEE compliant suppliers
- Over 4.5 million homes electrified since 1991
- Eskom committed R132.9 million on corporate social investment projects

Navigation icons



Becoming a high-performance organisation



Leading and partnering to keep the lights on



Reducing Eskom's environmental footprint and pursuing low-carbon growth



Securing future resource requirements



Implementing coal haulage and the road-to-rail migration plan



Pursuing private-sector participation



Transformation (including the business productivity programme)



Ensuring Eskom's financial sustainability

The navigation icons above are used throughout the report to link stakeholder concerns, material items, performance and key performance indicators to strategic objectives

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Top: New poles are planted for new connections in the Cosmos area in Johannesburg
Bottom: Eskom employees do maintenance on a high-voltage powerline

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

- ✓ Actual performance met or better than the target
- ⊖ Actual performance almost met the target
- ✗ Actual performance did not achieve the target

Online content

The table below sets out the reports that are available online:

Report	Purpose and basis of preparation	Online reference
Annual financial statements for the year ended 31 March 2014	The group and company financial statements of Eskom Holdings SOC Limited in accordance with International Financial Reporting Standards and the requirements of the Public Finance Management Act of South Africa as well as the Companies Act of South Africa	www.eskom.co.za/IR2014/01.html
The Eskom supplementary and divisional report	The supplementary and divisional report supports and expands on the information in the integrated report. It offers a detailed report about the performance of Eskom's operating divisions, key strategic and support functions, and affiliated entities for the 2013/14 year	www.eskom.co.za/IR2014/02.html
The King Report on Corporate Governance (King III) checklist	As required by King III, Eskom has identified and disclosed the King III principles that do not apply, together with an explanation, and areas where further improvement is necessary	www.eskom.co.za/IR2014/03.html
The Eskom Foundation report	The Eskom Development Foundation NPC ("Foundation") is responsible for the coordination and execution of Eskom's corporate social investment (CSI) strategy in support of Eskom's business imperatives. This reports details the operations and achievements of the Foundation for the 2013/14 year	www.eskom.co.za/IR2014/04.html
The Eskom Factor report	The Eskom Factor is a collective term to explain Eskom's footprint in South Africa, which has been quantified through a comprehensive assessment of the company's economic, social and environmental impact on the country, both positive and negative, within the financial year April 2010 to March 2011	www.eskom.co.za/IR2014/05.html
The Eskom interim integrated report for the six months ending 30 September 2013	The September 2013 interim integrated report sets out a contextual review of Eskom's overall performance for the period 1 April to 30 September 2013 and should be read in conjunction with the integrated report for the year ended 31 March 2013	www.eskom.co.za/IR2014/06.html

Top: Rotek, a subsidiary of Eskom Enterprises, performs some of the maintenance on power station components

Bottom: The air-cooled condenser duct takes steam from the turbine to the air-cooled condenser plant at Kusile power station



01

About this report

This integrated report aligns with best practices in integrated reporting. It includes the principles of integrated reporting contained in the international integrated reporting framework, published by the International Integrated Reporting Council (IIRC) in December 2013, and takes into account other guidelines published in this regard

Eskom's approach to integrated reporting

Integrated reporting brings greater cohesion and efficiency to the reporting process. It encourages integrated thinking to break down internal silos and reduce duplication in content, so improving the quality of information available to key stakeholders.

An integrated report focuses on value creation over the short, medium and long term. It uses the "six capitals" in the framework as a guide to ensure that a company considers all resources and how they interact with each other. The integrated report should indicate how the company's value creation process is impacted by the company's internal and external environment.

This report focuses on qualitative and quantitative items that are material to Eskom's operations and strategic objectives. The question of what is "material" has been determined by the board and executive management through extensive consultation within Eskom as well as with Eskom's stakeholders, while taking into consideration Eskom's strategic objectives, risk assessments and the way in which its value chain operates (refer to page 51 for more information regarding the determination of material items).

Eskom's integrated report steering committee guides the company in compiling this report and ensures alignment with other reporting processes. The finance director chairs this committee and reports on the process to the executive management committee.

The integrated reporting pilot programme

Eskom has been a member of the IIRC's pilot programme since its inception. More than 100 companies from around the globe have joined the programme's business network since it was launched in October 2011. These companies interact with the council and each other through regional and sector meetings, through web-based seminars, conferences and through a dedicated pilot programme community website. This wide-ranging interaction provides the opportunity to discuss and challenge technical material, test its application and share knowledge and experiences.

Eskom's 2012/13 integrated report was well received and was followed by an interim integrated report in December 2013. Reviews of these reports identified a number of ways to improve the report, which have been considered in compiling the 2013/14 report.

Board responsibility and approval statement

The board, assisted by its respective committees, is ultimately responsible for overseeing the integrity and completeness of the integrated report. The board have applied their collective mind

Majuba power station
near Volksrust in
KwaZulu-Natal

About this report (continued)

to the preparation and presentation of the integrated report and have concluded that it is presented in accordance with the international integrated reporting framework version 1.0 (IIRC framework).

On 29 May 2014, the board approved the 2014 integrated report taking into consideration the completeness of the material items it deals with and the reliability of data and information presented, in line with the combined assurance process followed.

Sustainability

Global Compact LEAD

Eskom was one of the first signatories to the United Nations Global Compact (UNGC) in 1999 and is committed to its principles. Eskom reports on its progress in complying with the UNGC principles on an annual basis. Eskom is also a UNGC LEAD company, recognised for leadership in the sustainability field.

Global Reporting Initiative (GRI)

Eskom continues to use the GRI G3 guidelines, supported by Eskom internally developed guidelines, as a basis for reporting its sustainability information. Eskom is currently assessing the efficacy of transitioning from G3 to G4 as well as the application of the IIRC framework.

Sustainability audit, combined assurance and King III

Selected sustainability KPIs were subject to external assurance. These are marked with an "RA" in appendix A and B on pages 170 to 177. The assurance opinion is on page 180.

Eskom follows a combined assurance approach (refer page 75 for detail). Eskom's reports are also prepared with due consideration to King III. Refer to www.eskom.co.za/IR2014/03.html for more information on King III.

Reporting boundary

This integrated report reviews Eskom's performance for the year from 1 April 2013 to 31 March 2014.

This report holistically examines Eskom's performance in relation to its strategic objectives (refer pages 83 to 161), taking into account the environment in which the company operates, its long-term goals, the risks that might prevent it from achieving those goals and the measures put in place to mitigate these risks (refer Eskom's business model on page 31 for more detail on the company's operations).

Unless otherwise stated, the information in this report refers to the Eskom group, comprising the Eskom business and its major subsidiaries (Eskom Enterprises SOC Limited, Escap SOC Limited, Eskom Finance Company SOC Limited and the Eskom Development Foundation NPC). (Refer page 42 for more detail.)

Structure of the report

This report includes information on Eskom's business model, its approach to leadership and governance and its operational performance during the year under review. It is structured as follows:

- **Letter from the chairperson** discusses key reflections and provides insight into the shareholder's vision for the utility
- **The chief executive's report** provides an executive summary, highlighting key areas in operational performance, Eskom's progress in achieving its long-term strategic objectives and the main areas that will need to be addressed during the year ahead
- **The shareholder's compact** details Eskom's performance against key performance indicators as set by its shareholder, the government of South Africa, represented by the Minister of Public Enterprises
- **About the Eskom group** outlines Eskom's business model, highlighting the internal and external factors that affect its operations. It details the company's corporate structure and its purpose, values and strategic objectives and outlines Eskom's strategic priorities for the year to come and beyond
- **Defining material items in partnership with stakeholders** explains Eskom's methodology in identifying the material items that have a bearing on performance and the risks relating to these material items. It also provides a reference for where these items are discussed in greater detail in the report
- **Leadership and corporate governance** provides insight into Eskom's corporate governance framework. It also sets out leadership's key focus areas for the year under review and details the link between performance and remuneration
- **Performance on strategic objectives** details Eskom's performance on key performance indicators relevant to its eight strategic objectives. It includes performance targets and actual measurements for key indicators relevant to each objective, as well as commentary on performance. Operating highlights, challenges and future focus areas are also summarised
- **Summarised group financial results** are a summarised version of the full annual financial statements
- **Appendices** consist of:
 - A table containing the key performance indicators discussed in this report
 - A table containing other performance indicators
 - An overview of awards Eskom received in 2013/14
 - Sustainability assurance statements reflecting Eskom's sustainability responsibilities, and approval and assurance statements from Eskom and the external assurance provider
 - A list of abbreviations and acronyms, and a glossary
 - Eskom's contact details

Letter from the chairperson



In the two decades since South Africa achieved its freedom, our country has made enormous progress. Eskom has played a central role in this transformation. Between 1994 and 2014, our generating fleet capacity has been expanded from 37 636MW to 41 995MW, and our power lines have increased from 238 964km to 359 337km. Over the same

period, the proportion of households with access to electricity has risen from 44% to 85%¹. Since the inception of the capacity expansion programme in 2005, a total of 8 930 individuals have participated in skills development and a significant number of jobs have been created through these mega projects

There is a need for energy security in South Africa to support the country's much anticipated economic growth in the future. Eskom is committed to its purpose to provide sustainable electricity solutions to grow the economy and improve the quality of life of all South Africans. In the years ahead, the current capacity expansion programme will, once completed, result in a more secure national power supply that can meet the country's needs.

South Africa is now experiencing the consequences of deferring planning and investment decisions in years gone by. In order to keep the lights on, Eskom has had to run its generating plant at significantly higher load factors, which continues to have a negative impact on the overall plant performance and the health of the plant. Even as new capacity enables Eskom to bridge the gap, careful management of existing resources is required to ensure that we do not push our ageing plant beyond sustainable limits.

Over the past year, Eskom has worked extremely hard to keep the lights on and, apart from 14 hours in March 2014, we have done so successfully. We recognise that load shedding has serious economic and social impacts and are working tirelessly to avoid this, keeping in mind that our mandate is to ensure the integrity of South Africa's power system. All of our resources – human, technical and financial – are geared towards ensuring that electricity generation, transmission and distribution remain secure and sustainable over the long term. Eskom resorts to load shedding only when not doing so could lead to a longer, more damaging shutdown of the entire system.

The electricity tariff approved by the National Energy Regulator of South Africa in 2013 resulted in lower revenue than Eskom has applied for which has serious consequences for our business and future sustainability. We have launched the business productivity programme which aims to reduce cost, increase productivity and enhance efficiencies, but the revenue shortfall cannot be addressed through cost savings and efficiencies alone. We continue to engage our stakeholders in this regard, but cost-reflective tariffs remain a requirement.

It remains critical for us to balance the short-term priority of security of supply with long-term operational and financial sustainability and this entails difficult trade-offs to be made, amongst others:

- Given the tight reserve margin, we have operated the more expensive diesel-fuelled open-cycle gas turbine (OCGT) stations far above previous load factors to ensure a continuous supply of electricity. In light of our revenue outlook, this situation is not sustainable
- Eskom's Generation sustainability strategy will improve plant health and reliability in the long term, but the need for maintenance should be balanced with the current power system and financial constraints
- Ensuring that the older coal-fired stations meet the strict atmospheric emission standards is a challenge. Should our older plant persistently exceed the legal limits for atmospheric emissions, the board may have to consider using the plant at reduced capacity, which would place even greater pressure on security of supply and possibly have a negative financial impact

These are difficult trade-offs that not only Eskom, but the country, should consider.

Integrated decision-making at a policy level is needed to ensure that the country looks beyond the end of the current capacity expansion programme. This involves planning for new power stations in a timely manner, including the diversification of energy sources, building and strengthening the distribution and transmission networks, addressing environmental concerns, securing an adequate, affordable supply of primary energy as well as moving towards cost-reflective tariffs.

Clarity on new power stations beyond Kusile is required for all participants in the electricity sector. Nearly two-thirds of Eskom's power stations are beyond the midpoint of their expected lifespans. While we have not yet been allocated any new base-load capacity after Kusile, we are exploring diversification of our energy sources to complement our generating fleet in future, thus ensuring security of supply to the country. This includes the development of a gas strategy, which entails the conversion to combined-cycle gas turbines in the short term and upstream gas activities in the long term. These decisions are not Eskom's and we are confident that, working with the shareholder, these questions will be addressed comprehensively during the period ahead.

On behalf of the shareholder and the board, I would like to thank Mr Brian Dames, Eskom's former chief executive, who stepped down at the end of the reporting period. Brian spent 27 years with Eskom and brought both skill and dedication to his position. The position of chief executive has been filled by Eskom board member, Mr Collin Matjila, on an interim basis until a permanent replacement is identified.

We welcome Ms Tsholofelo Molefe, formerly the group executive: Group Customer Services, as our new finance director.

1. Based on the StatsSA 2012 General Household survey, revised in October 2013.

Letter from the chairperson (continued)

The board thanks the executive management committee for their vigilance and determination in confronting the challenges facing Eskom. We have a highly competent management team in place. We recognise, however, that the vacancies at senior level needs to be addressed. This will be one of the first priorities of the incoming chief executive, who may also want to shape the management structure.

A note of appreciation is owed to our former shareholder representative, the Honourable Minister Malusi Gigaba and the Department of Public Enterprises, who have supported and guided Eskom on the path to sustainable growth. Eskom's board and management have been fortunate to have an active and accessible shareholder representative who enabled us to understand government's thinking on key issues. The overall strategic direction of Eskom is aligned to the Department of Public Enterprises' vision statement "To drive investment, productivity and transformation in its portfolio of state-owned companies, their customers and suppliers so as to unlock growth, drive industrialisation, create jobs and develop skills."

This report covers a period when a democratic South Africa bid farewell to its founding president, Nelson Mandela, who was an inspiration to all of humanity. As he once said, "After climbing a great hill, one only finds that there are many more hills to climb." This is precisely the situation facing Eskom. We are dedicated to fulfilling our mandate, but the board will not allow Eskom to commit itself beyond its means. It is critical for Eskom to ensure a balance between security of supply, financial and operational sustainability and environmental compliance and to responsibly manage the trade-offs that are required.

Drawing inspiration from former President Mandela, we will successfully confront the challenges we face in the years ahead.



Zola Tsotsi
Chairperson



A team from the Cullinan technical service centre fix a technical fault on a distribution line

Chief executive's report



Eskom's going-concern status will continue to be a key focus for the coming year as the revenue shortfall created by the MYPD 3 decision cannot be solved through cost savings and efficiencies alone – cost-reflective tariffs remain a requirement. Eskom has to balance short-term priorities with long-term sustainability requirements

Over the next several years, South Africa's electricity shortage will be alleviated as new power stations begin feeding power into the grid, providing improved security of supply to businesses and households. We still have some way to go before this vision becomes a reality. This integrated report reflects the complex challenges we face in re-orienting our business while ensuring a stable supply of electricity.

Eskom is doing what needs to be done. We have outlined a four-year strategy premised on our eight strategic objectives to build a sustainable future, based on the following seven sustainability elements:

- Sustainable asset creation
- Financial sustainability
- Operational sustainability
- Building a sustainable skills base
- Environmental sustainability
- Transformation and social sustainability
- Building a solid reputation

During 2014/15, our primary focus will be on the first three elements – asset creation, financial and operational sustainability – where the material challenges to the business are most immediate. Safety will remain an overarching priority.

The power system will remain constrained until units from the capacity expansion programme come online. During this time, all South Africans have a role to play in using energy efficiently and reducing demand on the system, particularly during peak hours.

This report reviews our performance in terms of the eight strategic objectives. It shows where we have made progress, where we are lagging behind and what we are doing to ensure that our business continues to support economic and social development in South Africa and the region.

Becoming a high-performance organisation

Safety

Safety is at the centre of our zero harm policy. Overall safety performance has been improving over the past three years but there are still concerns related to contractors. We are working with contractors to ensure that all safety requirements are met. Non-compliance is not tolerated.

At the Ingula pumped-storage construction site, a single accident claimed the lives of six contractors in October 2013. In the wake of this tragic incident, we have continued to reinforce all safety practices on site and continue to implement improvement actions.

Our thoughts and prayers go to all the families, friends and colleagues of the employees and contractors who passed away in the line of duty this past year:

Eskom employees	Contractor employees
Llwellyn Fredericks	Maurice Antonio
Mthunzi Majeke	Federico Caasi Jr
Mulimisi Piet Mamburu	Dennis Casale
Saul Legstom Micambeni	Bongani Tom Dhlamini
Nigel Roger Roelfse	Majara Lesaoana
	Lucas Masilela
	Mcatsane Thokozane Mbebe
	Malan Mjoli
	Selby Velaphi Mkhwanazi
	Benzile Mlotshwa
	Daniel Mthiyane
	Sinethemba Ndzoyiya
	Thembalakhe Ntsethe
	Khaya Eric Nukani
	Tsepho Justice Rakotsoka
	Arno Reynders
	Abias Tobe
	Mojalefa Tshwaela

Technical performance

In line with the Generation sustainability strategy, Eskom is implementing appropriate levels of planned maintenance based on what is necessary to ensure long-term plant health while remaining cognisant of current system constraints, compliance, safety and statutory requirements as well as the financial constraints.

Chief executive's report (continued)

The performance of the generating plant is under serious pressure, especially as Eskom tries to focus on driving sustainability through the execution of normal planned maintenance, while catering for short duration corrective maintenance opportunities. This is shown by the unplanned capability loss factor (UCLF) percentage for the year ended March 2014 which deteriorated from 12.12% to 12.61%. The higher UCLF percentage is an indication of the deteriorating plant health of an ageing power station fleet. The deterioration in UCLF and higher planned maintenance resulted in decreased plant availability of 75.13% for the year to March 2014 compared to 77.65% the previous year.

During the past year the two indicators of Transmission's technical performance, namely the number of system minutes lost and major incidents, improved compared to the previous year, due to the sustained reduction in line faults and plant failures, as well as effective risk management.

The two indicators of Distribution's technical performance, namely system average interruption frequency index and the system average interruption duration index, improved significantly during the year. The improvement is due to the increase in the number of customer network centres, maximising live-line work, reduction of outages due to technology solutions and improved maintenance.

Being customer-centric

Eskom's has 5 232 915 customers as at 31 March 2014. A range of statistical perception and interaction-based customer surveys are used to measure customer satisfaction with Eskom's service. Most of these surveys have indicated an improvement in customer satisfaction in this year compared to the previous year. Despite the number of system emergencies, the proactive manner in which Eskom informs its customers of the system status, via twice daily reports, as well as the KeyAlert SMS messaging system, has made a difference.

Customers responded admirably when Eskom declared power system emergencies during the year and reduced demand by 600MW in November 2013, by 340MW in February 2014 and by 1 160MW in March 2014.

Building strong skills

Eskom is a complex business that requires a diverse skills set that must be maintained and developed. These are skills that we cannot do without and training remains a priority as we build for the future.

As at 31 March 2014, we had 5 160 technical learners in the pipeline (engineers, technicians and artisans) as well as 4 325 learners being trained to contribute to the socio-economic development of the country's youth.

The construction of new power stations is South Africa's largest capital investment project. The capacity expansion programme employs over 40 000¹ people, 8 930 of whom have benefited directly from skills training.

The Medupi experience has also underlined the need for Eskom to increase its project-management capacity. To this end, Eskom's project management training centre of excellence and the Eskom power plant engineering institute have made progress by collaborating with various universities, such as the smart grid centre development at the University of KwaZulu-Natal.

Leading and partnering to keep the lights on

Keeping the lights on

We are committed to keeping the lights on, but we cannot afford to do so at all cost. We need to operate within our financial means and in a way that does not compromise the sustainability of the national electricity grid, the natural environment, the safety of our people and surrounding communities.

A range of short-term interventions are in place to assist us in meeting the demand for electricity, especially during peak hours, while new power stations are under construction. These include the mass rollout programmes, which distribute energy-saving light bulbs to residential customers, and the 49M campaign to encourage energy-efficient behaviours to achieve an overall target of 10% energy demand reduction. Eskom has also continued the implementation of its demand response programme to sign up customers to reduce demand for compensation should the power system require it.

The MYPD 3 tariff determination sharply curtailed funding for integrated demand management (IDM) and made no award for the demand market participation programme beyond year two of the MYPD 3 period, and therefore Eskom has to focus on accessing alternative funding for Eskom's IDM programme and also recovering it through the regulatory clearing account adjustment. The peak demand electricity reduction of 410MW achieved through IDM initiatives exceeded the target of 379MW. Eskom continues to improve the internal energy efficiency of its facilities (power stations and office buildings) and realised annualised energy savings of 19GWh from new IDM projects for the year ended 31 March 2014, exceeding the target of 15GWh.

Over the past year Eskom has worked hard to keep the lights on and, apart from 14 hours in March 2014, we have done so successfully. When the power emergency was declared on 6 March 2014, Eskom followed approved load shedding procedures. This occurrence – the combined result of a low reserve margin and loss of load at two power stations, due in part to coal-quality issues – lasted for 14 hours. It differed vastly from 2008, when South Africa experienced prolonged periods of load shedding. It was unavoidable and we apologise for any inconvenience caused.

Decreasing the maintenance backlog

While no load shedding is forecast in the near future it remains a possibility as the power system will remain constrained until units from the capacity expansion programme come online. The status of the system is also affected by changes in atmospheric emission licence conditions. Much hinges on the balancing of the demand and supply side options in the interim without compromising the sustainability of the existing Eskom generation fleet further while the capacity expansion programme is being completed. Our ability to supply continuous power to the grid thus depends on both the adherence to required maintenance programmes to improve the performance of the current fleet and our ability to access and lever demand side management options.

The Generation sustainability strategy to improve performance over a period of five years to 2017/18, involves having the generating fleet operate at 80% availability, with 10% of the fleet's capacity scheduled for maintenance and a 10% allowance for emergency outages. This has enabled us to do more planned maintenance in 2013/14 than in the previous year. In 2013/14 maintenance was focused on design-based maintenance, 8% of total 10% planned maintenance,

1. The 25 181 jobs created mentioned elsewhere in the integrated report (pages 148, 150 and 172) refers to contractors that have been on site for a minimum of three months.

Chief executive's report (continued)

while the remainder was used for short-term emergent risks. Some outages were deferred due to supply-demand constraints, delaying improvements in plant performance.

To ensure that the most crucial maintenance is done, our technical governance committee prioritised the outages that had to be completed during the year and these were carried out.

We are taking several steps to reinforce operational stability over the short to medium term. The Eskom board has approved some flexibility to the execution of planned maintenance during periods of a tight power system to ease pressure on the reserve margin. We are also working with some large industrial customers to strengthen power-reduction agreements. For the future, we are exploring the conversion of open-cycle gas turbines to run on either natural gas or diesel to reduce cost.

Delivering capacity expansion

Eskom spent R59.8 billion on capital expenditure in 2013/14, R2.5 billion less than budgeted. The build programme is a priority for both the board and management:

- We completed the return-to-service programme during the reporting period. All three stations (Camden, Grootvlei and Komati) are fully operational. The last unit of this project – Komati power station's Unit 3 – was commissioned in September 2013, bringing the total amount of generating capacity for return-to-service units added to the grid since 2005 to 3 741MW
- The refurbishment projects, despite the ongoing challenge of outage constraints, have made good progress. All the Kriel units have now been refurbished, with the final unit (Unit 5) synchronised to the grid on 15 March 2014. Furthermore, three of the six Matla units have been refurbished, with the third unit (Unit 5) synchronised to the grid on 25 March 2014. Delays were experienced at Duvha due to outage movements, hence the refurbishment programme will only start during 2014/15. The development of the Generation outage management plan takes into account the outage schedules required for the refurbishment projects
- We remain on track for synchronisation of Medupi Unit 6 during the second half of 2014. Commissioning of the first unit has started, and we are working with contractors to ensure that they adhere to agreed schedules and processes. Key challenges include finding solutions for the control and instrumentation systems. Eskom will submit its claims to contractors to recover costs and compensate for delays incurred in accordance with the relevant works contracts
- The Kusile power station Unit 1 is scheduled for synchronisation by the end of 2015. The key challenge is finding a solution for control systems to avoid repeating delays experienced at Medupi. There was an increase in productivity at Kusile over the past year. Four medium-term contracts have been signed for coal supply to Kusile power station during the commissioning phase. The conclusion of long-term coal and limestone supply agreements for Kusile is yet to be finalised
- Work continues at the Ingula power station, but the tragic incident that cost the lives of six contractors has affected the schedule. We have taken a range of steps to investigate the incident and prevent similar incidents. Work to install turbines and generators will begin soon. As a result of the accident, the synchronisation of Unit 3, that was initially scheduled for the second half of 2014, is now targeted for the second half of 2015

A total of 811km of transmission power lines and 3 790MVA of transmission substation capacity were also commissioned during the course of the year. Construction on the 100MW Sere wind farm is progressing well, with 69% of the tower foundations and 17% of the turbines completed.



The turbine hall under construction at Medupi power station

Chief executive's report (continued)

When the build programme is completed in 2019/20, Eskom will have increased its capacity by 17 384MW¹. Some of our generating plant will reach the end of their life cycles over the next five to 10 years and, as the economy grows, so too will the demand for electricity. While the government's Integrated Resource Plan (IRP 2010) indicates that new base load capacity is required beyond the Medupi and Kusile power stations, no new base-load capacity has been allocated to Eskom yet. Eskom is working with the shareholder to ensure that planning for future capacity is undertaken in a timely manner.

Reducing Eskom's environmental footprint and pursuing low-carbon growth

Environmental compliance remains a priority in our operations. During the reporting period we spent R3 billion on improving the generating fleet's environmental performance. During the year the water usage improved relative to the previous year while the particulate-emissions performance remained the same. We also met the internal targets for both indicators.

Despite these measures, there is the risk that our older coal-fired stations will not be able to consistently meet the limits set by new atmospheric emission licences, which came into effect in April 2014 and the minimum emission standards which come into effect in 2015. Should this risk materialise, the resulting legal consequence, penalties and significant financial impact may make it unsustainable to continue running these ageing stations at full capacity, which would have implications in terms of our ability to meet demand and do maintenance on the rest of the fleet. We are committed to environmental sustainability but believe that a balanced approach is necessary to ensure environmental sustainability whilst supporting economic growth and access to affordable electricity.

Eskom is engaging with local authorities to align the new atmospheric emission licences with the capability of installed technology and considering the current operating conditions. To address the risk related to complying with the minimum emission standards we have applied for a five-year extension on the new licence terms for some of our generating plant. This will give us the time to retrofit emissions-filtering technologies to the plant to ensure that we will be able to reliably abide by the new licence terms. We remain committed to working with the authorities to limit the negative effects on public health and so maximise our positive impact on society.

In the case of the Kriel power station, Eskom's request to increase the particulate-emissions limit and to allow a grace period for when emissions exceed the limit of the new licence, has been denied. Every effort will be made to comply with the conditions of the licence. The new limit does not allow the station to continuously operate at its full rated power and will require load losses.

We also invest in renewable energy indirectly by purchasing electricity from independent power producers (IPPs) that use wind, solar power, biomass, landfill gas and small hydro technologies to generate power.

Critical for Eskom at this point is ensuring a balance between security of supply, financial sustainability and environmental compliance and to responsibly manage the trade-offs that are required.

1. Capacity increased from 17 100MW reported in 2012/13. The concentrated solar power plant (100MW), project Illanga (the 150MW photovoltaic renewables project to supplement auxiliary power usage by power stations), in addition to 34MW enhancements to existing plant capacity, are now included as there is more certainty regarding these projects.

Securing Eskom's future resource requirements

Eskom's thermal power stations require primary energy (fuel in the form of coal, diesel and uranium) as well as water to function. These need to be secured well in advance, in the correct volumes, at the appropriate quality levels, and at the best possible price if we are to generate sufficient electricity in a sustainable, cost-effective way.

Overall coal stock days were at 44 days on 31 March 2014, exceeding the target of 42 days.

Procuring sufficient coal of the appropriate quality remains a challenge. The calorific value of coal at Arnot, Matla and Tutuka power stations remains lower than required by the power station design, causing load losses. The high ash content continues to impact ash handling plant reliability and boiler performance. In addition, stone-contaminated coal affected performance at these stations. Technologies to screen coal for stones and metal have been installed at Tutuka and Arnot power stations to assist in mitigating this risk.

Coal supply was also a factor in the rotational load shedding implemented on 6 March 2014. Prolonged rainy weather had left coal stocks and open-pit coal mines wet. Fine coal, when wet, congeals and sticks to conveyor belts, restricting the amount of coal that can be delivered to the boilers resulting in the affected power stations generating less electricity.

Several projects are underway to ensure that our new coal-fired power stations have sufficient water resources when they begin operating. The first phase of the Mokolo Crocodile water augmentation project reached the 10.3km mark during the year, increasing the water supply to the area by 37% and transporting enough water to supply four of the six Medupi units.

Looking beyond short-term supply issues, we have two strategic concerns. First, for at least the next two decades, Eskom needs to be able to obtain coal of an acceptable quality, at an affordable price, from South Africa's coal reserves. Second is the need to take advantage of the resources in the southern African region. We continue to interact with government, as well as our suppliers, in an effort to ensure that our resource needs can be met over the long term.

A strategy has been developed to take full advantage of the benefits of gas. In the short term Eskom is undertaking a conversion of existing open-cycle gas turbine (OCGT) installations which will allow the OCGTs to switch from expensive diesel to more affordable gas. It is desirable for Eskom to participate in upstream gas activities to expedite the production of unconventional gas such as coal-bed methane and shale gas, which could enable cost-competitive base-load capacity. Longer term initiatives also include acquiring gas from Mozambique through existing and planned infrastructure and possibly the building of closed-cycle gas turbines.

Eskom supported the government of South Africa in concluding an inter-governmental agreement between South Africa and the Democratic Republic of the Congo (DRC) on the proposed Grand Inga hydro-electric project on the Congo River.

Implementing coal haulage and the road-to-rail migration plan

We transported 11.6Mt of coal by rail during 2013/14, reaching our target of 11.5Mt and improving our performance by 15% relative to the previous year. Railway lines are being built to supply the new coal-fired power stations. The route for the Majuba heavy-haul railway line is being cleared and construction is underway. When the 68km rail is completed in 2017, this dedicated line will transport 14Mt of coal a year from Ermelo to Majuba power station. The railway line for coal transportation to Kusile also saw some progress when protracted negotiations were concluded for the purchase of a servitude on a farm in the path of the line.

Chief executive's report (continued)

Pursuing private-sector participation

Eskom welcomes government's recent announcements regarding additional generation capacity through renewables, co-generation and coal technologies. These will augment the national electricity supply and reduce pressure on the grid when they come into operation.

Eskom has successfully connected 21 renewable energy independent power projects (RE-IPP) (representing a total capacity of 1 076MW) to the grid. Of these projects a total of 467.3MW is currently available to the system.

Total energy procured from IPPs for the year amounted to 3 671GWh at a cost of R3 266 million (averaging 88c/kWh) which is R721 million higher than the NERSA decision for 2013/14.

As the IPP programme expands, we look forward to growing participation by private-sector players, as well as greater certainty regarding Eskom's role in acquiring and building new generation capacity.

Transformation

Maximising Eskom's socio-economic transformation

Transformation is both a business and social imperative. We continued contributing to South Africa's economic transformation in line with available resources and all performance targets for broad-based black economic empowerment (B-BBEE) attributable expenditure was exceeded for the year ended 31 March 2014. The local sourcing in the capacity expansion programme for the year was 54.6%.

The expiry of Eskom's exemption from the Preferential Procurement Policy Framework Act (PPPFA) has required that a number of commodity strategies and targets be amended. We will continue to seek innovative ways to further advance the supplier development and localisation mandate in collaboration with other state-owned companies, and within the ambit of applicable procurement regulations.

The Eskom Development Foundation NPC oversees our corporate social investment projects. A total of 357 443 people benefited from its R132.9 million investment in projects focusing on health, education, the environment, and small and medium-sized business development during the year.

We brought electricity to 201 788 households during the year as part of Eskom and the Department of Energy's electrification programme, as well as to 112 schools. The Department of Energy has made additional funding available to extend the electricity network to rural and far-flung areas which will help accelerate progress towards universal electrification by 2025.

Internal transformation

Our employment equity indicators for black and female employees in senior management, middle management and professional positions all showed an improvement compared to the previous year.

We extended our employment equity plan, which was signed in 2010 and expired in March 2013, by a year to allow time to analyse our internal transformation progress and develop a long-term employment equity plan. The revised plan will be submitted to the shareholder in 2014/15.

Eskom has a highly competent management team in place. We recognise, however, that the vacancies at senior level needs to be addressed. This will be one of the first priorities for the incoming chief executive, who may also want to shape the management structure.



The Soshanguve manufacturing technology demonstration centre is a business incubator funded by the Eskom Development Foundation

Ensuring Eskom's financial sustainability

In February 2013, the National Electricity Regulator of South Africa (NERSA) awarded us an annual tariff increase of 8% over the period from 2013/14 to 2017/18, substantially lower than our request for 16% per annum. While we will be able to complete the current capacity expansion programme using existing resources, the tariff level awarded means that we will not achieve cost-reflective tariffs by 2017/18. We will not be able to expand the investment asset base beyond current commitments, and it will be a challenge for us to meet all regulatory requirements.

The environment that Eskom currently operates in poses a number of challenges:

- The revenue shortfall of R225 billion created by the MYPD 3 determination requires significant adjustments in the business
- Lower than projected local electricity sales are exacerbating the projected revenue shortfall
- We used the open-cycle gas turbine stations more since the tools we used to reduce demand in the past – particularly, power buybacks and the short-term power-purchase programme – are no longer available. We will not be able to continue this practice over the longer term as we cannot afford this nor maintain our liquidity buffer
- Payments to IPPs, which are regulated in terms of their power purchase agreements, have increased, and the costs are currently higher than anticipated by NERSA. The regulatory methodology allows the recovery of prudently incurred IPP costs as a pass through with a timing delay in the reimbursement
- There is increased pressure on the credit rating associated with the country's credit profile and Eskom's financial profile
- Our credit ratings underpin our ability to borrow sufficient volumes at affordable levels. Eskom's foreign-currency ratings are on the low end of investment grade (Baa3 from Moody's) and second-lowest (BBB from Standard & Poor's) investment grades. Both ratings have a "negative" outlook. In December 2013, Fitch affirmed Eskom's long-term local currency issuer default rating of BBB+. Eskom is at risk of a further downgrade if South Africa's sovereign rating, presently on "negative" outlook, deteriorates, or if our standalone financial profile weakens materially

Chief executive's report (continued)

In combination, these factors are putting a great deal of pressure on our financial sustainability. Accordingly, we are discussing possible funding options with the shareholder. In addition, we have applied to NERSA for the regulatory clearing account (RCA) adjustment. The RCA is necessitated by the fact that the revenue and expenditure approved for Eskom is largely based on forecasts. The MYPD rules require that from time to time a reconciliation of these variances be done in order to quantify over/under collection of revenue and over/under-expenditure on Eskom's part. NERSA allows only expenditure that has passed the efficiency test. Should the results of the assessment indicate that Eskom has to re-imburse the customers, then the price of electricity would have to decrease proportionally to the RCA balance. Similarly, if the customers have to re-imburse Eskom, the price would have to increase. Depending on the quantum of the RCA balance, it is either carried over to the following financial year, or a tariff adjustment is effected in the following financial year or the MYPD is re-opened and the full stakeholder consultation process is undertaken before any tariff adjustment is allowed.

While we pursue these discussions, we will continue to strengthen internal efficiencies, defer spend where possible and reduce costs through our business productivity programme. However, cost-reflective tariffs remain a necessity for operational and financial sustainability.

We have identified and largely secured funding for the current capacity expansion programme and have sufficient liquidity to meet our immediate liability requirements. We are confident that we will be able to secure the remaining funding for the current capacity expansion programme. However, this will have to be balanced against the negative outlook from the rating agencies and the possibility of a downgrade due to the deterioration in the credit metrics.

Eskom achieved a group net profit of R7.1 billion for 2013/14 (2012/13: R5.2 billion) which was significantly affected by the profit on the embedded derivatives of R2.1 billion (2012/13: loss of R5.9 billion). The profit should be viewed in context of Eskom's holistic financial position. The group is highly leveraged with a debt-to-equity ratio of 2.06 at 31 March 2014 (2013: 1.84). Eskom's gross debt as at 31 March 2014 is R255 billion (2013: R203 billion) and will continue to increase as we execute our funding plan. Both the free funds from operations as a percentage of gross debt and gross debt as a percentage of earnings before interest, taxation, depreciation and amortisation ratios are significantly below investment-grade targets.

Conclusion

Eskom remains committed to its aspiration of sustainable development as demonstrated in our continued support, as an active signatory, for the United Nations Global Compact. Eskom is a UNGC LEAD company which means that we are seen as a leader in the sustainability field. As part of this commitment Eskom successfully piloted a UNGC LEAD board programme which is focused on driving the sustainability agenda through the boards of companies.

Eskom continues to confront a challenging set of financial and operational circumstances. In this context we remember the words of late former president Nelson Mandela: "It always seems impossible until it's done." All of our efforts are aimed at ensuring an uninterrupted supply of electricity to the nation without compromising the financial well-being of the company. Working with the shareholder – who has been very supportive – and with cooperation of all South Africans in using electricity efficiently, we will successfully meet these challenges.

I would like to acknowledge the contributions of Mr Brian Dames, who served as our chief executive until the close of 2013/14. We thank Brian for his contributions to this organisation over

nearly three decades. The executive committee also bid farewell to Mr Bhabhalazi Bulunga, group executive: Human Resources and Mr Kannan Lakmeeharan (divisional executive for the Office of the Chief Executive) and group executive: Technology and Commercial (acting) during the year.

A sincere word of thanks to Ms Caroline Henry, who acted as chief financial officer after the resignation of the former finance director, Mr Paul O'Flaherty, to whom we bid farewell in July 2013. Caroline drew on her extensive experience as the Eskom Treasurer to ensure a seamless transition.

Congratulations to Ms Tsholofelo Molefe, who has been appointed as our new finance director. I know she will apply herself to her new role with the same dedication and acuity that helped transform Group Customer Services into the efficient, effective division it is today.

Above all, I thank our 46 919 employees, whose talent, skill and commitment will make all the difference as we build the bridge to a sustainable future. We have a clear strategy in place – now we must execute.



Collin Matjila
Interim chief executive



Two of the 46 wind turbines to be erected at the Sere wind farm on the West Coast

Shareholder's compact

The South African government, represented by the Minister of Public Enterprises, is Eskom's sole shareholder

Each year, in consultation with the shareholder, Eskom agrees on its performance objectives, measures and indicators, as well as its annual targets, in line with the Public Finance Management Act (1999).

The table below sets out Eskom's performance for the year to 31 March 2014 in terms of the shareholder's compact. All key performance indicators (KPIs) on the compact refer to the Eskom company only. Commentary on performance is contained in the "Performance on strategic objectives" section of this report.

Key performance indicators of the shareholder's compact

Key performance areas	Performance indicator	Unit	Target 2013/14	Target achieved?	Actual 2013/14	Actual 2012/13	Actual 2011/12	Page ref
Focus on safety	Employee lost-time incidence rate (LTIR)	Index	0.36	✓	0.31	0.40 ¹	0.41	85
Keep the lights on	Maintenance backlog reduction based on Eskom technical governance committee approval	Number	0	✓	0	–	n/a	106, 114
	IDM demand savings	MW	379	✓	410	595	365	106, 111
	Internal energy efficiency	GWh	15.0	✓	19.4	28.9	45.0	106, 113
Put customer at the centre	Customer service index	Index	88.7	✗	86.6	86.8	85.6	96
Improve operations	Normal UCLF ²	%	10.00	✗	12.61	12.12	7.97	89, 91
	Less: Constrained UCLF ³	%	–	–	1.63	3.41	–	
	Underlying UCLF ⁴	%	–	–	10.98	8.71	–	
	EAF	%	80.0	✗	75.13	77.65	81.99	89, 93
	Total system minutes lost for events <1 minute	Minutes	3.40	✓	3.05	3.52	4.73	
	SAIDI ⁵	Hours	45.0	✓	37.0	41.9	45.8	

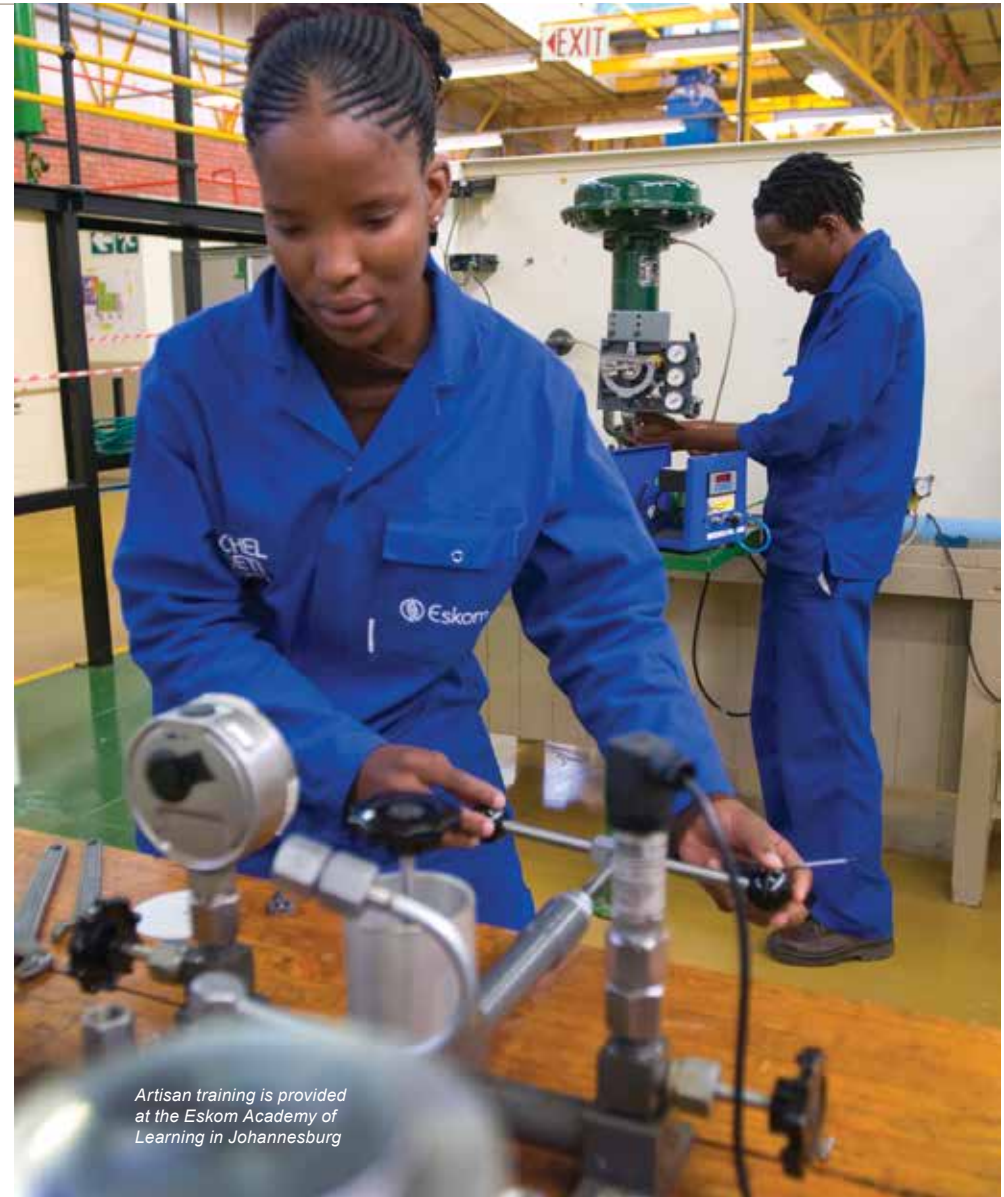
Key performance areas	Performance indicator	Unit	Target 2013/14	Target achieved?	Actual 2013/14	Actual 2012/13	Actual 2011/12	Page ref
Deliver capital expansion	Generation capacity installed and commissioned	MW	100	✓	120	261	535	117
	Transmission lines installed	Km	770.0	✓	810.9	787.1	631.0	117, 123
	Transmission capacity installed and commissioned	MVA	3 790	✓	3 790	3 580	2 525	
	Generation new build capacity milestones (Medupi, Kusile and Ingula)	Days deviation	30.00	✗	48.90	43.48	n/a	117
Reduce environmental footprint in existing fleet	Relative particulate emissions	kg/MWh	0.36	✓	0.35	0.35	0.31	128
	Water usage per kWh sent out ⁶	L/kWhSO	1.39	✓	1.35	1.42	1.34	128, 129
Implementing coal haulage and the road-to-rail migration plan	Coal road-to-rail migration	Mt	11.48	✓	11.58	10.12	8.50	141
Ensure financial sustainability ⁷	Cost of electricity (excluding depreciation)	R/MWh	453.40	✗	541.92	496.24	374.19	153
	Interest cover	Ratio	1.18	✗	0.65	0.27	3.27	155
	Debt:equity (including long-term provisions)	Ratio	2.17	✗	2.21	1.96	1.69	
	Free funds from operations (FFO) as % of total debt	%	9.11	✓	9.21	8.55	15.06	
Build strong skills (total pipeline or new enrolments)	Training spend as % of gross employee benefit costs ⁸	%	5.00	✓	7.87	–	–	100
	Engineers	Number	2 007	✗	1 962	2 144	2 273	
	Technicians	Number	780	✓	815	835	844	
	Artisans	Number	2 619	✗	2 383	2 847	2 598	
	Youth programme ⁹	Number	5 000	✗	4 325	5 701	5 159	

Shareholder's compact (continued)

Key performance areas	Performance indicator	Unit	Target 2013/14	Target achieved?	Actual 2013/14	Actual 2012/13	Actual 2011/12	Page ref
Maximise socio-economic contribution	Local sourcing in procurement	%	52.0	✓	54.6	80.2	77.2	148
	Procurement from B-BBEE compliant companies	%	75.0	✓	93.9	86.3	73.2	
	Procurement from black youth-owned companies	%	1.0	✓	1.0	1.0	–	
	Employment equity – disability	%	3.00	⊖	2.99	2.59	2.49	151
	Racial equity in senior management, % of black employees	%	61.0	⊖	59.5	58.3	53.9	
	Gender equity in senior management, % of female employees	%	30.0	⊖	28.9	28.2	24.3	
	Racial equity in professionals and middle management, % of black employees	%	71.0	✓	71.2	69.6	65.7	
	Gender equity in professionals and middle management, % of female employees	%	36.0	⊖	35.8	34.6	32.4	

1. One noise-induced hearing loss late report by Generation and one LTI incident for Distribution resulted in the signed off LTIR of 2012/13 changing from 0.39 to 0.40.
2. Normal UCLF – measures the lost energy due to unplanned energy losses resulting from equipment failures and other plant conditions.
3. Constrained UCLF – This is UCLF that was a result of emissions and short-term related UCLF due to system constraints to meet the "Keeping the lights on" objective. This is apportioned between PCLF and OCLF.
4. Underlying UCLF – This is the difference between normal and constrained UCLF and that is still within Generation's control.
5. SAIDI is an availability of supply index – the average duration (hours) of a sustained interruption the customer would experience per annum (number of hours per annum).
6. The volume of water consumed per unit of generated power from commissioned power stations.
7. The original year to 31 March 2014 budget which was included for the shareholder compact was subsequently revised and the differences mainly result from additional operating expenditure allocated to Generation. The revised budget ratios are as follows:

• Cost of electricity (excluding depreciation)	463.25 R/MWh
• Interest cover (excluding remeasurement of the shareholder loan)	0.98
• Debt/equity	2.19
• FFO as a % of gross debt	10.51%
8. This is a new measure, effective from 1 April 2013.
9. Includes learners trained by Eskom, as well as learners trained by Eskom's suppliers.



Artisan training is provided at the Eskom Academy of Learning in Johannesburg

02

About the Eskom group



Eskom was voted as the "Most desired company to work for" by the Sunday Times newspaper. Awards were also received in the categories "Community Upliftment" (second place), and "Top company that does the most to look after the environment and natural resources" (second place)

Eskom is South Africa's primary electricity supplier and is wholly owned by the South African government. In total, it generates and distributes about 95% of electricity used in South Africa and about 40% of electricity used on the continent

Nature of the business and client base

Eskom generates, transmits and distributes electricity to industrial, mining, commercial, agricultural and residential customers in South Africa, and to municipalities, who in turn redistributes electricity to businesses and households within their areas. It also purchases electricity from independent power producers (IPPs) in terms of various agreement schemes as well as electricity generating facilities beyond the country's borders.

Eskom operates 27 power stations with a total nominal capacity of 41 995MW, comprising 35 726MW of coal-fired stations, 1 860MW of nuclear, 2 409MW of gas-fired, 2 000MW hydro- and pumped-storage stations as well as the 3MW wind farm at Klipheuwel. The company also maintains more than 359 337km of power lines and substations with a cumulative capacity of 232 179MVA.

Eskom is building new power stations and major power lines to meet South Africa's energy demand. This capacity expansion programme will be completed in 2019/20. To ensure that Eskom is able to meet demand and create the space for crucial infrastructure maintenance while new generating capacity is being built, it runs a range of demand-management and energy-efficiency programmes.

Eskom sold 217 903GWh of electricity to about 800 municipalities in bulk, 3 000 industrial customers, 1 000 mining customers, 50 000 commercial customers and 84 000 agricultural customers in 2013/14. It also supplied electricity to more than 5.1 million residential customers. The figure for residential users includes prepaid customers.

Eskom's business model

The International Integrated Reporting Council's framework describes a company's business model as "its system of transforming inputs, through its business activities, into outputs and outcomes with the aim to fulfilling the organisation's strategic purposes and create value over the short, medium and long term". This system is affected by internal and external factors, which together make up the company's operating environment.

About the Eskom Group (continued)

Electricity supply industry (ESI) in South Africa

The ESI consists of generation, transmission and distribution as well as the importing and exporting of electricity. Eskom sells electricity to a variety of customers, including to redistributors (municipalities). Redistributors distribute power to end-users directly, under licence.

Eskom is a key player in the industry in the generation space, particularly with most of the base-load and peaking capacity being operated by Eskom.

Independent power producers (IPPs) have been invited to participate through a renewable energy programme run by the Department of Energy (DoE). Potential players were shortlisted and successful bidders have been contracted to supply energy into the national grid owned by Eskom. All grid planning is done by Eskom, lines are constructed under specific licensing criteria and conform to a national grid code which is overseen and regulated by NERSA.

Regulation of electricity market: The electricity business is regulated by NERSA in terms of the National Energy Regulatory Act. NERSA issues licences, regulates all tariff increases, provides national grid codes, etc.

Integrated Resource Plan 2010 (IRP 2010): The IRP 2010 sets out South Africa's long-term energy needs and discusses the generating capacity, technologies, timing and costs associated with meeting that need.

National Nuclear Regulator (NNR): The NNR ensures that individuals, society and the environment are adequately protected against radiological hazards associated with the use of nuclear technology, and in Eskom's case, regulates its Koeberg nuclear power station.

Independent system market operator bill (ISMO): This is a proposal to restructure the existing market structure (one dominant player within a regulated market which manages the overall value chain of electricity generation, transmission and the bulk sale of electric power). A proposed independent system operator with or without transmission assets being incorporated into the structure was considered in terms of legislation. Eskom has in its comments to the parliamentary sub-committee indicated that it was important not to embark on any restructuring while the power system was constrained and recommended a phased approach towards the creation of an ISMO.

Southern African Power Pool (SAPP): Eskom imports electricity from Namibia, Lesotho, and Mozambique and sells electricity to Lesotho, Namibia, Botswana, Zimbabwe, Mozambique, Swaziland and Zambia on either firm or unfirm contracts.

External factors that influence Eskom

Eskom is affected by four key external factors, which form the framework within which the company operates. These factors are the shareholder mandate; the economic, social and environmental climate; the Integrated Resource Plan for Electricity 2010-2030 (IRP 2010); and relevant legislation, regulations and policies (other than the IRP 2010).

Shareholder mandate

Eskom's mandate, as outlined by the government, is to sustainably provide electricity to grow the economy and improve the quality of life of people in South Africa and the region. In practice, this requires keeping the lights on under conditions of tight supply – requiring a concerted effort to balance competing priorities in an appropriate manner – the need to do maintenance, manage the financial constraints, and ensure sustainability in the longer term. Eskom cannot do this on its own and relies on partnerships with all stakeholders and various demand-side management interventions.

Eskom uses integrated demand-management programmes to reduce energy demand while it builds additional generating, transmitting and distributing capacity.

Eskom is also tasked with supporting the government's developmental objectives, as outlined in the New Growth Path, the National Development Plan and other development documents.

Eskom's annual corporate plan gives effect to Eskom's medium-term strategic objectives and the annual shareholder's compact sets out annual key performance indicators in support of Eskom's mandate and strategic objectives. This plan and compact are sent to the Minister of Public Enterprises for approval before the start of each financial year.

The economic, social and environmental climate

The electricity that Eskom produces is a major driver of the economy and about 3% of the country's gross domestic product can be attributed to Eskom.

The pace at which the economy grows is linked to the pace at which the country's energy needs grow, and therefore the pace at which Eskom needs to expand to meet demand. Infrastructure capital investment has historically not kept up with economic growth, resulting in a constrained electricity-supply situation in the short term.

Elements of the social landscape affecting operations include an increase in labour action against Eskom's customers, which ultimately reduces their electricity usage, and against its contractors and suppliers, which has the potential to further delay the capacity expansion programme and raises concerns about contractor and employee safety.

The current economic climate also has the potential to increase customer non-payment, electricity and equipment theft, and illegal connections, all of which have a technical and financial impact on Eskom's ability to ensure security of supply.

Just as electricity generation inevitably affects the environment, the environment also has an effect on Eskom. Eskom's operating licence depends on various legislative requirements, including keeping its water usage and atmospheric emissions within legislative requirements.

The Integrated Resource Plan for Electricity 2010-2030

The IRP 2010 sets out South Africa's long-term energy needs and discusses the generating capacity, technologies, timing and costs associated with meeting that need. In November 2013, the Department of Energy (DoE) issued a draft update of the IRP for public comment. This reflects the effect of slowing economic growth on projected electricity demand as well as changes in the committed build programme. Public comment on the update has been gathered. The DoE is now consulting with other government departments and is expected to issue the approved updated plan in the second half of 2014.

The government is in the process of allocating generating capacity to power producers, based on the IRP 2010 requirements. The number of MWs required and technology allocated to Eskom will substantially influence its expansion plans after the completion of Kusile, especially if that allocation includes nuclear power. No South African cabinet decision has yet been made regarding new nuclear power stations. The government's nuclear energy working groups and sub-working groups are developing strategies for the envisaged new nuclear build programme, including the supply of nuclear fuel. Eskom is participating in the sub-working groups.

About the Eskom Group (continued)

Legislation, regulation and policies

Eskom is subject to numerous laws and regulations regarding its operations, including conditions relating to tariffs, expansion activities, environmental compliance and regulatory and licence conditions. Eskom has to operate within the terms of the various regulations and water usage and atmospheric emissions licences that govern its operations. Current licensing conditions place stringent limits on plant emissions to reduce the country's current and future environmental footprint.

Important legislation that influences Eskom's governance include the Companies Act (2008), the Public Finance Management Act (1999), the Preferential Procurement Policy Framework Act (2000), the Promotion of Access to Information Act and the Promotion of Administrative Justice Act (2000). King III, the Protocol on Corporate Governance in the Public Sector, and various international guidelines guide Eskom regarding best practice in governance and reporting. Eskom has applied most of the King III principles although, since it is a state-owned company, some of them do not apply. In some instances, Eskom has adopted alternative practices to those recommended by King III. Where a principle has not been applied, an explanation is provided. For more information on King III practices refer to www.eskom.co.za/IR2014/03.html

Eskom periodically has to apply to NERSA for the revenue it requires to sustainably operate its business. The application for revenue is in the form of a multi-year price determination (MYPD) and currently the third pricing application, MYPD 3, is in effect and covers the five-year period 2013/14 to 2017/18.

Eskom's internal operating environment

The four internal cornerstones of Eskom's business are: leadership and governance; the Eskom values; policies, procedures and systems; and technology.

Leadership and governance

Eskom's board is responsible for governing the company. The executive management committee and a broader management committee, which includes line and functional leaders, implement the decisions made at governance level on a day-to-day basis. There is a clear distinction of roles and responsibilities between the board, the executive management committee (Exco) and the management committee (Manco). The Exco provides overall guidance while Manco focuses on monitoring performance and operations at a more detailed level.

Eskom's leadership and governance is underpinned by Eskom's values.

Eskom's values

Eskom works within a culture that strives to embody the following values:

- **Zero harm:** Eskom strives to ensure that zero harm befalls its employees, contractors, the public and the natural environment
- **Integrity:** Eskom strives to achieve honesty of purpose, conduct and actions, and respect for people
- **Innovation:** Eskom strives to encourage value-adding creativity and to be results orientated. It aims to lead through excellence in innovation
- **Sinobuntu:** Eskom is caring
- **Customer satisfaction:** Eskom is committed to meeting or even exceeding the needs of the recipients of its products and services
- **Excellence:** Eskom aims to be recognised for its exceptional standards, performance and professionalism



Live-line maintenance on the high-voltage lines reduces the need to shut lines down for maintenance

About the Eskom Group (continued)



The Apollo HVDC converter station in Johannesburg converts the direct current power into alternating current power from Mozambique and then feeds it into the South African national grid

Policies, procedures and systems

Systems play an important role in Eskom, affecting every aspect of operations from safety to the experience of its customers to the efficiency of its power stations. Standardised processes, policies and procedures have been developed for all aspects of the business and are regularly updated to ensure good governance and implement efficiency improvements.

Eskom has key performance indicators to measure business performance. These measures are documented and approved in terms of the enterprise performance management process.

Eskom achieved ISO 9001 certification on 31 March 2013. During the surveillance audits, the certification bodies (e.g. SABS) did not identify any significant findings or risks that could lead to Eskom losing its ISO 9001 certificate. Work is underway with the SABS to identify specialist ISO standards which need to be implemented in specific divisions or business units in Eskom.

Technology

Technology is a key enabler for Eskom and includes telecommunications, information technology, research and innovation. Eskom is constantly scanning the technology environment for new ways to improve its operations.

Eskom runs focused research programmes to improve its processes and technologies as well as reduce its impact on the environment. If research indicates that a technology is promising, Eskom invests in a pilot project to investigate the feasibility of larger-scale rollout. These technologies include new methods for generating electricity (such as the concentrated solar power plant in Upington) and smart grid technology.

Eskom's value chain

Eskom is committed to providing and maintaining a safe, healthy working environment for all employees and contractors and has made safety a key focus area within the company.

Core operations

As stated in the "Nature of the business and client base", on page 31 of this report, Eskom's core operations are the generation, transmission and distribution of electricity. The primary energy resources (coal, liquid fuel and uranium), water and limestone that Eskom's power stations need to operate, must be sufficient, delivered on time and at optimal cost, and be of the required quality.

Coal is procured in term of cost-plus contracts, fixed-cost contracts, medium- and short-term contracts. Cost-plus contracts are long-term agreements whereby a mine's coal reserves are dedicated to Eskom and bought at a cost that covers the mine's full capital investment plus a return on investment. Fixed-cost contracts are with mines that produce both export-quality coal for sale on international markets and Eskom-quality coal, which is sold to the company at a fixed price, subject to annual inflationary adjustments. Kusile will be the first Eskom power station to use limestone when it comes into operation.

Generating electricity requires a significant amount of water and also results in atmospheric emissions, ash and nuclear waste.

Eskom aims to minimise its impact on the environment by reducing atmospheric emissions and fresh-water usage by transitioning to a cleaner energy mix, considering different technologies and continuing with research and development to develop improved energy technologies.

Eskom's primary partners are the people and companies it sells electricity to, both locally and beyond its borders. The quality of these relationships is very important to the company and is constantly being monitored and enhanced. Eskom's customers are important partners in assisting the company to ensure security of supply by reducing their electricity demand. This is done through demand-management and energy-efficiency strategies such as the televised Power Alerts, the integrated demand-management campaign and the 49M energy-efficiency campaign.

Strong partnerships with government, suppliers and contractors are vital to Eskom meeting current and future electricity needs. This group includes various government departments, coal mines and water authorities, IPPs, fellow members of the Southern African Power Pool, original equipment manufacturers and contractors working on the capacity expansion programme. Eskom has also established partnerships with other state-owned entities such as Transnet and Broadband Infraco to capitalise on any complementary strengths that may exist between itself and these organisations and enhance the economic contribution of state-owned entities.

Eskom's regional development strategy involved creating the Southern African Energy unit, through which it imported electricity in the past year from Namibia, Lesotho, and Mozambique. As a member of the Southern African Power Pool, Eskom also sells electricity to Lesotho, Namibia, Botswana, Zimbabwe, Mozambique, Swaziland and Zambia on firm or unfirm contracts.

Capacity expansion programme

Eskom is in the process of a capacity expansion programme to expand its generation and transmission capacity. This programme will increase Eskom's generating capacity by 17 384MW. This includes building two coal-fired and one pumped-storage power stations, one wind farm as well as a concentrated solar thermal station. It also involves strengthening and substantially extending the transmission grid.

About the Eskom Group (continued)

Finance

Eskom's funding model consists of equity, revenue and debt funding, with strong support from the government. Eskom's revenue requirement and resultant tariff is determined by its regulator, NERSA, through multi-year-price-determinations. Eskom's credit rating is affected by its own financial position as well as the sovereign credit rating. Eskom has embarked on the business productivity programme to address the revenue shortfall it is faced with by introducing cost reductions, increasing productivity as well as improving operational efficiencies.

Workforce

Eskom's operations are supported by a highly skilled workforce that executes Eskom's core operations and provides supporting business services such as human resources management, information technology services, procurement, research, etc.

Eskom has a rigorous transformation programme in place to ensure equity in the workplace, and has put in place skills-development programmes to train engineers, technicians and artisans to meet its need for skilled workers in future. Eskom's employees receive training on an ongoing basis.

Procurement

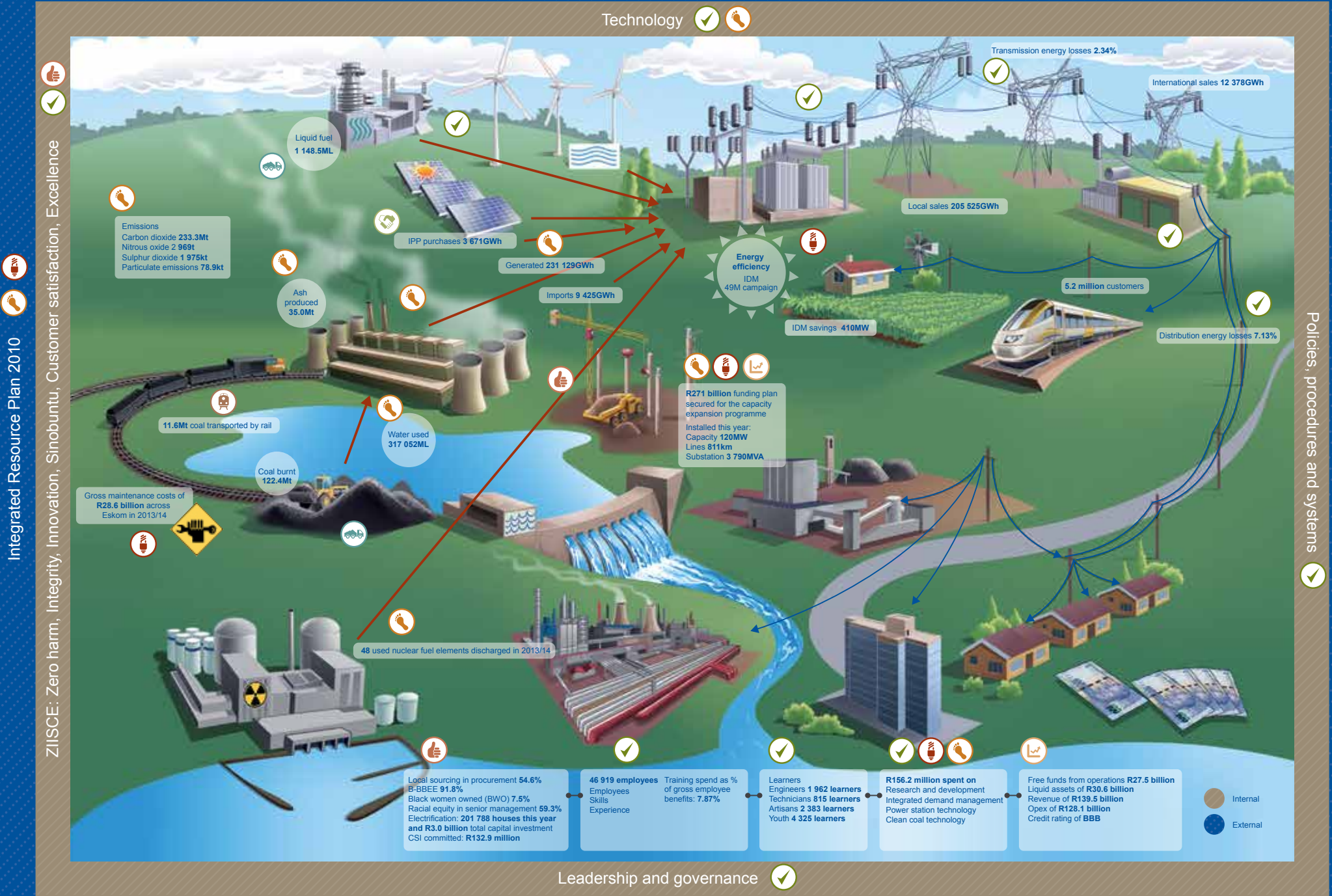
Eskom has a centre-led procurement and supply chain process. Eskom uses its procurement partnerships to stimulate black economic empowerment, in line with its supplier localisation and development aspirations.

Corporate social investment and development services

Eskom has a dedicated subsidiary, the Eskom Development Foundation NPC, to run corporate social investment activities. Eskom is also leveraging the capacity expansion programme to reduce unemployment, improve the country's skills pool, stimulate the local economy and increase economic equity by supporting B-BBEE.

Eskom has been implementing the Department of Energy's integrated national electrification programme in its licensed areas of supply since April 2001. Since it started electrifying homes in 1991, more than 4.5 million households have been electrified within Eskom's supply areas.

The following diagram outlines Eskom's business model and how it creates value:

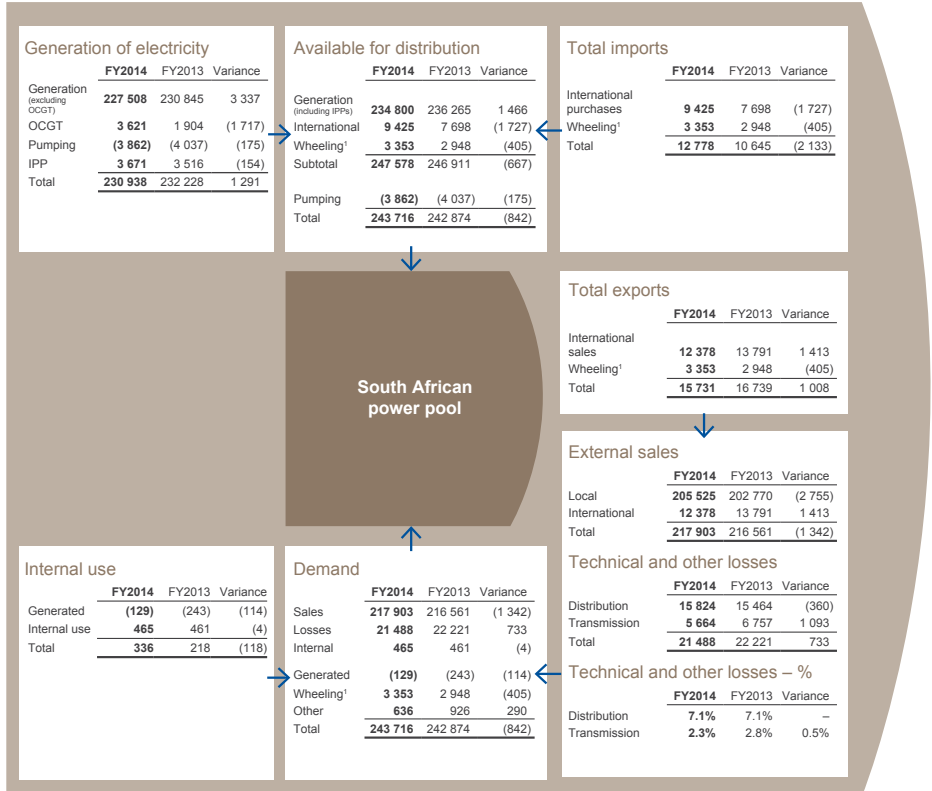


About the Eskom Group (continued)

The Eskom energy wheel

The energy wheel shows the volume of electricity that flowed from local and international power stations and independent power producers (IPP) to Eskom’s distribution and export points during the past two years, including the losses incurred in reaching those customers. All figures are in GWh unless otherwise stated.

Eskom energy flows during 2013/14 and 2012/13



About the Eskom Group (continued)

Eskom’s legal and operating structure

Eskom’s legal structure

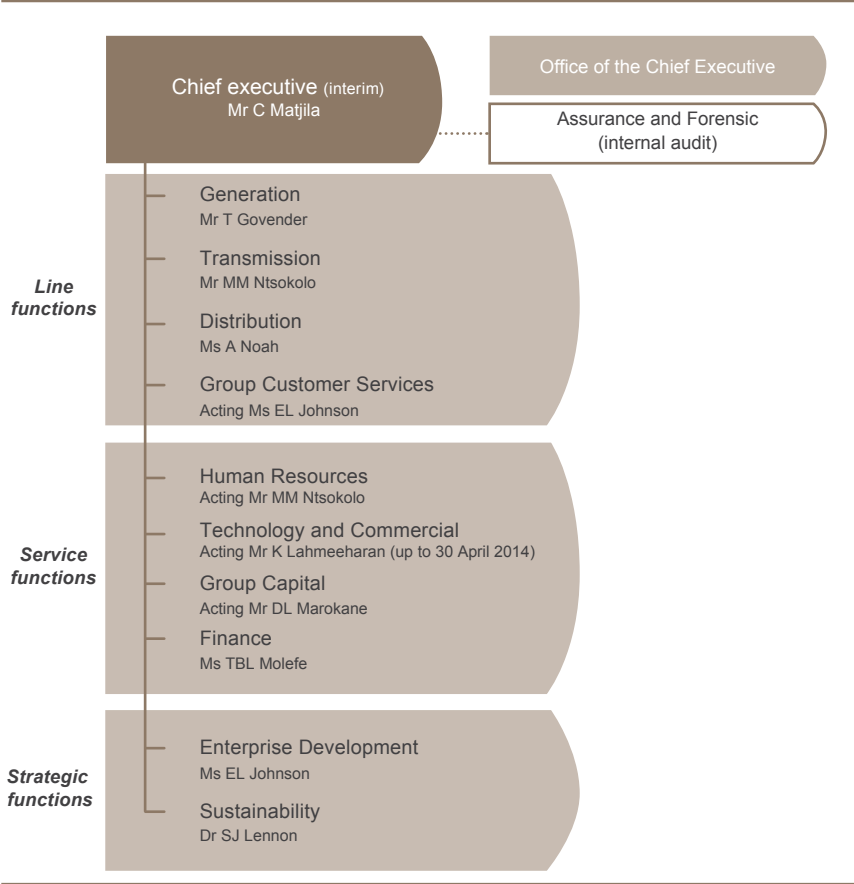
Eskom’s head office is in Johannesburg, while it has operations across South Africa. It maintains a small office in London, primarily for quality control of the equipment being manufactured for the capacity expansion programme.

The Eskom group consists of the Eskom business and a number of subsidiaries, including:

- **The Eskom Enterprises SOC Limited group.** Through the Rotek and Roshcon entities, Eskom Enterprises provides life-cycle support, plant maintenance, network protection and support for the capacity expansion programme for Eskom's line divisions. These entities support Eskom's strategic objective of “Becoming a high-performance organisation” as well as the “Leading and partnering to keep the lights on” objective. There is also a subsidiary with an interest in electricity operations and maintenance concessions in Uganda. Another subsidiary, Eskom Energie Manantali s.a (EEM), operates an operating and maintenance concession with Société de Gestion de l'Energie de Manantali (SOGEM). A mediation process to reach agreement on a 10-year operating and maintenance contract was not as successful as intended, with some major issues that could potentially expose EEM to undue risk remaining unresolved. Exit options are thus being pursued. As a result, EEM has been classified as a discontinued operation in Eskom's March 2014 financial statements
- **Eskom Finance Company SOC Limited** was established in 1990 primarily to enable Eskom's employees to have access to home loan finance whilst optimising home ownership costs to both Eskom and its employees. Eskom is in the process of finding an appropriate disposal solution for this subsidiary on request of the shareholder, however, as it currently does not meet the requirements as stated in the International Financial Reporting Standards (IFRS), it has not been classified as a discontinued operation in Eskom's financial statements
- **Escap SOC Limited**, Eskom's wholly owned insurance captive company, manages and insures the business risk of Eskom and its subsidiaries, excluding nuclear and aviation liabilities
- **The Eskom Development Foundation NPC** is a wholly owned non-profit company that manages Eskom's corporate social investment in support of Eskom's “Transformation” objective

Eskom’s operating structure

Eskom's operating structure, depicted below, comprises line functions that operate the business, service functions that service the operations and strategic functions that develop the enterprise.



About the Eskom Group (continued)

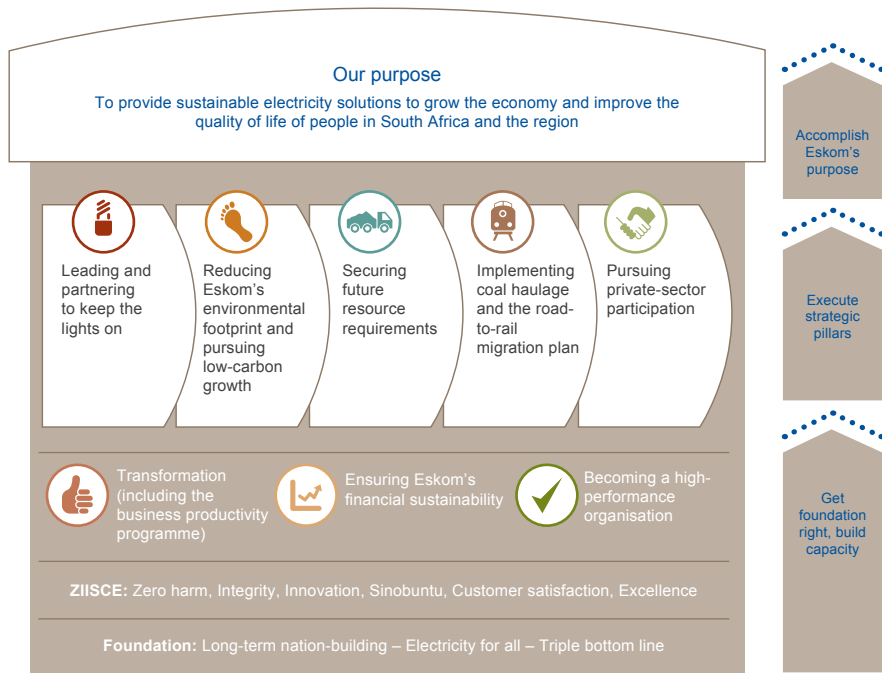
Purpose, values and strategic objectives

The purpose of Eskom's annual corporate plan is to outline the strategic and operational direction of Eskom and to capture the necessary financial, operational and resource plans to support this direction. As such, the corporate plan becomes an engagement document for discussion with Eskom's stakeholders. The latest plan covers the four-year period from 1 April 2014 to 31 March 2018 and the focus is on Eskom's response plan to its changing environment.

A secondary purpose of the corporate plan is to comply with the requirements of section 52 of the Public Finance Management Act (PFMA) as well as section 29 of the National Treasury regulations, and to support internal Eskom policies. The consolidated corporate plan with all its annexures is submitted to the Department of Public Enterprises (DPE) and National Treasury annually in February.

The targets reflected in the integrated report for 2013/14 are those that were approved in the five-year corporate plan that covered 2013/14 to 2017/18. The 2017/18 targets are those that are reflected in the current four-year corporate plan that was submitted to DPE and National Treasury on 28 February 2014. Eskom's purpose, values and strategic objectives have been consistent in both the 2013/14 and 2014/15 corporate plans.

Eskom's purpose, values and strategic objectives



Purpose

The purpose of Eskom is to provide sustainable electricity solutions to assist the economy to grow and to improve the quality of life of people in South Africa and in the region.

Strategic objectives

Eskom has aligned itself around eight strategic objectives. These objectives give Eskom direction to deliver on its purpose, vision and values. They are confirmed on an annual basis as part of the corporate plan process.

Becoming a high-performance organisation

Eskom continues its transformation into a high-performance utility focused on quality customer service; safer, effective and efficient plant operation through prudent plant maintenance; optimising key talent; and ensuring resilience measures are in place for major disruptive events. The business productivity programme is identifying and eliminating inefficiencies in the business to enable Eskom to better manage its costs and revenue.

Leading and partnering to keep the lights on

Eskom is committed to keeping the lights on whilst at the same time maintaining a sound basis for sustainable operations. This will be done by taking a leading role and actively partnering with all key stakeholders, including the people of South Africa, in a comprehensive supply-and-demand management strategy.

Reducing Eskom's environmental footprint and pursuing low-carbon growth

Eskom is committed to reducing its environmental and carbon footprint and helping South Africa achieve its environmental targets by transitioning to a cleaner energy mix and reducing emissions and water use and ensuring full compliance with environmental legislation. In addition, Eskom has to adapt to a changing environment as a result of the negative impacts of climate change placing pressure on its resources and infrastructure.

Securing future resource requirements

Eskom must partner with suppliers and regulators to ensure that it has the resources including land, coal, liquid fuel, uranium and water it needs for its existing and new generating assets to operate.

Implementing coal haulage and the road-to-rail migration plan

Eskom will continue to reduce the number of coal trucks on the road and contribute to the security of coal supply by migrating coal transport from road to rail. The aim is to reduce the cost of transporting coal and improve the safety record of coal hauliers.

Pursuing private-sector participation

Eskom acts as a catalyst for private-sector participation in South Africa to ensure security of supply for South Africa.

Transformation (including the business productivity programme)

Eskom has initiated a transformation programme to address national and internal transformation challenges by leveraging the capacity expansion programme and Eskom's organisational spend to reduce unemployment, improve the country's skills pool and increase economic and workplace equity. This transformation programme is informed by the government's developmental goals.

Eskom is addressing the overall challenges it faces through the business productivity programme, which aims to ensure a sustainable business despite the financial constraints faced.

About the Eskom Group (continued)

Ensuring Eskom's financial sustainability

Eskom remains focused on re-engineering the business to achieve sustainability and cost-efficiency by striking a balance between reducing costs where appropriate and the three sources of funding: equity, debt and revenue. This will inevitably involve increasing electricity prices to obtain cost-reflective tariffs in the future and to retain a supportive credit rating that retains access to funding as well as reduces the cost thereof.

Link between Eskom strategic objectives and the “six capitals”

The capitals, as defined in the integrated reporting framework are “stocks of value” that are increased, decreased or transformed through the activities and outputs of a business.

For the purpose of the integrated reporting framework, the six capitals are categorised and described as follows:

- **Financial capital** – The pool of funds that is available to an organisation for use in the production of goods or the provision of services
- **Manufactured capital** – Manufactured physical objects (as distinct from natural physical objects) that are available to an organisation for use in the production of goods or the provision of services. Manufactured capital is often created by other organisations, but includes assets manufactured by the reporting organisation for sale or when they are retained for its own use
- **Intellectual capital** – Organisational, knowledge-based intangibles
- **Human capital** – People's competencies, capabilities and experience, and their motivations to innovate
- **Social and relationship capital** – The institutions and the relationships within and between communities, groups of stakeholders and other networks, and the ability to share information to enhance individual and collective well-being
- **Natural capital** – All renewable and non-renewable environmental resources and processes that provide goods or services that support the past, current or future prosperity of an organisation

The table below gives an indication of how the six capitals are impacted by Eskom's strategic objectives. It is evident from this that Eskom's strategic objectives are integrated and consider all aspects of its business and the value that it creates over time.

		Six capitals					
		Financial capital	Manufactured capital	Intellectual capital	Human capital	Social and relationship capital	Natural capital
Strategic objectives	Becoming a high-performance organisation	✓	✓	✓	✓	✓	✓
	Leading and partnering to keep the lights on	✓	✓	✓	✓	✓	✓
	Reducing Eskom's environmental footprint and pursuing low-carbon growth	✓	✓	✓	✓	✓	✓
	Securing future resource requirements	✓	✓			✓	✓
	Implementing coal haulage and the road-to-rail migration plan	✓	✓			✓	
	Pursuing private-sector participation	✓	✓			✓	✓
	Transformation (including the business productivity programme)	✓	✓		✓	✓	
	Ensuring financial sustainability	✓	✓	✓	✓	✓	✓

Trade-offs

An excess or shortage of any of the resources required for Eskom's core operations or supporting services can affect all the others. Eskom is constantly monitoring and managing the costs and benefits of key trade-offs between its required resources to ensure that its operations are efficient and sustainable. The following are examples of the trade-offs Eskom currently faces:

- Diesel to run the open-cycle gas turbines ensures security of supply in the short term, but negatively affects Eskom's financial sustainability in the longer term
- Eskom's Generation sustainability strategy is crucial to improve plant health and reliability in the long term, thereby improving security of supply. In the shorter term, planned maintenance has to be balanced with the constrained power system and financial constraints. By contrast, not performing sufficient maintenance negatively affects plant reliability, which likewise increases the risk of load shedding
- Requesting customers to reduce their electricity demand assists Eskom to meet demand, but has negative consequences for Eskom's revenue due to reduced sales
- Coal is a relatively inexpensive fuel to source financially, but has a high environmental cost, and contributes to an increasingly vulnerable supply chain, e.g. reliance on road transport and mining challenges coupled with extreme weather events

About the Eskom Group (continued)

Future focus for Eskom

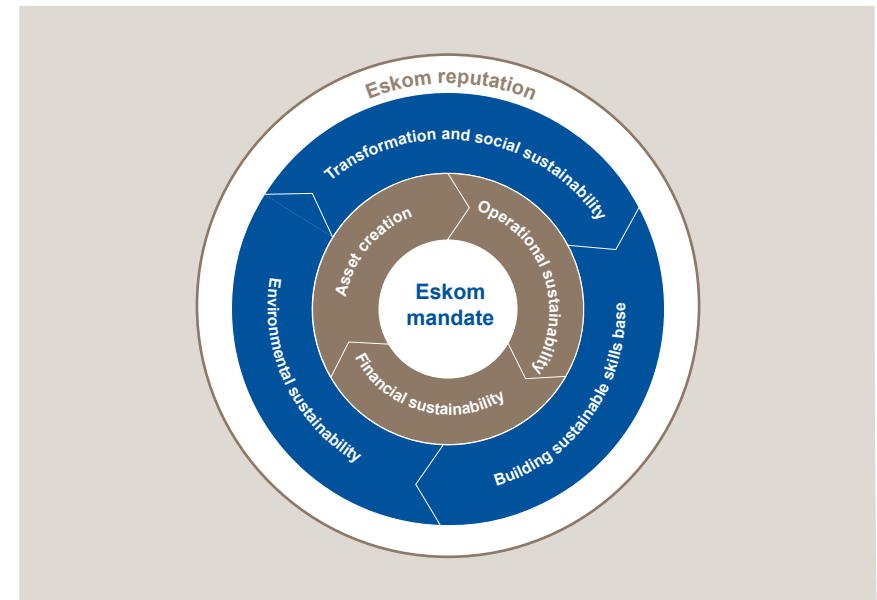
The current environment that Eskom operates in poses a number of short-term challenges:

- The power system will remain constrained until units from the capacity expansion programme come online, but the level of power that can be generated can be influenced by changes in atmospheric emission licence conditions
- The MYPD 3 determination has resulted in a revenue shortfall of R225 billion, which is exacerbated by lower local sales volumes, increasing pressure on Eskom's credit rating
- High open-cycle gas turbine usage (as a result of power system constraints) is increasing operational expenditure and has a negative impact on Eskom's financial sustainability
- The utility business model is changing around the world. Eskom needs to refine its business model to ensure its agility and long-term sustainability

The Eskom environment is dynamic, posing challenges, threats and opportunities. To guide Eskom in achieving the strategic objectives and deliver on its mandate, Eskom has developed a response plan to ensure sustainability along seven distinct dimensions. In pursuing these dimensions, safety will continue to be the foundation for all Eskom's operations and is key to Eskom's performance. The principles of the response plan are as follows:

- Capital investment will prioritise capacity expansion projects, generation sustainability, environmental compliance, transmission strengthening and compliance, customer connections, asset maintenance, asset replacement and refurbishment and the connection of independent power producers, based on the available capital budget over the five-year MYPD 3 period
- Eskom will pursue the Generation sustainability strategy which focuses on plant, people and processes
- Alternative funding options, including government support will be pursued
- The regulatory clearing account adjustment (RCA) will be pursued
- Focus on skills building, transformation and environmental sustainability will continue
- Eskom's business model must be adapted and re-engineered

Seven areas of sustainability



Eskom's overall strategic direction is aligned to the DPE vision statement "To drive investment, productivity and transformation in its portfolio of state-owned companies, their customers and suppliers so as to unlock growth, drive industrialisation, create jobs and develop skills."

Focus for 2014/15

During 2014/15, Eskom will focus on three core areas in support of its strategic objectives:

- **Sustainable asset creation** through the capacity expansion programme, with particular focus on synchronisation of Medupi Unit 6
- **Ensuring financial sustainability** by implementing the business productivity programme which also includes applying to NERSA in terms of the RCA
- **Operational sustainability** by continuing the Generation sustainability strategy and enhancing performance levels in the Transmission, Distribution and Group Customer Services divisions

03

Eskom's approach to integrated reporting

More than 120 stakeholder engagements were arranged in the year to 31 March 2014 at a national level. This excludes the many engagements at an operational and provincial level. Engagements focused on sharing key information, improving existing and new relationships and creating partnerships to ensure support in addressing Eskom's challenges

Defining material items in partnership with stakeholders

The relationships with stakeholders are managed in Eskom in terms of a governance process which is aligned to King III. This includes a stakeholder relations policy, process control manual, assessment of stakeholder relations and annual reporting of the material issues to the executive management committee, the social, ethics and sustainability committee and to the board. New developments for 2014 will include a stakeholder management data tool and the bi-annual submission of an integrated stakeholder relations issues and engagement report to the executive management committee and board.

This integrated report focuses on qualitative and quantitative items that are material to Eskom's operations and strategic objectives. The question of what is "material" has been determined by the board and executive management through extensive consultation within Eskom as well as with Eskom's stakeholders, while taking into consideration Eskom's strategic objectives, risk assessments and the way in which its value chain operates.

Material items are those that are both of high concern to stakeholders and have a significant impact on the business. Eskom analysed the following to determine its material items:

- Both formal and informal stakeholder feedback, including media coverage
- Parliamentary questions received and the questions and feedback from government portfolio committee engagements
- Reports submitted to the board and shareholder for discussion or approval
- Eskom's shareholder's compact, corporate plan, its long-term strategic objectives and key focus areas for 2013/14
- Eskom's key risks, as identified by its integrated risk management process
- Policies and initiatives relevant to Eskom's business
- Policy, legislation and regulation changes

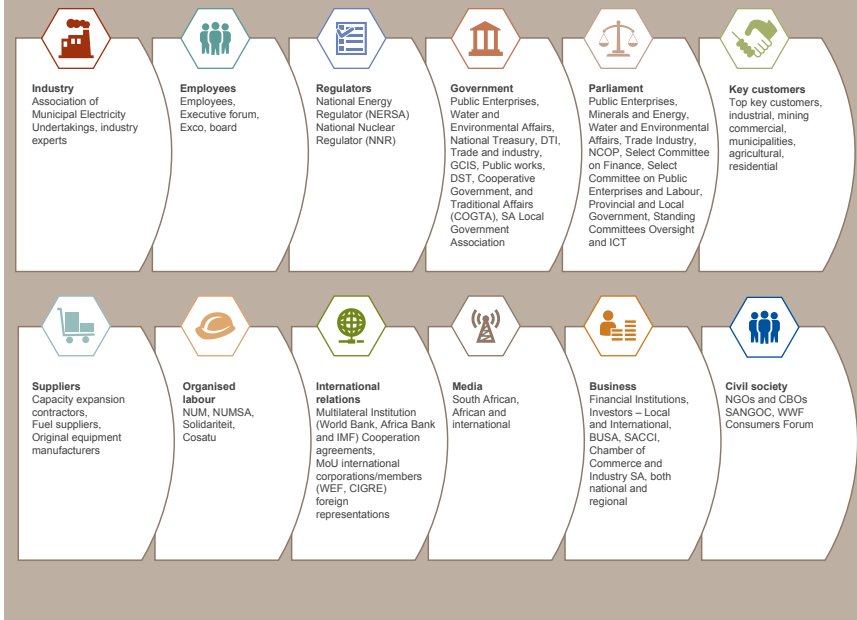
The complete list of material items was analysed in terms of Eskom's strategic objectives and was tabled at Eskom's integrated report steering committee for consideration of the accuracy and completeness of the list. As part of Eskom's governance process, the following committees also reviewed the material items that were included in this integrated report for accuracy and completeness:

- Executive management committee
- Social, ethics and sustainability committee
- Audit and risk committee
- Board

Many stakeholder groups such as the World Bank visit the Medupi power station project

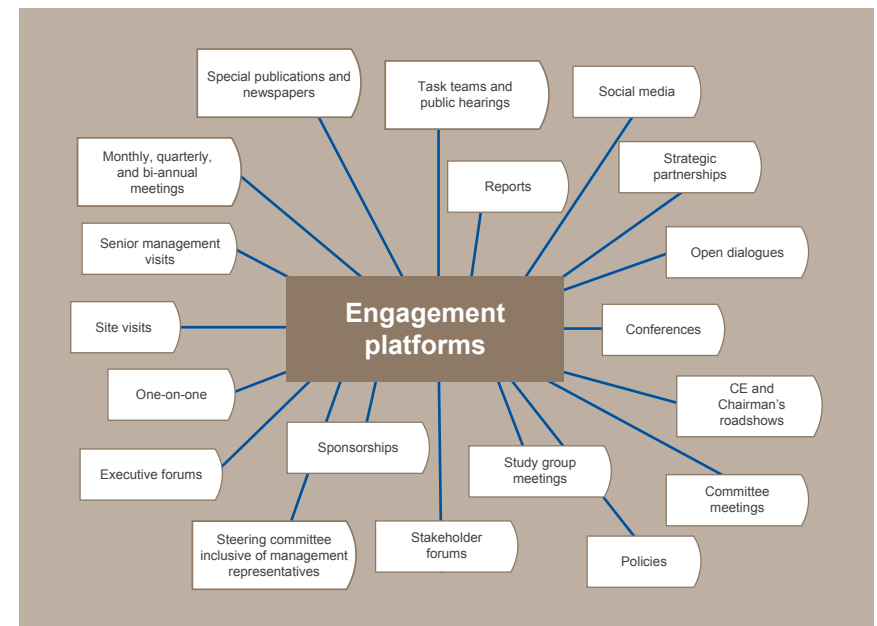
Eskom's approach to integrated reporting (continued)

Eskom operates within a complex stakeholder landscape involving multiple stakeholders with multiple objectives, who are engaged through multiple engagement agents and touch points. The stakeholders engaged during the year include:



Stakeholder engagement

There are various avenues of communication through which stakeholders can approach Eskom with their concerns and expectations. The company takes care to ensure that all stakeholder engagements are carefully planned in terms of the scope of the engagement, the intended outcomes of the interaction and the engagement approach.



Eskom's approach to integrated reporting (continued)

Eskom's interaction with stakeholders

Stakeholders	Method of interaction
Government, parliament, national departments and regulators	One-on-one meetings; Presentations to parliamentary portfolio committees; Committee meetings; Eskom website; Reports; Annual general meeting; Industry associations and task teams; Site visits and public hearings; Monthly, quarterly and bi-annual meetings; Community and executive forums
Lenders, investors and customers	Roadshows; Meetings; Results presentations; Webcasts; Site visits; Eskom website; Teleconferences; Social media; Formal presentation website; Company announcements; Reports and quarterly forums
Suppliers and contractors	Roadshows; One-on-one meetings; Preferential procurement programmes; Open days; Contracts and service agreements; Workshops; Presentations; Training; Project steering committees
Eskom management, employees and organised labour	Provincial employee engagements; Collective bargaining practices; Pre- and post- interim and annual results; Regular meetings; Eskom website; Social media; Development programmes; Special publications and newspapers; Open dialogues, conferences and forums; Partnerships
Business groups, civil society and non-governmental organisations	Roadshows; Results presentations; Reports; Community forums; Stakeholder forums; Peer educators; Industry partnership; Wellness campaigns, HIV and Aids awareness; Skills development programmes; Advertising in local newspapers; Sponsorships; NGO Forum
Industry experts, analysts, academics and media	Industry associations and task teams; Forums and committees; Emails and Eskom website; Interviews; Roadshows; Results presentations; Quarterly briefings; Company reports; Articles

The improvement in the 12-month moving average top customer KeyCare service measure for the year is attributable to Eskom meeting regularly with its top customers to share critical information on the system status and the capacity expansion programme. This was done with regular feedback from the chief executive to the key customers, quarterly liaison meetings at plant level and customer forums. The regional key account managers and their teams also regularly visit the general managers of customers and municipal managers to share important information and to enquire about service-related issues requiring attention. During the year, 56 general managers, 133 engineers and 138 accounting staff from the top customers were interviewed.

Despite the number of system emergencies, the proactive manner in which Eskom informs its customers of the system status, via twice daily reports, as well as the KeyAlert SMS messaging system, has made a difference by assisting Eskom's top customers to plan their operational activities.

Stakeholder materiality matrix

This integrated report addresses only those items that:

- Have such relevance that they could substantively influence stakeholders' decisions
- Pose a significant risk or opportunity to business operations in the short, medium and long term
- May affect the achievement of strategic objectives and sustainability of value created through Eskom's activities

Eskom's integrated report steering committee prioritised the issues that were identified through the stakeholder engagement process, to form a stakeholder materiality matrix as outlined in the table that follows on page 56. While Eskom considers all the items raised by stakeholders, these are not all necessarily addressed in this report.

Stakeholder material items have not been grouped together in general categories. By grouping them together the significance of some material items would have been lost for some specific stakeholders. Stakeholder concerns that are ranked as having a "high" or "medium" impact on Eskom (the last two columns) are regarded as having the potential to significantly affect the company's achievement of its strategic objectives. As such, they have been included in this integrated report under the "Performance on strategic objectives" section.

The material items have been numbered to allow for cross-referencing with the key focus areas and associated risks table on pages 58 to 62. The numbering does not indicate the level of importance of an item.

Eskom's approach to integrated reporting (continued)

Stakeholder materiality matrix

		Impact on Eskom	
		Low	High
Stakeholder concerns	High	<div><div><div><div></div><div>11. Environmental concerns regarding the use of nuclear power including the management of nuclear waste</div></div><div><div></div><div>17. Social responsibility contribution</div></div><div><div></div><div>22. Tender opportunities for suppliers</div></div><div><div></div><div>41. Eskom annual and interim results</div></div><div><div></div><div>42. Performance against the shareholder compact</div></div></div></div> <div><div><div><div></div><div>3. Impact of international sales on security of supply</div></div><div><div></div><div>10. Concerns regarding water scarcity</div></div><div><div></div><div>23. Impact of carbon tax</div></div><div><div></div><div>24. Directors' remuneration and leadership transition</div></div><div><div></div><div>27. Protecting the poor from high tariffs and providing free basic electricity</div></div><div><div></div><div>31. Availability of alternative investment options to investors</div></div><div><div></div><div>35. Employee salary and benefits</div></div><div><div></div><div>40. Customer dissatisfaction with quality of service delivery</div></div></div></div> <div><div><div><div></div><div>1. Technical performance of generation, distribution and transmission plant, including maintenance</div></div><div><div></div><div>4. Overreliance on open-cycle gas turbines, including the availability and cost of liquid fuel</div></div><div><div></div><div>5. Security of supply, including load shedding and quality of coal feed into power stations</div></div><div><div></div><div>6. Delayed completion of capacity expansion projects including costs, contractor capacity and performance, job creation, localisation and labour unrest</div></div><div><div></div><div>9. Impact of particulate emission licences on the security of supply</div></div><div><div></div><div>12. Adequate coal stock at power stations</div></div><div><div></div><div>25. Impact of outstanding electricity debtors on Eskom's liquidity position</div></div><div><div></div><div>26. Negotiated pricing agreements</div></div><div><div></div><div>28. Impact of high tariffs on businesses and customers</div></div><div><div></div><div>29. Revenue shortfall following NERSA's MYPD 3 determination and the impact of this on financial and operational sustainability</div></div><div><div></div><div>39. Energy losses due to theft of equipment, illegal connections, meter tampering and illegal vending of pre-paid electricity</div></div></div></div>	
	Low	<div><div><div><div></div><div>21. Fraud and governance issues</div></div><div><div></div><div>34. Availability of jobs and training opportunities</div></div><div><div></div><div>37. Electric vehicle research</div></div></div></div> <div><div><div><div></div><div>15. Creation of an Independent System Market Operator</div></div><div><div></div><div>18. Transform employment equity</div></div><div><div></div><div>19. Electrification connection challenges (including network upgrading, timeliness, costs)</div></div><div><div></div><div>20. Increase localisation and procurement from black, black women and black youth-owned businesses</div></div><div><div></div><div>33. Shortage of technicians, artisans and engineers</div></div><div><div></div><div>36. Improve research and innovation</div></div></div></div> <div><div><div><div></div><div>2. Implement energy-efficiency programmes and incentives</div></div><div><div></div><div>7. Reduce carbon footprint by procuring renewable energy</div></div><div><div></div><div>8. Environmental contraventions and water licences</div></div><div><div></div><div>13. Availability of coal and water of acceptable quality at a fair price</div></div><div><div></div><div>14. Safety of the workplace, the public and the transport of coal on the roads</div></div><div><div></div><div>16. Private-sector participation through Department of Energy renewable energy programme and other IPPs</div></div><div><div></div><div>30. Uncertainty regarding the regulatory regime including the tariff review</div></div><div><div></div><div>32. Savings through the business productivity programme</div></div><div><div></div><div>38. Lack of improvement in safety performance</div></div><div><div></div><div>44. Strategic partnerships, relationships and communication with stakeholders</div></div><div><div></div><div>45. Awaited IRP 2010 allocations after Kusile, especially nuclear and coal power stations</div></div></div></div>	
	Low	<div><div><div><div></div><div>43. Business continuity and disaster management, including the strategy for insurance</div></div></div></div>	

Risks relating to material items

The Eskom board, through the audit and risk committee, manages Eskom's risk and resilience in order to provide greater security for its employees, customers and other stakeholders. Two risk profiles are considered in Eskom, namely enterprise risk and business risk profiles.

An **enterprise risk profile** gives Exco and the board a robust and holistic top-down view of key risks facing the organisation. This makes it possible to manage those risks strategically and to increase the likelihood that Eskom's objectives will be achieved. Enterprise risk is defined as one or a combination of the following:

- Risks emanating from external factors and/or enterprise events that are strategic challenges which may affect Eskom's ability to achieve its objectives e.g. climate change
- Risks associated with Eskom's ability to develop and execute strategy, achieve strategic objectives, and build and protect value
- Business risks that occur across multiple divisions that, when integrated and aggregated, are material and impact Eskom's objectives
- The aggregated risks may not be recognised as material in any one division but are occurring across multiple Eskom divisions and when integrated, become significant
- A single business risk, may be material enough to impact on the Eskom's objectives as a whole and as such maybe reported as a corporate risk

The **business risk profile** gives Exco and the board a robust and holistic bottom-up view of key risks facing the divisions, and a view of the level of effectiveness in the management of those risks.

Risks inherent to Eskom's operations are considered as:






- Risks that will have a significant consequence should they materialise, but that may not be consistently listed on the risk register because of the perceived adequacy of the controls or due to their perceived low likelihood
- Risks which by their nature fall into the realm of business continuity management – i.e. related to the continuity of critical products and services in the event of a disruption to processes providing these (the focus here is not on the cause of the disruption but on the time-critical impact on the process if buildings, equipment, system, technologies, human resources, or suppliers, are affected)
- Risks that fall into the category of disaster risks – i.e. with potentially significant impact on the country if Eskom products and services are disrupted (if business continuity is not adequate), and if Eskom does not have the capability to respond




In line with Eskom's integrated risk management methodology, inherent risks are continuously reviewed with a particular focus on the effectiveness of controls.

Eskom is required to comply with the relevant provisions in the Disaster Management Act No 57 of 2002 (and the associated National Disaster Management Framework) and Eskom is currently focusing on improving the processes around this requirement.

The following table details the key focus areas and associated risks and provides a link to the material items identified in the stakeholder materiality matrix (refer to page 56). It also refers to the section in this report where the items are discussed in more detail. Labour issues have been identified as a new item on this table since the integrated report for the year ended 31 March 2013.

Eskom's approach to integrated reporting (continued)

Key focus areas and associated risks	Key performance indicators	Strategic response and controls	Page reference
VII Labour   <i>Related material items: 6, 38, 44</i> Possible labour unrest among contractors, service providers and suppliers could further delay major projects, cause significant disruptions in electricity supply, decrease productivity and pose a risk to the safety of Eskom employees, contractors and members of the public	<ul style="list-style-type: none"> No specific key performance indicators 	<ul style="list-style-type: none"> Strike prevention mechanisms Engagement with government intelligence agencies and environmental scanning Monitoring the labour environment Develop, review and implement strategy on employee engagement Security drive to protect employees, contractors and infrastructure See the treatment and controls under the "focus on safety" focus area in this table on page 58 	52 – 54 76, 151 75, 85 – 88
VIII Reduce environmental footprint in existing fleet  <i>Related material items: 2, 7, 8, 9, 10, 11, 23, 36, 37, 42</i> Should Eskom fail to embed climate change and sustainable development in its operations, its access to natural resources and licence to operate may be jeopardised to the point that it will be unable to reliably supply electricity. Eskom's emissions performance could also deteriorate, possibly resulting in costly legal contraventions, increased public health risks due to growing emissions, reputational damage and jeopardised security of supply should generating plant have to be wholly or partially shut down	<ul style="list-style-type: none"> Specific water usage Relative particulate emissions Environmental legal contraventions in terms of the operational health dashboard 	<ul style="list-style-type: none"> Emission treatment plans are in place. However, they cannot always be executed due to the outages required to do upgrades being postponed Ongoing reviews to ensure that water-use licences and permit requirements are met Kusile and Medupi power stations will be fitted with flue gas desulphurisation technology, which will reduce sulphur oxides, nitrogen oxides and particulate emissions Renewable-energy projects are underway Eskom supports introducing renewable energy IPPs to the electricity industry Internal and external energy-efficiency programmes Eskom's climate change strategy 	128 – 129, 132 129 – 130, 137 – 138 138 132 – 133 143 – 145 111 – 114 130 – 132 141
IX Implementing coal haulage and the road-to-rail migration plan  <i>Related material items: 14, 42, 44</i> Failing to successfully implement the road-to-rail migration strategy would cost Eskom lost opportunities in terms of cost (road repairs and logistics costs would not be lowered) and reputation. Safety benefits would also not materialise	<ul style="list-style-type: none"> Amount of coal haulage transferred from road to rail 	<ul style="list-style-type: none"> The road-to-rail migration strategy is being implemented in partnership with Transnet Freight Rail 	141
X IPP-contracted energy  <i>Related material items: 5, 16, 44</i> If IPPs are only able to intermittently deliver electricity, Eskom's demand-and-supply planning may be affected, so affecting security of supply	<ul style="list-style-type: none"> Installed IPP capacity GWh purchased from IPPs 	<ul style="list-style-type: none"> Eskom continues to sign power purchase agreements with IPPs Eskom is implementing a contract management strategy for IPPs 	143 – 145

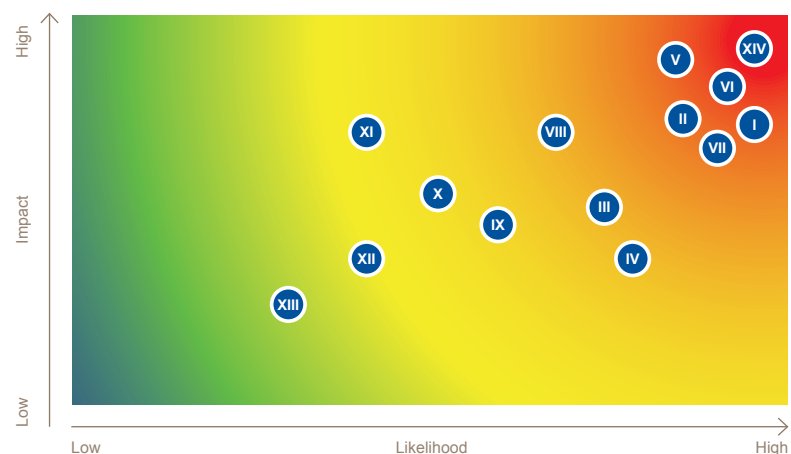
Key focus areas and associated risks	Key performance indicators	Strategic response and controls	Page reference
XI Independent System Market Operator  <i>Related material item: 15</i> The creation of the Independent System Market Operator may affect Eskom and its stakeholders should it be implemented within a constrained capacity environment	<ul style="list-style-type: none"> No specific key performance indicators 	<ul style="list-style-type: none"> Eskom contributed to the preparation of a due diligence report that was tabled with the Department of Energy Eskom has suggested a phased approach 	32
XII Maximise socio-economic contribution and procurement equity  <i>Related material items: 17, 19, 20, 21, 22, 27, 42, 44</i> Failing to meet targets for corporate social investment, universal electrification and local procurement – especially procurement from businesses that are owned by black people, black women or black youth – would mean that Eskom has effectively not fulfilled its mandate to contribute to the government's developmental plans	<ul style="list-style-type: none"> Percentage of local content in all new build contracts Percentage of expenditure attributable to B-BBEE companies, black-women-owned and black youth-owned companies Corporate social investments Electrification connections 	<ul style="list-style-type: none"> Eskom promotes jobs and local-content procurement in all new commercial contracts Eskom's procurement policies advance B-BBEE and black-women-owned and black youth-owned businesses Eskom provides training through the Academy of Learning and learner programmes The universal electrification programme is ongoing Corporate social investment activities are ongoing Eskom's socio-economic development strategy 	148 – 150
XIII Employment equity  <i>Related material items: 18, 42</i> Failing to meet equity targets for disability, race and gender in middle and upper managerial and professional positions would affect Eskom's reputation and labour relations, and could jeopardise the developmental aspect of its mandate	<ul style="list-style-type: none"> Employment equity indicators 	<ul style="list-style-type: none"> Eskom has implemented an employment equity plan supported by a long-term, target-setting strategy to drive the transformation agenda 	150 – 151

Eskom's approach to integrated reporting (continued)

Key focus areas and associated risks	Key performance indicators	Strategic response and controls	Page reference
<p>xiv Ensure Eskom's financial sustainability</p> <p><i>Related material items: 4, 13, 16, 23, 24, 25, 26, 29, 30, 31, 32, 35, 41, 42, 45</i></p> <p>The revenue shortfall between Eskom's MYPD 3 application and NERSA's tariff determinations may compromise business operations and delivery on the current corporate mandate. Should poor decisions be made regarding liquidity and portfolio management, it will lead to insufficient funds to meet financial obligations</p> <p>Further sovereign rating downgrades, combined with uncertainty around Eskom's financial sustainability or ability to meet loan obligations on time as perceived by the rating agencies, may result in a lower credit rating for Eskom. This would negatively affect its funding and hedging options, and increase borrowing costs</p>	<ul style="list-style-type: none"> Financial and liquidity ratios 	<ul style="list-style-type: none"> Eskom continues to monitor its funding and liquidity position The MYPD 3 response, which includes the business productivity programme, forms the core of the treatment plan. Executive management committee "sponsors" have been assigned to the programme's seven streams to drive value creation and ensure that cash is delivered to the business, and the board closely monitors the progress There is ongoing engagement with NERSA regarding the regulatory rules and RCA A joint board/Exco task team has been established to find a solution to Eskom's financial sustainability in the long term Refer to note 4 in the 2014 annual financial statements for more information regarding Eskom's financial risk management (www.eskom.co.za/IR2014/01.html). 	<p>153 – 161</p> <p>73</p> <p>48 – 49</p> <p>72</p>

The heat map that follows indicates the relative likelihood and impact of selected risks noted in the materiality matrix. For a risk to be classified as a priority one risk, both the likelihood and impact should be high. Roman numerals are used to facilitate the linkage to the material items table above.

Heat map of risks linked to material items



04

Leadership and corporate governance

Eskom needs strong leadership, governance structures and processes to effectively manage its operations and achieve its core mandate of ensuring that South Africa's energy needs are met

Shareholder and board of directors

Eskom is a state-owned company answering to the Minister of Public Enterprises. Its strategic direction is guided by a unitary board (that is, a single board with both executive and non-executive directors). The non-executive directors, including the chairman of the board, and the chief executive are appointed by the shareholder. The finance director is appointed by the board after approval of the candidate by the shareholder. The chairperson and chief executive is not the same person.

Eskom's board is responsible for the strategic direction of the company and monitoring the company's progress against the business strategy. The board also drives Eskom's goal to be a good corporate citizen and is assisted by Eskom's committees and subsidiaries in this regard. Board members have a diverse profile that includes the sciences, engineering, law, finance, auditing, enterprise risk management, business and accounting skills and expertise. The majority of the board is made up of independent non-executive directors.

The first three-year term of office for non-executive directors expires in July 2014 and will be reviewed at the annual general meeting (AGM). Retiring directors are eligible for reappointment and the appointment of non-executive directors is reviewed annually at the AGM.

Eskom has a transformation programme in place and has put in place skills-development programmes to train engineers, technicians and artisans

Leadership and corporate governance (continued)

Membership of the board at 31 March 2014



Mr Zola Tsotsi (67)
Independent non-executive director
Chairperson of the board



Mr Collin Matjila (52)
Independent non-executive director
Appointed as interim chief executive on
1 April 2014



Mr Brian Dames (48)
Chief executive
Resigned 31 March 2014



Ms Tsholofelo Molefe (45)
Finance director
Appointed 14 January 2014

Please see www.eskom.co.za/IR2014/07.html for board members' qualifications, significant directorships and appointment dates



Dr Bernie Fanaroff (66)
Independent non-executive director



Ms Queendy Gungubele (55)
Independent non-executive director



Ms Neo Lesela (44)
Independent non-executive director



Ms Bajabulile Luthuli (41)
Independent non-executive director



Ms Chwayita Mabude (44)
Independent non-executive director



Ms Yasmin Masithela (40)
Independent non-executive director



Dr Boni Mehlomakulu (41)
Independent non-executive director



Mr Mafika Mkwana (60)
Independent non-executive director



Mr Phenyane Sedibe (44)
Independent non-executive director



Ms Lily Zondo (45)
Independent non-executive director

Directors' ages are as at 31 March 2014

Leadership and corporate governance (continued)

Changes in board composition and company secretary

Mr Brian Dames resigned as chief executive, effective 31 March 2014. Mr Collin Matjila, an independent non-executive director, was appointed interim chief executive effective on 1 April 2014 while the recruitment process for a new chief executive is underway.

Mr Paul O'Flaherty resigned as finance director effective 10 July 2013. Ms Caroline Henry (senior general manager: Treasury) was, in the interim, appointed as acting chief financial officer. On 14 January 2014, Ms Tsholofelo Molefe, formerly the group executive: Group Customer Services, was appointed as the finance director.

Ms Bongiwe Mbomvu resigned as company secretary, effective 31 August 2013. Ms Annamarie van der Merwe was appointed as interim company secretary with effect from 1 September 2013.

Board assessments

An independent evaluation of the performance and effectiveness of the board, individual directors and the company secretary is being undertaken with regard to 2013/14, in line with Eskom practice. The board will consider the improvement opportunities identified in the evaluation report and develop a programme to implement the recommendations, including the enhancement of the director training programme to focus on industry-specific topics, as was the case the previous year with regards to the 2012/13 evaluation.

Director induction and orientation

A comprehensive programme is in place to train and orientate new directors and external committee members on a continual basis.

Corporate governance framework

The governance framework that regulates the relationship between the shareholder, the company and the board includes the following:

- **A memorandum of incorporation**, which sets out certain powers of the shareholder and the board. Eskom's revised memorandum of incorporation (Mol) is being finalised. The board and the shareholder are in consultation on various provisions of the Mol
- **A strategic intent statement**, which sets out the agreed mandate and strategy for Eskom
- **The corporate plan**, which forms the basis of Eskom's operations and outlines the company's purpose, values and strategic objectives
- **A shareholder's compact**, which sets out annual key performance indicators and targets in support of the strategic intent statement. To the extent necessary, the shareholder's compact seeks to clarify the objectives of Eskom in the context of the strategic intent statement
- **Codes of good governance** such as King III and the Protocol on Corporate Governance in the Public Sector. Eskom has endeavoured to apply all the King III principles and practices. However, as a state-owned company, a few of these cannot be applied and Eskom has, in some instances, adopted alternative practices to those recommended by King III. A report on Eskom's King III exceptions and alternative practices can be found at www.eskom.co.za/IR2014/03.html
- **Relevant legislation**, including the Companies Act, the Public Finance Management Act (PFMA), National Treasury regulations, the Eskom Conversion Act (2001), and regulations of NERSA and the National Nuclear Regulator (also refer to page 34)
- **Materiality framework** which sets out the requirements regarding matters needing approval in terms of the PFMA

- **Relevant policies and procedures** of the shareholder and Eskom
- **Delegation of authority framework** which delegates power and authority from the board to committees and employees. The revised delegation of authority framework was approved and is being implemented

One of the essential components of the governance framework is the emphasis on the clarity of roles between the board, shareholder and management, and this is addressed through the strategic intent statement and shareholder's compact.

A subsidiary governance framework is in place to ensure that Eskom's subsidiaries align with the group's sustainability goals.

Responsible and ethical leadership

Eskom's leadership focuses on effective ethical leadership and corporate citizenship. As can also be seen from what is set out earlier regarding the performance of Eskom and its key priorities, the board and executive management have recognised the need to integrate strategy, governance and sustainability.

The Eskom board ensures that the group's ethics-management programme is effectively implemented. Eskom manages fraud and corruption by:

- Fostering ethical standards
- Raising awareness regarding ethics through training, reporting and providing advice through an ethics help desk
- Encouraging whistle-blowing through mechanisms such as a fraud and corruption hotline on 0800 112 722
- Conducting forensic investigations

A detailed forensic report is tabled with the audit and risk committee on a quarterly basis. This report contains information on:

- New forensic incidents reported, including those reported through the hotline
- Progress on investigations relating to incidents of corruption, fraud, irregularities and sexual harassment
- Losses and recoveries recorded by Assurance and Forensics
- Disciplinary action taken (11 employees were dismissed during the year as a result of the outcome of forensic investigations)
- Trends and observations stemming from investigations
- Preventative action taken (for example, fraud awareness training to enhance vigilance among employees was attended by 1 933 employees during the year)

Eskom is a signatory to the United Nations Global Compact LEAD initiative, which includes an anti-corruption clause, as well as the World Economic Forum's Partnership Against Corruption initiative.

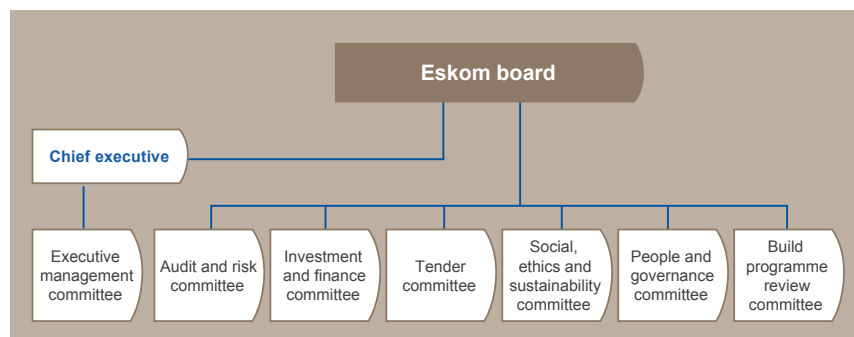
Committees

The board's effectiveness is improved by the use of board sub-committees, to which it delegates authority without diluting its own accountability. Board committees consist of a majority of independent non-executive directors who exercise their authority in accordance with approved terms of reference, which are reviewed on an annual basis. These terms of reference define each committee's composition, role, responsibilities and authority, and are aligned with regulatory

Leadership and corporate governance (continued)

requirements and best-governance practices. The board provides the strategic direction, while the chief executive, who is assisted by the executive management committee, is accountable to the board for implementing the strategy.

The diagram below sets out Eskom's key governance structures:



The board held 11 meetings during the year. The board committees held the following number of meetings:

• Audit and risk committee	9
• Investment and finance committee	12
• Tender committee	12
• Social, ethics and sustainability committee	5
• People and governance committee	6
• Build programme review committee	10

Please see www.eskom.co.za/IR2014/08.html for more information on the committees and their activities throughout the year. For the report of the audit and risk committee, please refer to page 3 of the annual financial statements, which can be found at www.eskom.co.za/IR2014/01.html

Executive management committee

The executive management committee is established by the chief executive and assists the chief executive to guide the overall direction of the business and exercise executive control in managing day-to-day operations. The executive management committee held 17 meetings during 2013/14. Refer to page 43 for Eskom's operational structure as well as the related executive management committee member responsible for each function.

Other than the chief executive and finance director, who are executive directors, Eskom's group executives are appointed by the board. Group executives are full-time employees subject to Eskom's conditions of service.

Please see www.eskom.co.za/IR2014/09.html for executive management committee members' qualifications, significant directorships and appointment dates.

Changes in executive management committee in 2013/14

Refer to changes in board composition on page 68 for changes regarding the chief executive and the finance director.

Mr Paul O'Flaherty, who was also the group executive: Group Capital, resigned with effect from 10 July 2013 and Mr Dan Marokane (group executive: Technology and Commercial) was appointed to act as group executive: Group Capital.

Mr Kannan Lakmeharan (divisional executive for Office of the Chief Executive) was appointed to act as group executive: Technology and Commercial. Mr Lakmeharan resigned with effect from 30 April 2014 and Mr Matshela Koko was appointed to act as group executive: Technology and Commercial until the permanent appointment has been concluded.

Ms Erica Johnson, group executive for Enterprise Development has been acting as group executive: Group Customer Services from 20 January 2014 after Ms Tsholofelo Molefe vacated the position.

Mr Bhabhalazi Bulunga, group executive: Human Resources went on early retirement on 31 January 2014. Mr Mongezi Ntsokolo, group executive: Transmission, was appointed acting group executive: Human Resources from 1 February 2014.

Filling of the executive vacancies will be one of the first priorities for the incoming chief executive.

Leadership's key focus areas

The board and executive management have been instrumental in guiding Eskom with regard to the key priorities and risks in the business – they have been appropriately involved in the material issues affecting the business.

Some of the key items that were tabled at board and executive management level during 2013/14 are listed below and all these items are addressed in this integrated report:

- **Strategy**, including the corporate plan for 2014/15 to 2017/18
- **General performance and risks**, including safety, board and sub-committee evaluations, key business risks, and shareholder reporting
- **Generation sustainability**, including maintenance issues
- **Security of supply**, including IPPs, energy efficiency, electricity and equipment theft, and stakeholder engagement
- **Progress on the capacity expansion programme**
- **Financial sustainability**, including the business productivity programme, municipal debt, budgets, Eskom's borrowing programme and statutory reporting
- **Security of coal and water supply**, including coal haulage
- **Eskom's environmental footprint**, including emissions and environmental licences
- **Transformation**, including employment equity, job creation, the electrification programme and B-BBEE

Leadership and corporate governance (continued)

Ensure security of supply and Eskom's financial sustainability

Balancing security of supply and Eskom's financial sustainability were two of the most material items the board had to deal with this year. Some of the key decisions the board has taken during the year in this regard are listed below:

- The going-concern status of the company will not be compromised while Eskom continues to ensure security of supply
- The funding for the use of open-cycle gas turbines (OCGTs) in 2013/14 was increased from R3.6 billion to R11.3 billion to ensure security of supply, but this funding needs to be found elsewhere within the approved budgets, until it is recovered as a part of the regulatory mechanism
- Appropriate levels of planned maintenance based on what is necessary to ensure long-term plant health will be executed while at the same time taking into account the current system constraints, compliance, safety and statutory requirements, and the financial constraints
- Eskom will explore alternative funding options, including government support
- Eskom will pursue all the regulatory options, including the liquidation of the RCA balance and, if necessary, a potential re-opening of the MYPD 3 revenue determination will be considered
- The capital portfolio will be managed within the available funds and should additional funding not be secured for additional capital requirements, the current capital portfolio will be reviewed to reprioritise projects to ensure environmental and regulatory compliance
- The board build programme review committee was established in April 2013 to enhance governance and monitoring and provide an additional oversight role for the capacity expansion programme
- The residential customer revenue-management strategy, which includes the Soweto revenue management strategy to address debtor payment levels, received PFMA approval from the DPE and will be implemented in the new financial year
- Various cost saving initiatives relating to the business productivity programme have been approved by the board investment and finance committee
- The board has taken active steps to address the sustainability challenges in an integrated manner, including the establishment of a special board/Exco task team

Cost savings through the business productivity programme

Eskom implemented the business productivity programme (BPP) which focuses on the reduction of the cost base, increased productivity and revisions of the Eskom business model and strategy in order to close the revenue shortfall that was created by the MYPD 3 determination. Cash savings of between R50 billion and R60 billion are targeted over the period of MYPD 3.

To date, 86 savings opportunities (value packages) totalling R72.9 billion have been identified and approved and covers the following functional areas:

- Primary energy
- Employee costs
- Repairs and maintenance
- External spend
- Finance
- Revenue management

Cost-saving projects focus on:

- Improving the efficiency and effectiveness of the capacity expansion programme
- Reducing external expenditure through, amongst others, efficient procurement practices, negotiating for better prices, revising technical standards and reviewing the necessity of some activities
- Reducing revenue losses, improving debt management and finding additional revenue sources
- Optimising maintenance costs and processes
- Reducing direct and indirect employee benefit costs
- Optimising funding options and the balance sheet
- Optimising and reducing the cost of primary energy

Risk reviews are performed prior to the implementation of value packages. A number of controls are in place to manage the risk of non-realisation of BPP targets. These mostly relate to the current governance processes such as business planning, budgeting and periodic financial monitoring. However, more specific measures will be implemented as part of the BPP programme. This will provide a much more granular view, monitoring value packages from inception through savings realisation, following a "stage gate" methodology. This is a proven, standard methodology applied in cost-saving exercises. A comprehensive project management approach and methodology is in the process of being implemented.

Leadership and corporate governance (continued)

Internal controls including security and combined assurance

Internal controls

The board, through the audit and risk committee, ensures that internal controls are effective and adequately reported on for auditing and regulatory purposes. In line with King III, Eskom applies a combined assurance model to ensure coordinated assurance activities. This model gives the audit and risk committee an overview of significant risks, as well as the effectiveness of critical controls to mitigate these risks. The principles for the combined assurance model are embedded in the combined assurance framework. Eskom's internal audit function is managed by the Assurance and Forensics department which reports directly to the audit and risk committee.

Eskom has for the past few years been running the "Back2Basics" programme to standardise, simplify and optimise its internal processes and improve the overall control environment. This is managed by a cross-functional committee called the CARAT committee. Process control manuals, each containing a "risk and controls" matrix, have been prepared for all key processes. These manuals cover both financial and operational processes, including the processes to be followed to determine the key performance indicators for technical matters and operations. The process control manuals are updated regularly.

The CARAT committee is a sub-committee of the executive management committee and performs the following in terms of its mandate:

- It ensures that processes are driven with functional accountability with respect to the principles of completeness, accuracy, relevance, accessibility and timeliness
- Reviews all change requests affecting processes, systems or data
- Ensures the adherence to and compliance with business processes defined in each support function process control manual
- Identifies the need for business process optimisation projects
- Enforces standardisation across the business
- Defines and monitors KPIs to drive performance improvement across the business

The Audit and Forensic department's risk-based plan for technical and financial reviews of internal control systems is approved by the audit and risk committee on an annual basis. Eskom keeps a database of all internal and external audit findings (financial and technical). The database is monitored on a monthly basis by management and Assurance and Forensics, and progress on resolving audit findings is reported to the audit and risk committee on a quarterly basis. Eskom also provides the Auditor-General of South Africa with a quarterly assessment on the control environment.

Combined assurance

Combined assurance assists management in identifying duplication of assurance work, any potential assurance shortfall, and improvement plans for those areas identified. It also helps focus assurance providers to better achieve consensus on the key risks the company faces and reduce the risk of failing to identify significant risks.

The combined assurance model provides three lines of defence against risk:

- **Line 1: Line management and managerial controls.** Line management is responsible for managing risk and performance
- **Line 2: Functional areas** like risk management, compliance (including ISO 9001 and 14001 compliance), safety, health, environment, quality and the associated frameworks, policies, reporting and oversight, support management in executing its duties and provides a layer of control over risk management
- **Line 3: Independent, objective internal and external assurance providers.** The third line of defence is independent of management and provides independent, objective assurance

A combined assurance forum has been established to implement and embed the combined assurance framework principles. The forum consists of the three lines of defence, with the objective of:

- Ensuring coordinated and relevant assurance activities focusing on key risks
- Improving collaboration between different assurance providers
- Improving reporting to the board and committees, including minimising repetition of reports being reviewed by different committees
- Reducing assurance fatigue and minimising disruptions to the business
- Providing the audit and risk committee with a better basis for exercising its oversight function

The Assurance and Forensics department is responsible for driving combined assurance within Eskom. External auditors independently audit the financial statements and selected sustainability information.

Security risk management

The board is responsible for ensuring that an integrated crime-prevention plan is in place to minimise Eskom's exposure to crime, particularly fraud. Eskom develops strategies to protect assets, interests, information, people and processes, and gives assurance that the required measures are implemented.

Security projects for the year included purchasing new data-leakage prevention software, firewalls, laptop encryption and a security operations centre. Public Finance Management Act approval has been obtained for the transmission national security refurbishment project. This project includes various initiatives to improve and upgrade the security systems at various critical and high-risk Transmission sites, in order to mitigate risks to the integrity of assets and continuity of supply. The project is underway and will receive continued focus until completion.

Leadership and corporate governance (continued)

Remuneration and employee relations

Eskom's approach to remuneration and benefits is designed to attract and retain skilled, high-performing employees. To achieve this, Eskom pursues the following remuneration principles:

- Business requirements determine market positioning
- Provide market-related remuneration structures, benefits and conditions of service
- Maintain external competitiveness to attract and retain key skills
- Ensure internal equity through defensible differentials in pay and benefits
- Remunerate employees in accordance with their job grade, and at least at the minimum of the applicable salary scale
- Follow a lead-lag market approach. The Eskom salary/guaranteed packages will typically be leading the market just after the annual increases have been implemented and lagging the market two to three months before the next increases are due

Eskom is committed to resolving unjustifiable race- and gender-based income differentials by reinforcing its remuneration management principles. This involved ensuring that all qualifying employees are moved to the 50th percentile for their job description. An income differential exercise was implemented in November 2013 and the resulting salary adjustments were made.

Eskom's employee engagement model aims to encourage employee participation and involve employees and executives in conversations around strategy, performance and people. Eskom has developed more productive, sustainable relationships with organised labour and continues to do so through a partnering model to guide these interactions. The company has also embarked on a process to further strengthen the relationships with the trade unions, using the services of an external facilitator.

Eskom's remuneration structures fall into four categories as set out below.

Bargaining unit

Bargaining-unit employees (all those below middle management) receive a basic salary plus benefits. Major benefits include membership of the pension and provident fund, a medical aid, housing allowance and an annual bonus (thirteenth cheque). Basic salaries and conditions of service are reviewed annually through a collective bargaining process. Bargaining-unit employees also participate in an annual short-term incentive scheme.

Eskom and its recognised trade unions approved the Council for Conciliation, Mediation and Arbitration (CCMA) for wage-negotiation arbitration towards the end of 2013. In January 2014, the CCMA awarded Eskom's trade unions a 5.6% annual wage increase (6.3% total costs including benefits) for one year, backdated to 1 July 2013. This was largely in line with Eskom's final offer.

Even though electricity has been declared an essential service, which prohibits Eskom employees from engaging in industrial action, employees at some sites embarked on various forms of unprotected industrial action during the year.



High-voltage line construction calls for very stringent safety measures

Leadership and corporate governance (continued)

Managerial level

Managerial-level employees are remunerated on a cost-to-company/package basis. The package includes pensionable earnings, compulsory benefits and a residual cash component. Managerial employees also participate in an annual short-term incentive scheme, consisting of rewards for achieving objectives set by the chief executive and approved by a board committee.

Short-term incentive scheme for bargaining unit and managerial level

Eskom has a short-term incentive scheme in place that aims to align individual performance with organisational strategic objectives by setting targets for key performance indicators that contribute to these objectives.

The key performance indicators are linked to Eskom's strategic objectives and cascade down from the organisational level to the individual level. Employees are contracted to achieve targets for selected key performance indicators and are rewarded for meeting or exceeding these targets. All permanent employees take part in the scheme. The value of the bonus itself depends on the organisation's overall performance.

The performance areas of Eskom are weighted: safety (15%), technical and customer service (45%), energy demand and cash savings (20%) and achievement of new build milestones (20%).

The executive management committee can reduce the incentive payable to the bargaining unit and managerial level when the minimum requirements of the scheme are not adhered to, for example fatalities, by a maximum of 30%.

Non-executive directors

Non-executive directors' fees are paid as a fixed monthly fee, decided in accordance with the shareholder's approval. Non-executive directors are reimbursed for company-related expenses.

Executive remuneration

The chief executive, finance director and group executives have permanent employment contracts based on Eskom's standard conditions of service.

Executive remuneration is based on the organisation's performance, as assessed through performance on key indicators, and the individual's contribution to that performance. It consists of a basic salary augmented by short- and long-term incentives. The balance between fixed and variable remuneration (short- and long-term incentives) is reviewed annually.

International and local benchmarks are considered in determining remuneration. The remuneration strategy is aligned with shareholder guidelines.

The board approves the remuneration of the finance director and group executives. The chief executive's remuneration is approved by the shareholder. Factors taken into account include the executive's level of skill and experience, his/her contribution to organisational performance, and the group's business results.

The remuneration of executive management committee (Exco) members consists of the following:

- A total guaranteed amount, consisting of a fixed cash portion and compulsory benefits. This is reviewed annually
- Short-term incentives, consisting of rewards for achieving objectives set by the chief executive and approved by a board committee (refer to the key performance indicators on page 80)
- Long-term incentives, consisting of rewards for achieving objectives set by the shareholder (refer page 80)

In terms of their performance contracts, only 20% of executives' performance rating is based on individual performance; the remaining 80% is based on Eskom's collective performance. Cognisance must be taken of the responsibilities and risks that directors and executives carry, given their broad accountability.

Incentives for executives

Eskom has a formal remuneration plan that links management remuneration to the performance of the organisation and individual contribution.



All key performance areas and key performance indicators in the shareholder's compact are included in the Exco compacts. The compact is in essence a performance agreement.

- Compacts of Exco members are focused on the implementation of the corporate plan and are as such linked to the Eskom strategic objectives
- The people and governance committee reviews the key performance areas and key performance indicators of the Exco members' compacts annually to ensure alignment with the shareholder's compact and the corporate plan
- Individual performance is reviewed annually and is based on a performance contract (compact) between the group executive and chief executive
- Compacts for all other executives are aligned with the Exco compacts
- Targets include both company and division specific priorities (key performance areas and key performance indicators) which link directly to the shareholder compact and corporate plan

Exco compacts rely on three elements to determine bonuses for executives:

- **Gatekeepers** need to be reached to qualify for bonus: If gatekeepers are not reached, then there will be no bonus at all
- **Qualifiers** determine the performance score of between 60% and 120%, depending on achievement
- **Modifiers** reduce performance score if not reached and can decrease the performance score by up to 25%, depending on how many modifiers are not reached

Leadership and corporate governance (continued)

Long-term incentives

A number of performance shares (award performance shares) were awarded to the Exco members on 1 April 2010, 2011, 2012 and 2013. The board has set performance conditions in line with the Eskom shareholder's compact over a three-year performance period. Performance covers financial and non-financial targets. Awards only vest if, and to the extent that, these targets are met. The vesting percentage can be reduced by the people and governance committee if gatekeepers are not met.

Long-term incentive vesting percentages – 2014: 53.48%, 2013: 48.23%.

The vesting rates take into account the penalty of 0% for 2014 and 15% for 2013 on the vested amount.

Short-term incentives

Short-term incentives, consisting of rewards for achieving set objectives over a 12-month period, are division/company specific.

The table below contains the executive compact areas for the year ended 31 March 2014.

The consolidated key performance indicator table (which includes the key performance indicators in the shareholder's compact) shows the link (colour coded as indicated below) between the key indicators in appendix A (refer to pages 170 to 175) and the executive compact key performance areas.

Executive compact key performance areas	
1.	Operate safely
2.	Keep the lights on
3.	Deliver on the capacity expansion programme
4.	Protect the environment
5.	Socio-economic contribution and build skills
6.	Transformation
7.	Improve performance
8.	Chief executive discretion

The weight allocated to each person for each of the compact areas will depend on the responsibilities of that specific individual.

Disclosure of the remuneration of the three highest paid individuals in Eskom, as required by the King III code, is included in the table below.

The following table sets out the directors' and group executives' remuneration for the year ended 31 March 2014. Refer to note 49 in the financial statements (www.eskom.co.za/IR2014/01.html) for detailed remuneration information.

Directors' and group executives' remuneration

Name	2013/14 R 000	2012/13 R 000
Non-executive directors	7 077	6 400
Zola Tsotsi (chairman)	1 789	1 374
Other non-executives	5 288	5 026
Executive directors	24 428	17 341
Brian Dames	15 367	8 464
Tsholofelo Molefe ¹	3 170	2 904
Paul O'Flaherty (former finance director)	5 891	5 973
Other executive management committee members	28 645	33 743
Bhabhalazi Bulunga (group executive: Human Resources)	3 294	3 179
Thava Govender (group executive: Generation)	4 152	4 485
Erica Johnson (group executive: Enterprise Development)	4 826	5 972
Steve Lennon (group executive: Sustainability)	3 674	5 430
Dan Marokane (group executive: Technology and Commercial)	4 737	4 555
Ayanda Noah (group executive: Distribution)	3 776	4 659
Mongezi Ntsokolo (group executive: Transmission)	4 186	5 463
Total remuneration	60 150	57 484

1. Appointed as finance director on 14 January 2014. Before that date, remuneration relates to the position as group executive: Group Customer Services. The prior year figure was reclassified for comparative purposes.

05

Becoming a high-performance organisation



Eskom has continued its focus on enhancing and improving its performance to ensure a major performance transformation into a utility focused on enhancing the quality of customer service, safer, more effective and efficient plant operation through prudent plant maintenance, optimising key talent and ensuring resilience measures are in place for major disruptive events. The business productivity programme will identify and eliminate inefficiencies in the business to enable Eskom to manage its costs and revenue

Eskom focuses on the following to become a high-performance organisation:

- Safety
- Improving operations
- Being customer-centric
- Building strong skills
- Investing in appropriate technologies

Operating highlights

- The lost-time incidence rate, including occupational diseases, has shown a significant improvement compared to the previous year and is within target
- Koeberg Unit 2 achieved a record run of 484 days when it was shut down for a scheduled refuelling outage – this marks a continuous run from one refuelling outage to another
- Both Distribution and Transmissions' key technical indicators have shown good improvement compared to the previous year
- A number of information technology projects and improvements were successfully completed during the year, including improvements in the online vending system that successfully went live on 22 July 2013

Operating challenges

- The number of fatalities is still high and there is an increased exposure of employees and contractors to crime-related assault incidents
- Eskom declared four power system emergencies on 19 November 2013, on 20 and 21 February 2014 as well as on 6 March 2014. Rotational load shedding was implemented for 14 hours on 6 March 2014 (refer to page 104 under "Keeping the lights on")
- Unit 3 at Duvha power station (575 MW) was taken out of service on 30 March 2014 due to an over-pressurisation incident – it will remain out of service for a prolonged period. The incident is under investigation

Special climbing apparatus is used to scale the wooden distribution poles

Becoming a high-performance organisation (continued)

- Eskom's unplanned capability loss factor (UCLF), a measure of generating plant health, and the energy availability factor (EAF), which measures plant availability, deteriorated compared to the previous year and Eskom failed to meet its target
- Equipment theft, vandalism and energy theft (illegal connections) as well as the related impact on plant performance and the cost of supplying electricity remains a challenge
- Debt collection, especially from municipalities, is a challenge with arrear debt increasing significantly compared to the previous year. More than one percent of the 2013/14 electricity revenue is provided for as arrear debt

Future focus areas

- Continuing to reinforce safety practices to achieve zero harm for Eskom's employees and contractors, including more extensive and frequent public road safety campaigns and related initiatives
- Achieving a predictable and sustainable generation performance within the Generation sustainability strategy over five years
- Network strengthening to achieve grid code N-1 compliance, as well as the integration of new generation sources
- Continued focus on distribution sustainability through prioritised interventions towards refurbishment, reliability improvements and addressing maintenance backlogs
- Implementing processes in terms of the revenue management strategy to enhance energy protection and energy loss programmes, and improve debt collection
- Exploring alternative funding mechanisms for the existing learner pipeline and collaboration with other institutions



Moving coal transport from road trucks to rail has been a key focus area in terms of road safety and cost considerations

Safety

Eskom's safety principle is that no operating condition or urgency of service justifies exposing anyone to injury or safety or environmental risks arising out of Eskom's business. This principle applies to all levels of the company, the public and the environment. Eskom's safety performance is assessed in terms of the number of fatalities among employees and contractors for the year, and its lost-time incidence rate. The lost-time incidence rate is a proportional representation of the occurrence of lost-time injuries over 12 months per 200 000 working hours.

Safety performance indicators

Indicator and unit	Target 2017/18	Target 2013/14	Actual 2013/14	Actual 2012/13	Actual 2011/12	Target achieved?
Lost-time incidence rate (employees only), index	0.24	0.36	0.31	0.40 ¹	0.41	✓
Fatalities (employees and contractors), number	0	0	23	19	24	✗
Fatalities (public), number	0	0	33	29	34	✗

1. Two late classifications of LTIR incidents resulted in the LTIR for 2012/13 changing from 0.39 to 0.40.

Eskom's internal safety measures are having a positive effect, with its lost-time incidence rate decreasing to 0.31 in 2013/14, from 0.40 in 2012/13. The company's fatality count, however, remains high at five fatalities.

Regrettably, there were 18 contractor fatalities, six of whom died in an accident at the Ingula pumped-storage scheme in October 2013. Seven contractor employees were also seriously injured. Eskom is concluding an internal investigation into the incident. All work on the inclined high-pressure shaft has been stopped in terms of the Mine Health and Safety Act (1996) pending review by the mine health and safety inspectorate. The statutory processes and reviews regarding this accident are still in progress. Refer to page 121 for more information.

Contractor management is one of Eskom's occupational hygiene and safety strategic elements. Given the strategic importance of contractors across Eskom, substantial efforts are required to introduce safe systems of work across the entire organisation to ensure continual safety performance improvement in Eskom's drive for zero harm.

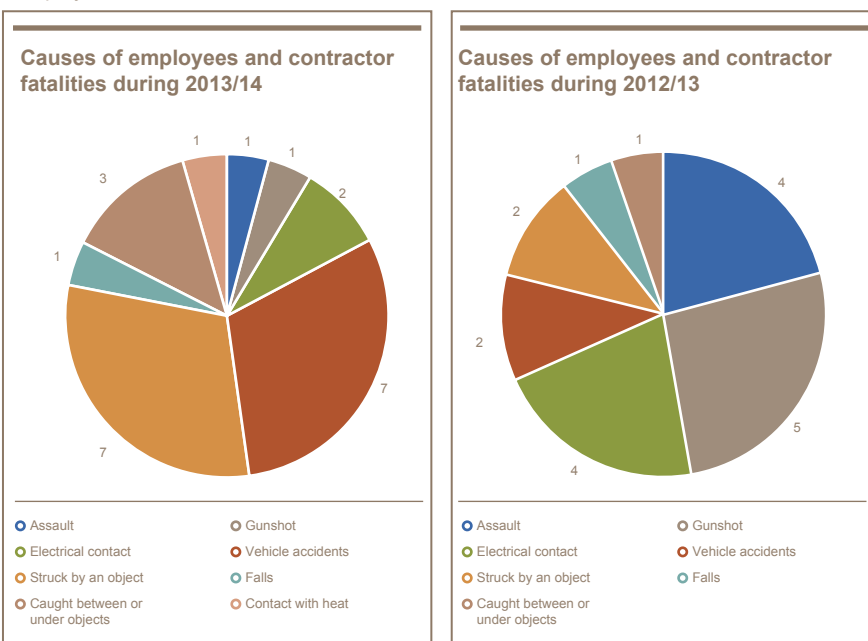
A contractor safety performance analysis was conducted between April 2012 and December 2013. Historical workplace health and safety key performance indicators, covering contractor fatalities and lost-time incidents, were used as lag indicators to identify problem areas. The analysis highlighted motor vehicle accidents, falls from elevation, and "struck-by" incidents as the most common causes of incidents. The next step is to ensure that the contractor management strategy is aligned to address the areas identified.

Becoming a high-performance organisation (continued)

Summary of main causes of fatalities for 2013/14

Cause of death	Employees	Contractors	Public
Vehicle accident, number	3	4	11
Electrical contact, number	1	1	18
Other causes (such as being struck by an object, caught between objects, falls), number	1	13	4
Total fatalities, number	5	18	33

Employee and contractor fatalities



Altogether 33 members of the public died in incidents linked to Eskom's activities. Of these, 11 deaths were the result of motor-vehicle accidents, while the remaining fatalities were related to electrical contacts, including those as a result of criminal activities.

Eskom's "zero harm" drive continues. Safety initiatives to mitigate the risks faced by employees, contractors and members of the public include:

- Conducting safety audits of principal contractors every month as opposed to every six months
- Devising contractor-management plans with safety performance targets
- Improving procedures for reporting safety incidents and identifying root causes
- Detailing specifications for personal protective equipment
- Using simulators to train truck drivers in defensive and all-terrain driving
- Running campaigns to improve driver safety awareness

Eskom continues to implement its industry-supported safety drive by restricting the transport of coal by road between Friday night and Sunday morning, as most coal transport-related road fatalities occurred between these times. Compared to previous periods, a decline was seen in the number of fatalities occurring over this period, with the majority of incidents caused by the public and not truck driver behaviour.


Nuclear safety

The social, ethics and sustainability committee is responsible for scrutinising safety at Eskom's nuclear facility to ensure that it exceeds all regulatory and internal requirements and aligns with international best practice. The committee also makes recommendations on policies, strategies and guidelines relating to nuclear issues.

A nuclear safety review board, consisting of experienced international nuclear power experts was established in 2014 to provide an additional and independent expert view of the management and performance of the Koeberg nuclear power station. The chairperson of this review board provides a report on a six-monthly basis to the board social, ethics and sustainability committee.

All aspects of electricity production at the Koeberg nuclear power station are the responsibility of the Generation group executive. The nuclear safety assurance function is a separate department in the Generation division, with its own technical experts reporting directly to the Generation group executive. In line with global best practice, Eskom has a three-tier system of nuclear safety governance. The next international peer review will be in July 2014.

Becoming a high-performance organisation (continued)




Life-saving Rules

(Cardinal Rules)


1. Open, isolate, test, earth, bond and/or insulate before touch

No person may work on any electrical network unless trained and authorised to do so. Furthermore all hazards and risks must be identified and the apparatus must also be proven safe to work on




2. Hook up at heights

Where there is potential for a fall, a risk assessment must be conducted and suitable control measures must be implemented




3. Buckle up

No person may drive any vehicle on Eskom business unless he or she and all passengers are wearing seat belts




4. Be sober

No person is allowed to work whilst under the influence of drugs and/or alcohol




5. Permit to work

No person is allowed to work without the required Permit to Work (PTW)



Zero fatalities • Zero injuries • Zero environmental incidents • Zero tolerance


Powering your world

Improving operations

The technical operations of Eskom's Generation, Distribution and Transmission line divisions are assessed in terms of the following:

Generation

- **Unplanned capability loss factor (UCLF)** measures the lost energy due to unplanned energy losses resulting from equipment failures and other plant conditions
- **Planned capability loss factor (PCLF)** measures energy loss during the period because of planned shutdowns
- **Energy availability factor (EAF)** measures plant availability including planned and unplanned unavailability and energy losses not under plant management control

Transmission

- **Total system minutes lost for events <1 minute** measures the cumulative number of minutes the system was compromised to the point that electricity could not be relayed, due to transmission system failures or constraints. This metric only considers events lasting less than a system minute. One system minute is equivalent to the loss of the entire system for one minute at the annual peak
- **The number of major incidents** refers to events with a duration of longer than one system minute

Distribution

- **System average interruption frequency index (SAIFI)** is a reliability of supply index and measures how often on average (frequency) the customer connected would experience a sustained interruption per annum (number of times per annum)
- **System average interruption duration index (SAIDI)** is an availability of supply index and measures the average duration (hours) of a sustained interruption the customer would experience per annum (number of hours per annum)

Key indicators of Eskom's technical operations performance

Indicator and unit	Target 2017/18	Target 2013/14	Actual 2013/14	Actual 2012/13	Actual 2011/12	Target achieved?
Normal UCLF, %	10.00	10.00	12.61	12.12	7.97	✗
Less: Constrained UCLF, % ¹	–	–	1.63	3.41	–	–
Underlying UCLF, % ²	–	–	10.98	8.71	–	–
PCLF, %	10.00	10.00	10.50	9.10	9.07	✓
EAF, %	80.00	80.00	75.13	77.65	81.99	✗
Total system minutes lost for events <1 minute, minutes	3.80	3.40	3.05	3.52	4.73	✓
Major incidents, number	1	2	0	3	1	✓
SAIFI, events per year	17	20	20.2	22.2	23.7	⚖
SAIDI, hours per year	39	45	37.0	41.9	45.8	✓

1. Constrained UCLF – This is UCLF that was a result of emissions and short-term related UCLF due to system constraints to meet the "Keeping the lights on" objective. This is apportioned between PCLF and OCLF.

2. Underlying UCLF – This is the UCLF that is the difference between normal and constrained UCLF and that is still within Generation control.

Becoming a high-performance organisation (continued)



A Koeberg worker wears protective clothing that is required for the nuclear sections of the power plant

Generation

Eskom aims to optimally operate and maintain its electricity generating assets for the duration of their economic life. Eskom's operating strategy for generation constantly considers the following factors in balancing national demand and supply:

- **Electricity demand fluctuates.** Eskom aims to ensure that there is enough supply to meet demand. An undersupply of electricity would have negative economic consequences for the country and the company
- **Plant health is deteriorating,** resulting in reduced plant availability and reliability. Eskom needs to do more plant maintenance, but the constrained system does not allow for sufficient planned outages to do so and also affects plans to reduce Eskom's environmental footprint
- **System reserve requirements.** Over and above meeting the expected demand for electricity, Eskom needs to have generation capacity in reserve to cater for an unforeseen increase in demand, or unplanned plant breakdowns where additional plant capacity will need to kick in to replace the generation capacity lost
- **Poor-quality coal** results in inefficient energy production, places strain on generating plant and negatively affects Eskom's environmental footprint. Although measures are in place to ensure that suppliers provide Eskom with coal of suitable quality and sufficient quantity, some stations continue to receive poor-quality coal
- **Potential delays in commissioning new capacity** means that the power system remains too constrained to do planned maintenance to existing plant, resulting in plant health deteriorating even further

As a result of previous years' deferment of maintenance that was required to keep the lights on and the fact that nearly two-thirds of Eskom's power stations are beyond the mid-point in their expected lifespan, the technical performance of the power stations has been declining over the past few years. The Generation sustainability strategy has been implemented which aspires to Eskom's power station fleet having on average an energy availability factor of 80%, with 10% set aside for planned maintenance outages and 10% for unplanned outages.

The power station enhancement project quick win actions have almost been completed. Medium- and long-term actions are outage dependent and are thus impacted by the deferment of outages. While this project operated as a standalone project in 2012/13, it is now incorporated within the Generation sustainability strategy.

More planned maintenance is now scheduled in the winter months. The power plant availability (EAF) of 75.1% for the year to 31 March 2014 (2012/13: 77.7%), against a target of 80%, reflects the increase in both unplanned unavailability, as well as the increased planned maintenance. Eskom aspires to reach the 80% EAF target over a period of five years as it increases its efforts and focus in driving sustainability of generation assets. Although the system was tight, Eskom still managed to schedule and complete nine maintenance outages – a good achievement to meet winter demand and do more maintenance than before. Refer to page 114, which deals with maintenance in further detail.

Plant performance

The utilisation of available plant capacity (EUF) was significantly higher than the target and higher than the previous four years due to the increased loading of available plant to match the demand. The overall fleet EUF was at 83.55% (2012/13: 81.87%). The utilisation of the coal-fired units for the year to 31 March 2014 was 92.73%, nuclear achieved 99.52% and peaking (including the OCGT stations) achieved 20.72%.

Eskom did not meet its EAF target, mostly due to an increase in unplanned plant unavailability and energy losses due to incorrect quality coal being delivered, mainly at Tutuka and Arnot power stations.

The unplanned capability loss factor (UCLF) for the year to March 2014 is slightly higher than previous years, indicative of ageing generating plant, the related deteriorating plant health and the high utilisation of the plant. The UCLF for 2013/14 was 12.61% compared to 12.12% in 2012/13 and 7.97% in 2011/12. The impact on UCLF was 1.63% due to decisions by management regarding emission control and short-term outages not undertaken in order to ensure security of supply.

The partial load losses continue to contribute significantly to the system total unplanned losses, and continue to increase. The UCLF due to these losses was 5.24%, contributing 42% to the system UCLF. The main reasons for the load losses were problems at the draught plant, coal mills, turbines, gas cleaning and feed-water systems.

Boiler tube failures are typically the result of welding repair damage, corrosion, fly ash erosion, etc. In the year, 210 UCLF boiler tube failures were recorded, with a UCLF of 2.18%, contributing 17% to the system UCLF. This is higher in both number and UCLF contribution compared to the previous year when a total of 191 failures and UCLF contribution of 1.95% were recorded.

The energy efficiency improvement programme aims to improve the heat rate of the units at Eskom's 13 coal-fired stations. Heat rate measures the conversion rate of heat from the energy source (coal) to electricity generated. Improvements would indicate an improvement in plant performance and will help reduce Eskom's environmental footprint, including its carbon emissions.

Becoming a high-performance organisation (continued)

Average Eskom coal power station heat rate

	2013/14	2012/13	2011/12
Average coal power station heat rate, MJ/kWh	11.49	11.25	11.46

The heat rate improvements in 2012/13 have not been sustained, with a 2.1% deterioration in 2013/14 compared to 2012/13. This deterioration is attributed to the deferment of outages that has impacted the execution of technical plan projects, as well as coal qualities at certain power stations.

Koeberg performance

Koeberg Unit 1 was returned to service on 22 April 2013, following the shutdown that occurred on 20 February 2013 to repair an electrical switchboard fault.

On 24 March 2014, Koeberg Unit 2 was shut down for scheduled outage number 20, having been online for a record 484 days since 25 November 2012, when it was returned to operation after the previous outage. This is the first time in Koeberg's history that one of the units completed an uninterrupted run from one refuelling outage to the next.

Benchmarking

For benchmarking information relating to Eskom's coal-fired stations, energy availability and the nuclear power station please refer to www.eskom.co.za/IR2014/10.html



Koeberg Unit 2 completed an uninterrupted run from one scheduled refuelling outage to the next

Transmission

Transmission provides an integrative function for the operation and risk management of the interconnected power system. This includes balancing supply and demand in real time, trading energy internationally, buying energy from independent power producers (IPPs), and operating the transmission grid.

Good transmission technical performance was achieved with zero major incidents, system minutes <1 performance at 3.05 compared to a target of 3.40, and a line fault performance of 1.73 compared to a target of 2.45 faults/100km. Performance vulnerabilities remain due to the ageing assets and unfirm networks. Firmness relates to the degree of redundancy (N-1) as defined in the grid code.

Benchmarking

Transmission took part in a benchmarking exercise with 27 other international transmission companies in 2012/13. The study focused on maintenance and plant performance and identified best international practices for the transmission industry. These studies have been used to identify opportunities for the development of continual improvement objectives and strategies. The results of the 2012/13 study indicate that Eskom's Transmission substation and line asset performance is marginally below average whilst a significant improvement has been achieved with line asset performance over the previous two years.

Criminal incidents

A sustained reduction in security incidents has meant that no major losses were incurred during the year to 31 March 2014. Nonetheless, theft remains a risk for Eskom as experienced earlier in the financial year, when the theft of copper at a substation resulted in a minor interruption to a rural supply point.

Distribution

Eskom's distribution network relays electricity from the transmission network to customers, including municipalities that manage their own distribution networks.

There was a significant improvement in the SAIDI performance, achieving an average of 37.0 hours in 2013/14 compared to 41.9 in 2012/13. There was also an improvement in the SAIFI performance, achieving an average of 20.2 events in 2013/14 compared to 22.2 events in 2012/13.

These improvements are due to:

- The establishment of additional customer network centres to increase the operational footprint and enable a quicker response to network interruptions
- Reduced network downtime by maximising live-line work for planned maintenance
- The implementation of a revised network reliability planning standard to improve the reliability of the network, in line with the regulatory requirements of the Distribution grid code
- Increased network visibility, to enable remote monitoring and switching of network equipment to reduce the outage time
- Improving reliability centered maintenance to reduce the risk of equipment failure
- Focused management attention that ensures disciplined execution of all initiatives

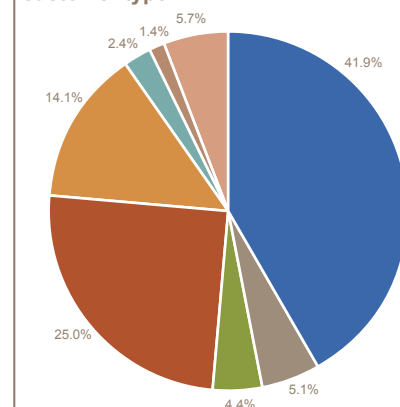
Becoming a high-performance organisation (continued)









Benchmarking

Distribution is currently preparing for a new benchmarking cycle, comparing technical and operational performance with international utilities.

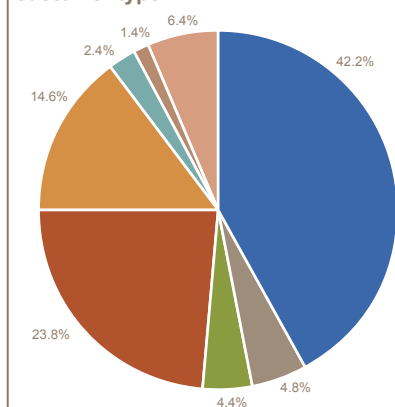
For previous year's benchmarking information relating to Eskom's distribution network please refer to www.eskom.co.za/IR2014/11.html









Direct electricity sales for 2013/14 by customer type



Actual (GWh)			
 Municipality	91 262	 Residential	11 017
 Commercial	9 605	 Industrial	54 658
 Mining	30 667	 Agriculture	5 191
 Rail	3 125	 International	12 378
Total		217 903	

Direct electricity sales for 2012/13 by customer type



Actual (GWh)			
 Municipality	91 386	 Residential	10 390
 Commercial	9 519	 Industrial	51 675
 Mining	31 611	 Agriculture	5 193
 Rail	2 996	 International	13 791
Total		216 561	

Being customer-centric

Eskom aims to ensure that its customers are consistently satisfied with the level of service they receive. Customer-centricity extends to the company's revenue-collection practices. Billing should be accurate and prompt, and payment should be collected in a timely fashion.

Eskom assesses its customer-centricity in terms of:

- **Eskom's customer-service index**, which combines six external and internal customer-service assessments to determine an overall score for service to residential, small- and medium-sized customers
- **Eskom's KeyCare rating**, which measures the satisfaction of Eskom's large industrial customers
- **The average number of debtor days**, which measures the average age of outstanding customer debt

These indicators help Eskom identify aspects of service that need to be improved.



Eskom technical services centres send out special trucks to do maintenance on the lower voltage distribution lines

Becoming a high-performance organisation (continued)

Key performance indicators for customer-centricity

Indicator and unit	Target 2017/18	Target 2013/14	Actual 2013/14	Actual 2012/13	Actual 2011/12	Target achieved?
Customer service index, %	89.7	88.7	86.6	86.8	85.6	✗
Eskom KeyCare, %	102.0	102.0	108.7	105.8	105.9	✓
Arrear debt as percentage of revenue, %	–	0.50	1.10	0.82	0.53	✗
Average debtor days for municipalities, average days ^{1,2}	–	22.0	32.7	22.4	n/a	✗
Average debtor days for large power users (<100GWh a year), average days ²	–	16.0	16.9	18.3	n/a	⊖
Average debtor days for small power users (excluding Soweto debt), average days	–	42.0	50.2	48.2	42.9	✗
Average debtor days for large power top customers (excluding disputes), average days	–	14.0	14.5	12.3	14.4	⊖

1. The earlier key performance indicator for large power users (including municipalities) was replaced by two key performance indicators: average debtor days for municipalities and the average debtor days for other large power users (<100 GWh per year).
2. These key performance indicators only came into effect on 31 March 2013. Data is not available for 2011/12. The calculation for debtor days excludes international customers and major disputed accounts that are involved in litigation or arbitration.

Customer satisfaction metrics

Key industrial customers regard Eskom's customer service highly, reporting 110.84% satisfaction against a target of 102% on the KeyCare metric despite being asked to contribute significantly to keep the lights on. This is largely due to Eskom's proactive and regular interaction with this group to keep them informed on the status of the power system and the capacity expansion programme via a number of forums as well as regular visits to customer management.

Eskom narrowly missed reaching its customer service index target, reporting an overall rating of 86.6% (2013/14: 86.8%). The main reasons cited by customers for dissatisfaction in this customer grouping were tariff increases, the threat of load shedding, metering accuracy, the speed of installing new connections, the quality of supply, outage management and slow response for quotations and connections on small projects.

Managing electricity debtors

Eskom makes every effort to ensure that customers pay their accounts. It constantly monitors payments and is willing to enter into reasonable payment agreements that take into account defaulting customers' circumstances.

Electricity debtors (before impairment provision) increased from R16.7 billion at 31 March 2013 to R20.2 billion at 31 March 2014. The allowance for impairment for trade and other receivables increased by R1.4 billion, from R4.3 billion in 2012/13 to R5.7 billion in 2013/14.

The residential revenue management strategy, which includes Soweto, is critical to enhance energy protection and energy loss programmes, and improve debt collection for Soweto, large and small power users. The strategy entails:

- The installation of split metering with protective enclosures and converting customers to pre-paid meters with new supply group codes to eliminate illegal pre-paid vending
- There is now a focused credit management process for all businesses, which, together with disconnections, should assist in recovering outstanding debt

Implementation of the strategy is planned for early in the new financial year, as the PFMA approval was received late in the financial year.

For more information regarding Eskom's financial risk management, including credit risk, refer to note 4 in the 2014 annual financial statements (www.eskom.co.za/IR2014/01.html).

Large power users' arrear debt

There has been a slight increase in the number of key industrial customers not honouring their payments on time, due to cash flow problems caused by the economic climate. All non-payments are handled according to Eskom's credit-management policy, with the disconnection process being initiated where necessary.

Municipal arrear debt

Historically, payments by municipalities are strongly correlated to them receiving the equitable share from National Treasury (payments in December, March, June and September). Previously this funding was sufficient to settle outstanding electricity debt, but this is no longer the case with municipalities facing increased electricity prices and reduced funding.

Disconnection of supply is the last resort for Eskom. In line with the Promotion of Administrative Justice Act (2000), the company sent disconnection notices to some of the defaulting municipalities during the year. No disconnections have yet been effected, as all the municipalities that received disconnection notices responded appropriately, with the exception of one municipality. This matter is the subject of litigation.

The total municipal arrear debt as at 31 March 2014 is R2.6 billion (2013: R1.2 billion) and numerous meetings were held with the DPE and National Treasury to discuss sustainable ways to address municipal debt and implement longer-term interventions to deal with this challenge.

Soweto arrear debt

Soweto's arrear debt continues to increase. Eskom supplies electricity to about 180 000 households in Soweto and average payment for the year is 16% (2012/13: 16%). The total Soweto debt, as at 31 March 2014, stood at R3.6 billion (31 March 2013: R3.2 billion), excluding interest charged on overdue amounts. During the year, 4 838 defaulting customers were disconnected, which is not enough to curb the debt. The implementation of the residential revenue management strategy, which includes Soweto revenue management, will assist to improve future revenue streams.

Becoming a high-performance organisation (continued)

Building strong skills

Eskom constantly needs to source, develop and retain technically skilled workers at all levels of the company to ensure the sustainability of its business.

Key performance indicators for skills development

Indicator and unit	Target 2017/18	Target 2013/14	Actual 2013/14	Actual 2012/13	Actual 2011/12	Target achieved?
Training spend as % of gross employee benefit costs, % ¹	5.00	5.00	7.87	n/a	n/a	✓
Total engineering learners in the system, number	391	2 007	1 962	2 144	2 273	✗
Total technician learners in the system, number	652	780	815	835	844	✓
Total artisan learners in the system, number	1 434	2 619	2 383	2 847	2 598	✗
Youth programme, number	–	5 000	4 325	5 701	5 159	✗

1. Training spend is a new measure effective from 1 April 2013, thus comparative information prior to this date is not available.

Eskom reviewed the learner numbers and decided to realign the learner pipeline from 14.5% of staff complement to a more sustainable level of 6% phased in over the next five years. The engineering and artisans target was not achieved as a result of this decision.

The underperformance of the country's youth (SYDI) programme is due to a lack of funding.

A learner hub was established to ensure centralised learner management, and manage the further development, placement or exit of learners.

Eskom has also partnered with higher learning and basic education institutions to promote access to quality education, particularly in the fields of maths and science, as part of its external development programme. Another example is Eskom's Academy of Learning (EAL) artisan operating and maintenance centre of excellence which chairs the initiative that champions the building of additional infrastructure and developing a curriculum at the further education and training college in Lephalale, and provides support through leadership and technical guidance. The first skills programme, accommodating 40 demobilised workers, started on 21 October 2013 and was completed on 13 December 2013. Successful candidates earned national credits.

EAL's mandate is to close Eskom's competency gap by addressing, coordinating and integrating all learning needs of employees, as well as enhancing performance throughout Eskom, by focusing on business needs, and catering for all facets of the learning value chain and learning operations. As an example, the EAL welding school of excellence is accredited by the International Institute of Welding. A total of 150 welding apprentices are in the learner pipeline and the first group of 50 will qualify in 2014. This initiative will help with the national shortage of welding skills. The early success of this initiative is evident, with positive feedback from potential employers and continuous improvement of learner capabilities.

Investing in appropriate technologies

Eskom invested R156.2 million into researching and developing technologies that could reduce its carbon footprint and improve technical and safety performance. This is 20% lower than research investment in the previous year (R195.3 million).

The research and development department has made good progress on its portfolio for the year, especially on 18 high priority projects. Key amongst these is the online boiler monitor, Waterberg coal evaluation and high frequency electrostatic precipitator projects which are all on track. The focus on high impact, high value project identification and delivery will continue. This requires increased effort on project management systems and practices and alignment with the real needs of the business. For further details on Eskom's research activities, refer to www.eskom.co.za/IR2014/12.html

Eskom achieved ISO 9001 certification (quality management systems) and is in the process of obtaining certification for safety, health and environmental management for its various divisions and units. It is also working with the South African Bureau of Standards to identify additional specialist ISO standards that need to be implemented for its various divisions.



The underground coal gasification project next to the Majuba power station has been a highlight in Eskom's research portfolio

06

Leading and partnering to keep the lights on



Eskom remains committed to keeping the lights on whilst at the same time maintaining a sound basis for sustainable operations and financial sustainability. Eskom is achieving this by taking a leading role and actively partnering with all key stakeholders in a comprehensive supply-and-demand management strategy. At the same time, Eskom is working hard to deliver on capacity expansion projects that will increase its generating capacity

Operating highlights

- Demand-savings initiatives achieved a total of 410MW, exceeding the target of 379MW
- The residential mass roll-out programme has been a key contributor to the demand savings. Phase 2 of the programme has been completed and 87MW of these savings have been verified in 2013/14
- Annualised energy savings of 19GWh were achieved from new integrated demand management (IDM) projects for the year ended 31 March 2014 relating to internal energy efficiency of Eskom's facilities, exceeding the target of 15GWh
- The pilot underground coal gasification plant has been built at Majuba. Testing is ready to commence, pending environmental and water permissions from the relevant state departments
- 120MW of generation capacity has been commissioned, 811km of transmission power lines built and 3 790MVA of transmission substation capacity commissioned during the year
- The return-to-service programme has now been completed with the successful commissioning of the final unit at Komati power station at the end of September 2013. In total, all 23 units of the three mothballed power stations have been returned to service (3 741MW) at a cost of R26 billion
- Despite the outage constraints, some of the refurbishment projects have progressed well, i.e. all Kriel units have now been refurbished; the last unit (Unit 5) synchronised on load on 15 March 2014. Three of the six Matla units have been refurbished, with the third unit (Unit 5) synchronised on load on 25 March 2014
- In June 2013, a partnership agreement was signed between Eskom, contractors and labour to bring about stability at the Medupi and Kusile construction sites. Since the conclusion of the agreement, the sites have experienced less work stoppages and no violence
- Eskom has taken the initiative in facilitating the establishment of the Medupi leadership initiative to address the consequence of demobilisation of workers

Operating challenges

- As a result of contractor's performance regarding the continued failure of the control and instrumentation systems factory acceptance tests on the boiler-protection system at the Medupi power station, Eskom has stepped in and placed a contract with an alternative contractor for the engineering and manufacturing of the boiler-protection systems, which form a small part of the overall scope of the control and instrumentation systems works contract. The current contractor of the control and instrumentation system for Medupi remains bound to fulfil its obligations in terms of such contract

Solar photovoltaic panels have been installed at Lethabo power station near Vereeniging

Leading and partnering to keep the lights on (continued)

- Acquisition of servitudes over state-owned and tribal land is a lengthy process because in many cases the land has not been surveyed. This causes significant delays to the construction and expansion of the transmission network
- As a result of a constrained power system, the difficulty in obtaining outages for Transmission projects and Generation coal projects (including refurbishments), continues to pose a challenge to the execution of projects

Future focus areas

- Continued focus on accessing alternative funding for Eskom's IDM programme and developing low cost energy-saving programmes in view of financial constraints
- Servitude acquisitions remain a critical priority and engagement continues with government departments to assist in dealing with the challenges experienced with regard to expropriation applications

Power system emergencies and rotational load shedding

For many hours of the day, the reserve margin is more than adequate. However, during peak hours or when abnormal events occur, demand at times exceeds supply. When this occurs, Eskom implements demand and supply-side management strategies, including the demand response programme where selected large customers reduce their demand on request from Eskom. As a last resort, Eskom will introduce rotational load shedding to protect the integrity of the power system. Failure to do so could lead to a full national power blackout with severe consequences for the country. Clear protocols are in place in the event that there is no option but to resort to load shedding.

The emergency response command centre was activated on a total of 36 occasions in the year to 31 March 2014. The majority of the activations were proactive interventions (in alert mode) to manage emerging threats. However, emergencies had to be declared on four occasions during the year.

- *Emergencies declared on 19 November 2013, 20 and 21 February 2014 and 6 March 2014*
Power system emergencies were declared when there was insufficient capacity to meet the demand. Instructions were given to large customers to reduce demand in accordance with the protocols for stage one load reduction. Control centres were instructed to be ready for load shedding. For the first three emergencies rotational shedding was not required as the response from customers was adequate to stabilise the power system. However on 6 March load shedding was instituted.

Customers responded admirably when Eskom declared these emergencies and reduced demand by 600MW in November 2013, by 340MW in February 2014 and by 1 160MW in March 2014.

- *Rotational load shedding on 6 March 2014*

The already constrained system was exacerbated by a rapid change in the early hours of 6 March 2014, as production at four units at power stations was severely curtailed, with load losses of 3 226MW by 08:00.

An emergency was declared at 06:00 and load curtailment commenced. By 08:00 it was necessary to commence with rotational load shedding, which continued for 14 hours. The load shedding reached stage three in the morning, reducing demand by approximately

- Procurement and due diligence processes regarding the conversion of the OCGT plant from diesel to gas
- The milestones leading up to the commercial operation of Medupi Unit 6 are all expected to be completed in the second half of 2014
- Lifting of the work stoppage instruction in terms of section 54 notice of the Mines Health and Safety Act at Ingula to allow for work to continue in the inclined high-pressure shafts
- For the Generation coal projects and Transmission projects, managing the requirements regarding the integration of the project outage schedules

5 000MW, thus enabling the stable operation of the system. By mid-day the load reduction was reduced to stage two and at 22:00 the system emergency was cancelled and all load was restored.

Stages one, two and three indicate the degree of severity of the supply shortfall, and thus the frequency and duration of the required rotational load shedding, with three being the most severe.

The curtailment of production at the four units was mainly due to the handling difficulties regarding wet coal as a result of continuous rain over a number of days leading up to this date. After the load shedding in 2008 following heavy rains, Eskom is mixing coarse coal with the finer coal to prevent the wet coal from coagulating on the conveyors. However, the length of this period of wet weather meant that many of the coarse stock piles were depleted.

This was the only incident of rotational load shedding during the year.

- *Communication to all customers*

In an effort to reduce electricity demand, an integrated communication and stakeholder "Keeping the lights on" programme encourages all South Africans to "beat the peak" in winter and to "live lightly" in summer. The Power Alert and Power Bulletins on TV and radio have proved effective in encouraging customers to reduce their power usage when the power system is constrained, having achieved a cumulative average saving of approximately 350MW. In addition, bi-weekly status updates are issued to the media and quarterly power system media briefings are held, along with regular national, regional, and local stakeholder engagements to provide open and transparent information on the state of the power system.

- *International customers*

Cross-border international customers are also subjected to load reduction and load shedding protocols. Customers with discretionary agreements are declined in advance of a tight supply situation. Customers with non-firm agreements follow the same load reduction and load shedding as large customers in South Africa. Industrial end-use customers are interrupted in line with their agreements. Those with firm supply agreements continue to receive supply, but are urged to cut back consumption.

Leading and partnering to keep the lights on (continued)

Keeping the lights on

“Keeping the lights on” refers to Eskom’s ability to ensure that sufficient generating units are on line, and, during periods of generation constraints, to balance the power supply and demand by using demand-savings initiatives to reduce energy usage. “Keeping the lights on” is about asking all customers to use electricity more sparingly, especially during peak hours, when demand at times exceeds supply, or when abnormal events occur that impact on the available supply.

Previously, Eskom had no choice but to defer power station maintenance in order to keep the lights on, which was not a sustainable approach. At the end of 2012, Eskom’s board approved the Generation sustainability strategy. The plan spans five years, with 2013/14 being the first full year that the plan has been in place. The “keeping the lights on” strategy now also includes managing the demand such that the Generation sustainability strategy can be achieved, while avoiding rotational load shedding, as well as tracking the status of reduction in the maintenance backlog.

Eskom’s “keeping the lights on” performance is also assessed in terms of verified energy savings and reductions in the maintenance backlog.

Key performance indicators for keeping the lights on

Indicator and unit	Target 2017/18	Target 2013/14	Actual 2013/14	Actual 2012/13	Actual 2011/12	Target achieved?
Evening peak demand savings, MW	174	379	410	595	365	✓
Internal energy efficiency, annualised GWh ¹	0	15	19	29	45	✓
Maintenance backlog reduction based on the Eskom technical governance committee approval, number	0	0	0	n/a	n/a	✓

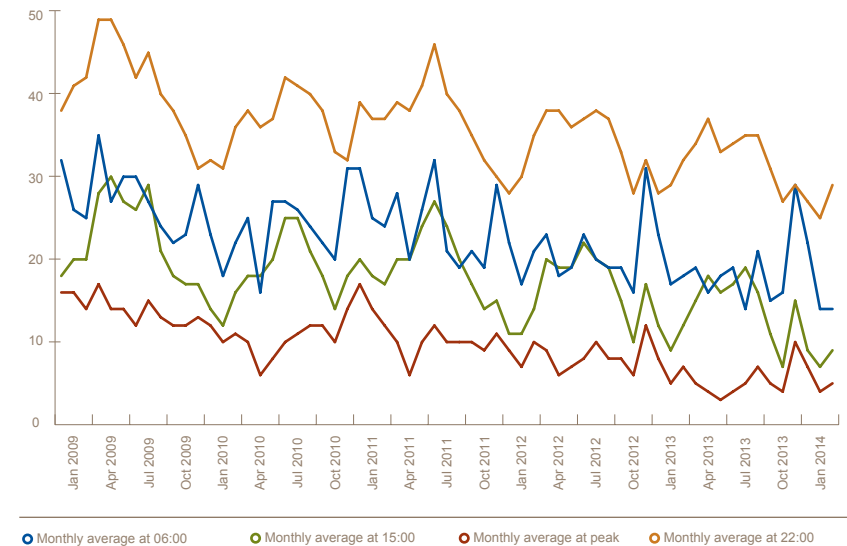
1. The figures reported for each year are for projects verified in the relevant financial year.

Managing supply-and-demand constraints

During 2013/14 Eskom performed more planned maintenance than normal as a result of implementing the Generation sustainability strategy – refer to page 114, which deals with maintenance in further detail. While implementing this strategy is critical to ensure the long-term sustainability of the generating assets, it has inevitably created more pressure on the already tight supply/demand balance.

Although there was sufficient capacity to meet the demand during the day in winter, on a number of evenings the power system was tight with all available generation in service and contracted demand reduction used to reduce load. The average available operating reserves over the peak period in June 2013 were under 3% as depicted on the graph. For Eskom’s rotational load shedding event that occurred on 6 March 2014, refer to page 104.

Average monthly % actual reserves including OCGTs
(Excess capacity compared against actual demand)



Eskom has managed to meet the daily peak demand with the support of customers with interruptible load agreements (the Bayside, Hillside and Mozal aluminium smelters), demand-market participation (DMP) customer support, emergency DMP, demand-side management (DSM), tariffs (more expensive tariffs during peak periods encourage customers to reduce demand during peak periods), municipality assistance, independent power producers (IPPs) as well as utilising the open-cycle gas turbines (OCGTs). The 2012/13 power buyback programme impacted the GWh sold in April and May 2013, however, the cost of this programme was provided for in the 2012/13 financial year.

Refer to page 143 for details on electricity purchases from IPPs and pages 111 to 114 for details on demand-side levers, which have contributed to the security of electricity supply.

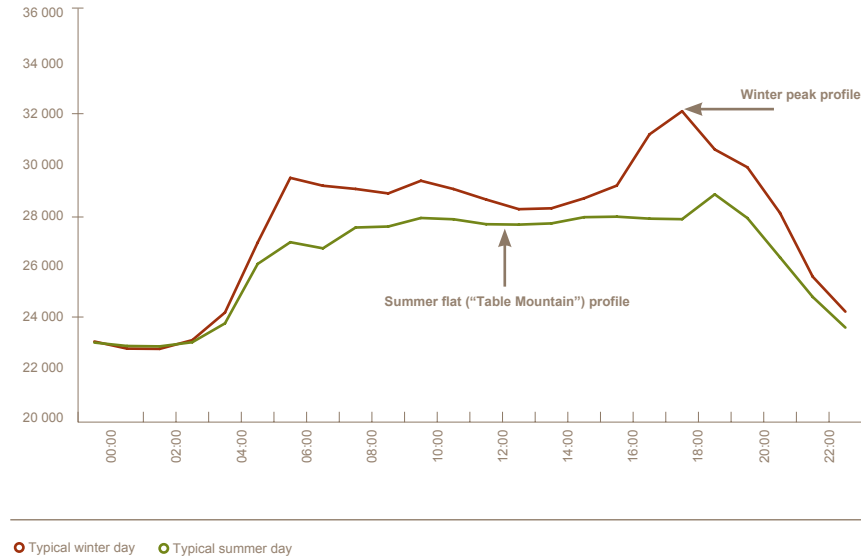
A lower than normal reduction in sales volumes to key customers in the winter periods to offset the growth in sales to the remainder of the customer base did not manifest itself as strongly this year, resulting in additional demands on the OCGT fleet. Electricity demand during the peak periods of 17:00 to 21:00 was still significant, hence the requirement for OCGT generation during peak periods. As generation units are taken off-load for maintenance, it also necessitated the increased usage of these expensive diesel burning OCGT stations. OCGTs were used in winter as well as summer to ensure security of supply.

Leading and partnering to keep the lights on (continued)

The total production by OCGTs reached 3 621GWh against a budget of 1 284GWh in 2013/14 (2012/13: 1 905GWh). The actual load factor on the plant for the year to 31 March 2014 was 17.16%, against a budgeted factor of 6.08% (2012/13: 9.03%). The total board approved spend on diesel for the OCGTs for 2013/14 was R11.3 billion, of which R10.6 billion was spent in the year to 31 March 2014 (2012/13: R5.0 billion). The MYPD 3 decision for OCGT purchases was R2.5 billion for 2013/14, which was R8.1 billion less than the actual spend.

Summer and winter have very different load profiles as depicted below. Unlike winter, where the demand increases during the evening peak, the demand profile during summer is much flatter ("Table Mountain" profile as depicted in the figure below) with an increased demand profile throughout the day, primarily due to air-conditioning and geysers. The outlook for the coming year is predicted to be very tight due to the maintenance required by the generating fleet, resulting in Eskom on occasion being up to 1 000MW short to meet the evening peak over the winter period. The summer period shortage may not be as high but will be for longer periods as can be seen from the profile below.

Summer and winter load profiles



September – March: spring/summer

“Live lightly”

- Table Mountain profile
- Constrained all day including from 17:00 – 21:00
- Air-conditioning, geysers and pool pumps primarily impact demand
- Commercial, agricultural and residential customers can make the biggest difference

April – August: autumn/winter

“Beat the peak”

- Peak profile
- Constrained from 17:00 – 21:00
- Electrical heating, geysers and pool pumps primarily impact demand
- Residential customers can make the biggest difference as demand increases in the evenings

Between 5pm and 9pm, Geyser and Pool pump are not welcome. Please switch them off.

Between 5pm and 9pm electricity usage peaks when people return home after work. They start cooking, watching TV and bathing. All of this leads to a large demand on our limited power supply. A geyser can consume up to 39% of household power; whereas a pool pump can use up to 11%. Please help us reduce the pressure on the national grid by switching off your geyser and pool pump during peak periods. For more information please visit www.eskom.co.za/ldm

Eskom

Leading and partnering to keep the lights on (continued)

Cross-border purchases and sales of electricity

Eskom is a member of the Southern African Power Pool (SAPP) that provides the opportunity for the various utilities in the region to ensure integrated planning and smooth and safe operation of the interconnected transmission system. The various members of the SAPP support each other during emergencies and wheel (transport) electricity on behalf of each other across their grids. It also provides access to a day-ahead market where surplus energy can be traded with those who are experiencing a deficit.

Eskom has bilateral electricity trading agreements with most SAPP members and continues to export and import electricity. Eskom is aware of its responsibility to South Africa regarding the exporting of electricity when the domestic supply-demand balance is constrained. To reduce the impact of exports, Eskom has ensured that the contracts with SAPP trading partners are sufficiently flexible to allow for the following controls:

- During emergency situations in South Africa, non-firm agreements (Botswana and Namibia) and industrial customers across the border (Mozal and Skorpion Zinc) are interrupted in line with the terms of their agreements
- The remaining firm supply agreements (Swaziland and Lesotho) continue to be supplied in full, but they are urged to reduce consumption. During load shedding in South Africa they are required to undertake proportional load shedding

Botswana failed to bring its new Morupule B coal-fired power station into commercial operation, resulting in a significant supply deficit in that country. Eskom agreed to continue

supplying 100MW on a firm basis (which is withdrawn if South Africa is exposed to rotational load shedding) and additional capacity subject to availability.

For 2013/14, 15% of the international sales have occurred during peak periods, 38% during standard hours and 47% during off-peak hours.

Cross-border purchases and sales of electricity

	Actual 2013/14	Actual 2012/13	Actual 2011/12
Sales, GWh	12 378	13 791	13 108
Purchases, GWh	9 425	7 698	9 939
Net sales, GWh	2 953	6 093	3 169

The energy exports continue to exceed the planned level due to delays in the commissioning of new generation assets in neighbouring countries and due to a drier than normal season affecting the availability of hydro generation in neighbouring countries. Despite this, the exports are still 1 321GWh less than in 2012/13.

The performance of Hidroelectrica de Cahora Bassa S.A. energy imports remains a risk due to challenges regarding the reliability of the high-voltage direct current transmission lines.

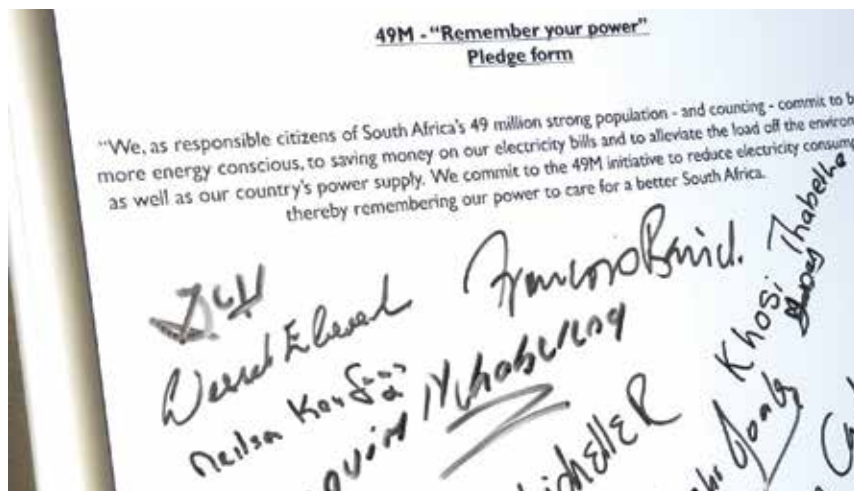
Integrated demand management and energy efficiency

Eskom employed various demand-management strategies to ensure security of supply, while creating space to maintain and refurbish its power stations during the year.

Demand-side management

Demand-side management (DSM) encourages customers to limit their electricity usage. Demand-side management initiatives support national security of supply and minimise the negative economic consequences of a power shortage for the country.

During 2013/14, Eskom spent R1.36 billion on DSM whereas the MYPD 3 decision for the 2013/14 financial year was R1.46 billion.



The 49M initiative that aims to inspire and rally all South Africans behind a common goal – saving electricity – now has 135 corporate partners who have pledged their support

Leading and partnering to keep the lights on (continued)



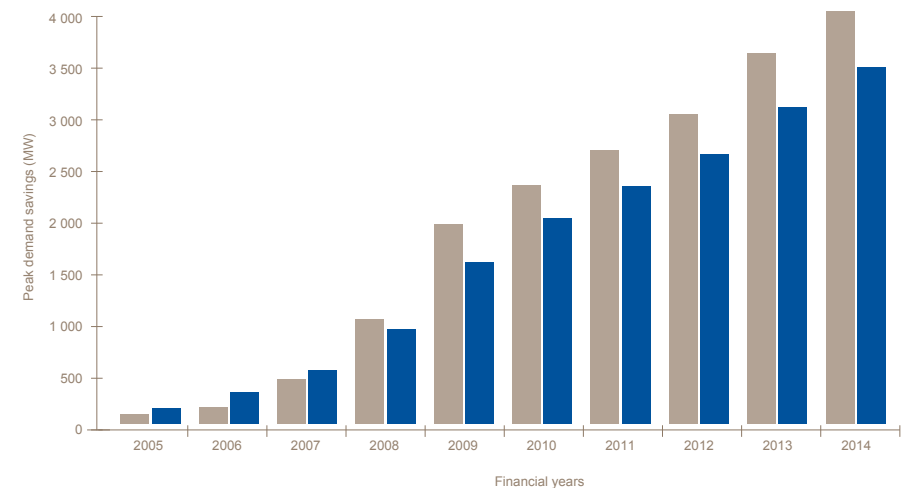
Eskom contributes to the government's solar water heating initiative, which aims to install one million solar water heaters

Demand-side management and energy efficiency

Demand-side management is divided into two broad programmes:

- **The demand-response programme** consists of a range of sub-programmes which offers commercial and industrial customers financial incentives to reduce their electricity requirements as and when needed. Before being placed on hold, the requirements for taking up demand response programme products (standard product and standard offering) were amended to allow smaller companies to participate in the programme. Eskom spent R350 million (2012/13: R3.1 billion) on demand market participation, the reduction from previous year mainly as a result of a significant decrease in the power buyback programme.
- **The residential mass roll-out programme** aims to reduce residential electricity usage by encouraging households to use energy-efficient technologies. The programme is a significant lever to reduce demand during periods of system constraint, but it will require funding from government as it has not been accommodated in the MYPD3 determination. It includes the following sub-programmes:
 - The compact fluorescent lamps (CFL) programme – phase 2 of the CFL roll-out has been completed, with 1.2 million bulbs installed, realising verified savings of 65MW in 2013/14. The CFL roll-out phase 3 began in February 2014
 - The solar water-heater programme – Eskom contributes to the government's solar water heating initiative, which aims to install one million solar water heaters. Over the year ended 31 March 2014, a total of 47 020 solar water heaters were installed, bringing the total for the rebate programme and residential contracts to 381 052 since its inception in 2009

Verified accumulated demand savings against the cumulative target per year (MW)



● Verified demand savings (MW) ● Eskom target

Energy-efficiency measures

Eskom's Power Alert and "5pm to 9pm" campaigns continue to reduce power demand during the evening peak. The average weekday evening peak impact for the period under review for all colours (green, orange and red) is 224MW. The average impact for the red flightings in the evening peak on the worst constrained day is 294MW. The impact shows the positive response by customers to these signals.

Eskom's 49M campaign, a long-term behavioural-change initiative that encourages energy-efficiency practices, particularly for residential users, has the ultimate goal of reducing energy consumption by 10%. This includes targeted seasonal campaigns such as the "beat the peak" campaign and the "live lightly" campaign. To date, 133 partners have joined the campaign and have committed to promote energy efficiency in their organisation.

Internal energy-efficiency initiatives

Eskom continues to improve the internal energy efficiency of its facilities (power plant and buildings) by undertaking energy audits and implementing efficiency programmes that focus on lighting, heating, ventilation and air-conditioning. Annualised energy savings of 19GWh were achieved from new IDM projects for the year ended 31 March 2014, exceeding the target of 15GWh.

Leading and partnering to keep the lights on (continued)

The piloted power management software has been rolled out to Eskom's Windows 7 users and includes the roll-out of the enhanced power management rules for both desktops and laptops. This has already resulted in energy savings.

Decreasing the maintenance backlog

Between 2008 and 2012, Eskom had no option but to defer certain planned maintenance on its generating fleet to ensure security of supply. This backlog, coupled with the burning of below-standard coal and the high utilisation of the plant, resulted in wear and tear on plant and impact the health of the ageing fleet.

In 2013/14, Eskom started rolling out the Generation sustainability strategy that involved increasing the fleet's planned capability loss factor (PCLF) – that is, planned down time for maintenance and refurbishment – to 10% of overall energy availability to create a gap for maintenance. Historically more maintenance is scheduled for the summer months, when the electricity demand is lower, but more maintenance was scheduled in the winter months than ever before in order to reduce the backlog. See the graph on the next page which demonstrates the increase in planned maintenance over the previous three years.

Eskom, through its technical governance committee, prioritised nine maintenance items for the year, with a target of zero items outstanding by 31 March 2014. This target was achieved by December 2013.

Maintenance plan for a coal-fired power station

Coal-fired generating units need to be regularly taken out of service to conduct routine repairs and inspections. While these units are down, the rest of the generating fleet needs to compensate for the commensurate decrease in generating capacity.

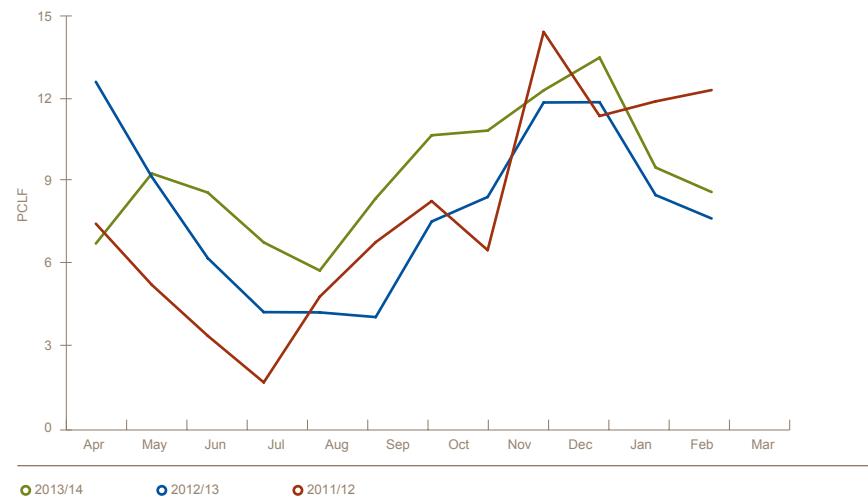
Activity	Cycle time (years)	Duration (days)
Major general overhaul	6-12	40-60
Interim repairs	2-3	14-35
Mini general overhaul	6	28
Boiler inspection	1-1.5	7-14
Statutory inspection and test	6	35
Main steam pipe work	ad hoc	120

The year-on-year maintenance cost has grown incrementally, as shown in the following table, as a result of extensive planned and unplanned maintenance. The UCLF of 12.61% and the PCLF of 10.50% are indicative of the level of maintenance that was executed.

	Actual 2013/14	Actual 2012/13	Actual 2011/12
Generation operating maintenance costs, R million ¹	7 763	5 954	4 936

1. This is after the capitalisation of costs, which are included in capital expenditure. The gross maintenance for Generation, before capitalisation is R14.3 billion (2012/13: R10.6 billion)

Monthly planned maintenance (PCLF) (%)



Delivering capacity expansion

Eskom's performance in terms of delivering capacity expansion is assessed in terms of:

- **Generation capacity installed and commissioned** which measures the generating capacity added in MW
- **Power lines built** which measures the transmission power lines built in kilometres
- **Substation capacity installed and commissioned** which measures substation transformer capacity added in MVA
- **Generation capacity milestones** which measures the variance of achieving the milestones in days
- **Capital expenditure (excluding interest during construction)** which measures the amount spent on capital projects

Leading and partnering to keep the lights on (continued)

Project management

Realising it did not have adequate engineering and project management capacity to undertake the mega projects, Eskom decided to outsource the work to execution partners that were to provide world class project management, engineering services and management of contractors.

Processes were implemented for claims and variations management. Contingency status reports capture and track the contract controls. An overarching oversight claims and variations committee performs regular analysis of the overall control and interested parties are informed of lessons learnt.

Eskom has undergone a process to revise its contractor management strategy to control cost and improve contractor management. In cases where the performance was not satisfactory the following was done:

- The performance bonds for some of the contractors were called
- Counter claims against the contractors are being finalised
- Eskom has requested that sub-contractors are replaced and that contractors' management teams be changed
- Eskom assumed some of the management roles and increased oversight

Since 2005, Eskom has been expanding its generation and transmission capacity to meet the country's growing demand for energy. Eskom's nominal generating capacity in 2005 was 36 208MW. The programme will increase this by 17 384GW by 2019/20. The key generation expansion projects are the 4 764MW Medupi and 4 800MW Kusile coal-fired stations, and the Ingula pumped-storage scheme in the Drakensberg, which will deliver 1 332MW of hydro-electricity during peak demand periods. Transmission line length and substation capacity will also increase substantially.

The capacity expansion programme has cost R213.2 billion (excluding capitalised borrowing costs) to date.

Between 2005 and 31 March 2014, the programme has increased Eskom's generating capacity by 6 137MW, its transmission lines by 5 497km and its transmission substation capacity by 27 565MVA.



Eskom has commissioned a total of 27 565MVA substation capacity since 2005

Technical performance for the year to 31 March 2014

Indicator and unit	Target 2017/18	Target 2013/14	Actual 2013/14	Actual 2012/13	Actual 2011/12	Target achieved
Generation capacity installed and commissioned, MW	6 214	100	120	261	535	✓
Power lines built, km	1 539	770	810.9	787	631	✓
Substation capacity installed and commissioned, MVA	5 755	3 790	3 790	3 580	2 525	✓
Generation capacity milestones, days	30.0	30.0	48.9	43.5	–	✗

Project schedules continue to be under strain, while certain recovery plans are being implemented in order to mitigate the effects of the challenges.

Leading and partnering to keep the lights on (continued)

Medupi power station

- The cumulative cost incurred on Medupi as at 31 March 2014 is R77.0 billion against a total budget of R105.0 billion (excluding capitalised borrowing costs)
- The project schedule recovery processes are already showing good results. Project cost, time and commercial reviews are aligned with the integrated schedule and preliminary milestones are in place to achieve the planned synchronisation dates, as well as the revision of their estimated cost at completion
- The critical path to first synchronisation remains through the delivery, installation and testing of the boiler-protection system as part of the control and instrumentation works. The boiler-protection system factory acceptance test is planned for the first quarter of the new financial year
- There are technical issues surrounding welding on the Unit 6 boiler and recovery strategies have been put in place to implement solutions to the post-weld heat treatment. The weld procedure qualification record re-qualification exercise is substantially complete with all welds procedures verified and accepted by Eskom engineering and the approved inspection authority. Remedial work is in progress at the boiler and for welds identified as being defective. Boiler re-heater work is complete and has been signed off by Eskom
- The control and instrumentation contractor has progressed well in some areas while they still remain late in other areas. Site access is also a major contributing factor to current delays. The factory acceptance test in this regard was conducted and passed. There are still outstanding distributed control system related defects that will be dealt with via site acceptance testing
- The control and instrumentation solution and mitigation strategy is in place:
 - Units 5 and 6: The alternative system solution is on track for completion by September 2014 (first fires)
 - Eskom has decided to step-in under sub-clause 17.7 (employer's step-in rights and additional remedies) of the Medupi control and instrumentation system works contract, and has placed a contract with an alternative contractor for engineering and manufacturing of the boiler-protection system for Units 6 and 5, up to factory acceptance test stage. This contractor is currently busy with the pre-factory acceptance tests on the boiler-protection system
 - Units 1 to 4: Initiated commercial process for a closed enquiry to selected group of suppliers for initially an early work order and then a complete work enquiry for the full solution
- All 64 air-cooled condenser fans have been commissioned and are undergoing optimisation
- The coal-conveyor system is ready to take coal from the mine
- A review of the current R105 billion budget is underway and entails the following:
 - An independent review of the deep dives of the control/cost logs of each contract package and owner development costs in order to quantify the cost impact
 - The refinement of the integrated project schedule for Units 5 to 1. The organisational structure has been reworked, with some reorganisation done for Units 5 to 1. A new unit based organisation is in place, which includes package-based commercial management
- The first synchronisation of Medupi Unit 6 is expected to be in the second half of 2014
- The Medupi partnership agreement between Eskom, principal contractors and organised labour has been signed, with 69 site-specific issues that were agreed. Four are still outstanding and these are scheduled to be finalised in the second quarter of 2014
- Eskom has taken the initiative in facilitating the establishment of the Medupi leadership initiative to address the consequence of demobilisation of workers and the impacts on the community and the local economy of Lephalale. More than 250 opportunities were identified, six were prioritised and funding of over R76 million was committed by the collaborating partners to kick-start the initiative



Construction of the Medupi power station project in Lephalale is gaining momentum

Leading and partnering to keep the lights on (continued)



The Kusile power station project will on completion be the fourth largest coal plant in the world

Kusile power station

- The cumulative cost incurred on Kusile as at 31 March 2014 is R66.6 billion against a total budget of R118.5 billion (excluding capitalised borrowing costs)
- The Kusile power station project has also been impacted by overall poor contractor performance
- The Unit 1 boiler continues to impact several of the top 10 critical paths for Unit 1 synchronisation. Specifically, access has been delayed to other contractors for the installation of the Unit 1 auxiliary transformers, the transverse ash conveyor foundations, the fabric filter electrical building, and the compressed air building
- The Unit 1 target date for first synchronisation is October 2015. However, the latest forecast indicates January 2016 for first synchronisation. This date is driven by the release of the area by the boiler contractor and the start of construction by its sub-contractors appointed for the compressor building. Compressed air is required for Unit 1 commissioning
- The Kusile team continues to work with the boiler contractor in these areas and with follow-on contractors to develop mitigation strategies for the work



The machine hall at the Ingula pumped-storage scheme project is the largest cavern in mud rock in the world

Ingula pumped-storage power station

- The cumulative cost incurred on Ingula as at 31 March 2014 is R19.4 billion against a total budget of R25.9 billion (excluding capitalised borrowing costs)
- Safety continues to remain a key focus at Ingula, especially following the accident in the inclined high-pressure shaft 3 – 4 on 31 October 2013
 - The Mine Health and Safety Inspectorate of the Department of Mineral Resources issued a work stoppage instruction in terms of section 54 of the Mines Health and Safety Act (MHSA) in the inclined high-pressure shafts as a result of the incident. It remains in effect in that no work is allowed to commence and continue in the inclined high-pressure shafts. The safe work procedures, risk assessments and documentation approval relating to the above accident are being finalised. The MHSA section 54 work stoppage instruction has not been completely lifted, but has been conditionally lifted to allow for cleaning of the inclined high-pressure shafts
 - It is estimated that work will restart during June 2014. This has set back the completion schedule at Ingula
- Although no construction work is allowed to commence and continue in the inclined high-pressure shafts, work on other parts of the site continues. Construction work in the inclined high-pressure shafts can only commence once the revised work method has been approved by the Mine Health and Safety Inspectorate of the Department of Mineral and Resources. The aforesaid documentation was submitted to them for approval at the end of April 2014. The full impact of the accident on the schedule at Ingula is currently being assessed by the project team
- As a result the projected forecast dates (after the accident) for the first unit (Unit 3) synchronisation is the second half of 2015. The accident will also impact the remaining units' synchronisation dates

Leading and partnering to keep the lights on (continued)

Knowledge management across the capacity expansion programme

- Implementation of project management tools across the capacity expansion programme, aligned to international benchmarks
- Establishment of communities of practice to address welding quality control beyond the traditional quality assurance
- Proactive and timely identification and involvement of alternative service providers for critical control and instrumentation activities, whilst strictly monitoring markers of success for incumbents
- Revising the contractor execution and supervision approach to improve productivity
- Tripartite partnership agreement with organised labour, contractors and Eskom to create a climate of harmony across the capacity expansion programme and thereby reduce disruption due to industrial action
- Consistent commercial approach to contractors across the capacity expansion programme
- Safety forums and interventions to drive continuous improvement in safety performance

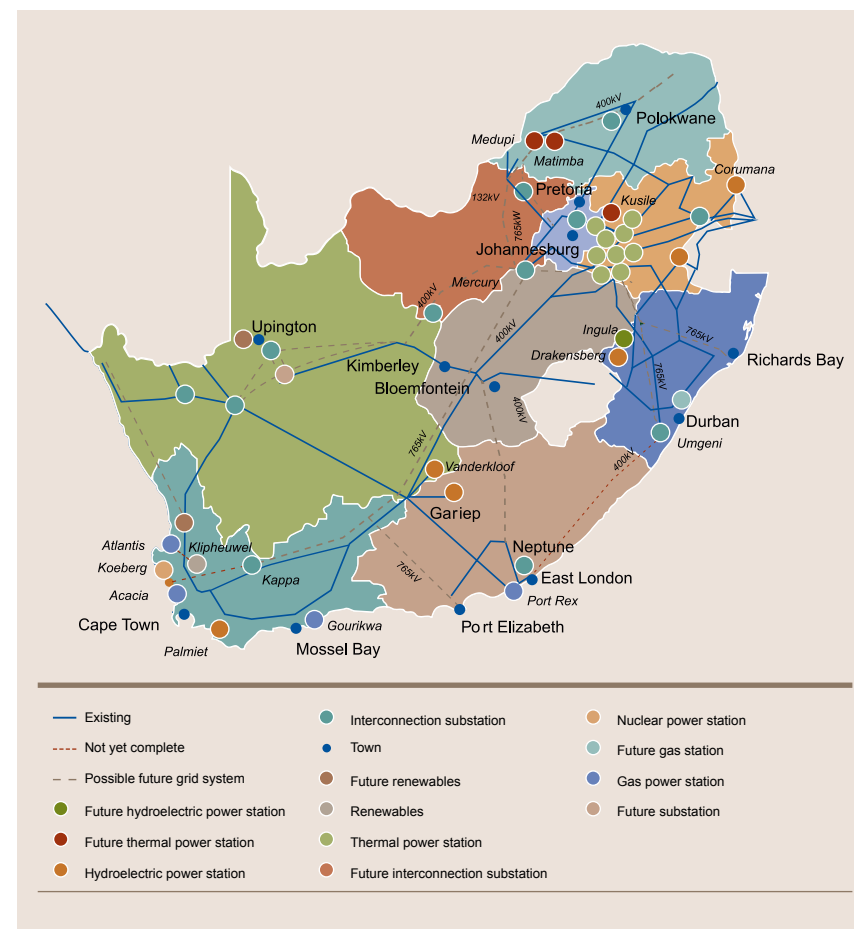


The 94km high-voltage line from the Ingula pumped-storage scheme to the Venus substation has been completed

Power lines and substation capacity commissioned

Eskom commissioned 811km of power lines and 3 790MVA of substation capacity in 2013/14, bringing the total power lines commissioned since 2005 to 5 497km and the total substation capacity to 27 565MVA.

Eskom's transmission projects as at 31 March 2014



Leading and partnering to keep the lights on (continued)

Transmission expansion projects experienced similar obstacles to those faced by generation projects, with additional challenges posed by the need to secure servitudes on state or tribal land that first needed to be surveyed and access to servitudes over privately owned land.

The difficulty in integrating project outage schedules with the existing outage schedule poses a further challenge, although it is taken into account in the development of the Generation outage management plan.

Capital expenditure

Eskom spent R59.8 billion on capital expenditure in 2013/14, R2.5 billion less than the budget of R62.3 billion, excluding capitalised borrowing costs, mainly due to construction delays in the capacity expansion programme.

Capital expenditure (excluding capitalised borrowing costs) per division (R million)¹

Division	Actual 2013/14	Actual 2012/13	Actual 2011/12
Group Capital	33 475	37 690	39 730
Generation	10 326	8 512	6 590
Transmission	1 516	893	1 554
Distribution	10 265	8 317	7 941
Subtotal	55 582	55 412	55 815
Future fuel	2 675	2 634	1 992
Eskom Enterprises	453	376	473
Other areas including service and strategic functions (including inter-group eliminations)	1 093	1 711	535
Total Eskom group funded capital expenditure	59 803	60 133	58 815

1. Capital expenditure includes additions to property, plant and equipment, intangible assets and future fuel, and excludes construction stock and capitalised borrowing costs.



Construction at the Medupi power station as seen from the clean water dam



Eskom's coal-fired power stations generate around 35Mt of ash which requires various handling methods

07

Reducing Eskom's environmental footprint and pursuing low-carbon growth



Environmental performance and reducing Eskom's environmental and carbon footprint remain key focus areas for Eskom and every effort is made to reduce the impact of existing plant through improved management, and where required, plant modifications. New plant and infrastructure is designed to be more efficient and ensure that negative impacts on the natural environment and human health are minimised

Eskom continues to reduce its carbon footprint by exploring and implementing renewable technologies and purchasing energy from renewable energy IPPs. Eskom believes a balanced approach is necessary to ensure environmental sustainability whilst supporting economic growth and access to affordable electricity.

Operating highlights

- Water-usage and environmental-emissions targets were met, with substantial improvement in the water-usage performance compared to the previous year
- Additional maintenance improved emissions performance at several power stations
- Eskom's Sere wind farm project has shown progress with the installation of 10 of 46 wind turbines by 31 March 2014
- Eskom secured co-financing loan agreements for the proposed concentrated solar thermal station near Upington

Operating challenges

- Eskom's request for a variation of the particulate emission conditions in Kriel power station's atmospheric emission licence was denied and the licence will not allow the continuous operation of the station at full rated power
- New atmospheric emission licences were received for all power stations with the exception of Matimba and Lethabo power stations. Outstanding licences are expected to be received early in the new financial year
- Water quality from some catchments is deteriorating, and having a negative impact on some power stations due to limited capacity to treat the pollution in the water

Future focus areas

- Eskom will continue to implement the compliance programme to achieve full compliance to environmental requirements, specifically: atmospheric emission licences, waste management permits, water use licences, environmental authorisations and biodiversity related permits
- The minimum emission standards are effective from 2015. Eskom is unable to meet the emissions standards at all sites within the required timelines, and has submitted an application for a five-year postponement for some power stations in terms of section 6 of the Listed Activities and Associated Minimum Emission Standards
- Continue to work towards Blue drop (water treatment) and Green drop (sewerage works) certification by March 2016
- Completion and commissioning of Sere wind farm project in the 2014/15 financial year

Temperatures often reach subzero levels at the Ingula pumped storage scheme construction site

Reducing Eskom's environmental footprint and pursuing low-carbon growth (continued)

- The implementation of a carbon tax, and the resultant possible increase in tariffs remains a challenge in terms of the economic impact thereof. National Treasury's announcement on the deferment of the implementation to January 2016, however, provides further opportunities for Eskom to engage with National Treasury

Reducing Eskom's environmental footprint

Eskom's overall environmental performance is assessed in terms of relative particulate emissions, specific water consumptions (water usage for all commissioned power stations) and the number of environmental legal contraventions. Relative emissions entail the measurement of emissions intensity, which is the amount of emissions per unit of output.

Key performance areas for reducing Eskom's environmental footprint

Indicator and unit	Target 2017/18	Target 2013/14	Actual 2013/14	Actual 2012/13	Actual 2011/12	Target achieved?
Relative particulate emissions, kg/MWh sent out	0.29	0.36	0.35	0.35	0.31	✓
Specific water consumption, L/kWh sent out ¹	1.21	1.39	1.35	1.42	1.34	✓
Environmental legal contraventions in terms of the operational health dashboard ²	0	0	2	2 ³	5	✗

- The volume of water consumed per unit of generated power from commissioned power stations.
- Under certain conditions, contraventions of environmental legislation are classified in terms of the Eskom operational health dashboard index. These include instances where censure was received from authorities, non-reporting to authorities as may be legally required, non-reporting in Eskom, a repeat legal contravention, or when the contravention was not addressed adequately.
- Increased from previously reported figure (1) due to an additional legal contravention that was identified during the year for activities associated with the underground coal gasification (UCG) project, in October 2012.

Provisions for environmental measures (R million)

	Actual 2013/14	Actual 2012/13	Actual 2011/12
Power station-related environmental restoration – nuclear plant	9 331	7 177	5 428
Power station-related environmental restoration – other power plant	6 942	6 762	4 731
Mine-related closure, pollution control and rehabilitation	4 366	4 309	2 476

Refer to note 28 of the 2014 annual financial statements at www.eskom.co.za/IR2014/01.html

Reducing particulate and gaseous emissions

Particulate emission performance was marginally better than the target and remained consistent with 2012/13, indicating that maintenance measures and technological advances are starting to yield environmental benefits.

Power stations with fabric filter plant continue to sustain low emission levels. However, challenges are experienced with emissions at many of the stations with electrostatic precipitators. This is due to a range of factors, including capacity constraints and the limited space available for maintenance. At some stations a decline in the coal quality and the high load factors together result in overburdened dust handling plant.

Eskom remains committed to reducing emissions to minimise the effect of its operations in terms of health and the environment, and to comply with regulated emission standards. Eskom has completed maintenance at several stations to improve emissions performance. Given the constrained power system situation, there may not be enough planned outages for Eskom to rollout similar maintenance across the entire fleet before new national emissions standards come into effect in 2015.

The programme to retrofit fabric filter plant on at least five power stations in the existing fleet continues, with the possible completion of the first unit at Grootvlei power station expected in 2016.

Eskom has received new atmospheric emission licences for most of its power stations. In the case of Kriel power station, Eskom's request to increase the particulate emissions limit and to allow a grace period for when emissions exceed the limit of the new licence, has been denied. Every effort will be made to comply with the conditions of the licence. The new limit does not allow the station to continuously operate at its full rated power and will require load losses during off-peak time. This will increase cost if other levers, such as OCGTs, have to be used to supplement this reduction in load.

Compliance with National Emission Standards

Eskom has embarked on an extensive retrofit programme to reduce emissions at the highest emitting power stations. The execution of this programme will require long outages and a significant amount of capital (currently R72 billion in nominal terms), and will achieve 57% compliance with the National Emission Standards by 2026. Despite this, Eskom is unable to comply fully with the new National Emission Standards, which come into effect in 2015 and 2020, for several reasons.

- Implementation of certain of the required technologies requires additional water which is not presently available
- Implementation of the required technologies requires plant outages of 120-150 days per unit and there is insufficient spare capacity to enable the required outages to be taken across the fleet before 2015 or in some cases 2020 without impacting on the ability to meet national electricity demand
- The long planning horizons required for these capital projects means that it is simply not possible to execute most of the retrofits in time

Given this situation, in February 2014 Eskom submitted an application for a five-year postponement of compliance to the standards in cases where compliance within the legislated timeframe is not possible. A response is expected from the authorities within six to nine months.

Reducing water consumption

Eskom has formed water management task teams to reduce freshwater consumption and legal contraventions relating to water use.

Eskom met its target for specific water usage, reporting 1.35L/kWh sent out against a target of 1.39L/kWh sent out. The improvement on the previous year's performance of 1.42L/kWh sent out can be attributed mainly to an increase in the proportion of energy generated by the dry-cooled stations during the year. Increased opportunities for maintenance, implementation of initiatives

Reducing Eskom's environmental footprint and pursuing low-carbon growth (continued)

identified by the water management task teams, good rains and the increased recovery of water compared to previous year also contributed to the improvement.

Eskom tracks the number of mines that supply coal to Eskom on a monthly basis, together with their water use licence status. At the end of the 2013/2014 financial year, 36 of the 46 mines supplying Eskom with coal had approved water use licences, and 10 have applied for licences and are awaiting approval from the Department of Water Affairs (DWA). This is a significant improvement compared to the previous year.

Eskom continues to engage with the DWA to clear the remaining backlog of water use licences, and proactively monitors the compliance of all of Eskom's coal suppliers to the National Water Act.

Reducing environmental legal contraventions

Two environmental legal contraventions in terms of the operational health dashboard have been identified in the year, matching the 2012/13 figure. The first contravention is associated with the failure of Hendrina power station to effectively and timeously manage water-related legal contraventions that took place between October 2012 and October 2013. This is being addressed by the power station. The other contravention was due to Eskom constructing the Ruigtevallei-Dreunberg 132kV line on an incorrect servitude option that was not approved in the environmental authorisation.

The number of legal environmental contraventions decreased from the previous year (32 contraventions against 48¹ in 2012/13). A total of 13 were linked to water usage (leaks and spills, sewage spills and ash-line leaks) and 10 to power stations exceeding particulate emissions limits. The remaining contraventions related to clearing vegetation without a licence, installing distribution lines without environmental authorisation and oil spills. Eskom has initiated training and awareness initiatives to ensure that employees and contractors are made aware of environmental risks.

Eskom aims to obtain ISO 14001 (environmental management) certification for all its power stations.

Programmes are being implemented to achieve full compliance with atmospheric emission licences, waste-management permits, water-use licences, environmental authorisations and biodiversity-related permits.

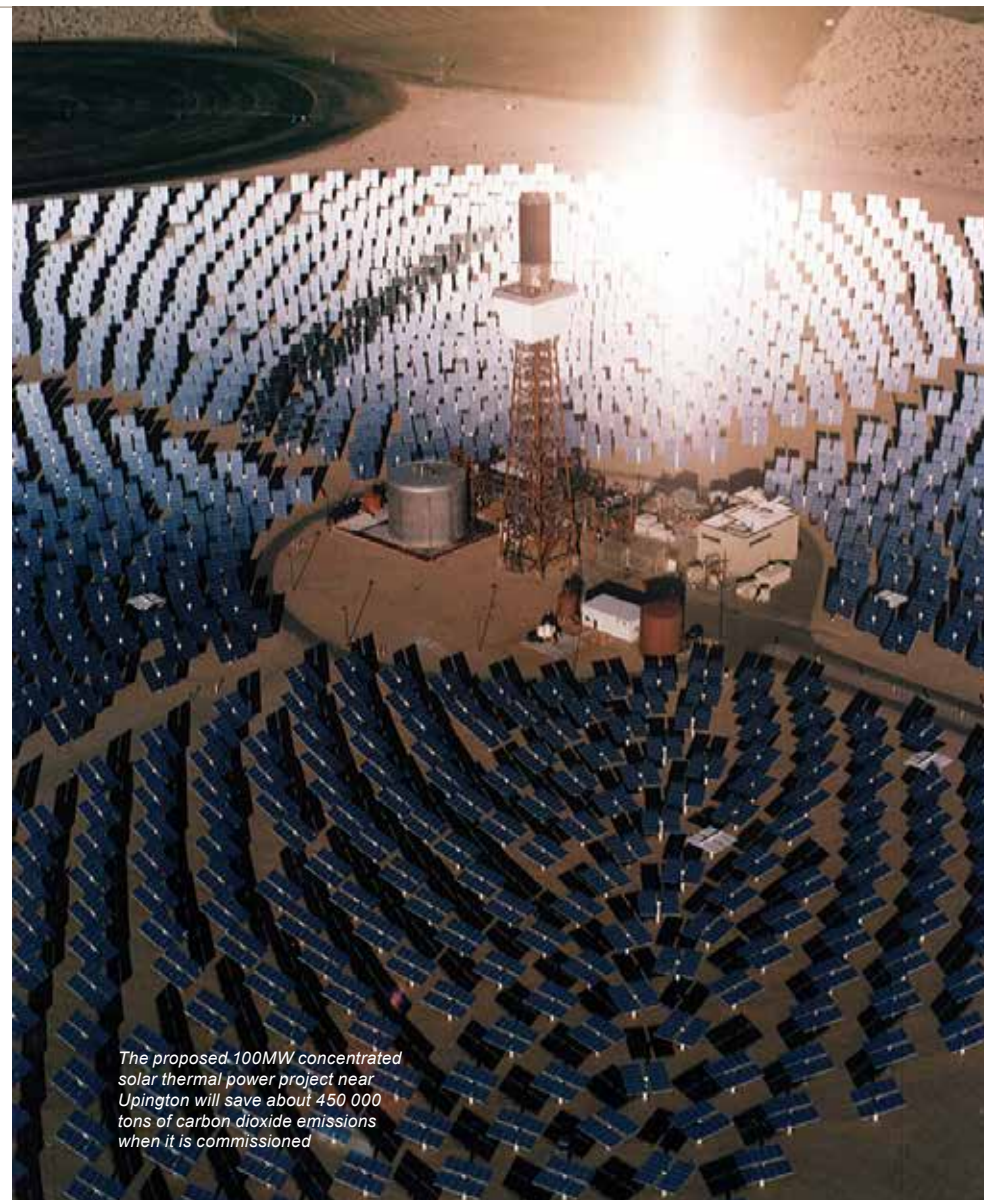
Reducing Eskom's carbon footprint

Climate change strategy

Eskom aims to foster a company culture that considers sustainable development in all activities. The company's adaptation to climate change strategy is based on six pillars:

- **Diversification** of the generation mix to lower carbon-emitting technologies
- **Energy-efficiency** measures to reduce demand, greenhouse gases and other emissions
- **Adaptation** to the negative impacts of climate change
- **Innovation** through research, demonstration and development
- **Investment** through carbon market mechanisms
- **Progress** through advocacy, partnerships and collaboration

1. The 2012/13 number of 47 was restated due to an additional legal contravention that was identified during the year for activities associated with the development of facilities at Kusile which occurred in March 2013.



Reducing Eskom's environmental footprint and pursuing low-carbon growth (continued)

Eskom's adaptation strategy is in the process of being implemented throughout the business. The strategy, which details how Eskom will respond to and prepare for the impacts of climate change, is industry leading. Eskom has been invited to international meetings to present this strategy and has participated in discussions to prepare business views on the issue.

Eskom's executive management committee approved a socio-economic development policy and strategy which supports Eskom's drive for sustainable socio-economic growth through the provision of electricity.

Eskom continued working with the government on developing carbon budgets, adaptation and mitigation plans for climate change, protocols for measuring and evaluating carbon emissions, and procedures for reporting on greenhouse gases. It actively supported the government delegation to the COP 19 conference and is developing a strategy for COP 21.

Eskom also continued its work with the following environmental business movements:

- **The World Business Council for Sustainable Development**, which develops medium-term business solutions to ensure a sustainable planet by 2050
- **The Global Sustainable Electricity Partnership**, through which Eskom hosted two workshops on financing electrification with the Southern African Power Pool

Investing in renewable energy

Eskom remains committed to reducing its carbon footprint and helping the country transition to a cleaner energy mix by pursuing low-carbon sources of generation capacity. It also aims to facilitate the development of renewable energy production into a robust subsector of the emerging power industry through its support for the government's RE-IPP programme.

South Africa is rich in natural resources, including wind, sun and ocean energies, that could, if efficiently harnessed, help meet the country's electricity needs while reducing its absolute and relative carbon emissions.

Eskom's two key renewable energy projects, namely the Sere wind farm and the concentrated solar thermal power station near Upington, are progressing.

- Construction of **Sere** is well underway – the first wind turbine was erected on 2 December 2013. By the end of the year, 10 of the 46 planned turbines had been installed, and foundations for a further 22 turbines had been laid. The 100MW wind farm will be fully commissioned in the 2014/15 financial year, saving approximately 230 000 tons of carbon emissions per year
- The **concentrated solar thermal power station** has received exemption from PPPFA conditions and co-financing loans have been signed. Six suppliers have applied to prequalify for the project, due to be commissioned in 2017. The Upington plant will save an estimated 450 000 tons of carbon dioxide emissions when it is commissioned

Photovoltaic solar-panel arrays are being installed at Eskom office buildings and power stations to offset internal electricity usage. The photovoltaic project (project Illanga) is expected to add 150MW by 2017/18.



Seven of the 46 turbines that will be erected at the Sere wind farm to generate around 100MW of wind power

Renewable energy from independent power producers

Eskom facilitates investment into renewable energy generation by purchasing power from IPPs that use wind, solar power, biomass, landfill gas and small hydro technologies to generate electricity, in accordance with the Department of Energy's renewable energy IPP (RE-IPP) procurement programme. Eskom is responsible for ensuring that these IPPs are connected to the national grid and that it purchases a target amount of electricity from them. Please see pages 143 to 145 for more detail.

08

Securing Eskom's future resource requirements



Eskom burns around
122Mt of coal per year

Eskom has to secure land, water, limestone, as well as its primary energy sources (coal, liquid fuels, gas and uranium) for its existing and new generating assets to operate. Primary energy needs to be of the required quality, and delivered on time and at an optimal cost. These resources must at all times be managed in a way that minimises the impact on the environment and ensures the safety of Eskom's employees, contractors and the public

Securing coal is a growing challenge as Eskom's coal-fired power stations require a continuous supply of acceptable quality coal at fair prices. Eskom has to compete with international buyers for South Africa's coal reserves, which has a negative effect on the coal price. More detailed specifications for the acceptable quality of coal delivered to Eskom also influence supply.

Eskom secures these resources through national collaboration and effective engagement with relevant stakeholders. The following indicators are used:

- Average coal stock days
- Coal delivery (see "Implementing coal haulage and the road-to-rail migration plan" on page 141)
- Coal quality, which is measured indirectly via a power plant's UCLF and EAF measurements (see "Becoming a high-performance organisation" on page 91)
- Specific water consumption (see "Reducing Eskom's environmental footprint" on page 137)
- Primary energy costs, including future fuel
- Volume of coal burnt

Operating highlights

- Significant progress made in the execution of the coal supply strategy
- Four medium-term contracts have been signed for coal supply to Kusile power station during the commissioning phase
- Fund advisors have been appointed to create a mine development fund to advance black-owned emerging miners' coal and limestone mining projects
- The Komati water scheme augmentation project was commissioned and declared operational on 5 June 2013
- The Mokolo Crocodile water augmentation project phase 1 debottlenecking delivered water to Medupi for construction activities and for the commissioning of the first few units

Operating challenges

- Even though overall coal quality was on target, negative impacts were experienced at Arnot, Matla and Tutuka power stations due to foreign material, mill constraints and stone contamination, resulting in poor quality coal
- Production performance at some of the cost-plus mines continues to be a challenge
- The Duvha coal conveyor was damaged by fire in December 2013, impacting coal stock days and coal cost negatively

Securing Eskom's future resource requirements (continued)

- During the last quarter of the year there was an increase in the number of community protests around coal trucks, and this impacted the coal supply to critical stations
- The prolonged rainy weather in the last quarter of the year caused coal and live coal stock piles to become wet. Additional coarse coal had to be procured where low stockpiles or wet coal issues had impacted electricity production

Future focus areas

- Improving the performance of the existing cost-plus mines as well as improving coal quality for certain power stations
- Continuing with the roll-out of the coal supply strategy implementation plan
- Conclusion of long-term coal and limestone supply agreements for Kusile power station
- Developing and implementing a water quality strategy to protect water resources and reduce the impact of deteriorating water quality on power stations
- Continuing to implement measures to improve coal quality for Arnot and Tutuka power stations

Securing Eskom's coal requirements

Reliably procuring sufficient coal of the appropriate quality remains a challenge. Even though Eskom's power stations are designed to use poor quality coal, in recent years some mines delivered fuel that did not meet Eskom's coal quality standards, resulting in increased emissions, coal ash and wear on the plant.

Primary energy balances – coal and liquid fuel (R million)

Indicator and unit	Actual 2013/14	Actual 2012/13	Actual 2011/12
Coal and liquid fuel inventory balance	5 276	5 330	3 798
Future fuel balance (coal portion)	7 763	7 098	5 020

For further detail on primary energy costs for the year, refer to page 157.

Key performance indicators for securing Eskom's coal requirements

Indicator and unit	Target 2013/14	Actual 2013/14	Actual 2012/13	Actual 2011/12	Target achieved?
Coal burnt, Mt	–	122.42	122.95	125.21	–
Coal purchased, Mt	–	121.98	126.44	124.27	–
Coal stock days, days	42	44	46	39	✓

Overall coal stock days exceeded the target of 42 days largely due to overproduction of coal at the mines attached to Lethabo, Matla and Kendal power stations. Since these are all cost-plus mines, there is no financial benefit in reducing their production. Production performance at the Arnot and New Denmark cost-plus mines continues to be a challenge.

In December 2013, a fire on the conveyor belt transporting coal to Duvha power station resulted in coal being transported by road, coal stock days at the station decreasing to 19 days (minimum stock level: 23 days). The recovery of the one conveyor stream was completed at the end of March 2014 and the second stream is due for completion by the end of May 2014.

Although overall coal standards improved in 2013/14, stone-contaminated coal and mill constraints resulting in poor-quality coal still affected performance at Arnot, Matla and Tutuka power stations. Technologies to screen coal for stones and metal have been installed at the Tutuka stockyard, Arnot power station and the Arnot colliery. These measures assist in detecting impurities in coal so that these can be removed or the coal sorted for quality before being fired, thus preventing coal-related plant damage.

Coal supply strategy implementation plan

Eskom started to implement a set of actions to give effect to the coal supply strategy. Some of the actions include the following:

- Eskom is continuing to work closely with Transnet Freight Rail and the Department of Water Affairs (DWA) to develop funding models for the rail and water infrastructure required to access the Waterberg coalfield
- Transnet Freight Rail delivered all the required coal from Exxaro in the Waterberg region to Majuba power station for the full scale combustion test. The test was successfully completed at Majuba power station on 21 February 2014, and the final report is anticipated to be completed within the 2014/15 financial year
- The creation of a mine development fund to advance black-owned emerging miners' coal and limestone mining projects

Eskom has contracted 80% of the coal it requires over the next five years.

Eskom made presentations before parliament's minerals portfolio committee to debate the draft Mineral and Petroleum Resource Development Amendment bill, which aims to promote national energy security, including the possibility of declaring coal a strategic resource. Despite claims that the country has ample coal both for export and to supply Eskom, the company believes that given the importance of the resource to the country, state intervention is required to ensure that South Africa has enough coal to meet its growing energy needs. Parliament approved the bill on 27 March 2014.

Securing Eskom's water requirements

Eskom has continued to work closely with the Department of Water Affairs to address the backlog of water-use licences for its power stations, capacity expansion programme and coal suppliers. Water performance is assessed in terms of water usage, measured in megalitres (ML), litres per kilowatt-hour sent out (L/kWhSO) and water costs.

Key performance indicators for securing Eskom's water requirements

Indicator and unit	Target 2013/14	Actual 2013/14	Actual 2012/13	Actual 2011/12	Target achieved?
Water usage, ML	–	317 052	334 275	319 772	–
Water usage, L/kWhSO ¹	1.39	1.35	1.42	1.34	✓
Water costs, R million	2 082	1 451	1 379	165	✓

1. The volume of water consumed per unit of generated power from commissioned power stations.

Securing Eskom's future resource requirements (continued)

The Mokolo Crocodile water augmentation project phase 1 debottlenecking was completed and resulted in an increase in the water infrastructure capacity. The three months labour strike and heavy rains have delayed the full water delivery date to October 2014. Phase 2 of this water supply agreement negotiations with DWA are progressing well to ensure water security to the Lephalale area in the Limpopo province. The projected water delivery date has moved from December 2018 to December 2019. This is not expected to impact the retrofit of flue gas desulphurisation capability at Medupi power station, as the first two units can be retrofitted from the water available from the existing water resource.

Water resources are at healthy levels due to above average rainfalls, however, water-treatment works at some power stations are struggling to handle the levels of pollution at stations where the quality of water from catchments is deteriorating.

The Kilbarchan Colliery, a closed colliery owned by a subsidiary of Eskom, is decanting mine-affected water. To ensure that the colliery complies with the Mine Health and Safety Act (1996), Eskom has appointed service providers to develop a closure plan and remediation solutions in line with the required water-use and environmental authorisations.

Securing Eskom's nuclear fuel requirements

The current uranium and enriched uranium contracts are sufficient for Koeberg until 2017, while the current fuel-fabrication contracts are sufficient to cover Koeberg's demand until 2015/16.

Normal commercial processes will be followed to enter into appropriate contracts for the supply of nuclear fuel when the above contracts come to an end. The contracting and pricing strategy will depend on the market and policies applicable at that time.

Primary energy balances

R million	Actual 2013/14	Actual 2012/13	Actual 2011/12
Nuclear fuel (inventory balance)	1 456	856	1 217
Future fuel balance (nuclear portion)	981	1 023	432



09

Implementing coal haulage and the road-to-rail migration plan



The construction of a dedicated railway comes as result of Eskom's initiative to change transportation of coal to a number of power stations, from road trucks to rail transportation

Eskom has been progressively migrating coal transport from road to rail over the past four years. Rail transport is safer, more environmentally friendly, less damaging to roads and more cost-effective than road transport by truck. The project is being implemented in partnership with Transnet Freight Rail

The Majuba heavy-haul line is the road-to-rail strategy's flagship project. When completed, this dedicated line will be able to transport 14 million tons (Mt) of coal from Ermelo to Majuba power station each year. The site for the railroad is being established and construction on surrounding structures (cattle creeps, culverts, agricultural underpass and bridges) has begun. The project is scheduled for completion in 2017.

Operating highlights

- The volume of coal transported by rail increased by 15% compared to the previous year

Future focus areas

- Continue work on the Majuba line project
- Expedite the integrated logistics strategy implementation plan which includes the formation and roll-out of the implementation of the road change-over strategy
- Fast track the formation of the implementation vehicle that will house skilled resources who can facilitate and assist transporters and truck drivers with other opportunities as the road-to-rail migration programme continues

Migrating coal transport from road-to-rail

Eskom transported 11.6Mt of coal by rail, meeting the 2013/14 target of 11.5Mt. This target was lower than the previous year's 12.2Mt target to account for lower electricity demand.

Key performance indicator for migrating coal transport from road-to-rail

Indicator and unit	Target 2017/18	Target 2013/14	Actual 2013/14	Actual 2012/13	Actual 2011/12	Target achieved?
Coal haulage (road-to-rail), Mt	20.7	11.5	11.6	10.1	8.5	✓

Coal deliveries by rail remain a challenge due to the operational performance constraints experienced by both Eskom and Transnet Freight Rail. Operational inefficiencies were experienced across all Eskom rail services. In June 2013, the rail deliveries were affected by a series of derailments on the Transnet Freight Rail Natcor rail line.

10

Pursuing private-sector participation



Eskom remains committed to developing the electricity supply industry by facilitating the integration of independent power producers (IPPs) into the national grid and buying electricity from IPPs for national distribution. IPPs play an important role in ensuring security of supply at a time when Eskom's generating capacity is closely matched by electricity demand

Eskom interfaces with IPPs through two organisational units. Firstly Eskom's grid access unit manages the end-to-end network service relationship with generators and IPPs connecting to Eskom's grid. Its other key role is to facilitate grid access by ensuring the process is efficient and all commercial options for IPPs are available in a transparent and non-discriminatory manner.

Secondly, the buyer is housed in the energy planning and market development unit, which enters into power purchase agreements with IPPs. This unit also assists the Department of Energy (DoE) with the country's integrated resource plan.

Operating highlights

- The first project under the RE-IPP was connected to the grid on 27 September 2013 and the first IPP was commissioned on 15 November 2013
- Eskom has successfully facilitated the connection of 21 renewable energy independent power producer (RE-IPP) projects with a capacity of 1 076MW to the grid. Of these a total of 467.3MW is currently available to the system
- The DoE approved an additional 1 457MW pursuant to the third bid submission. No contracts have yet been signed for this capacity
- A further 1 005MW of capacity was signed under the DoE Peaker programme

Future focus areas

- Assisting the DoE with applications for the fourth round of the RE-IPP programme
- Securing funding, land and environmental permissions for the transmission strengthening project in preparation for more IPPs being added to the grid

Key performance indicators for IPP capacity

Indicator and unit	Target 2013/14	Actual 2013/14	Actual 2012/13	Actual 2011/12	Target achieved
IPP purchases, GWh	4 152	3 671	3 516	4 107	✗

Installing and purchasing IPP capacity

Eskom has a range of short-, medium- and long-term contracts with IPPs. Short- and medium-term energy purchases from IPPs are primarily intended to help widen the supply-and demand margin so that Eskom can perform maintenance (refer to "Keeping the lights on" on pages 106 to 109). Long-term IPP purchases focus on renewable and gas-based energies to reduce South Africa's carbon footprint and diversify the energy mix while strengthening the country's energy industry.

A multi-storey video wall – located in the control room at Eskom's national control centre in Johannesburg

Pursuing private-sector participation (continued)



Eskom operates around 359 337km of power lines across South Africa

Short/medium term

- **The medium-term power purchase programme (MTPPP)** involves Eskom purchasing base-load capacity from private generators. The programme was initiated in 2008
- **The wholesale electricity pricing system programme (WEPS)** involves Eskom entering into annual contracts to purchase electricity at wholesale prices from co-generators outside of the ambit of the MTPPP and short-term contracts
- **The short-term power purchase programme (STPPP)**, which involves Eskom contracting private generating capacity on a short-term basis
- **Municipal base-load contracts** with City Power and the City of Tshwane. Eskom contracted 585MW of generating capacity from Kelvin, Rooiwal and Pretoria West power stations. Electricity was purchased at rates comparable to the MTPPP. NERSA did not approve any further costs for purchases from municipal generators during MYPD 3, so these contracts were not extended after they expired at the end of December 2013

Long term

- **The DoE peaker programme** is a long-term Department of Energy (DoE) initiative that involves purchasing power from the independently-owned Avon and Dedisa power plant (OCGTs), which are under construction. Eskom signed power purchase agreements with the service provider that owns both stations during the year. Dedisa is expected to be commissioned in 2015, and Avon is scheduled for 2016
- **The renewable energy independent power producer procurement (RE-IPP)** programme is a long-term DoE initiative that was launched on 3 August 2011 and commits Eskom to signing power purchase agreements for renewable energy from IPPs

Total energy procured from all IPPs for the year amounted to 3 671GWh at a cost of R3 266 million (average cost of 88c/kWh), which is R721 million higher than the NERSA decision for 2013/14.

The following table provides a comparison of the amount of energy purchased in 2013/14 and the cost per type of IPP contract.

Actual energy procured through IPP programmes in 2013/14

IPP purchases	Actual energy purchased (GWh)	Actual cost (Rm)	Actual cost (c/kWh)
MTPPP	1 478	1 217.5	82
STPPP	931	815.6	88
WEPS	139	72.3	52
Municipal base loads	873	771.9	88
RE-IPP	250	350.5	140
Adjustment	—	38.3	—
Totals/averages	3 671	3 266.1	88

In April 2014, the Department of Energy announced that:

- A fourth round of bidding for the renewable energy IPP programme would close in August 2014
- The number and capacity of renewable energy IPPs to be contracted through the third round of the programme might be extended
- The process to procure 800MW of co-generation power and 2 500MW of coal generation power from IPPs was underway
- The revised solar water heater programme model would start using locally produced heaters in the 2014/15 financial year

11

Transformation



Eskom's supplier localisation drive is complemented by its corporate social investment (CSI) programme, which aims to improve society at large through targeted direct investments into community education, health and developmental projects

Rolling out government's universal electrification programme within Eskom's areas of operation has been the company's most direct, widespread contribution to social improvement. The capacity expansion programme, as one of the main drivers of industrialisation in the country, has contributed substantially to the shareholder's vision of transforming society by creating jobs and developing skills. Eskom also has an internal transformation policy to ensure workplace equity.

Operating highlights

- Eskom achieved 201 788 electrification connections during 2013/14 (including DoE funded connections), the highest since 2002. The increased connections are in response to increased DoE funding in terms of its universal access programme
- Eskom awarded R3.1 billion in contracts to local suppliers on the capacity expansion programme
- All targets for B-BBEE attributable expenditure measures were exceeded

Operating challenges

- Construction delays resulted in the CSI target for the number of rural development projects completed not being met. The remaining project is due for completion in the first few months of 2014/15
- The expiry of Eskom's exemption from the Preferential Procurement Policy Framework Act (PPPFA) required that a number of commodity strategies and targets be reviewed and amended
- Employee numbers have been capped, resulting in the reduction of opportunities to improve on employment equity

Future focus areas

- Continuing with the CSI impact study which is currently underway to determine the impact of CSI programmes implemented over the past three years
- Finding innovative funding solutions for CSI spend
- Continuing the electrification connections on the accelerated DoE universal access programme
- Finding innovative ways to further advance skills development, job creation, localisation and enterprise development in collaboration with other state-owned companies, and within the ambit of applicable procurement regulations
- Finalisation of Eskom's revised employment equity plan

Eskom achieved 201 788 electrification connections during 2013/14, the highest achieved since 2002

Transformation (continued)

Maximising Eskom's socio-economic contribution

Eskom's socio-economic contribution is measured in terms of the key performance areas shown in the table that follows.

Key performance indicators of Eskom's socio-economic contribution for the group¹

Indicator and unit	Target 2017/18	Target 2013/14	Actual 2013/14	Actual 2012/13	Actual 2011/12	Target achieved?
Corporate social investments committed, R million	–	133.0	132.9	194.3	87.9	⊖
Job creation, number	2 000	24 965	25 181	35 759	28 616	✓
Total number of electrification connections, number ²	300 013	184 975	201 788	139 881	154 250	✓
Procurement from B-BBEE compliant suppliers, %	75.0	75.0	91.8	82.1	73.2	✓
Local sourcing in procurement, % ³	52.0	52.0	54.6	80.2	77.2	✓
Procurement from black-owned suppliers, %	20.0	10.0	35.3	22.1	14.6	✓
Procurement from black women-owned suppliers, %	9.0	5.0	7.5	5.1	3.3	✓
Procurement from black youth-owned suppliers, %	5.0	1.0	1.0	1.0	–	✓

1. Group numbers are shown, except where those numbers are not available, in which case company numbers are presented.

2. The reporting boundary for the number of connections was changed in March 2014 to exclude farm worker and municipality funded connections. The target has been revised to exclude 651 farmer connections. The comparatives have been restated (876 and 963 farmer, and 3 801 and zero municipality-funded connections deducted for March 2013 and March 2012 respectively). A total of 992 farm worker, and 2 879 municipality funded connections were installed for the current year.

3. Local sourcing of procurement for capacity expansion projects only.

Corporate social investment

The Eskom Development Foundation NPC (the Foundation) continues to implement Eskom's corporate social investment mandate to promote transformation and social sustainability. The Foundation focuses on initiatives to develop small- and medium-sized enterprises, education, health, food security, community development, energy and the environment. Year-to-date, the Foundation has approved the commitment of R132.9 million for corporate social investment (CSI), impacting 357 443 beneficiaries. An amount of R115.4 million was spent during the year.

CSI highlights for the year include:

- The graduation of 214 learners who successfully completed the contractor academy programme
- Launch of the telematics programme with the St Johns School in the Eastern Cape. The telematics technology enables students to benefit directly from the subject presenter based in Cape Town through satellite connection. A total of 4 973 learners will benefit from this initiative and it encourages a culture of teaching and learning through technology
- The successful completion of six further education and training (FET) college projects, and five rural development projects as listed as follows

Rural development projects	FET colleges
Sthandimfundo High School	Cape Town
Tiyane Magoro Pre-school	Boland
Mqhokweni Primary School	Vhembe
Nzimakwe cooperative	Sekhukhune
Phumalanga Primary School	Umgungundlovu
	Mnambithi

More information on Eskom's corporate social investment initiatives can be found at www.eskom.co.za/IR2014/04.html

Electrification

The Government of South Africa, through the Department of Energy (DoE), continues to fund the electrification of previously disadvantaged and farm worker households in its licensed areas of supply. While the DoE funds the new connections and infrastructure development, Eskom carries the ongoing operating costs for these connections, and receives the revenue for electricity sold.

The National Census of 2011/12 identified 3.4 million South Africans who are without electricity. The majority of these people live in the Limpopo, Eastern Cape and KwaZulu-Natal provinces. In order to achieve the United Nation's millennium development goal of universal access to electricity by 2030, the DoE has accelerated the universal access programme.

The DoE's integrated national electrification programme that commenced in 2013/14, increased its funding by 17%. At the same time, Eskom is pursuing construction efficiency opportunities in order to unlock savings to fund 50 000 extra connections per annum. The electrification programme is now being implemented in more remote areas where the construction of network infrastructure is more expensive due to the distances involved and, in some cases, the difficult terrain encountered.

Eskom has in 2013/14, for the first time since year 2002, achieved electrification of more than 200 000 household connections in a year. Electrification performed on behalf of, and funded by, municipalities has been excluded from the numbers reported above. Eskom has connected 2 879 municipal households in 2013/14 (2012/13: 3 801). The electrification of farm dwellers is also excluded from these numbers.

Electrification of grid schools and clinics

School electrification is funded by the Department of Basic Education. A total of 112 schools received electricity for the first time for a total capital outlay of R51 million. No clinics were identified for electrification during the year.

Indicator and unit	Actual 2013/14	Actual 2012/13	Actual 2011/12
Capital investment, R million	51	36	2
Total connections, number	112	142	19

Transformation (continued)

Localisation, job creation and skills development through the capacity expansion programme

Contracts with key suppliers generally include targets for skills development and job creation. Some suppliers are failing to meet these targets on time and are being monitored more closely to ensure compliance.

Since the inception of the capacity expansion programme, a total of 8 930 individuals have been trained for skills development against a target of 9 377. A total of 2 476 learners are currently being trained in various institutions throughout the country.

As at 31 March 2014, there are a total of 25 181 jobs created through the mega projects in the capacity expansion programme. This is less than the previous year as the completion of work in certain areas has resulted in the demobilisation of workers.

A total of 547 contracts worth R5.6 billion were awarded through the capacity expansion programme during 2013/14. Of this, R3.1 billion (54.6% of the total contract value) was committed to local content. To date, R98.7 billion (65.3% of the total contracted value of R151.2 billion) has been committed to local content, of which R68.7 billion (69.5% of local committed expenditure) has been paid out.

In addition to Eskom's local expenditure, major suppliers on the capacity expansion programme committed to R1.4 billion to local development plans specific to their build contracts. These commitments are specific to the boiler, turbine and generator packages. These values are cumulative, from inception of the capacity expansion programme in 2005, up to 31 March 2014.

Eskom B-BBEE attributable expenditure performance

Initiatives to ensure B-BBEE compliance have brought about improvements in Eskom's transformation performance. The Eskom group's total measured procurement spend (including primary energy) amounted to R130 billion in 2013/14, of which R119.4 billion (91.8%) was attributable to B-BBEE compliant suppliers, exceeding the internal target of 75%.

Strategies are being developed to improve procurement from black-owned businesses, with a particular focus on businesses owned by black women and black youth. Total measured procurement spend from black women- and black youth-owned both met or exceeded the target for the year.

Improving internal transformation

Eskom extended its employment equity plan, which was signed in 2010 and expired in March 2013, by one year to allow time to analyse the company's internal transformation progress and develop a long-term employment equity plan. This was done in consultation with the Department of Labour and organised labour.

Key performance indicators for internal transformation¹

Employment equity – Group	Target 2017/18	Target 2013/14	Actual 2013/14	Actual 2012/13	Actual 2011/12	Targets achieved?
People with disability, %	2.50	3.00	2.77	2.43	2.36	✗
Racial equity in senior management, % of black employees	74.0	61.0	59.3	58.4	53.9	✗
Racial equity in professionals and middle management, % of black employees	79.0	71.0	70.6	69.0	65.7	⚖
Gender equity in senior management, % of female employees	38.0	30.0	28.8	28.5	24.3	✗
Gender equity in professionals and middle management, % of female employees	42.0	36.0	34.9	34.0	32.4	✗

1. Group numbers are shown, except where those numbers are not available, in which case company numbers are presented.

The Eskom group employs 46 919 people including fixed-term contractors. It has become apparent that Eskom cannot grow its headcount and strategies have been put in place to manage the current headcount. The freeze on recruitment to limit employee numbers has restricted the opportunities for transformation; however Eskom is committed to achieving the employment equity expectations and is reviewing various options. The primary focus will be on the occupational levels that are under-represented.

Employment equity at senior management, professional and middle management levels remains below target, with women under-represented across all occupational levels.

The proportion of people with disabilities is 2.77%, slightly below the 3% target but above the government's target of 2% for the public services. Eskom has identified that not all its facilities can accommodate people with disabilities. To address this, Eskom has drafted a disability charter to ensure that facilities become more accessible.

Employee relations

Eskom's employee engagement model builds employee participation and involves employees and executives in conversations around strategy, performance and people. Eskom has also built more productive and sustainable relationships with organised labour and continues to do so through a partnering model to guide these interactions. In addition, Eskom has embarked on a process to further strengthen the relationships with the trade unions, utilising the services of an external facilitator.

After a lengthy wage dispute, Eskom and its recognised trade unions referred the wage dispute to the CCMA for resolution. A final decision, for the most part in favour of Eskom, was delivered in January 2014. The decision was only effective for the financial year 2013/14, backdated to 1 July 2013.

Even though Eskom has been declared an essential service, which prohibits employees from engaging in industrial action, employees at some Eskom sites have embarked on various forms of unprotected industrial action.

12

Ensuring Eskom's financial sustainability



Eskom's going-concern status will continue to be a key focus for the coming year as the revenue shortfall created by the MYPD 3 decision cannot be solved by cost savings and efficiencies alone – cost-reflective tariffs remain a requirement. Eskom has to balance short-term priorities with, long-term sustainability requirements and has to ensure that it will be able to repay a significant amount of current and future borrowings

Notwithstanding the significant effect that the MYPD 3 tariff increase has had on the expected revenue for the year, as well as the R225 billion revenue shortfall over the five-year MYPD 3 period, Eskom has identified and largely secured funding for the current capacity expansion programme up to the completion of the Kusile power station.

Eskom has sufficient liquidity to meet its current liability requirements. Eskom remains confident that it will be able to raise the remaining funding for the current capacity expansion programme, but this must be balanced against the negative outlook from the rating agencies and the possibility of a downgrade due to the deterioration in the credit metrics.

Eskom remains focused on re-engineering the business to achieve sustainability and cost efficiency by striking a balance between reducing costs where appropriate and the three sources of funding: equity, debt and revenue. The need for a supportive credit rating that reduces the cost of funding as well as retaining access to funding markets, and therefore, the need to migrate to cost-reflective tariffs in the future, will play a key role.

Eskom implemented the business productivity programme (BPP) which focuses on the reduction of the cost base, increased productivity and revisions of the Eskom business model and strategy in order to close the revenue shortfall. Cash savings of between R50 billion and R60 billion are targeted over the MYPD 3 period. Please refer to page 73 for further detail on BPP.

Eskom submitted a regulatory clearing account (RCA) application to NERSA for the MYPD 2 period during the last quarter of 2013 regarding the variances between costs and revenues assumed in MYPD 2 compared to the actual costs incurred and revenues received by Eskom. In terms of the regulatory rules, the regulator can increase future electricity tariffs to compensate Eskom for an under-recovery of revenue or it can reduce tariffs in the future if Eskom has over-recovered revenue. The electricity sub-committee has made a recommendation on the RCA to the NERSA board and a decision is awaited in the first quarter of the new financial year. It is anticipated that this adjustment is likely to commence no later than 1 April 2015.

While the regulatory mechanism does not take into account Eskom's capital expenditure, other than depreciation once in commercial operation and a return on assets, the revenue shortfall due to the lower tariff does have an impact on the cash available to Eskom for capital expenditure. Eskom submitted a capital programme amounting to R337 billion over the MYPD 3 period and the result of the determination implies that Eskom has to reduce its capital programme to R251 billion taking into account the cash position. There is an additional requirement for critical projects

The coal conveyor and coal stockyard at the Medupi power station project is funded by the World Bank

Ensuring Eskom's financial sustainability (continued)

that can't be executed within the R251 billion budget. The capital expenditure portfolio will be managed by Eskom within the funds available, and should additional funding not be secured for the additional capital requirements, the current capital portfolio of R251 billion will be reviewed to reprioritise projects to ensure that environmental and regulatory legal requirements are met. Eskom is currently nine years into a capacity expansion programme which is funded from various local and international funding sources and relies on Eskom's credit rating, which is linked to South Africa's sovereign rating.

The board has emphasised that by implementing the corporate plan for 2014/15 to 2017/18 and all the approved initiatives to ensure the continued operation of Eskom, it is a specific prerequisite that Eskom remains a going concern and financially sustainable.

Operating highlights

- Eskom successfully raised USD1 billion through an international bond issue during July 2013
- The original R300 billion funding plan that covered the capacity expansion programme to the end of Kusile, from 1 April 2010 to 31 March 2017, is progressing well with 90.5% of the R300 billion secured
- During the period, Eskom entered into a loan amendment whereby the currency of the World Bank loan was changed from a floating US dollar loan to a fixed-rate rand loan, the effect being that Eskom now no longer has a US dollar exposure to hedge
- Eskom restructured a cross-currency swap and as a result released R2.3 billion in March 2014 (cash received), and also reduced the coupon payable over the period

Operating challenges

- Bridging the R225 billion five-year revenue shortfall resulting from the 8% MYPD 3 tariff increase which is exacerbated by the decline in local sales volumes (compared to budgeted sales volumes), the impact of the determination on operations and capital expenditure and the net impact on Eskom funding requirements
- The high cost of the liquid fuel for open-cycle gas turbines to maintain security of supply
- The cash flow impact of electricity theft and the increase in outstanding debt of electricity debtors like municipalities and residential customers

Future focus areas

In light of Eskom's financial sustainability, it is imperative that the following are undertaken to maintain a positive outlook for the organisation's liquidity:

- Disciplined execution of the BPP workstream opportunities that are identified
- Continuing engagement with NERSA on regulatory clearing account recovery
- Exploring other funding alternatives to unlock cash, including investigating additional equity

Performance indicators for ensuring Eskom's financial sustainability

Indicator and unit	Target 2017/18	Target 2013/14	Actual 2013/14	Actual 2012/13	Actual 2011/12	Target achieved
Company						
Electricity revenue per kWh, c/kWh	89.30	62.37	62.82	58.49	50.27	✓
Electricity operating costs per kWh (including depreciation and amortisation), c/kWh	73.21	52.67	59.67	54.15	41.28	✗
Interest cover, ratio	1.06	1.18	0.65	0.27	3.27	✗
Debt:equity (including long-term provisions), ratio	3.40	2.17	2.21	1.96	1.69	=
FFO as a percentage of gross debt (target >20%), % ²	11.08	9.11	9.21	8.55	15.06	✓
Group						
Working capital ratio, ratio	0.79	0.65	0.71	0.68	0.76	✓
Free funds from operations, R million ¹	49 119	29 653	27 542	18 108	30 483	✗
Gross debt/EBITDA (target < 3), ratio ²	6.80	7.95	10.96	16.20	6.46	✗
Debt service cover (target >2.5), ratio ³	2.17	1.55	1.21	2.01	3.50	✗

1. Comparative restated.

2. The target reflects investment grade aspiration.

3. The target reflects a loan covenant.

Actual performance for the year ending 31 March 2014 has been significantly different from the budgeted outlook, which can be directly linked to the reduction in local sales volumes, and the additional OCGT expenditure necessary to ensure the security of supply.

Ensuring Eskom's financial sustainability (continued)

The following Eskom company financial ratios have been recalculated to reflect a scenario that assumes that Eskom's sales volumes were as budgeted and that the OCGT spend was only at budgeted levels:

Indicator and unit	Actual March 2014 ¹	Actual 2014 adjusted	Variance
EBITDA, R million	23 497	36 228	12 732
Electricity operating costs per kWh (including depreciation and amortisation), c/kWh	59.67	54.11	(5.55)
Interest cover, ratio	0.65	1.36	0.71
Free funds from operations (FFO), R million	25 874	38 612	12 732
Debt service cover ratio, ratio	1.16	1.94	0.77
FFO as percentage of gross debt, %	9.21	13.74	4.53
Gross debt/EBITDA, ratio	11.96	7.76	(4.20)
Sales volumes, GWh	217 903	227 393	9 490

1. The figures reflect company numbers which are not necessary comparable to those in the table on page 155, which shows group figures.

Financial results of operations

Eskom achieved a group net profit of R7.1 billion for 2013/14 (2012/13: R5.2 billion). Operating profit before fair value gains and losses on embedded derivatives and net finance costs was R11.4 billion (2012/13: R10.4 billion). Compared to 2012/13, the 8% tariff increase resulted in a 7.4% average increase in electricity revenue per kilowatt-hour (kWh). This increase was offset by a 10.2% increase in operating costs per kWh compared to the previous year. The decline in local sales volumes has an impact on the calculation of operating costs per kWh sold (compared to target), as a significant portion of Eskom's operating cost base is fixed.

The effect of applying the replacement value approach to Eskom's assets results in the group reporting a net loss of R12.5 billion (2012/13: R8.7 billion). This equates to a negative return on assets of 1.89% (calculated before applying the impairment provision). For further details on the replacement value approach, refer to note 52 in the annual financial statements available at www.eskom.co.za/IR2014/01.html

This section should be read in conjunction with the summarised financial statements on pages 164 to 166 as well as the full annual financial statements available at www.eskom.co.za/IR2014/01.html

Sales and revenue

Group revenue for 2013/14 was R139.5 billion (2012/13: R128.8 billion) and the increase is mainly as a result of the electricity tariff increase of 8% as determined by NERSA. Electricity sales for the year amounted to 217 903GWh, representing a 0.6% increase on the previous year (2012/13: 216 561GWh). Local sales to industrial customers have increased by 5.6% year-on-year, mainly due to increased operations by certain key customers as well as less power buybacks during 2013/14. This increase is offset by a decline of 3% in the mining sector and a 9.6% decrease in international sales. Refer to pages 110 to 111 for more detail on international sales.

Operating costs

Primary energy costs for the year amounted to R69.8 billion (2012/13: R60.7 billion). This included R10.6 billion (2012/13: R5.0 billion) relating to the fuel for the open-cycle gas turbines (refer pages 106 to 108 under "Keeping the lights on"). Per unit, primary energy costs increased by 14.2% per unit of electricity sold, from 28.05c/kWh in 2012/13 to 32.04c/kWh in 2013/14. The 3.99c/kWh increase is mainly due to:

- Coal usage costs increasing by 0.74c/kWh
- The cost of using open-cycle gas turbines increasing by 2.54c/kWh
- Demand-market participation, power-buyback and co-generation costs decreased by 1.27c/kWh – this was mainly due to power-buyback costs decreasing from R2.8 billion in 2012/13 to R0.01 billion in 2013/14
- Other expenditure including coal handling, fuel for gas-fired start-ups, water usage, environmental levies and international purchases made up the remainder of the increase

The amount paid to the South African Revenue Service regarding the environmental levy for the 2013/14 financial year was R8.5 billion (2012/13: R8.0 billion).

Group employee numbers, inclusive of fixed-term contractors, reduced by 376 from 47 295 at 31 March 2013 to 46 919 at 31 March 2014. Group gross employee costs (before capitalisation) for the year amounted to R31.3 billion (2012/13: R28.6 billion). The increase in gross employee cost is mainly as a result of the increase in contract labour cost relating to the capacity expansion programme.

Group arrear bad debt was 1.10% of external revenue for the year (2012/13: 0.82%). The municipality arrear debt as well as residential arrear debt in Soweto continues to grow. Refer to pages 96 to 97 under "Being customer-centric" for more detail on electricity debtors.

The group's other operating expenses for the year came to R19.2 billion (2012/13: R23.0 billion). The main items in this category are:

- The company's net repairs and maintenance cost¹ (after capitalisation) of R12.9 billion (2012/13: R10.6 billion). Refer to pages 114 to 115 under "Keeping the lights on" for more detail on generation's maintenance, which is on average about 60% of the total of repairs and maintenance cost
- The company's demand-side management (DSM) cost for Eskom amounted to R1.4 billion in 2013/14 (2012/13: R3.0 billion). The decrease is as a result of the reduced amount allowed by NERSA in its MYPD 3 determination. Refer to pages 111 to 113 under "Keeping the lights on" for more detail on IDM

Eskom's focus on cost efficiencies has had a positive impact on the other items included in other operating costs.

1. A significant amount of repairs and maintenance cost incurred by the Eskom company relate to its subsidiaries Roshcon and Rotek and therefore the cost is eliminated against the repairs and maintenance line upon consolidation of the group results, in accordance with IFRS.

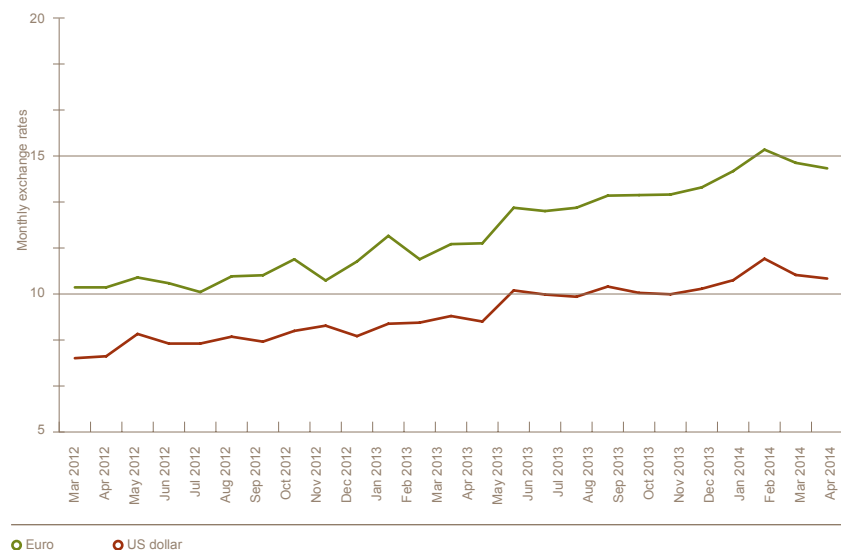
Ensuring Eskom's financial sustainability (continued)

Net fair value on financial instruments and embedded derivatives

The net fair value loss on financial instruments, excluding embedded derivatives, was R0.6 billion for the year (2012/13: R1.7 billion). These gains and losses consist primarily of the costs attributable to the rolling over of forward exchange contracts, which vary from period to period due to the timing of the placement of related procurement contracts and exchange-rate fluctuations.

The net impact on the income statement of changes in the fair value of the embedded derivatives (relating to the negotiated pricing agreements) was a fair value gain of R2.1 billion for the year (2012/13: R5.9 billion loss). Embedded derivative liabilities amounted to R9.3 billion (2012/13: R11.5 billion). The loss in 2012/13 was mainly due to the decision at 31 March 2013 to account for the full term of the underlying negotiated pricing agreement contracts. The profit in the current year is mainly as a result of the changes in the USD/ZAR exchange rate and interest rates. Eskom submitted the remaining contract to NERSA in the previous year and is awaiting its decision.

Euro and US dollar to rand exchange rate movements



Finance costs

After capitalising borrowing costs and including the unwinding of interest on provisions, the net finance cost for the group for 2013/14 was R4.8 billion (2012/13: R3.0 billion income). Gross finance income was R2.5 billion (2012/13: R2.8 billion) while the gross finance cost was R17.6 billion (2012/13: R1.1 billion). The borrowing costs capitalised for the year were R13.3 billion (2012/13: R3.7 billion), while the unwinding of interest amounted to R2.9 billion (2012/13: R2.4 billion).

The gross finance cost, as well as borrowing costs capitalised for the 2012/13 year, were impacted by the remeasuring of the government loan which amounted to an income of R17.3 billion. The remeasurement of the government loan is based on the MYPD 3 price path and no remeasurement was required in the current year.

Taxation

The effective tax rate for the year was 23.3% for the group (2012/13: 26.4 %). Please refer to note 42 of the annual financial statements available at www.eskom.co.za/IR2014/01.html for more information.

Liquidity and capital resources

Cash and cash equivalents, together with liquid investment in securities, amounted to R30.6 billion as at 31 March 2014 (31 March 2013: R28.0 billion). In terms of the latest projections, assuming no further drawdowns on borrowings, Eskom's liquidity reserves cover its requirements for approximately 120 days.

The group's net cash inflow from operating activities for 2013/14 was R33.6 billion (2012/13: R27.7 billion). The group's working-capital ratio was 0.71, compared to 0.68 as at 31 March 2013.

Cash flows used for investing during the year stood at R57.2 billion (2012/13: R58.4 billion). The capital expenditure cash flows included in this item, excluding capitalised interest, amounted to R55.8 billion (2012/13: R57.9 billion). For details on the capital expenditures incurred for the year refer to the table on page 124.

The net cash inflows from financing activities for the year were R32.8 billion (2012/13: R21.8 billion). The raising of borrowings and the issuing of securities have been managed to match the capital expenditure.

Gross debt increased by R51.9 billion during the year. The debt-to-equity ratio for the group (including long-term provisions) was 2.06 as at 31 March 2014 (2012/13: 1.84). The free funds from operations as a percentage of gross debt was 9.73% for the group at 31 March 2014 (2012/13: 8.04%), while the gross debt as a percentage of earnings before interest, taxation, depreciation and amortisation was 10.96% (2012/13: 16.20%).

Funding progress

As at 31 March 2014, R271.6 billion or 90.5% of the R300 billion borrowing programme had been secured. The R300 billion borrowing programme is based on the original funding requirements as at April 2010 and covers the period 1 April 2010 to 31 March 2017. Further funding requirements, including those resulting from the lower than expected MYPD 3 tariff determination, are not included in this borrowing programme.

The tracking of execution progress of the original R300 billion plan will have to be replaced over time, with the R251 billion borrowing requirement which covers the period 1 April 2013 to 31 March 2018. Eskom's current funding plan does not take into account allocations of capital projects in terms of the IRP 2010 post-Kusile.

Ensuring Eskom's financial sustainability (continued)

Progress on the original R300 billion funding plan as at 31 March 2014

Sources	Funding sources April 2010 – March 2014	Secured to date	Drawdowns April 2010 – March 2013	Drawdowns April 2013 – March 2014	Combined drawdowns since April 2010	Amount secured/ supported by government
Bonds	90.0	65.4	44.8	20.6	65.4	42.6
Commercial paper ¹	70.0	70.0	30.0	10.0	40.0	0.0
ECAs ²	32.9	32.9	19.4	2.3	21.7	0.0
World Bank	27.8	27.8	8.6	3.4	12.0	27.8
AfDB ³	20.9	20.9	13.3	2.8	16.2	20.9
DBSA ⁴	15.0	15.0	7.0	2.0	9.0	0.0
Shareholder loan	20.0	20.0	20.0	–	20.0	20.0
Other/new sources	23.4	19.64	0.9	3.59	4.5	5.0
Total (R billion)	300.0	271.6	144.1	44.7	188.7	116.2
Percentages		90.5			69.5	42.8
		(% of R300 billion)			(% of secured)	(% of secured)

1. Commercial paper is issued for up to one year and then redeemed and re-issued for the same net amount. The commercial paper is thus by definition not fully secured for the full period, however, Eskom's long-term observations and past trends support a high level of confidence that Eskom will be able to roll over the redemptions each year. For this reason, the gross value of the commercial paper is shown under the "secured" column in the table above.

2. Export credit agencies.

3. African Development Bank.

4. Development Bank of South Africa.

Summary of Eskom's credit ratings as at 31 March 2014

Rating	Standard & Poor's	Moody's	Fitch	
			Local currency	National scale
Foreign currency	BBB	Baa3	–	AAA*
Local currency	BBB	Baa3	BBB+	F1+
Standalone	b-	b1	B	None
Outlook	Negative	Negative	Stable	Stable
Action date	14 Oct 2013	19 Jul 2013	11 Jan 2013	15 Jan 2014
Affirmation date	14 Oct 2013	19 Jul 2013	12 Dec 2013	15 Jan 2014

* Adjusted from AA+ to AAA in January 2014.

For the rating rationale of Standard & Poor's and Moody's, please refer to the interim integrated report (www.eskom.co.za/IR2014/06.html).

Eskom continues to monitor the effects of its funding initiatives and operations on the ratios that impact on its credit rating. Eskom's credit rating continues to reflect its highly leveraged financial profile, the execution risks associated with its capacity expansion programme and a degree of regulatory uncertainty.

Funds for the next 12 to 18 months will be sourced mainly from a combination of issuing domestic and international bonds, export credit agency-backed financing, development finance institutions and the domestic commercial paper market. New opportunities from alternative funding sources and products, such as Islamic (Sukuk) funding, preference shares, syndicated loans and project-based funding are also being explored and considered to complement the current funding sources. Eskom's current funding plan does not take into account allocations of capital projects in terms of the IRP 2010 post-Kusile.

Activities remain focused on funding the remaining balance of the committed capacity expansion programme and the maintenance of a liquidity buffer. The additional capital requirements will only be approved if additional funding can be secured.



Hitachi, one of the main suppliers for the Medupi power station project, funded the Segwati Pre-school in Shongoane village, Lephalale

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Summarised group financial results

The group financial results have been extracted from the Eskom consolidated financial statements for the year ended 31 March 2014 that have been prepared in accordance with International Financial Reporting Standards (IFRS) and in the manner required by the Companies Act of South Africa, 71 of 2008

The consolidated financial statements have been prepared under the supervision of the finance director, Ms Tsholofelo Molefe CA(SA). These consolidated financial statements have been reviewed by the independent auditors KPMG Inc and SizweNtsalubaGobodo Inc and were approved by the board of directors on 29 May 2014. The consolidated financial statements, with the audit opinion issued by the independent auditors, are available at www.eskom.co.za/IR2014/01.html

One of the key focus areas in terms of the power line network is to increase live work to reduce the outages experienced by customers

Condensed group income statement

for the year ended 31 March 2014

	2014 Rm	Restated 2013 Rm
Continuing operations		
Revenue	139 506	128 775
Primary energy ¹	(69 812)	(60 748)
Net employee benefit expense	(25 622)	(23 564)
Depreciation and amortisation expense	(11 937)	(9 960)
Net impairment loss	(1 557)	(1 039)
Other operating expenses	(19 177)	(23 039)
Operating profit before net fair value loss and net finance (cost)/income	11 401	10 425
Other income	962	1 126
Net fair value loss on financial instruments excluding embedded derivatives	(620)	(1 655)
Net fair value gain/(loss) on embedded derivatives	2 149	(5 942)
Operating profit before net finance (cost)/income	13 892	3 954
Net finance (cost)/income	(4 772)	3 003
Finance income	2 475	2 796
Finance cost	(7 247)	207
Share of profit of equity-accounted investees, net of tax	43	35
Profit before tax	9 163	6 992
Income tax	(2 137)	(1 856)
Profit for the year from continuing operations	7 026	5 136
Discontinued operations		
Profit for the year from discontinued operations	63	47
Profit for the year	7 089	5 183
Attributable to:		
Owner of the company	7 089	5 183

1. Primary energy relates primarily to the acquisition of coal, uranium, water, gas and diesel that are used in the generation of electricity together with the environmental levy.

Condensed group statement of financial position

at 31 March 2014

	2014 Rm	2013 Rm
Assets		
Non-current assets	439 869	378 775
Property, plant and equipment and intangible assets	404 389	344 271
Investment in equity-accounted investees	318	296
Future fuel supplies	8 744	8 121
Investment in securities	4 841	8 574
Loans receivable	8 654	8 425
Derivatives held for risk management	9 361	5 420
Other assets	3 562	3 668
Current assets	64 977	53 241
Inventories	12 422	12 251
Investment in securities	6 066	8 776
Loans receivable	329	114
Derivatives held for risk management	2 812	1 906
Trade and other receivables	16 578	14 925
Other assets	7 094	4 649
Cash and cash equivalents	19 676	10 620
Non-current assets held-for-sale	147	8
Total assets	504 993	432 024
Equity		
Capital and reserves attributable to owner of the company	119 784	109 139
Liabilities		
Non-current liabilities	310 915	264 446
Debt securities and borrowings	234 562	190 776
Embedded derivatives	7 871	10 095
Derivatives held for risk management	310	840
Deferred tax liabilities	19 461	15 806
Deferred income	12 518	10 907
Employee benefit obligations	9 922	10 282
Provisions	21 157	20 087
Other liabilities	5 114	5 653
Current liabilities	74 181	58 439
Debt securities and borrowings	20 258	12 180
Embedded derivatives	1 461	1 386
Derivatives held for risk management	1 197	572
Provisions	9 601	6 648
Trade and other payables	28 531	28 999
Taxation	1	9
Other liabilities	13 132	8 645
Non-current liabilities held-for-sale	113	—
Total liabilities	385 209	322 885
Total equity and liabilities	504 993	432 024

Condensed group statement of cash flows

for the year ended 31 March 2014

	2014 Rm	Restated 2013 Rm
Cash flows from operating activities		
Profit before tax	9 163	6 992
Adjustment for non-cash items	21 925	22 620
Changes in working capital	(10 455)	(828)
Cash generated from operations	20 633	28 784
Net cash flows (used in)/from financial trading assets	(1 471)	1 701
Net cash flows from/(used in) financial trading liabilities	4 383	(2 317)
Net cash flows from/(used in) current derivatives held for risk management	10 278	(331)
Net cash flows (used in)/from non-current assets held-for-sale	(23)	48
Income taxes paid	(184)	(216)
Net cash from operating activities	33 616	27 669
Cash flows from investing activities		
Proceeds from disposal of property, plant and equipment	28	36
Acquisitions of property, plant and equipment and intangibles	(53 160)	(55 332)
Expenditure on future fuel supplies	(2 675)	(2 533)
Increase in non-current loans receivable	(229)	(990)
Other cash flows from investing activities	(1 171)	460
Net cash used in investing activities	(57 207)	(58 359)
Cash flows from financing activities		
Debt securities and borrowings raised	44 142	31 120
Debt securities and borrowings repaid	(8 014)	(7 149)
Decrease in investment in securities	5 748	5 047
Decrease in finance lease liabilities	(11)	(31)
Interest received	2 768	2 765
Interest paid	(11 838)	(9 968)
Net cash from financing activities	32 795	21 784
Net increase/(decrease) in cash and cash equivalents	9 204	(8 906)
Cash and cash equivalents at beginning of the year	10 620	19 450
Foreign currency translation	(23)	(49)
Cash and cash equivalents at beginning of the year attributable to non-current assets held-for-sale	(125)	125
Cash and cash equivalents at end of the year	19 676	10 620



How you can help to keep the lights on this winter ... especially between 5pm and 9pm weekdays

South Africa's homes – from flats and clusters to stand-alone houses and residential estates – demand 17% of the electricity used in our country. But on weekdays, between 5pm and 9pm, this demand increases and peaks at 35%, a huge jump that puts severe strain on the power supply.

Why does this happen?

We arrive home from work around 5pm, Monday to Friday.

The first thing we do is switch on the lights, television, our electrical space heaters, followed by the oven, the microwave and the washing machine or dishwasher. We also run hot water in the kitchen and take a bath or shower – with the geyser tucked away in the ceiling working hard to heat the water.

Millions of us follow this evening routine at the same time, which means South Africa's households use more than one third of the electricity consumed in the country between 5pm and 9pm, on weekdays.

As the demand increases, Eskom does all it can including running some emergency power stations during the day, to balance supply and demand. This winter we need to continue with power station maintenance and the system will be tighter during the peak period from 5pm to 9pm.

What can you do to help keep the lights on this winter?

Three simple things:

1. Switch off your electrical element geyser between 5pm and 9pm; this appliance uses the most electricity of all in the home, and can account for up to 50% on your electricity bill
2. Don't switch on your space heater between 5pm and 9pm. This appliance is energy-intensive and can account for up to 16% on your monthly electricity bill, instead, dress warmly, switch on a gas heater, and use a hot water bottle and blankets to keep warm
3. Switch off your pool pump between 5pm and 9pm; this appliance uses up to 11% on your electricity bill.

Let's switch off together ... and keep South Africa powered up this winter


Visit www.eskom.co.za/idm for detailed information on saving tips for winter and Eskom's energy efficiency product rebates.

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Appendices

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A lineman wearing a Faraday suit can work on live, high-power lines by being transported to the lines in a helicopter. Wearing the suit, they can crawl down the wires

Appendix A: Key performance indicators

The following table shows the key performance indicators of Eskom, and includes all the shareholder's compact indicators.

The key performance indicators are colour coded to indicate the link to the executive compact key performance areas. Refer to executive remuneration on page 80.

Executive compact key performance areas

1. Operate safely	<p>Five-year trend from 2009/10 to 2013/14</p> <p>▲ The key performance indicator shows a positive trend over the five years, with the arrow indicating the performance against target</p> <p>● The key performance indicator shows a negative trend over the five years, with the arrow indicating the performance against target</p> <p>○ The key performance indicator has been stable over the five years</p>
2. Keep the lights on	
3. Deliver on the capacity expansion programme	
4. Protect the environment	
5. Socio-economic contribution and build skills	
6. Transformation	
7. Improve performance	

Indicator and unit	Targets		Annual actuals					Five-year trend
	Target 2017/18	Target 2013/14	Actual 2013/14	Actual 2012/13	Actual 2011/12	Actual 2010/11	Actual 2009/10	
Becoming a high-performance organisation								
Focus on safety								
Employee lost-time incidence rate (LTIR), index ^{SC}	0.24	0.36	0.31 ^{RA}	0.40 ^{RA1}	0.41 ^{RA}	0.47 ^{RA}	0.54 ^{RA}	▼
Fatalities (employees and contractors), number	0	0	23 ^{RA}	19 ^{RA}	24 ^{RA}	25 ^{RA}	17 ^{RA}	▲
Improve operations								
Normal unplanned capability loss factor, % ^{SC.2}	10.00	10.00	12.61 ^{RA}	12.12 ^{RA}	7.97 ^{RA}	6.14 ^{RA}	5.10 ^{RA}	▲
Less: Constrained unplanned capability loss factor, % ³	—	—	1.63	3.41	—	—	—	
Underlying unplanned capability loss factor, % ⁴	—	—	10.98	8.71	—	—	—	
Normal planned capability loss factor, % ⁵	10.00	10.00	10.50 ^{RA}	9.10	9.07	7.98	9.04	▲
Underlying planned capability loss factor, % ⁶	—	—	10.77	—	—	—	—	
Energy availability factor (EAF), % ^{SC}	80.00	80.00	75.13 ^{RA}	77.65 ^{RA}	81.99 ^{RA}	84.59 ^{RA}	85.21	▼

Indicator and unit	Targets		Annual actuals					Five-year trend
	Target 2017/18	Target 2013/14	Actual 2013/14	Actual 2012/13	Actual 2011/12	Actual 2010/11	Actual 2009/10	
Total system minutes lost for events <1 minutes, minutes ^{SC}	3.80	3.40	3.05 ^{RA}	3.52 ^{RA}	4.73 ^{RA}	2.63 ^{RA}	4.09 ^{RA}	▼
Major incidents, number	1	2	0 ^{RA}	3 ^{RA}	1 ^{RA}	0 ^{RA}	1 ^{RA}	▼
System average interruption frequency index, events ⁷	17.0	20.0	20.2 ^{RA}	22.2 ^{RA}	23.7 ^{RA}	25.3 ^{RA}	24.7 ^{RA}	▼
System average interruption duration index, hours ^{SC.8}	39.0	45.0	37.0 ^{RA}	41.9 ^{RA}	45.8 ^{RA}	52.6 ^{RA}	54.4 ^{RA}	▼
Being customer-centric								
Customer service index ^{SC}	89.7	88.7	86.6	86.8	85.6	84.4	85.1	▲
Eskom KeyCare, index	102.0	102.0	108.7	105.8	105.9	101.2	98.1	▲
Arrear debts as % of revenue (group), %	–	0.50	1.10	0.82	0.53	0.75	0.83	▲
Customer service (large power users – <100GWh per annum), average debtors' days	–	16.0	16.9	18.3	–	–	–	▼
Customer service (large power users – municipalities), average debtors' days	–	22.0	32.7	22.4	–	–	–	▲
Customer service (large power users – including municipalities), average debtors' days	–	–	–	18.3	21.8	18.9	18.9	
Customer service (small power users excluding Soweto debt), average debtors' days	–	42.0	50.2	48.2	42.9	45.1	40.5	▲
Customer service large power top customers excluding disputes, average debtors' days	–	14.0	14.5	12.3	14.4	15.5	15.4	▼
Build strong skills								
Training spend as % of gross employee benefit costs, % ^{SC.9}	5.00	5.00	7.87 ^{RA}	–	–	–	–	
Total engineering learners in the system, number ^{SC}	391	2 007	1 962 ^{RA}	2 144 ^{RA}	2 273 ^{RA}	1 335	955	▲
Total technician learners in the system, number ^{SC}	652	780	815 ^{RA}	835 ^{RA}	844 ^{RA}	692	681	▲
Total artisan learners in the system ^{SC} , number	1 434	2 619	2 383 ^{RA}	2 847 ^{RA}	2 598 ^{RA}	2 213	2 144	▲
Strategic Youth Development Programme, number ^{SC.10}	–	5 000	4 325 ^{RA}	5 701 ^{RA}	5 159	–	–	▼

Appendix A: Key performance indicators (continued)

Indicator and unit	Targets		Annual actuals					Five-year trend
	Target 2017/18	Target 2013/14	Actual 2013/14	Actual 2012/13	Actual 2011/12	Actual 2010/11	Actual 2009/10	
Leading and partnering to keep the lights on								
Keep the lights on								
Maintenance backlog reduction based on the Eskom Technical Governance Committee approval, number ^{SC,11}	0	0	0 ^{RA}	–	–	–	–	
Integrated demand management savings, MW ^{SC,12}	174.0	379.0	409.6 ^{RA}	595.0 ^{RA}	365.0 ^{RA}	–	–	▲
Internal energy efficiency, GWh ^{SC,13}	0.0	15.0	19.4 ^{RA}	28.9 ^{RA}	45.0 ^{RA}	26.2 ^{RA}	–	▼
Deliver capital expansion								
Generation capacity installed and commissioned, MW ^{SC}	6 214	100	120 ^{RA}	261 ^{RA}	535 ^{RA}	315 ^{RA}	452 ^{RA}	▼
Transmission lines installed, km ^{SC}	1539.0	770.0	810.9 ^{RA}	787.1 ^{RA}	631.0 ^{RA}	443.0 ^{RA}	600.0 ^{RA}	▲
Transmission capacity installed and commissioned, MVA ^{SC}	5 755	3 790	3 790 ^{RA}	3 580 ^{RA}	2 525 ^{RA}	5 940 ^{RA}	1 630 ^{RA}	▲
Generation new build capacity milestones (Medupi, Kusile and Ingula), days ^{SC}	30.00	30.00	48.90 ^{RA}	43.48	–	–	–	▲
Total capital expenditure (excluding capitalised borrowing costs), R billion	40.8	62.3	59.8 ^{RA}	60.1	58.8	47.9	48.7	▲
Reducing Eskom's environmental footprint and pursuing low-carbon growth								
Reduce environmental footprint in existing fleet								
Relative particulate emissions, kg/MWh ^{SC}	0.29	0.36	0.35 ^{RA}	0.35 ^{RA}	0.31 ^{RA}	0.33 ^{RA}	0.39 ^{RA}	▼
Specific water consumption, L/kWh sent out ^{SC,14}	1.21	1.39	1.35 ^{RA}	1.42 ^{RA}	1.34 ^{RA}	1.35 ^{RA}	1.34 ^{RA}	▲
Environmental legal contraventions in terms of the operational health dashboard, number ¹⁵	0	0	2	2	5	–	–	▼
Transformation (including the business productivity programme)								
Maximise socio-economic contribution								
Corporate social investment, R million	–	133.0	132.9 ^{RA}	194.3 ^{RA}	87.9 ^{RA}	62.3 ^{RA}	58.7 ^{RA}	▲
Job creation, number	2 000	24 965	25 181 ^{RA}	35 759	28 616	21 477	–	▲
Total number of electrification connections, number ¹⁶	300 013	184 975	201 788 ^{RA}	139 881	154 250	145 360	145 284	▲

Indicator and unit	Targets		Annual actuals					Five-year trend
	Target 2017/18	Target 2013/14	Actual 2013/14	Actual 2012/13	Actual 2011/12	Actual 2010/11	Actual 2009/10	
Employment equity – Company								
Employment equity – disability, % ^{SC}	3.00	3.00	2.99 ^{RA}	2.59 ^{RA}	2.49 ^{RA}	2.53	2.54	
Racial equity in senior management, % black employees ^{SC}	74.0	61.0	59.5 ^{RA}	58.3 ^{RA}	53.9 ^{RA}	52.5	47.3	
Racial equity in professionals and middle management, % black employees ^{SC}	79.0	71.0	71.2 ^{RA}	69.6	65.7	64.1	62.9	
Gender equity in senior management, % female employees ^{SC}	38.0	30.0	28.9 ^{RA}	28.2 ^{RA}	24.3 ^{RA}	23.5	21.6	
Gender equity – professionals and middle management, % female employees ^{SC}	42.0	36.0	35.8 ^{RA}	34.6	32.4	31.6	30.3	
Employment equity – Group								
Employment equity – disability, %	2.5	3.0	2.8 ^{RA}	2.4 ^{RA}	2.4 ^{RA}	2.4	2.3	
Racial equity in senior management, % black employees	–	61.0	59.3 ^{RA}	58.4	–	–	–	
Racial equity in professionals and middle management, % black employees	–	71.0	70.6 ^{RA}	69.0	–	–	–	
Gender equity in senior management, % female employees	–	30.0	28.8 ^{RA}	28.5	–	–	–	
Gender equity in professionals and middle management, % female employees	–	36.0	34.9 ^{RA}	34.0	–	–	–	
Procurement equity – Company								
Local sourcing in procurement (new build), % ^{SC,17}	52.0	52.0	54.6 ^{RA}	80.2 ^{RA}	77.2 ^{RA}	79.7 ^{RA}	73.9 ^{RA}	
Procurement from B-BBEE compliant suppliers, % ^{SC}	75.0	75.0	93.9 ^{RA}	86.3 ^{RA}	73.2 ^{RA}	52.3 ^{RA}	28.6	
Procurement from black-owned suppliers, %	20.0	10.0	32.7 ^{RA}	22.1	14.6	–	–	
Procurement from black women-owned suppliers, %	9.0	5.0	7.2 ^{RA}	4.7 ^{RA}	3.3 ^{RA}	4.3	12.1	
Procurement from black youth-owned suppliers, % ^{SC}	5.0	1.0	1.0 ^{RA}	1.0	–	–	–	

Appendix A: Key performance indicators (continued)

Indicator and unit	Targets		Annual actuals					Five-year trend
	Target 2017/18	Target 2013/14	Actual 2013/14	Actual 2012/13	Actual 2011/12	Actual 2010/11	Actual 2009/10	
Procurement equity – Group								
Procurement from B-BBEE compliant suppliers, %	75.0	75.0	91.8 ^{RA}	82.1 ^{RA}	–	–	–	▲
Procurement from black-owned suppliers, %	20.0	10.0	35.3 ^{RA}	–	–	–	–	
Procurement from black women-owned suppliers, %	9.0	5.0	7.5 ^{RA}	5.1 ^{RA}	–	–	–	▲
Procurement from black youth-owned suppliers, %	5.0	1.0	1.0 ^{RA}	–	–	–	–	
Implementing coal haulage and the road-to-rail migration plan								
Implement coal road to rail migration plan								
Coal road-to-rail migration (additional tonnage transported on rail), Mt ^{SC}	20.7	11.5	11.6 ^{RA}	10.1 ^{RA}	8.5	7.1	5.1	▲
Pursuing private sector participation								
IPP purchases, GWh	–	4 152	3 671	3 516	4 107	1 833	–	▲
Ensuring Eskom's financial sustainability								
Ensure financial sustainability (shareholder compact ratios) – Company ¹⁸								
Cost of electricity (excluding depreciation), R/MWh ^{SC}	732.10	453.40	541.92 ^{RA}	496.24 ^{RA}	374.19 ^{RA}	296.36 ^{RA}	255.09 ^{RA}	▲
Interest cover, ratio ^{SC}	1.06	1.18	0.65 ^{RA}	0.27 ^{RA}	3.27 ^{RA}	1.40 ^{RA}	0.77 ^{RA}	▼
Debt:equity (including long-term provisions), ratio ^{SC,19}	3.40	2.17	2.21 ^{RA}	1.96 ^{RA}	1.69 ^{RA}	1.66 ^{RA}	1.68 ^{RA}	▲
FFO as % of total debt, % ^{SC}	11.08	9.11	9.21 ^{RA}	8.55	15.06	12.55	7.12	▲
Ensure financial sustainability – Company								
Electricity revenue per kWh (including environmental levy), c/kWh	89.30	62.37	62.82	58.49	50.27	40.27	31.95	▲
Electricity operating cost per kWh (including depreciation and amortisation), c/kWh	73.21	52.67	59.67	54.15	41.28	32.78	28.23	▲
Ensure financial sustainability – Group								
Working capital ratio, ratio	0.79	0.65	0.71	0.68	0.76	0.85	0.89	▼
Free funds from operations (FFO), R million ¹⁹	49 119	29 653	27 542	18 108	30 483	16 953	2 356	▲
Gross debt/EBITDA, ratio ¹⁹	6.80	7.95	10.96	16.20	6.46	7.55	8.40	▲
Debt service cover ratio, ratio	2.17	1.55	1.21	2.01	3.50	1.90	1.43	▼

Notes:

RA Reasonable assurance provided by the independent assurance provider (refer pages 180 to 184).

SC Included in the Shareholder Compact.

- Two late LTIR incidents resulted in the signed-off LTIR for 2012/13 changing from 0.39 to 0.40.
- Normal UCLF – measures the lost energy due to unplanned energy losses resulting from equipment failures and other plant conditions.
- Constrained UCLF – This is UCLF that was a result of emissions and short-term related UCLF due to system constraints to meet the "Keeping the lights on" objective. This is apportioned between PCLF and OCLF.
- Underlying UCLF – This is the UCLF that is now the difference between normal and constrained UCLF and that is still within Generation control.
- Normal PCLF – is energy loss during the period because of planned shutdowns.
- Underlying PCLF – The sum of the normal PCLF and the constrained PCLF (the apportionment of the constrained UCLF that is assigned to PCLF).
- SAIFI is a reliability of supply index – how often on average (frequency) the customer connected would experience a sustained interruption per annum (number of times per annum).
- SAIDI is an availability of supply index – the average duration (hours) of a sustained interruption the customer would experience per annum (number of hours per annum).
- Training spend as a % of gross employee benefit costs is a new measure, effective from 1 April 2013.
- Includes learners trained by Eskom, as well as learners trained by Eskom's suppliers.
- Refer to pages 114 to 115 for the maintenance backlog reduction strategy, where the extent of the maintenance backlog is explained.
- The basis of measurement changed during the 2010/11 year; prior to that verified savings of 372MWh (2009/10) were achieved.
- Reporting basis changed during the 2010/11 year; hence no comparatives are available prior to 2010/11.
- The volume of water consumed per unit of generated power from commissioned power stations.
- From 2012/13, environmental legal contraventions has been tracked in terms of the operational health dashboard. In defined circumstances where the management of a legal contravention indicates specific management issues/failings, it is recorded on the Eskom operational health dashboard. Comparatives for this measure have been provided.
- The reporting boundary for the number of connections was changed in March 2014 to exclude farm workers and municipality funded connections. The target has been revised to exclude 551 farmer connections. The comparatives have been restated (876 and 963 farmer connections, and 3 801 and zero municipality deducted for March 2013 and March 2012 respectively). A total of 992 farm worker, and 2 879 municipality funded connections were installed for the current year.
- Local sourcing of procurement for capital expansion projects only.
- The original year to 31 March 2014 budget which was included for the shareholder compact was subsequently revised and the differences mainly result from additional operating expenditure allocated to Generation. The revised budget ratios are as follows:

(i) Cost of electricity (excluding depreciation)	463.25 R/MWh
(ii) Interest cover (excluding remeasurement of the shareholder loan)	0.98
(iii) Debt/equity ratio	2.19
(iv) FFO as a % of gross debt	10.51%
- Comparative restated.

Appendix B: Other performance indicators

Indicator and unit	Actual 2013/14	Actual 2012/13	Actual 2011/12	Actual 2010/11	Actual 2009/10	Five-year trend
Technical						
Unit capability factor (UCF), %	76.9 ^{RA}	78.8 ^{RA}	83.0 ^{RA}	85.9 ^{RA}	85.9	▼
OCGT load factor trend	19.3 ^{RA}	10.4 ^{RA}	3.9	1.1	0.3	▲
National load shedding	Yes ^{RA}	No ^{RA}	No ^{RA}	No ^{RA}	No ^{RA}	▲
Energy losses (Transmission), %	2.3 ^{RA}	2.8 ^{RA}	3.1 ^{RA}	3.3 ^{RA}	3.3	▼
Energy losses (Distribution), %	7.1 ^{RA}	7.1 ^{RA}	6.3 ^{RA}	5.7 ^{RA}	5.9	▲
Total system minutes lost, number ¹	3.05 ^{RA}	20.80 ^{RA}	6.27	2.63	5.25	▼
Environmental						
Liquid fuels usage – OCGT, ML	1 148.5 ^{RA}	609.7 ^{RA}	225.5 ^{RA}	63.6 ^{RA}	16.1 ^{RA}	▲
Environmental legal contraventions, number	32 ^{RA}	48 ^{RA}	50 ^{RA}	63 ^{RA}	55 ^{RA}	▼
Particulate emissions (tonnage), kt	78.92 ^{RA}	80.68 ^{RA}	72.42 ^{RA}	75.84 ^{RA}	88.27 ^{RA}	▼
Carbon dioxides, Mt	233.3 ^{RA}	227.9 ^{RA}	231.9 ^{RA}	230.3 ^{RA}	224.7 ^{RA}	▲
Sulphur dioxides, kt	1 975 ^{RA}	1 843 ^{RA}	1 849 ^{RA}	1 810 ^{RA}	1 856 ^{RA}	▲
Nitrogen oxide, kt	954 ^{RA}	965 ^{RA}	977 ^{RA}	977 ^{RA}	959 ^{RA}	▼
Low-level radioactive waste generated, m ³	180.8 ^{RA}	183.1 ^{RA}	184.7 ^{RA}	165.3 ^{RA}	137.8	▲
Low-level radioactive waste disposed of, m ³	28.7 ^{RA}	54.0 ^{RA}	53.8 ^{RA}	81.0 ^{RA}	216.0	▼
Intermediate-level radioactive waste generated, m ³	324.0 ^{RA}	34.7 ^{RA}	25.4 ^{RA}	39.4 ^{RA}	47.1	▲
Intermediate-level radioactive waste disposed of, m ³	178 ^{RA}	0 ^{RA}	128 ^{RA}	0 ^{RA}	266	▼
Ash (produced), Mt	34.97 ^{RA}	35.30 ^{RA}	36.21 ^{RA}	36.22 ^{RA}	36.01 ^{RA}	▼
Ash (recycled), %	7.0 ^{RA}	6.8 ^{RA}	6.4 ^{RA}	5.5 ^{RA}	5.6	▲
Social						
Safety						
Employee work-related fatalities, number	5 ^{RA}	3 ^{RA}	13 ^{RA}	7 ^{RA}	2 ^{RA}	▲
Total contractor fatalities, number	18 ^{RA}	16 ^{RA}	12 ^{RA}	18 ^{RA}	15 ^{RA}	▲

Indicator and unit	Actual 2013/14	Actual 2012/13	Actual 2011/12	Actual 2010/11	Actual 2009/10	Five-year trend
Procurement equity – Company						
B-BBEE expenditure, R billion	125.4 ^{RA}	103.4 ^{RA}	72.1 ^{RA}	41.9 ^{RA}	20.8 ^{LA}	▲
Black women-owned expenditure, R billion	9.6 ^{RA}	5.7 ^{RA}	3.3 ^{RA}	3.5 ^{RA}	2.5	▲
Black-owned expenditure, R billion	43.6 ^{RA}	26.5 ^{RA}	14.4 ^{RA}	–	–	▲
Black youth-owned expenditure, R billion	1.3 ^{RA}	1.2 ^{RA}	–	–	–	○
Procurement equity – Group						
B-BBEE expenditure, R billion	119.4 ^{RA}	96.0 ^{RA}	–	–	35.2	▲
Black women-owned expenditure, R billion	9.8 ^{RA}	6.0 ^{RA}	–	–	3.7	▲
Black-owned expenditure, R billion	45.8 ^{RA}	–	–	–	–	–
Black youth-owned expenditure, R billion	1.3 ^{RA}	–	–	–	–	–
Social responsibility						
Corporate social investment committed, R billion	132.9 ^{RA}	194.3 ^{RA}	87.9 ^{RA}	62.3 ^{RA}	58.7 ^{RA}	▲
Corporate social investment expended, R billion	115.4 ^{RA}	126.5 ^{RA}	40.8	–	–	▲
Corporate social investment (number of beneficiaries), number	357 443 ^{RA}	652 347 ^{RA}	531 762	303 983	590 440	▼
Employment equity						
Disabilities (company), number	1 283 ^{RA}	1 126 ^{RA}	1 022 ^{RA}	1 002	1 073	▲
Disabilities (group), number	1 305 ^{RA}	1 137 ^{RA}	1 032 ^{RA}	1 012	–	▲
Economic						
Coal stock days	44 ^{RA}	46 ^{RA}	39 ^{RA}	41 ^{RA}	37 ^{RA}	▲
Free funds from operations as % of total debt (group), %	9.69 ^{RA}	8.04	15.2	9.5	1.9	▲

RA Reasonable assurance provided by the independent assurance provider (refer pages 180 to 184).
LA Limited assurance provided by the independent assurance provider.

- ▲ The key performance indicator shows a positive trend over the five years, with the arrow indicating the performance against target
- ▲ The key performance indicator shows a negative trend over the five years, with the arrow indicating the performance against target
- The key performance indicator has been stable over the five years

Notes:

1. Total system minutes is a measure of the severity of all interruptions inclusive of major incidents.
2. Increased from the figure reported in 2013 (47) due to an additional environmental legal contravention which was not classified as at the end of the previous financial year – related to activities associated with development of facilities at Kusile which occurred in March 2013 no comparatives available as the measure was not tracked.

Appendix C: Awards

Eskom and its employees where applicable, were recipients of the following awards during the period under review:

Eskom brand	
Sunday Times	Eskom was voted as the “Most desired company to work for” by the Sunday Times newspaper. Awards were also received in the categories “Community Upliftment” (second place), and “Top company that does the most to look after the environment and natural resources” (second place)
Operation Khanyisa	The campaign received an Orchid from Independent Newspapers for its innovative approach to public sector advertising, as well as a Loerie advertising award in the Ubuntu category The Star Award from Crime Line was received for the second year
13 th Annual Oliver Empowerment awards	Eskom was the recipient of two accolades at the event held on 25 April 2014, namely the Socio-economic Development award for the Eskom Development Foundation contractor academy, and the Enterprise and Supplier Development award for Group Commercial – supplier development and localisation
Mail & Guardian newspaper	Eskom was voted as the Top Engineering Company by engineering students, and the second best by MBA and Professionals
Finweek	Eskom was named the fourth most popular brand in South Africa
Our Guardians	
Institute of Personnel Management	Eskom’s human resources function was announced as the winner in the Human Resources Team of the Year category. The Acting chief Advisor for Strategy at the EAL won the HR Practitioner of the year award for her outstanding contribution to the field
SA Human Rights Commission	Eskom was awarded the Golden Key Award for best practice by a public institution
Stars of Africa	Eskom received the Stars of Africa 2013 Gold award in the Eskom Contractor Academy: Incubation category
African Utility Week	Dr Steve Lennon received a lifetime achievement award for his outstanding contribution to the utilities industry at the African Utility Week’s Industry awards
Visionary CIO of the Year	Eskom chief information officer (CIO), Sal Laher, was the winner of the prestigious Visionary CIO of the Year award. The award recognises an executive in all industries across South Africa who has demonstrated vision and leadership in using technology to support and grow business

Our Guardians	
Boss of the Year	Ayanda Nakedi, Senior General Manager of the Renewables business unit was awarded the 2013 Boss of the Year award
General Counsel of the Year	At the African Legal awards, Willie du Plessis, General Manager (Legal Specialist), was awarded the General Counsel of the Year award
Integrated reporting	
Nkonki SOC Integrated Reporting	In June 2013, Eskom emerged as the overall winner of the Nkonki SOC Integrated Report Awards 2013. Eskom also scooped several other awards in categories related to governance and the application of King III
Investment Analysts Society of Southern Africa	At the 28th annual Investment Analyst’s Society awards, Eskom emerged as the winner for the best presentation in the market cap above R30 billion category
Association of Chartered Certified Accountants	Eskom’s integrated report was the winner in the resources category
Ernst & Young Excellence in Integrated Reporting	Eskom was adjudged an “Excellent Integrated Reporter” at the Ernst & Young 2013 inaugural Excellence in Integrated Reporting Awards event
Chartered Secretaries Southern Africa and JSE Limited Annual Report award	In November 2013, Eskom emerged as the joint winner, alongside Transnet, in the state entities category
Sustainability	
Department of Water Affairs	Eskom was named as the runner-up in the 2013 Water Conservation and Water Demand Management Sector awards (mining, industry, power)
Processes	
Institute of Management Consultants South Africa	Eskom’s Group IT division received the award for the SAP project implementation
SAP AG	Eskom achieved its independent SAP Centre of Excellence accreditation from SAP globally, with a score of 192 out of 200, making it one of only four companies to achieve this level of accreditation
Enterprise Mobility Forum	Eskom won two Mobility awards – one for best enterprise solution for Distribution’s handheld solution for field workers and the second for best return on investment for a mobility solution

Appendix D: Sustainability responsibilities, approval and assurance statements

Sustainability assurance statements

Sustainability key performance indicators, set out within this report, measure performance on issues material to stakeholders. These key performance indicators have been prepared in accordance with the GRI G3 guidelines, supported by Eskom's internal reporting guidelines.

The King Code advocates that sustainability reporting and disclosure should be independently assured. KPMG Services Proprietary Limited provided reasonable assurance on selected sustainability key indicators marked with an "RA" in appendices A and B of this report.

The board have applied their collective mind to the preparation and presentation of the integrated report and have concluded that it is presented in accordance with the International Integrated Reporting Framework Version 1.0.

The board believes the integrated report is a fair presentation of the integrated performance of the group and appropriately takes into consideration the completeness of the material items it deals with and the reliability of data and information presented, in line with the combined assurance process followed.



MC Matjila
Interim chief executive
29 May 2014



TBL Molefe
Finance director
29 May 2014

Independent assurance report on selected sustainability information to the directors of Eskom Holdings SOC Limited

We have undertaken a reasonable assurance engagement on selected sustainability information as described below and presented in the 2014 integrated report (the report) of Eskom Holdings SOC Limited (Eskom) for the year ended 31 March 2014. This engagement was conducted by a multidisciplinary team including health, safety, environmental and assurance specialists with extensive experience in sustainability reporting.

Subject matter

We are required to provide reasonable assurance on the following key performance indicators prepared in accordance with the Global Reporting Initiative (GRI) G3 guidelines, marked with an "RA" and presented in the table in Appendix A (key performance indicators) and Appendix B (other performance indicators):

- Technical performance parameters:
 - Unplanned capability loss factor (UCLF)
 - Unit capability factor (UCF)
 - Energy availability factor (EAF)
 - Planned capability loss factor (PCLF)
 - System minutes lost (<1 minute)
 - Total system minutes lost
 - Major incidents
- System average interruption frequency index (SAIFI)
- System average interruption duration index (SAIDI)
- Management of the national supply/demand constraints
- OCGT load factor trend
- Energy losses (transmission and distribution)
- Integrated demand management (megawatts)
- Internal energy efficiency (gigawatts).
- Environmental performance parameters
 - Coal road to rail migration
 - Specific water consumption
 - Liquid fuel usage (diesel and kerosene)
 - Particulate emissions (total tonnages)
 - Relative particulate emissions
 - Carbon dioxide emissions
 - Sulphur dioxide emissions
 - Nitrogen oxides emissions
 - Low level radioactive waste (generated and disposed)
 - Intermediate level radioactive waste (generated and disposed)
 - Ash (produced and recycled)
 - Environmental legal contraventions in terms of the operational health dashboard
- Social performance parameters
 - Engineering learners
 - Technician learners
 - Artisan learners
 - Strategic youth development programme
 - Broad-based black economic empowerment (B-BBEE) expenditure (company and group – attributable spend and percentage)
 - Black women-owned expenditure (company and group – attributable spend and percentage)
 - Black-owned expenditure (company and group – attributable spend and percentage)
 - Black youth-owned expenditure (company and group – attributable spend and percentage)
 - Corporate social investment (committed rand value, spend rand value and number of beneficiaries)
 - Total employee and contractor work-related fatalities
 - Employee work-related fatalities
 - Contractor work-related fatalities
 - Employee lost-time incidence rate (LTIR)
 - Disabilities (company and group – number and percentage)
 - Racial equity in senior management (company and group – percentage of black employees)
 - Gender equity in senior management (company and group – percentage of female employees)
 - Racial equity in professionals and middle management (company and group – percentage of black employees)
 - Gender equity in professionals and middle management (company and group – percentage of female employees)
 - Job creation
 - Training spend as a percentage of gross employee benefit costs

Appendix D: Sustainability responsibilities, approval and assurance statements (continued)

- Economic parameters:
 - Generation capacity installed and commissioned
 - Transmission lines installed
 - Transmission capacity installed and commissioned (MVA)
 - Total number of electrification connections
 - Maintenance backlog reduction based on Eskom technical governance committee approval
 - Generation new build capacity milestones
 - Coal purchased stock days
 - Cost of electricity (excluding depreciation)
 - Capital expenditure (excluding capitalised borrowing costs)
 - Debt:equity ratio (company)
 - Interest cover (company)
 - Free funds from operations (company and group – percentage of total debt)
 - Percentage of local content in new-build contracts

Directors' responsibilities

The directors are responsible for the selection, preparation and presentation of the sustainability information in accordance with the GRI G3 guidelines. This responsibility includes the identification of stakeholders and stakeholder requirements and material issues, for commitments with respect to sustainability performance, and for the 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.

Our independence and quality control

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standard Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

In accordance with International Standard on Quality Control 1, KPMG Services Proprietary Limited 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 an opinion on the selected sustainability information based on the evidence we have obtained. We have conducted our engagement in accordance with the International Standard on Assurance Engagements (ISAE 3000), 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 sustainability information is free from material misstatement.

A reasonable assurance engagement in accordance with ISAE 3000 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 the practitioner's 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 sustainability information. A reasonable assurance engagement also includes:

- Assessing the suitability in the circumstances of Eskom's use of the 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; and
- Evaluating the overall presentation of the selected sustainability information and whether the information presented in the report is consistent with our findings, overall knowledge and experience of sustainability management and performance at Eskom.

Our work included the following evidence-gathering procedures:

- Interviewing management and senior executives to evaluate the application of the GRI G3 guidelines and to obtain an understanding of the control environment relative to the reported sustainability information.
- Inspecting documentation to corroborate the statements of management and senior executives in our interviews.
- Testing the processes and systems to generate, collate, aggregate, monitor and report the selected sustainability information.
- Inspecting supporting documentation and performing analytical procedures.
- Performing site work at the nuclear power station (Koeberg), coal power stations (Majuba, Grootvlei, Lethabo, Kriel, Matla, Hendrina and Kendal), Transmission divisions (Central and Northern), the Distribution divisions (Limpopo, Western Cape and KwaZulu-Natal), Roshcon and Rotek.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion, the selected sustainability information for the year ended 31 March 2014 is prepared, in all material respects, in accordance with the GRI G3 guidelines.

Other matters

The report includes the provision of reasonable assurance on the following indicators. We were previously not required to provide assurance on these key performance indicators.

- Planned capability loss factor (PCLF)
- Black-owned expenditure (company and group – attributable spend and percentage)
- Black youth-owned expenditure (company and group – attributable spend and percentage)
- Racial equity in senior management (group – percentage of black employees)
- Gender equity in senior management (group – percentage of female employees)
- Racial equity in professional and middle management (company and group – percentage of black employees)
- Gender equity in professional and middle management (company and group – percentage of female employees)
- Job creation
- Training spend as a percentage of gross employee benefits
- Total number of electrification connections
- Maintenance backlog reduction based on Eskom technical governance committee approval
- Generation new build capacity milestone

Appendix D: Sustainability responsibilities, approval and assurance statements (continued)

- Capital expenditure (excluding capitalised borrowing costs)
- Free funds from operations (company and group – percentage)

Our report does not extend to any disclosures or assertions relating to future performance plans and/or strategies disclosed in the report.

The maintenance and integrity of Eskom's website is the responsibility of Eskom's 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 assurance report that may have occurred since the initial date of presentation on the Eskom website.

Restriction of liability

Our work has been undertaken to enable us to express an opinion on the selected sustainability information 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 opinion we have reached.

KPMG Services Proprietary Limited



Per **PD Naidoo**
Director

Johannesburg
29 May 2014



HG Motau
Director

Johannesburg
29 May 2014

Appendix E: Abbreviations, acronyms and glossary

Abbreviations and acronyms

B-BBEE	Broad-based black economic empowerment
BPP	Business productivity programme
DoE	Department of Energy
DPE	Department of Public Enterprises
EAF	Energy availability factor (see glossary)
EBITDA	Earnings before interest, taxation, depreciation and amortisation
EUf	Energy unavailability factor
GW	Gigawatt
GWh	Gigawatt hour (1 000MWh)
IIRC	International Integrated Reporting Council
IPP	Independent power producer (see glossary)
IRP 2010	Integrated Resource Plan 2010
King III	The third King Commission: Code of Corporate Governance
kt	Kiloton (1 000 tons)
kV	Kilovolt
kWh	Kilowatt hour (see glossary)
ML	Megalitre (1 million litres)
mSv	Millisievert
Mt	Million tons
MVA	Mega volt ampere
MW	Megawatt (1 million watts)
MWh	Megawatt-hour (1 000kWh)
MYPD	Multi-year price determination
NERSA	National Energy Regulator of South Africa
OCGT	Open-cycle gas turbines
OHSAS	Occupational health and safety standards
PCLF	Planned capability loss factor
PPFA	Preferential Procurement Policy Framework Act
RCA	Regulatory clearing account
RTS	Return-to-service power stations
SAIDI	System average interruption duration index
SAIFI	System average interruption frequency index
UCLF	Unplanned capability loss factor (see glossary)

Appendix E: Abbreviations, acronyms and glossary (continued)

Glossary

49M	The 49M initiative aims to inspire and rally all South Africans behind a common goal – save electricity and create a better economic, social and environmental future for all
Back2Basics programme	An efficiency programme that focuses on getting the basics right by simplifying, standardising and optimising our processes, systems and data, together with comprehensive process documentation
Base-load plant	Largely coal-fired and nuclear power stations, designed to operate continuously
Daily peak	Maximum amount of energy demanded in one day by consumers
Decommission	To remove a facility (eg reactor) from service and store it safely
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/(net interest paid plus debt repaid excluding repayments on commercial paper)
Demand-side management	Planning, implementing and monitoring activities to encourage consumers to use electricity more efficiently, including both the timing and level of demand
Electricity revenue per kWh	Electricity revenue including environmental levy/kWh sales total
Electricity operating costs per kWh	Electricity related costs: (Primary energy costs, net transfer pricing, employee benefit cost, depreciation and amortisation plus impairment loss and other operating expenses)/external sales in kWh
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
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/month)
Free funds from operations	Cash generated from operations adjusted for working capital (excluding provisions) and net interest paid/received and non-current assets held for risk management

Free funds from operations as a percentage of gross debt	Free funds from operations/gross debt multiplied by 100
Gigawatt	One thousand megawatts
Gross debt	Debt securities issued, borrowings, finance lease liabilities and financial trading liabilities plus the after tax effect of: retirement benefit obligations and provisions for power station-related environmental restoration and mine-related closures
Gross debt/EBITDA	Gross debt/earnings before interest, taxation, depreciation and amortisation
Independent non-executive director	Someone who is: <ul style="list-style-type: none"> – Not a full-time salaried employee of the company or its subsidiary – Not a shareholder representative – 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 – Not a professional advisor to the company – Not a significant supplier or customer
International financial reporting standards	Global accounting standards issued by the International Accounting Standards Board that require transparent and comparable information
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
Interest cover	Operating profit before net finance cost/(net finance cost but before unwinding of discount on provisions, change in discount rate and borrowing cost capitalised)
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 (one kilowatt-hour is 1 000 watt hours)
Load	Amount of electric power delivered or required at any specific point on a system
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 to avoid blackouts


Appendix E: Abbreviations, acronyms and glossary (continued)

Lost-time injury (LTI)	A work injury, including any occupational disease/illness or fatality, 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
Lost-time incidence rate (LTIR)	Proportional representation of the occurrence of lost-time injuries over 12 months per 200 000 working hours
Maximum demand	Highest demand of load within a specified period
Megawatt	One million watts
Megawatt-hour (MWh)	One thousand kilowatt-hours or 1 million watt-hours
Open-cycle gas turbines (OCGT)	Liquid fuel turbine power stations that form part of peak-load plant and run on kerosene and 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
Off-peak	Period of relatively low system demand
Peak demand	Maximum power used in a given period, traditionally between 07:00-10:00 and 18:00-21:00
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 peak-load periods
Primary energy	Energy in natural resources (eg coal, liquid fuels, sunlight, wind, uranium)
Pumped-storage scheme	A lower and an upper reservoir with a power station/pumping plant between the two. During off-peak periods the reversible pump/turbines use electricity to pump water from the lower to the upper reservoir. During 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 average equity	Profit/loss for the year after tax/average total equity
Return on average total assets	Profit/loss for the year after tax/average total assets
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 ≥ 1 system minute
Technical losses	Naturally occurring losses that depend on the power systems used

Unit capability factor (UCF)	Measure of power station availability indicating how well plant is operated and maintained
Unplanned capability loss factor (UCLF)	All occasions when a power station unit has to be taken out of service. Energy losses due to outages are considered unplanned if they are 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
Working capital ratio	(Total current assets less financial instruments with group companies less investments in securities less embedded derivative assets less derivatives held for risk management less financial trading assets less cash and cash equivalents)/(Total current liabilities less financial instruments with group companies less debt securities issued less borrowings less embedded derivative liabilities less derivatives held for risk management less financial trading liabilities)
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 time

4 ACTIONS IN 4 HOURS

Switch off between 5pm and 9pm



Switch off geysers Switch off pool pumps Switch off electrical heating Switch off all non-essential lighting

In winter consumers tend to use more electricity due to heating and this creates a higher demand.

There is sufficient capacity to meet the demand most of the day in winter. The concern is during the evening peak between 5pm and 9pm. If that can be reduced by as much as 2000MW, the supply will be adequate.

Eskom remain determined to avoid load-shedding and is asking all South Africans to pull together over the next several months.

Households can help reduce the load and **Beat The Peak** by following these four easy steps, especially during weekdays:

- **Switch off geysers and pool pumps**
- **Switch off non-essential lights**
- **Find alternatives to electric heaters**
- **Respond to the Power Alert and the Power Bulletin messages on both radio and TV**

Eskom is confident that together we can keep the lights on throughout winter if we all do our bit to "**Beat The Peak**".

Let's Beat The Peak together.

Eskom Holdings SOC Limited / Reg No 2002/015527/06

Appendix F: Contact details

Telephone numbers		Websites and email addresses	
Eskom head office	+27 11 800 8111	Eskom website	www.eskom.co.za contact@eskom.co.za
Eskom Strategic Marketing	+27 11 800 2323	Eskom integrated report	www.eskom.co.za/IR2014
Eskom media desk	+27 11 800 3304 +27 11 800 3343 +27 11 800 3378 +27 82 805 7278	Eskom media desk	mediadesk@eskom.co.za
Eskom Development Foundation	+27 11 800 6128	Eskom Development Foundation	www.eskom.co.za/csi csi@eskom.co.za
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Confidential reporting line	0800 11 27 22	Eskom environmental	envhelp@eskom.co.za
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Physical address		Postal address	
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Company secretary		Company registration number	
Eskom Holdings Secretariat Annamarie van der Merwe (Interim company secretary) PO Box 1091 Johannesburg 2000		Eskom Holdings SOC Limited 2002/015527/06	