

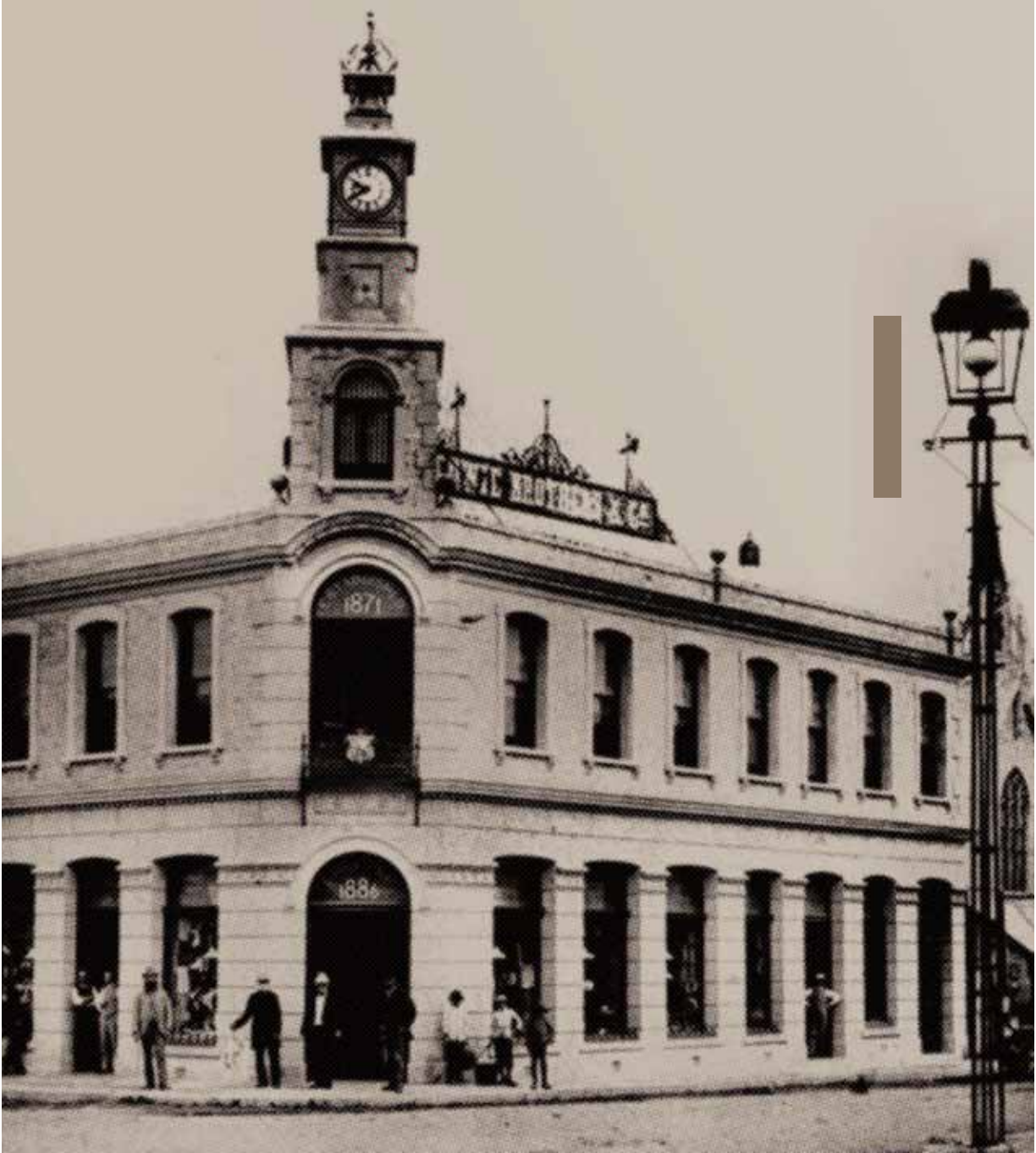


Shift performance,
grow sustainably

Integrated Report
for the year ended 31 March 2013



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Navigation icons



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2. Leading and partnering to keep the lights on
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4. Securing future resource requirements
5. Implementing coal haulage and the road-to-rail migration plan
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The navigation icons above are used throughout the report to link stakeholder concerns, material items, performance and key performance indicators to strategic objectives.

Eskom is 90 years old

Eskom has been supplying South Africa with electricity for 90 years, since it was established as the Electricity Supply Commission, “Escom” on 1 March 1923.

Having a stable, sufficient supply of electricity has enabled South Africa to grow into the largest and most developed economy in Africa, in which more than 83% of households have access to electricity.

Eskom has also contributed to South Africa's development in a more direct manner, both through its corporate social investment subsidiary

and through developing the country's technical skills pool through bursaries, learnerships and mentoring programmes. It has further provided direct employment for tens of thousands of South Africans, with the current employment figure standing at 46 266.

Eskom has a proud heritage, but there is still much to be done.

Historical timeline



The first Eskom logo

1923 to 1930

The Electricity Supply Commission, Eskom, is established. Witbank, Colenso and Salt River power stations are commissioned.



The Eskom logo introduced in 1962

1950 to 1970

The period sees growth in the Vaal Triangle and the Witwatersrand. Eskom's generation capacity increases by 400%, to 7 583 megawatts (MW), as a result of extending the capacity of existing stations and building new ones.



The Eskom logo introduced in 1987

1970 to 1990

Two hydro stations are commissioned for peak load. The decision is made to build Koeberg, the first nuclear power station in Africa. Gas turbine, coal and pumped-storage stations are commissioned. Eskom is renamed Eskom in 1987. An electricity council replaces the commission.



The Eskom logo introduced in 2002

1990 to 2010

Electrification on a large scale begins and the real price of electricity is reduced to stimulate economic growth. In 2001, Eskom receives the Global Power Company of the Year award. Eskom is converted to a company in 2002. Surplus electricity runs out and power shortages become apparent in 2007. Eskom starts implementing one of the largest infrastructure investment programmes ever undertaken in South Africa.

2010 to date

Eskom has added 6 017MW of new generating capacity since the start of the capacity expansion programme which is expected to relieve the tight electricity supply-demand balance. Building blocks have been put into place to turn Eskom into a high-performance organisation.



Celebrating the Guinness World record achieved by the 49M campaign are Guinness World Records Official Pravin Patel, and Eskom Holdings chief executive Brian Dames

About this report

Eskom's 2012/13 integrated report reviews the company's overall performance for the financial year from 1 April 2012 to 31 March 2013 as well as future prospects and priorities.

The goal of this report is to portray Eskom as a utility in the context of the environment in which it operates. The report takes a holistic view of the company, aiming to acknowledge the internal and external forces at work. It outlines business operations as they stand now, reviews challenges the company has faced, and examines how it has overcome them or plans to do so. Opportunities and risks for the years ahead are also discussed. "Eskom's approach to integrated reporting", on page 18, contains more information on the approach and frameworks used in compiling this report.

On 30 May 2013, the board approved this 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.

Structure of this report

Eskom's 2011/12 integrated report described the company's performance in terms of its value chain – from constructing new power stations to generating, transmitting and distributing electricity and interacting with Eskom's customers – and its supporting services and strategic functions.

This year's integrated report builds on last year's report and addresses performance in terms of Eskom's eight strategic objectives, as set out in its corporate plan. Structuring the report this way better reflects, to its key stakeholders and users of information, how Eskom manages its business. It improves the connectivity of information within the report and aligns Eskom's identified risks and material items more clearly.

The report has a concise, logical structure:

Letter from the chairperson provides insight into the shareholder's expectations of, and aspirations for, Eskom during the year under review.

The chief executive's report acts as an executive summary. It sets out Eskom's view of its operational environment, the central achievements of the reporting period, priorities for the year ahead, strategic objectives and long-term challenges for the business.

The shareholder's compact sets out Eskom's performance against key performance indicators as set by the shareholder, the government of South Africa.

Eskom's approach to integrated reporting explains Eskom's methodology in identifying the material items that have a bearing on performance and the risks related to these material items. It also provides a reference for where these items and risks are discussed in greater detail in the report.

About the company provides an overview of Eskom's primary business and client base. It outlines Eskom's business model in terms of how the company manages its capital resources – manufactured, intellectual, human, natural, relational and financial – to provide electricity to its customers. This section also outlines Eskom's purpose, values and strategic objectives.

Corporate governance reports on the composition of the board and the Executive Management committee. It reviews the committees and initiatives designed to ensure good governance and statutory compliance, and sets out Eskom's remuneration philosophy.

Performance on strategic objectives and future focus areas details Eskom's performance in terms of its eight strategic objectives. It also discusses two important material items – the Integrated Resource Plan 2010 (IRP 2010) and the tariff determination for the next five years (the third multi-year price determination, or MYPD 3) – that have a bearing on all eight strategic objectives. The eight strategic objectives are:

- Becoming a high-performance organisation
- Leading and partnering to keep the lights on
- Reducing Eskom's environmental footprint and pursuing low-carbon growth opportunities
- Securing future resource requirements
- Implementing coal haulage and the road-to-rail migration plan
- Pursuing private-sector participation
- Transformation
- Ensuring financial sustainability

Future priorities discusses Eskom's priorities over the next five years and sustainable business opportunities that have been identified.

Summarised group annual financial statements provide an abridged version of the full annual financial statements, which are available at www.eskom.co.za/IR2013/001.html.

Appendices include:

- A table combining the key performance indicators discussed in this report
- An overview of awards Eskom has received in 2012/13
- Sustainability assurance statements reflect Eskom's sustainability responsibilities, and approval and assurance statements from Eskom and the external assurance provider

- Links to the following online references:
 - King III checklist
 - Global Reporting Initiative G3 application checklist
 - The Eskom interim integrated report for the six months ending 30 September 2012
 - Annual financial statements
 - The Eskom supplementary and divisional report, providing detailed performance information from a divisional perspective
 - The Eskom Development Foundation report, detailing Eskom's corporate social investment activities
 - The Eskom Factor report, detailing Eskom's broader impact on, and contribution to, society
- A list of abbreviations and acronyms, and a glossary
- Eskom's contact details

References to supplemental information are provided throughout the integrated report.

Letter from the chairperson

Over the past year, in line with our mandate, we have worked to keep the lights on, improve generation performance and manage demand, speed up delivery of the build programme, ensure financial sustainability and accelerate transformation.

Over the longer term, our plans will evolve as we shape the business to adjust to the new tariff levels approved by the regulator and respond to shareholder decisions on additional capacity over the next two decades.

Eskom needs to generate and distribute power efficiently, while maintaining security of supply. At the same time, we must balance the need to raise funding for new investment with an obligation to assure affordability for households and businesses.

Addressing these requirements, while continuing to ensure an uninterrupted national power supply in the context of a precarious supply-demand balance, requires a flexible approach. Trade-offs may be necessary to ensure both a sustainable Eskom and affordable electricity in the years ahead.

An example is the urgent need to step up maintenance on our generation fleet. This will require an increase in planned maintenance outages of power station units over the winter, but will forestall a more rapid degradation of existing plants until new power stations come online. Questions of affordability must also be considered in the pace of implementing the renewables programme.

Over the past year the board has strengthened its oversight role in several areas. We are strongly

focused on ensuring that the Medupi, Kusile and Ingula power stations come online as soon as possible. A board subcommittee exercises direct operative oversight of these projects and receives progress reports every two weeks, and the shareholder has an uncluttered view of the status of the build programme.

We have taken steps to accelerate transformation. At the broadest level, this refers to efforts to re-engineer the business to fit our present circumstances, including developing an Africa strategy that is being considered by the shareholder. Our Coal Supply Strategy includes the development of black-owned emerging coal and limestone miners to transform the supply chain.

We are working to improve the labour relations environment. A confident workforce with high morale is key to the sustainability of our business. We want clear channels of communication with our employees and their representatives. We are also working to strengthen localisation, ensuring that black-owned companies are able to get into the mainstream of Eskom's procurement.

The board's succession planning programme has been in place for some time. Eskom's finance director, Paul O'Flaherty, who has played a central role in the R300 billion funding plan has tendered his resignation as finance director and

will leave his post at the conclusion of Eskom's annual general meeting on 10 July 2013. I would like to thank Paul for his efforts. At the same time, we can assure our stakeholders that we will work to ensure a seamless transition to a new finance director.

The board and the executive team remain fully attuned to the situation we face and, in partnership with Eskom's employees, will ensure that we successfully confront the challenges ahead.



Zola Tsotsi
Chairperson



Chief executive's report

Eskom is in the midst of a far-reaching and complex transition. When this process is complete, we will be a very different company, the South African economy will be on a much stronger footing, and there will be lasting benefits for our customers and communities.

All periods of change are difficult, and the 2012/13 integrated report reflects the substantial risks and challenges we have encountered and continue to face in navigating this transition.

Eskom is working to become a financially sustainable company that can safely and reliably power the South African economy in the 21st century. We have been putting the building blocks in place to realise this goal by:

- Keeping the lights on for the past five years
- Stabilising the company's short-term finances
- Securing funding for the new build programme
- Making progress on our capacity expansion programme
- Working to increase our role in South Africa's development
- Beginning to change the way we manage the company

We have made headway in all these areas, showing skill in using the resources available to us, and enabling us to stabilise the business and lay the foundation for a leaner, more agile utility that makes a growing contribution to South Africa's growth and development. Yet a great deal of work remains ahead of us.

Eskom faces three acute challenges in the new financial year:

- Continuing to keep the lights on while the gap between supply and demand is extremely narrow, and while high levels of planned maintenance are required to ensure the sustainability of ageing power stations

- Ensuring that the Medupi power station project delivers its first power to the national grid, and that significant progress is made towards the delivery of first power from the Kusile and Ingula projects within the next two years
- Re-engineering our business to adapt to the limits imposed by the 8% annual average tariff increase that the National Electricity Regulator of South Africa (NERSA) granted us for the next five years

Progress in these and other areas requires a series of tough decisions to implement our strategies in a dynamic environment. This will inevitably involve trade-offs. We will continue to work closely with our shareholder – the government of South Africa – and with our broad stakeholder base to ensure that decisions on Eskom's operating model and its mandate are taken in the country's long-term interests.

As part of its commitment to sustainability, Eskom continues to subscribe to the United Nations Global Compact principles and takes seriously its role as a lead member of the compact. We participate actively in other important UN initiatives, including the CEO Water Mandate, Caring for Climate and the Sustainable Energy for All initiative (SE4ALL). The latter initiative aims to ensure universal access to modern energy services, doubling the rate of improvement in energy efficiency and doubling the share of renewable energy in the global energy mix. I was part of the UN secretary-general's high-level advisory group and now serve as a member of the SE4ALL executive committee.



Performance on strategic objectives

Eskom has eight strategic objectives on which our key performance indicators are based. The highlights of our performance, and the challenges before us, are summarised here. Greater detail is found in the subsequent sections of the integrated report, and our supplementary and divisional report, which is available online at www.eskom.co.za/IR2013/002.html.

Building a high-performance organisation

Safety

Three Eskom employees and 16 contractor employees died on the job this year (19 in total, down from 24 in the prior year), and our lost-time incident rate decreased fractionally, from 0.41 to 0.39. We will continue improving our strategy measures. We are working closely with our contractors to ensure that they take safety seriously.

Our thoughts and prayers go to the families, friends and colleagues of the following:

Eskom employees	Contractor employees
Elvis Maseko	Akeem Adegbite
Othusitse Jacob Mmitsi	Derick Thulani Dlungwane
Malungisa Patrick Shongwe	Lebohang Malangabi
	Joseph Mashaba
	Nditsheni Mashau
	Sandile Matsebula
	Malibongwe Mhambi
	Khayelihle Mkhwanazi
	Andries Saziso Ntobela
	Olawale Olaniyani
	Sydney Happy Segonyane
	Albert Sikhosile Soyekwa
	Refus Charles Tlaka
	Sipho Gift Tseisi
	Bunruang Yorkun
	Bonginkosi Andries Zitha

Chief executive's report *continued*

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 that we cannot short-change as we build for the future. This year, we exceeded all shareholder targets for learnerships in the pipeline, with 2 144 engineers (target: 1 949), 835 technicians (target: 757) and 2 847 artisans (target: 2 543) receiving training. In addition, 5 701 participants took part in our youth programme, which aims to teach young people the importance of contributing to society.

Being customer-centric

Eskom's customer satisfaction levels are assessed in terms of a customer service index and the Eskom KeyCare rating. In 2012/13 Eskom achieved a customer service index of 86.8%, its best performance in many years and an average of 105.8% was achieved on its KeyCare indicator.

Leading and partnering to keep the lights on

Building new capacity

In 2005 we launched a major capacity expansion programme to lengthen and strengthen transmission lines, improve substation capacity and add 17.1 gigawatts (GW) of generating capacity to our fleet by 2018/19.

We have met the shareholder's target for commissioned generation capacity, adding 261MW of capacity to the grid against a target of 260MW – enough to power Bloemfontein during peak period. This brings the total amount of additional capacity that Eskom has delivered since 2005 to 6 017MW.

Medupi is the first coal-fired power plant to be built in South Africa in two decades and the largest construction project under way in the southern hemisphere. It is the first Eskom plant to employ super-critical technology, which operates at higher temperatures and pressures, resulting in superior efficiency. Medupi alone

will add 4 332MW of nominal capacity, or more than 10%, to the national grid.

Contractor performance and labour unrest have added significant risk to our ability to meet the target dates at Medupi. We have committed all available resources to ensuring that contractors live up to their commitments and that labour issues are resolved.

Construction is behind schedule at the Kusile coal-fired plant and the Ingula pumped-storage scheme. Kusile is only 22% complete reflecting the suspension of the project during 2009/10 owing to uncertainty about funding. Ingula is 68% complete, mainly reflecting geological challenges. Ingula and Kusile are due to start delivering first power to the grid in 2014/15, which gives us little time to bring them back on track.

We also expanded our transmission line network by 787km, falling short of the 900km target due to contractor performance, extreme weather conditions, equipment quality issues, environmental permits not being granted and challenges with securing land. The total length of transmission lines added since 2005 stands at 4 686km. We expanded transmission substation capacity by 3 580 megavolt-amperes (MVA) to 23 775MVA, meeting the target of 3 545MVA for the year.

Eskom's board has approved moving ahead with the 100MW Sere wind farm, which is part of our commitment to production from renewable resources, and the main turbine generator contract has been awarded.

Plant performance and fleet maintenance

Nearly two-thirds of Eskom's power stations are beyond the midpoint of their expected lifespans. Given a tight supply-demand balance, we have frequently had to defer planned maintenance to ensure uninterrupted national power supply over the past five years. This has taken its toll on the generation fleet, the performance of which has become increasingly volatile.

We can no longer afford the luxury of postponing maintenance. Eskom's unplanned capability loss factor (UCLF) has increased from 7.97% to 12.12% against our target of 6%.

The UCLF is an indicator of plant performance: a higher factor means that power station units have tripped or had to be taken offline due to faults, or that a power station is producing less energy than it is contracted to as a result of unplanned setbacks. The 12.12% UCLF consists of energy losses of 7.54% (excluding losses due to the Duvha Unit 4 outage, emission control and short-term outages) plus energy losses of 1.17% for the Duvha Unit 4 outage and energy losses of 3.41% due to decisions by management for emission control and short-term outages.

Space must therefore be created to do the necessary maintenance work. The Eskom board has recently approved a five-year plan for generation sustainability. The policy follows an 80:10:10 principle: on average, the generating fleet should have an energy availability factor (EAF) of 80%, leaving 10% for planned maintenance outages and 10% for unplanned outages. This will ensure that the fleet is sustainable in the long term.

We have also stepped up our communications campaign to urge South Africans to reduce demand, particularly during the evening peak, and are working with our shareholder to manage the implications of a more vulnerable power system.

During the reporting period, there were local-level interruptions to supply, such as those in KwaZulu-Natal and the Eastern Cape in August 2012 caused by severe winter weather. The number of major transmission incidents increased from one in 2011/12 to three in 2012/13. In general, however, our customers experienced fewer and shorter outages. The frequency of outages on the distribution network is measured by the system average interruption frequency index (SAIFI), which has decreased from 23.73 in 2011/12 to 22.19 in

2012/13. The duration of outages is measured by the system average interruption duration index (SAIDI), which has decreased from 45.75 in 2011/12 to 41.89 in 2012/13.

Reducing our environmental footprint

The global economic crisis has intensified public debate on how quickly countries should embrace clean-energy technologies on a large scale, particularly in light of the cost implications for governments, businesses and households. Eskom remains committed to reducing its environmental footprint and reducing its carbon emissions, but we face some serious constraints to progress over the short and medium term.

We reduced the number of environmental legal contraventions from 50 in 2011/12 to 47 in 2012/13. In contrast, both relative particulate emissions and water consumption increased during the reporting period.

This performance reflects the reality that Eskom is operating ageing plants, with little opportunity for maintenance or upgrades to reduce environmental impact. We will only be able to significantly improve our environmental performance once we create the maintenance downtime needed to fit existing plants with emissions-limiting technologies. This is another area where a short-term trade-off must be considered for long-term benefits. The new generating stations will also run cleaner and more efficiently, so our relative emissions and water usage will automatically reduce as load shifts from the current fleet from 2013/14 onwards.

For the moment, we are managing to limit electricity demand – and by implication the rate at which we consume natural resources and produce environmental emissions – through demand-management initiatives and internal energy-efficiency measures. During 2012/13, demand-management initiatives resulted in 2 244GWh of electricity savings, outperforming the shareholder's target of 1 827GWh. This translates to CO₂ emissions' savings of 2 244kt for the year.

Chief executive's report *continued*

Securing future resource requirements

About 85% of Eskom's present generating capacity is produced by coal-fired plants. While the use of coal as a primary energy source will decline as South Africa gradually reduces its reliance on fossil fuels, we will need a reliable, affordable supply of coal of an acceptable quality for many years to come.

Eskom's electricity tariffs are regulated, but the price of coal is not, and here too trade-offs may be necessary. South Africa's coal reserves are a strategic national resource. The country needs to find an appropriate balance between domestic and global demand, which is growing on the back of a 45% increase in coal-fired generation worldwide between 2000 and 2010. According to the International Energy Agency, South Africa exported 70 million tons (Mt) of coal – 28% of the total 253Mt mined – in 2012.

Partly in response to these concerns, a draft bill to amend the Mineral and Petroleum Resource Development Act (2002) has been published.

Eskom is meeting its coal needs through various short-, medium- and long-term agreements with collieries, and building water systems for future coal mines to help us meet our requirements over the long term. Our coal stock days have improved from 39 days as at 31 March 2012 to 46 days as at 31 March 2013. Funding models for the water and rail infrastructure needed to mine the Waterberg coalfields are also being investigated.

Coal haulage and the road-to-rail migration plan

Our plan to transfer coal transport from road to rail, which is more cost-effective, safer for the public and causes less damage to roads, is making steady progress. Coal terminals are in place and operating at Camden and Tutuka power plants, and the size of the road transport fleet has been reduced sharply. This has resulted in a 31% year-on-year decrease in public road fatalities involving coal trucks, and considerable

savings in fuel and road repairs. During 2012/13, 10.1Mt of coal were transported by rail, up from 8.5Mt in the prior year.

Private-sector participation

South Africa's energy industry is diversifying. In the past, a single state-owned entity – Eskom – generated, transmitted and distributed electricity. In recent years, the government has opened up the sector, allowing private firms to obtain operating licences and build generation plants. Eskom facilitates this process by adding independent power producer (IPP) capacity to the national grid and purchasing power from these producers.

In 2012/13, we contracted 1.1GW of IPP capacity to the grid. We signed power-purchase agreements for the first round of the Department of Energy's renewable energy IPP programme, and approved procurement of other IPP-generated power (including round two of the renewable energy IPP programme) amounting to 4 753MW.

Procurement equity and transformation

We were able to exceed most of our social development goals in 2012/13. Of the R4.3 billion contract values awarded in 2012/13 for the capacity expansion programme, R3.4 billion went to local contractors and suppliers, significantly exceeding the shareholder's 52% target, which translated to about R2.2 billion for the year. Overall, 86.3% (R103.4 billion) of our measured procurement spend of R119.9 billion went to broad-based black economic empowerment (B-BBEE) companies, well in excess of the shareholder's 70% target. Our internal targets for black and female employees in senior management, middle management and professional positions were met for 2012/13.

Ensuring financial sustainability

Eskom must be financially sustainable over the long term. This is not solely, or even primarily, about building the most attractive balance sheet. For us, financial sustainability is about promoting economic growth, competitiveness and job creation.

We need to cover the costs of production, distribution and maintenance, and realise a level of profit that enables us to borrow for capital expenditure at reasonable cost. If we can sustainably achieve this, Eskom will be able to provide a secure and reliable electricity supply for households and businesses over the long term, helping to create jobs and build the economy of South Africa and the broader region. If we cannot, we run the risk of draining the public purse and constraining the country's long-term economic prospects.

We continued to make progress in stabilising Eskom's finances over the reporting period and achieved a group net profit of R5.2 billion for 2012/13 (2011/12: R13.2 billion).

Our medium- to long-term financial challenges are significant. The 8% average annual tariff increase allowed over the next five years will require substantial adjustments to our operating model. Moreover, the approved revenue path does not take into account the need to expand capacity beyond Eskom's existing build programme, which concludes in 2018/19.



Electricity pricing and future generating requirements

On 28 February 2013, NERSA ruled that Eskom would be allowed to increase electricity tariffs by an average of 8% per year for the five years of the **third multi-year price determination** (MYPD 3). This is considerably less than the 16% average increase requested, which we considered necessary to achieve cost-reflective pricing and meet the demands facing the company. We are still determining how to best use the revenue allowed to us, which will involve reconsidering the way we operate, and our ability to manage the supply and demand sides of the power system. Some re-engineering of the business will be required, and working with the shareholder, we will have to assess the policy implications of measures under consideration.

Our plans will also be influenced by the government's decisions on implementing the **IRP 2010**. The document outlines the state's plans for South Africa's electricity industry to 2030, including new generating capacity. The Department of Energy is in the process of reviewing the IRP, and determining who will be responsible for building and managing the new capacity. To date, the Minister of Energy has made a determination on more than 9 000MW of additional capacity to be procured from IPPs. The Cabinet has indicated that Eskom will be the owner and operator of the new nuclear capacity envisaged in the IRP. However, there is still a significant degree of uncertainty on the specific role of Eskom, and the funding of additional generating and transmission capacity.

Chief executive's report *continued*

Eskom is eight years into a major capacity expansion programme that will cost R340 billion (excluding capitalised borrowing costs) and run to 2018/19. This capital is sourced from domestic and global sources and relies on our credit rating, which is linked to South Africa's sovereign rating. By the close of the reporting period, we had secured 82.9% (2011/12: 77.6%) of the R300 billion funding plan, of which R40.5 billion was drawn down during 2012/13.

During the year, global rating agencies downgraded Eskom's credit rating. We continue to enjoy strong support from the shareholder in the form of a government guarantee, which has allowed us to continue sourcing funding for the current build programme. The downgrading of our outlook, however, combined with the allowed level of tariffs over the next five years, may affect both the availability and cost of funding for future expansion.

Municipal arrear debt continues to rise. We continue to work with municipalities, and with provincial and national government, to resolve these issues. We have adopted an assertive approach to recovering debt from municipalities that do not meet agreed payment arrangements. We have issued disconnection notices in several instances, but disconnection has fortunately been averted so far, with municipalities putting arrangements in place to settle their debts.

A specific challenge involves Soweto, where we supply electricity to about 180 000 households yet on average the payments received are less than 20% of the revenue billed. To address this challenge, we have been working with stakeholders on an agreement that will include implementing split-metering technology for the greater Soweto service area. These devices use two-way communications to detect tampering.

Conclusion

Eskom has faced a difficult year, but our eyes are focused firmly on the ultimate prize: a reliable, safe and adequate supply of electricity for South Africa.

Weakness in both the global economy and the domestic economy has contributed to relatively low demand for electricity. As growth picks up, however, demand will increase, and we are working to ensure that substantial new generating capacity is available to support the competitiveness of South African enterprises and the needs of households.

We recognise that our customers rightfully demand high standards of performance. In the coming year, we will continue to make progress on our transition and manage the complex set of associated risks. We will re-engineer the business to work within the revenue level allowed by the regulator and respond to government's forthcoming decisions on long-term build commitments. Meeting our objectives in this context means looking at what we can do – and what we cannot do – and making decisions about the necessary trade-offs.

I extend my appreciation to Minister of Public Enterprises Malusi Gigaba for his continued support and insight, supported by the new deputy minister, Bulelani Magwanishe. I would also like to thank Eskom's board of directors and the Executive Management committee for their vigilance and determination to enhance their leadership and oversight role in confronting the challenges we face.

Above all, I extend my thanks to Eskom's 46 266 employees, who have made it possible to keep the lights on in challenging times. Over the next year, South Africa will rely on this highly talented team to use all the skills and resources at our disposal to ensure that we meet our goals.



Brian Dames
Chief executive



An employee from the Cullinan technical service centre performs maintenance on a distribution line

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), Eskom sends quarterly performance reports to the shareholder regarding the performance of the Eskom Group.

The table that follows sets out Eskom's performance in terms of the shareholder's compact. These key performance indicators echo Eskom's internal key performance indicators, on which the rest of this report has been based.

The objective of keeping the lights on consistently since 2008 has had an adverse effect on plant health as it has become necessary to defer several planned maintenance outages in order to ensure that there is always

sufficient capacity to meet national demand. While this strategy has ensured that national load-shedding has been averted to date, it has also resulted in the deterioration of plant health at various stations as evidenced by the 2012/13 UCLF % and poor environmental performance as evidenced by the relative particulate emissions and water usage figures for 2012/13.

The target for transmission capacity expansion was not met due to contractor performance, extreme weather conditions, equipment quality issues, environmental permits not being granted and challenges to secure land.

Eskom failed to meet its target of transporting 12.2 million tons by rail in 2012/13 due to a delay in appointing the operator of the Tutuka coal terminal and operational capacity challenges on the side of Transnet Freight Rail.

Key performance indicators of the shareholder's compact

Key performance areas	Performance indicator	Unit	Target 2012/13	Target achieved	Actual 2012/13	Actual 2011/12	Actual 2010/11
Keeping the lights on (refer to page 68)	Management of national supply/demand constraint	Load-shedding (yes/no)	No	✓	No	No	No
	Demand-side management energy efficiency	GWh	1 827	✓	2 244	1 422	1 339
	Internal energy efficiency	GWh	20.00	✓	28.86	44.96	26.20
Improving operations (refer to page 57)	UCLF	%	6.00	✗	12.12	7.97	6.14
	UCLF excluding emission control, short-term outages and Duvha Unit 4 outage	%	–	–	7.54	–	–
	UCLF related to the Duvha Unit 4 outage	%	–	–	1.17	–	–
	UCLF related to emission control and short-term outages	%	–	–	3.41	–	–
	SAIDI	Hours	≤47.00	✓	41.89	45.75	52.61
	System minutes <1	Minutes	≤3.40	✗	3.52	4.73	2.63

Key performance areas	Performance indicator	Unit	Target 2012/13	Target achieved	Actual 2012/13	Actual 2011/12	Actual 2010/11
Delivering capital expansion (refer to page 72)	Generation capacity installed and commissioned	MW	260	✓	261	535	315
	Transmission lines installed	Km	900	✗	787	631	443
	Transmission capacity installed and commissioned	MVA	3 545	✓	3 580	2 525	5 940
Reducing environmental footprint in existing fleet (refer to page 78)	Relative particulate emissions	kg/MWh sent out	0.30	✗	0.35	0.31	0.33
	Water usage	L/kWh sent out	1.32	✗	1.42	1.34	1.35
Maximising socio-economic contribution (refer to page 93)	Local content in new build contracts	%	52.0	✓	80.2	77.2	79.7
	Percentage of broad-based black economic empowerment spend	%	70.0	✓	86.3	73.2	52.3
Implementing coal haulage and the road-to-rail migration plan (refer to page 88)	Coal road-to-rail migration	Mt	12.2	✗	10.1	8.5	7.1
Pursuing private-sector participation (refer to page 90)	Independent System Market Operator ring-fenced and set-up subsidiary ¹	Yes/No	Yes	–	–	–	–
Ensuring financial sustainability (refer to page 96)	Cost of electricity (excluding depreciation) ²	R/MWh	481.60	✗	496.35	374.19	296.36
	Interest cover ^{2,3}	Ratio	0.72	✗	0.27	3.27	1.40
	Debt/equity ²	Ratio	2.10	✓	1.96	1.69	1.66
	Free funds from operations as % of total debt (group)	%	8.00	✓	8.04	15.15	9.51
Building strong skills (refer to page 64)	Engineers	Number	1 949	✓	2 144	2 273	1 335
	Technicians	Number	757	✓	835	844	692
	Artisans	Number	2 543	✓	2 847	2 598	2 213
	Youth programme	Number	5 000	✓	5 701	5 159	–

1. A due diligence study into establishing a transmission system operator was submitted to the Department of Energy towards the end of 2012. Based on the report, which was led by the Department of Energy and included input from the Department of Public Enterprises, the National Treasury and Eskom, the Portfolio Commission on Energy decided in March 2013 to implement the Independent System Market Operator Bill as originally tabled in Parliament. The establishment of a transmission system operator will not be included in current legislation but is nevertheless contemplated in future.

2. The original year to 31 March 2013 targets which were included for the shareholder compact were subsequently revised to include the front-end loading of integrated demand management (IDM) expenditure (by R4.3 billion through phase 3 of the residential mass roll-out) from the MYPD 3 period into MYPD 2. The additional IDM expenditure was approved by the Board Investment and Finance committee on 7 August 2012. The final budget numbers are set out below:

- Cost of electricity (excluding depreciation) 508.94 R/MWh
- Interest cover (excluding remeasurement of the shareholder loan) 0.34
- Debt/equity 2.23

3. The interest cover ratio includes the unwinding of interest, but excludes the impact of the remeasurement of the government loan of R17.3 billion income which is based on the MYPD 3 determination.



1923-2013

*Eskom's approach
to integrated
reporting*

Eskom's approach to integrated reporting

Integrated reporting is a fairly new international initiative that has emerged in response to the shortcomings of traditional corporate reporting, which emphasises financial results without taking into account the broader context in which companies operate and fails to weave together different reporting strands.

Integrated reporting reports on financial results, governance, sustainability and other material factors in an interdependent manner. It addresses the challenges that a company faces, the advantages it enjoys, the external factors that influence it and the way it, in turn, influences the external environment. This report aligns with the principles contained in discussion papers published by the International Integrated Reporting Council, including its draft Prototype Framework and Consultation Draft of the International <IR> Framework. These papers are available at www.theiirc.org.

Eskom's Integrated Report Steering committee, a subcommittee of the Executive Management committee, guides the company in compiling this report and ensures alignment with other reporting processes.

The integrated reporting pilot programme

Eskom is a member of the International Integrated Reporting Council's pilot programme. More than 80 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 at regional and sector meetings, through web-based seminars, at 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 2011/12 integrated report was well received. It was followed by an interim integrated report in November 2012. Eskom recognises that there is room for improvement, and has adapted the structure and content of this report to improve the interconnectedness of the information presented and reflect current reporting trends.

Sustainability

Eskom was one of the first signatories of the United Nations Global Compact in 1999 and is committed to its principles as a LEAD participant. Eskom continues to subscribe to the UNGC principles as well as its role as a UNGC LEAD member – improving sustainability performance. In addition, Eskom has also actively participated in other important UN initiatives, namely the CEO Water Mandate, Caring for Climate as well as the Sustainable Energy for All initiative.

Eskom applied Global Reporting Initiative (GRI) G3 principles in compiling this report. These principles ensure that the company incorporates the views of its stakeholders, as well as internal planning, reporting and risk-management processes. Eskom has declared a B+ application level in terms of the GRI G3 guidelines, based on the disclosure suite of reporting as noted in the GRI tables, which are available online at www.eskom.co.za/IR2013/003.html. Refer to the assurance provider's report at www.eskom.co.za/IR2013/004.html, which confirms this declaration.

Eskom's approach to integrated reporting *continued*

The list of relevant GRI G3 indicators is available online at www.eskom.co.za/IR2013/005.html.

KPMG has agreed the extracted selected sustainability information marked with a "RA" in Appendix A to the assured key performance indicators in the supplementary and divisional report. The full assurance report is available online at www.eskom.co.za/IR2013/006.html.

Determining materiality in partnership with Eskom's stakeholders

This report focuses on qualitative and quantitative items that are material to Eskom's business operations and strategic objectives. The question of what is "material" has been determined through extensive consultation with the company's stakeholders, while taking into consideration Eskom's strategic objectives and the way in which its value chain operates.

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

- Reports submitted to the board and Executive Management committee for discussion or approval
- The shareholder's compact
- Eskom's corporate plan, its long-term strategic objectives and key focus areas for 2012/13
- Eskom's key risks, as identified by its integrated risk management process
- Policies and initiatives relevant to Eskom's business
- The NERSA MYPD 3 public hearings
- Parliamentary questions received
- The content of government portfolio committee engagements
- Both formal and informal stakeholder feedback, including media coverage

As a state-owned company and South Africa's primary electricity provider, Eskom is subject to regulation of many aspects of its operations. These include licensing, tariff structure, trade commitments and environmental impacts. Issues regarding regulation were also considered in determining materiality.

Stakeholder materiality matrix

The issues that surfaced were aggregated and summarised into a materiality matrix, divided according to Eskom's strategic objectives. This matrix served as a framework for Eskom to identify the material items to be included in this report. The material items in this report are those that:

- Have such relevance and significance that they could substantively influence the decisions of stakeholders
- Pose a significant risk to the operations of the business in the short-, medium- and long-term
- May impact the sustained value creation executed through Eskom's activities

Eskom's Integrated Report Steering committee prioritised these items to form a stakeholder materiality matrix, as outlined in the following table. While Eskom considers all the items raised, these are not all necessarily addressed in this report.



President Jacob Zuma and Minister Malusi Gigaba visited Medupi power station for the Unit 6 hydrostatic pressure test

Stakeholder concerns that are ranked as having a “high” or “medium” impact on Eskom (the last two columns of the stakeholder matrix) 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 and future focus areas” section.

Stakeholder materiality matrix

		Impact on Eskom from low to high		
		High	Low	High
Stakeholder concerns from low to high	<ul style="list-style-type: none"> • Directors’ remuneration 	<ul style="list-style-type: none"> • International sales • Cost of liquid fuels • Protecting the poor from high tariffs and providing free basic electricity • Outstanding electricity debtors • Impact of carbon tax 	<ul style="list-style-type: none"> • Technical performance and maintenance of generation, distribution and transmission plant • Efficiency of generating plant • Load-shedding • Coal stock at power stations • Energy losses, theft of equipment and illegal connections • Medupi increase in cost, delays and labour unrest • High tariffs impacting businesses and customers • Commodity linked pricing agreements 	
	<ul style="list-style-type: none"> • Fraud and governance 	<ul style="list-style-type: none"> • Shortage of technicians, artisans and engineers • Customer service • Electrification • Employment equity numbers • Procurement from black-, black women and black youth-owned businesses • Localisation • Decision regarding future nuclear stations • Improve research and innovation 	<ul style="list-style-type: none"> • Increase productivity • Safety of public and the transport of coal on the roads • Safety plans for Koeberg nuclear power station • Handling of nuclear waste • Increase use of renewables to reduce emissions • Energy efficiency • Environmental contraventions and water licences • Availability of coal and water at a fair price and of acceptable quality • Private-sector participation through IPPs • Creation of an Independent System Market Operator (ISMO) • IRP 2010 allocation after Kusile 	
		<ul style="list-style-type: none"> • Business continuity and disaster management 		
		Low		High

Eskom's approach to integrated reporting *continued*

Eskom's stakeholders include the public; the private sector, especially energy-intensive industries like mining, lenders and the government, especially national and local government. All stakeholders were concerned

about avoiding load-shedding and meeting the country's future energy needs, while electricity tariffs were of particular interest to the public and the private sector.

The following table details Eskom's interaction with its stakeholders:

Eskom strategic objective	Employees and unions	Government, Parliament and regulators ¹	Lenders, analysts and investors	Customers	Industry experts, academics, media	Business groups, civil society and NGOs	Suppliers and contractors
Becoming a high-performance organisation	✓	✓	✓	✓	✓	✓	✓
Leading and partnering to keep the lights on	✓	✓	✓	✓		✓	✓
Reducing Eskom's environmental footprint and pursuing low-carbon growth opportunities	✓	✓	✓	✓	✓	✓	✓
Securing Eskom's future resource requirements	✓	✓	✓	✓	✓	✓	✓
Implement coal haulage and the road-to-rail migration plan	✓	✓	✓	✓		✓	
Pursuing private-sector participation	✓	✓				✓	
Maximising Eskom's socio-economic contribution and internal transformation	✓	✓	✓		✓	✓	✓
Ensuring financial sustainability	✓	✓	✓	✓	✓	✓	✓

1. Includes NERSA and the NERSA public hearings.

The methods adopted by Eskom to interact with its stakeholders are stated in the following table:

Stakeholders	Method of interaction
Employees and unions	Provincial employee engagement; policies; collective bargaining practices; pre- and post-interim and annual results; regular meetings.
Government, Parliament and regulators	One-on-one meetings, appearances at parliamentary portfolio committees; Eskom websites; monthly, quarterly and annual reports; annual general meeting; industry associations and task teams; site visits; public hearings.
Lenders, analysts, and investors	Roadshows; meetings; annual and interim reports; results presentations; webcasts; annual general meeting; site visits; Eskom websites; teleconferences.
Customers	Formal presentation website; roadshows; company announcements and reports; site visits; quarterly forums.
Industry experts, academics, media	Industry associations and task teams; forums and committees; emails and Eskom websites; interviews; roadshows; quarterly briefings; company reports; articles.
Business groups, civil society and non-government organisations	Roadshows; annual results presentation; community forums; stakeholder forums; peer educators; industry partnership; wellness campaigns and HIV/Aids awareness; skills development programmes; advertising in local newspapers.
Suppliers and contractors	Roadshows; one-on-one meetings; preferential procurement programmes; open days; contracts and service agreements; workshops; presentations; training; project steering.



Maintenance at the Apollo substation, the only high-voltage, direct current substation in South Africa

Eskom's approach to integrated reporting *continued*



The Integrated Resource Plan and the MYPD 3 tariff application

Two important external factors influence all aspects of Eskom's business, including the scope of its future mandate. These are the IRP 2010 and the tariff increase for MYPD 3, which was decided in 2012/13.

The IRP 2010 outlines the government's view of South Africa's electricity landscape in the next two decades. It sets out the country's future generating needs and the mix of energy technologies that should be employed to achieve this.

To date, the Department of Energy has allocated more than 9 000MW of additional capacity to be procured from IPPs. The Cabinet has indicated that Eskom will be responsible for owning and operating the new nuclear capacity envisaged in terms of the IRP 2010. However, there is still a significant degree of uncertainty regarding Eskom's role and the funding of additional capacity. A new power station can take more than a decade to plan, build and commission. This makes it difficult to plan large-scale generating and transmission projects.

A revised IRP is expected to be available towards the end of 2013. See page 53 for more on the IRP 2010.

The MYPD 3 tariff award of an average of 8% a year from 2013/14 to 2017/18 is considerably lower than the 16% a year on average that Eskom requested. Eskom is still assessing the full effect of this ruling, but there is no doubt that the associated decrease in its projected revenues will materially affect its operations, including its ability to obtain funding for future capacity expansion. Page 53 has more information on the MYPD process and NERSA's ruling.






The interplay of these factors means that, at the end of 2012/13, Eskom is a business in flux: the uncertainty of its future mandate is preventing it from planning ahead effectively, while its reduced income will require some re-engineering of the business and reprioritisation over the next five years.

Risks that relate to material items





Should any of the corporate or business risks Eskom faces materialise and result in significant financial loss, price increases, business interruption or load-shedding, whether in isolation or in aggregate, it will have a significant negative impact on Eskom's shareholder and stakeholder relationships, and its brand and reputation. Eskom's ability to raise funding and remain a going concern may be constrained. A strategy has been put in place to manage these risks and to engage with stakeholders.



The following table details Eskom's material items and risks, and links them to its strategic objectives. The treatment and controls offered in the table are a high-level summary. For a more detailed discussion of these and progress made in 2012/13 refer to the relevant page number indicated in the table.

Material items and risks

Material item and risk	Key performance indicators	Treatment and controls	Page
 <p>Focusing on safety There are significant health and safety risks associated with an electricity business</p>	<ul style="list-style-type: none"> • Number of fatalities • Lost-time incident rate 	<ul style="list-style-type: none"> • Eskom's "zero harm" initiative, which focuses on the following elements: <ul style="list-style-type: none"> – Leadership – Contractor safety – Supervisory capacity – Training and facilities – Human behaviour 	55 – 57
 <p>Improving operations A significant incident relating to Eskom's assets and technologies might occur, resulting in impairment of Eskom's operations, financial loss and reputational damage. Theft of electricity and equipment resulting in financial loss</p>	<ul style="list-style-type: none"> • UCLF • Energy availability factor (EAF) • SAIDI • SAIFI • System minutes lost (<1) • Number of major incidents 	<ul style="list-style-type: none"> • High-performance utility strategy • Leadership interventions • Appropriate insurance portfolio • Operation Khanyisa • Technologies to help reduce tower component theft are being pursued 	57 – 61
 <p>Being customer centric Reputational risk may arise from poor service delivery and a lack of understanding of what is important to customers</p>	<ul style="list-style-type: none"> • Customer service index 	<ul style="list-style-type: none"> • A centre of excellence has been established with structured operating units to improve operations and to manage reputational risk 	62 – 63
 <p>Building strong skills There may be inadequate skills within the workforce to support Eskom's technology-intensive operations</p>	<ul style="list-style-type: none"> • Total number of learners in the following streams: <ul style="list-style-type: none"> – Engineering – Technician – Artisan – Youth programme 	<ul style="list-style-type: none"> • Skills development initiatives (training, skills transfer; engagement with educational institutions) • Back2Basics initiative to standardise operations • Localisation of skills through the capacity expansion programme 	64
 <p>Keeping the lights on There is the risk of load-shedding, which would cause severe short- and long-term implications for the country and Eskom. Eskom's strategic resolve to keep the lights on may compromise long-term plant health due to limited maintenance opportunities, resulting in extended energy constraints and loss of confidence in Eskom</p>	<ul style="list-style-type: none"> • Management of national supply/ demand constraints • Demand-side management energy efficiency 	<ul style="list-style-type: none"> • Protection systems and operating standards • Black-start readiness • Disaster risk planning through national disaster management structures • Eskom's "keep the lights on" strategy • Capacity expansion and IPP programmes 	68 – 72

Eskom's approach to integrated reporting *continued*




	Material item and risk	Key performance indicators	Treatment and controls	Page
	<p>Delivering capacity expansion Late delivery and the escalating cost of capacity expansion projects would lead to a loss of stakeholder confidence, which would affect future build projects. Late delivery would also place further pressure on the national supply-demand system and generation maintenance</p>	<ul style="list-style-type: none"> • Generation capacity, transmission lines and transmission capacity installed • Total capital expenditure 	<ul style="list-style-type: none"> • Project management and assurance processes are in place to control project costs and ensure timely delivery of projects 	72 – 77
	<p>Reducing environmental footprint in existing fleet If Eskom fails to embed climate change and sustainable development within its organisational culture, its access to natural resources may be jeopardised to the point that the company is unable to reliably supply electricity. At the same time, Eskom's emissions performance would deteriorate, possibly resulting in costly legal contraventions, increased public health risks due to growing emissions, and reputational damage</p>	<ul style="list-style-type: none"> • Specific water usage • Relative particulate emissions • Environmental legal contraventions 	<ul style="list-style-type: none"> • Emission treatment plans are in place. However, they are not always possible to execute due to postponed outages • Ongoing reviews to ensure that water-use licences and permit requirements are met • Kusile and Medupi power plants will be fitted with flue gas desulphurisation technology, which will reduce nitrogen oxides and particulate emissions • Renewable-energy projects are under way • Eskom supports introducing renewable energy IPPs to the electricity industry • Internal energy efficiency 	79 – 83
	<p>Implementing coal haulage and the road-to-rail migration plan Failing to successfully implement the road-to-rail migration strategy would cost Eskom lost opportunities in terms of cost (road repairs would not be lowered) and reputation. Safety benefits would also not materialise</p>	<ul style="list-style-type: none"> • Amount of coal haulage transferred from road to rail (million tons) 	<ul style="list-style-type: none"> • The road-to-rail migration strategy is being implemented with Transnet Freight Rail 	88 – 89
	<p>Purchasing and installing IPP capacity Should IPPs only be able to deliver intermittent electricity, it may compromise Eskom's demand-and-supply planning, so affecting security of supply</p>	<ul style="list-style-type: none"> • Installed IPP capacity • GWh purchased from IPPs 	<ul style="list-style-type: none"> • By 31 March 2013, Eskom had signed up power purchase agreements with IPPs for a total capacity of 2 664MW • Eskom is in the process of implementing a contract management strategy for IPPs 	90 – 91

Material item and risk	Key performance indicators	Treatment and controls	Page
 <p>Independent System Market Operator The Independent System Market Operator regulation may affect Eskom and its stakeholders by affecting its revenue stream</p>	<ul style="list-style-type: none"> Independent System Market Operator ring-fenced within Eskom and a subsidiary set up 	<ul style="list-style-type: none"> Eskom assisted in the preparation of a due diligence report that was tabled with the Department of Energy. The Portfolio Commission on Energy decided in March 2013 to implement the Independent System Market Operator Bill as originally tabled in Parliament 	17
 <p>Maximising socio-economic contribution and procurement equity Consistently failing to meet its targets for corporate social investment, universal electrification and for ensuring that its procurement practices benefit local businesses – ideally black, black women and black youth-owned businesses – would mean that Eskom has effectively not fulfilled its mandate to contribute to the government’s New Growth Path and other developmental plans</p>	<ul style="list-style-type: none"> Percentage of local content in all new build contracts Percentage of expenditure attributable to B-BBEE companies and black women-owned companies Corporate social investment Government and Eskom electrification connections 	<ul style="list-style-type: none"> Eskom promotes job and local-content procurement in all new contracts relating to its capacity expansion programme Eskom’s procurement policies advance B-BBEE and black women-owned businesses Eskom provides training through the Academy of Learning and learner programmes The drive for universal electricity for all, via the electrification programme is ongoing 	93 – 94



Medupi power station near Lephalale in Limpopo province

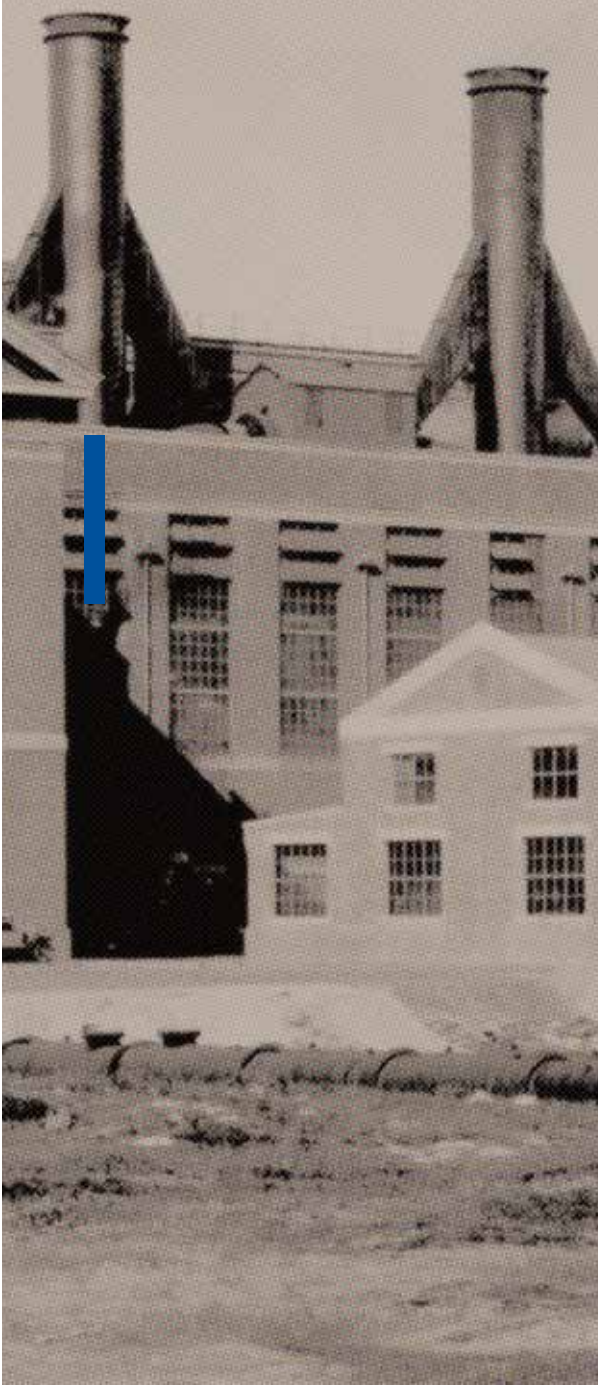
Eskom's approach to integrated reporting *continued*

Material item and risk	Key performance indicators	Treatment and controls	Page
 <p>Employment equity 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</p>	<ul style="list-style-type: none"> Disability, racial and gender equity at senior management, professional and middle management levels 	<ul style="list-style-type: none"> Eskom has implemented an ambitious employment equity plan, supported by a long-term target-setting strategy to drive the transformation agenda 	95
 <p>Ensuring financial sustainability Revenue gap between Eskom's MYPD 3 application and NERSA's tariff determinations may compromise business operations and delivery on the current corporate mandate. Poor liquidity and portfolio management would lead to insufficient funds to meet financial obligations, or excess funds that would result in increased finance 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 Eskom's board is steering the review process regarding the implications of the MYPD 3 determination Eskom is evaluating various scenarios and engaging various stakeholders in response to this material risk 	96 – 98
 <p>Credit ratings 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 impact its funding and hedging options, and increase borrowing costs</p>	<ul style="list-style-type: none"> Free funds from operations/ gross debt Earnings before interest, tax, depreciation and amortisation/ gross debt 	<ul style="list-style-type: none"> Eskom continues to monitor the effects of its operations and funding initiatives on the ratios that impact on its credit rating 	98 – 99



Learners from all over South Africa were represented at the Eskom Expo for Young Scientists finals in 2012

1923-2013



*About the
company*



About the company

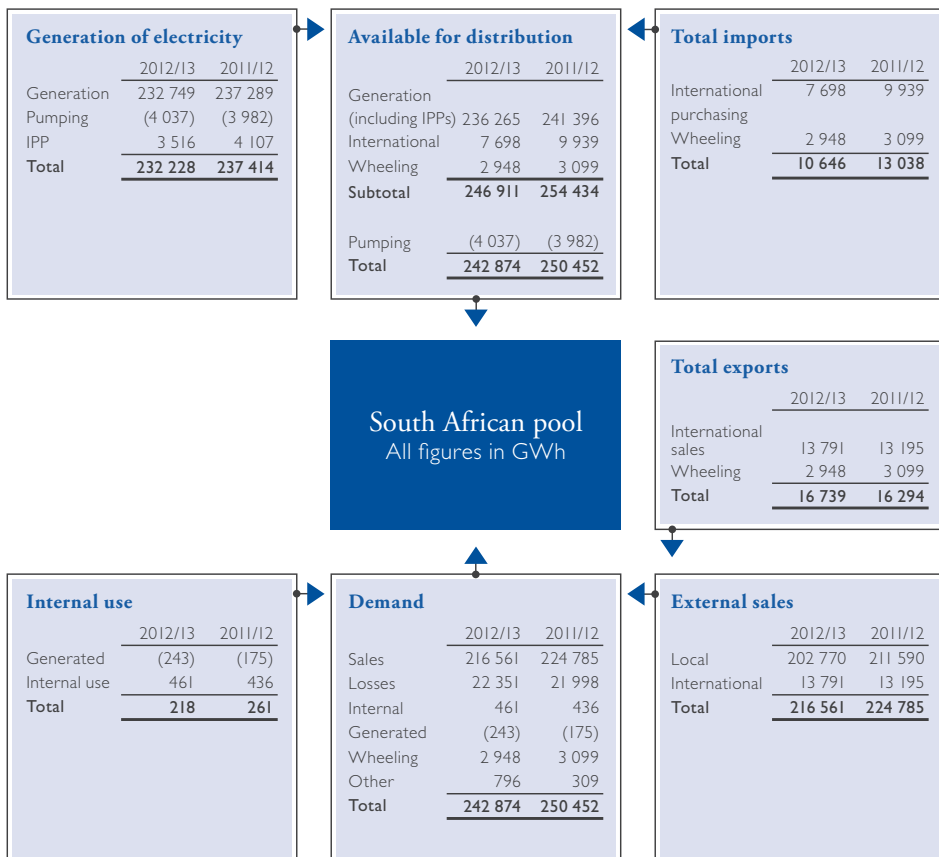
Nature of the business and client base

Eskom is South Africa's primary electricity supplier. Eskom generates, transmits and distributes electricity to industrial, mining, commercial, agricultural and residential customers. It also sells electricity to municipalities, which in turn redistribute it to businesses and households within their areas.

Eskom sold 216 561GWh of electricity in 2012/13 to about 3 000 industrial customers, 1 000 mining customers, 50 000 commercial customers and 84 000 agricultural customers. It also supplies electricity to more than 4.8 million residential customers, about 40% of whom are in rural areas. The figure for residential customers includes prepaid customers.

The Eskom energy wheel

The energy wheel describes the flow of electricity, in GWh, from generating and importing electricity to its distribution and export, including the losses incurred in reaching customers.



About the company *continued*

The Eskom business model

The International Integrated Reporting Council's consultation draft framework describes a business model as "its chosen system of inputs, business activities, outputs and outcomes that aims to 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.

External factors that influence Eskom

Eskom is affected by four key external factors, which together make up the framework within which the company operates:

- **Shareholder mandate:** As a state-owned company (SOC), Eskom is answerable to the government, represented by the Minister of Public Enterprises. Its purpose is to provide sustainable electricity to grow the economy and improve the quality of life of people in South Africa and the region. Eskom also supports the objectives of the government's National Growth Path and the National Development Plan
- **The economic and social climate:** 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. Eskom supports economic growth through keeping the lights on, infrastructure development and procurement spend, among other measures. Eskom's operations are negatively impacted by labour action against its contractors and suppliers, energy theft, illegal connections and equipment theft, all of which have a technical and financial impact on Eskom's operations
- **The Integrated Resource Plan 2010:** This plan outlines how much energy the country will need in the next two decades and the energy mix that will be required to achieve these targets. The government is in the process of allocating generating capacity to power

producers in the country. The amount that is allocated to Eskom will substantially influence Eskom's expansion plans going forward. A revised IRP is expected to be available towards the end of 2013

- **Laws, regulations and policies:** Eskom is subject to numerous stringent laws and regulations regarding its tariffs, licences, operations and expansion activities, particularly relating to its effect on the environment

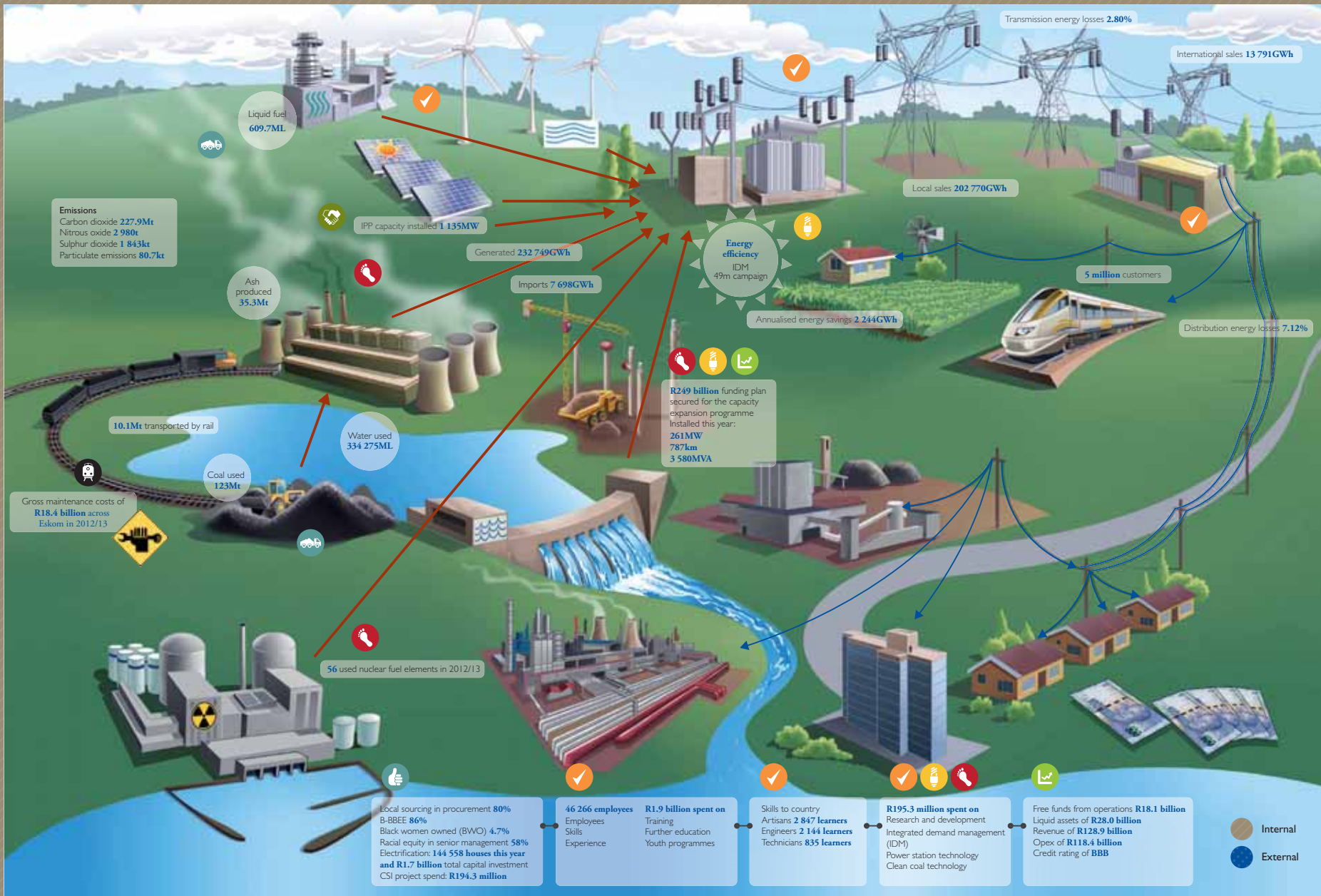
Internal factors that influence Eskom

Eskom is also affected by the following internal factors:

- **Leadership and governance:** The governance of the company is the board's responsibility and is facilitated by the Executive Management committee and a broader management committee, which includes line leaders and functional leaders. The structure is based on closer links between the business and the executives. It has clear roles and responsibilities for each layer of leadership, with the Executive Management committee providing overall guidance while the management committee team collectively supports the Executive Management committee in running the business
- **Policies, procedures and systems:** Standardised processes, policies and procedures are developed to support the internal control aspect of governance and improve efficiencies. Refer to the high-performance utility model framework in the 2012 divisional report at www.eskom.co.za/IR2012/007.html for an integrated view of Eskom's capabilities and processes
- **Eskom's values of zero harm, integrity, sinobuntu, customer satisfaction and excellence:** Eskom works within a culture that embodies these values and other desirable behaviours

Economic and social climate

Technology



Leadership and governance

Shareholder mandate

About the company *continued*

- **Technology:** This is a key enabler for Eskom and includes telecommunications, information technology, research and innovation. Eskom will implement initiatives that will enable the organisation to meet future challenges by focusing its research programmes, defining a clear roadmap and investing in future technologies (such as smart-grid technologies) to address current and future challenges

Inputs

- **Natural (primary energy):** The generation plant uses low-grade coal, enriched uranium, liquid fuels, solar energy, wind and water to generate electricity
- **Manufactured:** Eskom operates 27 power stations, of which 85% of the capacity is coal-fired. The balance is provided by nuclear, open-cycle gas turbine, hydro and pumped-storage power plants. Eskom has approximately 373 000km of power lines and cables
- **Intellectual (research and development):** Eskom is constantly researching ways to improve its processes and technology as well as reduce its impact on the environment. Environmentally friendly new energy technologies, such as wind farms and concentrating solar power plants, are researched, piloted and implemented
- **Human:** Eskom has a large workforce and a rigorous transformation programme in place to ensure equity in the workplace. It has also 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
- **Partnerships and relationships:** Eskom in partnership with South Africa, managed to keep the lights on in 2012/13. Eskom had to acquire additional capacity from municipalities and IPPs. It also had to reduce demand through integrated demand management programmes, demand market participation and power buybacks. Eskom's customer relationships are measured by independent research organisations

- **Financial:** Eskom's funding model consists of equity, revenue and debt funding, with strong support from the government. Eskom's credit rating is affected by its own financial position as well as the sovereign credit rating. Factors that may negatively affect Eskom's financial sustainability include carbon taxes, depreciation in the local currency, credit rating downgrades (sovereign and Eskom) and non-payment for electricity sold

Business activities

Eskom generates, transmits and distributes approximately 95% of electricity used in South Africa. Refer to the supplementary and divisional report at www.eskom.co.za/IR2013/008.html for more details on Eskom's generation, transmission, distribution, customer services and capacity expansion activities.

To ensure that it is able to meet demand and create the space for crucial infrastructure maintenance, Eskom runs a range of demand-management and energy-efficiency programmes.

Eskom is in the process of building new power stations and major power lines to meet South Africa's rising energy demand. This expansion programme will be completed in 2018/19.

Outputs

Eskom's primary output is electricity. However, generating electricity results in emissions, ash, nuclear waste and water usage. Eskom aspires to a more diverse energy mix, with the objective of reducing relative emissions of carbon dioxide until 2025 and subsequently reducing absolute emissions of carbon dioxide. Eskom aims to reduce fresh water usage by using mining water and by eliminating liquid effluent discharge to avoid damaging water resources.

Eskom has been implementing the Department of Energy's integrated national electrification programme in its licensed areas of supply since April 2001. Since the electrification programme started in 1991, more than 4.3 million households have been electrified by Eskom within its supply area.

Outcomes

The electricity that Eskom produces is a major driver of the economy. About 3% of the country's GDP can be attributed to Eskom.

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

Generating and distributing electricity is an inherently dangerous activity, and can result in injury and loss of life. Eskom has systems in place to create a safe and healthy working environment. No operating condition or urgency of service justifies exposing anyone to a situation that may cause them harm or injury.

The business model diagram outlines Eskom's business model and how it creates value. It includes the inputs in terms of the "six capitals" and its business activities, as well as its outputs and outcomes.

The New Growth Path

The New Growth Path of South Africa is the vision to place jobs and decent work at the centre of economic policy. This vision calls for joint commitments by all South Africans – investors and workers – government and civil society – to realise the common goals. The government has set clear targets for national, provincial and local governments to make employment a central focus of their activities. The government is now reorienting the work of state-owned enterprises and development finance institutions to align with the New Growth Path. To assist the process the following accords have been signed:

- National Skills Accord
- Basic Education and Partnerships with Schools
- Local Procurement Accord
- Green Economy Accord
- Youth Employment Accord

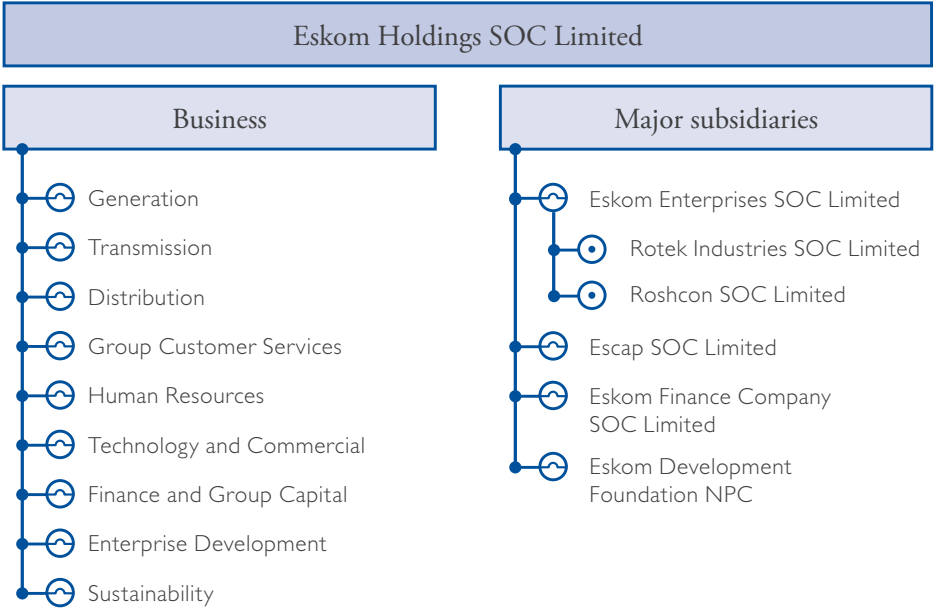
Eskom's involvement in supporting the initiatives are discussed throughout the integrated report and the supplementary and divisional report on Eskom's website at www.eskom.co.za/009.html.

Place of business

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

Legal structure

Structure of Eskom Holdings SOC Limited (including major subsidiaries)



This integrated report addresses the activities of the Eskom Holdings SOC Limited and its group of subsidiaries, namely:

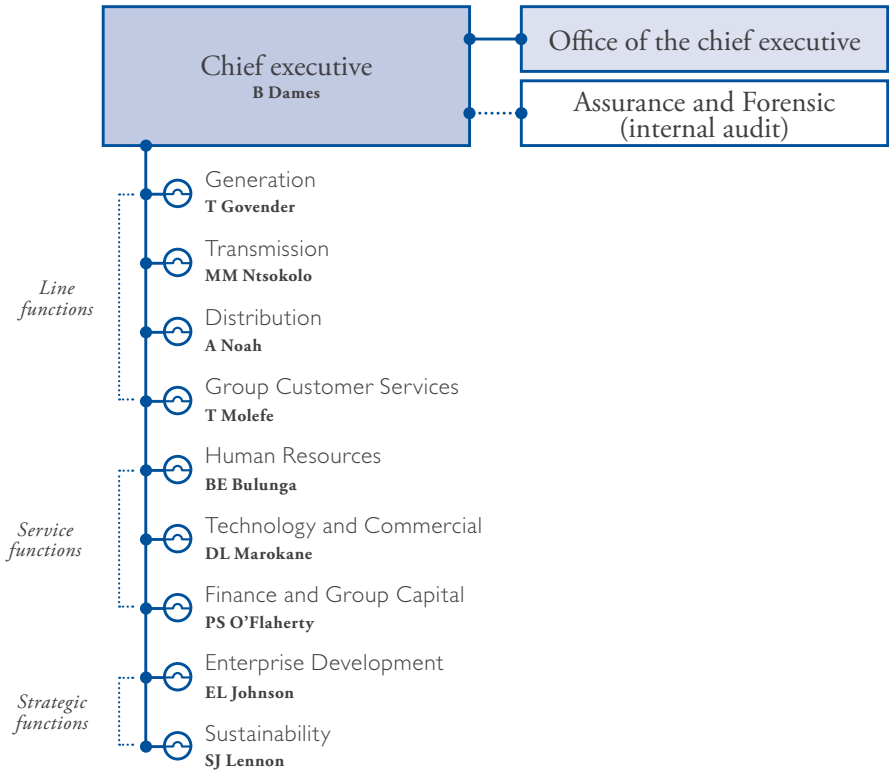
- Eskom Enterprises SOC Limited group. Through Rotek and Roshcon, Eskom Enterprises provides life-cycle support and plant maintenance, network protection and support for Eskom’s expansion programme in South Africa. It has two subsidiaries with an interest in electricity operations and maintenance concessions in Africa: one covers Mali, Senegal and Mauritania, while the other operates in Uganda
- Eskom Finance Company SOC Limited grants home loans to Eskom employees
- Escap SOC Limited, Eskom’s wholly owned captive insurance company, manages and insures Eskom’s business risk
- Eskom Development Foundation NPC is a wholly owned non-profit company that manages Eskom’s corporate social investment

About the company *continued*

Operational structure

The diagram below illustrates Eskom's organisational structure, together with the names of the group executives responsible for each function and their related years of service with Eskom.

Eskom's operational structure



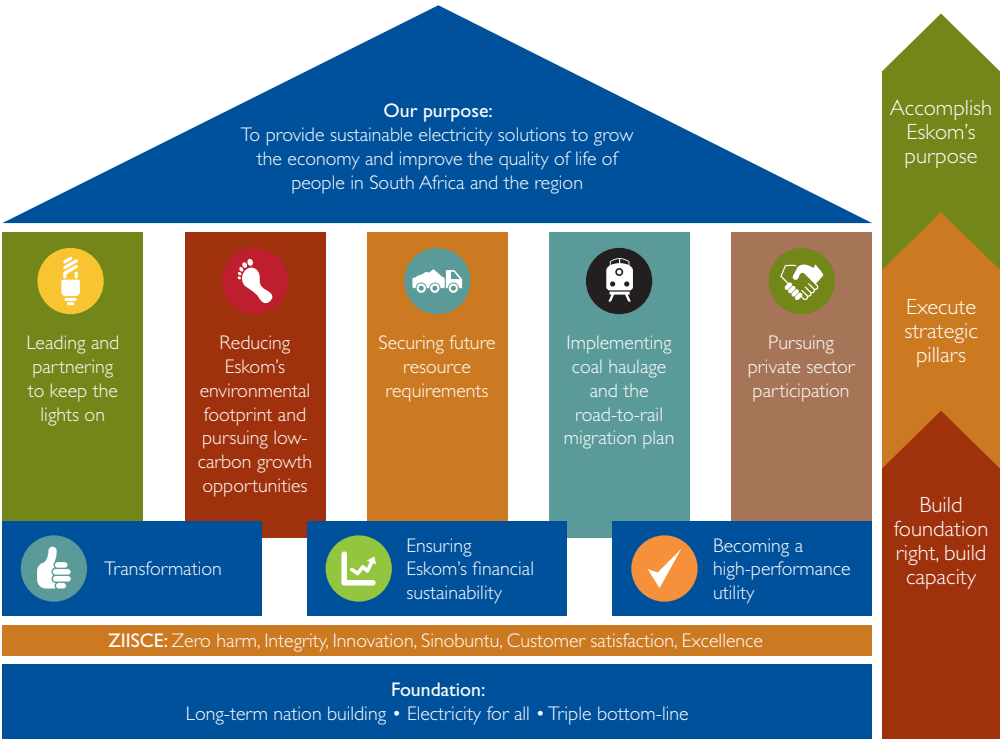
Purpose, values and strategic objectives

Eskom reviewed its strategic direction in 2012 to ensure continued relevance within the prevailing business context and to define any change in direction for the next corporate planning period. The approved 2012/13 to 2016/17 corporate plan and the outcome of the interim strategy review in 2012 have been used as the platform to develop the current

five-year corporate plan. This plan needs to be significantly revisited in light of the MYPD 3 determination.

Eskom's strategic direction is encapsulated in its purpose statement, eight strategic objectives, and values. The strategic objectives are aligned to the material items, as outlined in the material items and risks table on pages 25 – 28.

Eskom’s purpose, values and strategic objectives



For further details on each of Eskom's objectives please refer to www.eskom.co.za/IR2013/010.html.

To measure and review progress against its strategic objectives, Eskom's corporate plan allocated a set of key performance indicators to each of these strategic objectives.

The corporate plan is revised annually. The aspirational targets for 2017/18 used in this report are based on the 2012/13 iteration of the plan and will be revisited in light of the MYPD 3 determination.

Note that these key performance indicators and their targets mirror those set out in Eskom's compact with the shareholder (see "Shareholder's compact" on page 16). The performance on each indicator is discussed in "Performance on strategic objectives and future focus areas" on page 52 and the full list of key performance indicators can be found on page 125.



100
1923-
2013

*Corporate
governance*

Corporate governance

Eskom's corporate governance focuses on effective ethical leadership to integrate strategy, governance and sustainability. Eskom takes its strategic direction from its board of directors. The chief executive and the Executive Management committee are accountable to the board and are responsible for putting the board's decisions into effect. The chief executive and the Executive Management committee also oversee the company's day-to-day operations.

Board of directors

Eskom has a unitary board structure, meaning it consists of a single board with both executive and non-executive directors. The board's chairperson, chief executive, finance director and non-executive directors are appointed by the shareholder.

Eskom's directors are drawn from diverse backgrounds and bring a wide range of experience and professional skills to the board. These skills are supplemented by external members at committee level. Their contributions to the board, consisting of a wide range of qualifications and experience, are invaluable.

The performance of the board and individual directors is evaluated each year. The term of office of non-executive directors is three years, subject to review at the annual general meeting. Retiring directors are eligible for reappointment.

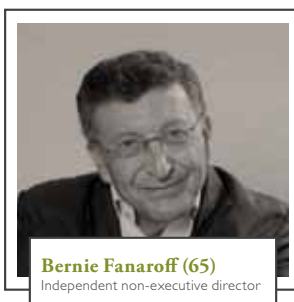


Apollo substation in Johannesburg is the main interconnector to Cahora Bassa in Mozambique

Corporate governance *continued*

Board members

Membership of the board at 31 March 2013 was as follows:





Brian Dames (47)
Chief executive

Please see www.eskom.co.za/IR2013/011.html for board members' qualifications, significant directorships and appointment dates.



Neo Lesela (43)
Independent non-executive director



Bajabulile Luthuli (40)
Independent non-executive director



Chwayita Mabude (43)
Independent non-executive director



Mafika Mkwanazi (59)
Independent non-executive director



Phenyane Sedibe (43)
Independent non-executive director



Lily Zondo (44)
Independent non-executive director

Corporate governance *continued*

Changes in board composition in 2012/13

There were no changes to the board's composition during 2012/13. Paul O'Flaherty, the finance director, has tendered his resignation and will leave his post at the conclusion of Eskom's annual general meeting on 10 July 2013. The shareholder is in the process of appointing a replacement in consultation with the board.

Executive Management and other board committees

The board delegates authority to executive structures and board committees. A framework to facilitate this delegation without diluting the board's accountability is in place. This delegation of authority has been revised and approved by the board. Training is being provided and standard delegations have been developed for groups and divisions.

Board committees exercise their authority in accordance with approved terms of reference.

The management of day-to-day operations is delegated to the chief executive. The chief executive is supported by the Executive Management committee and its subcommittees.

Each board committee is governed by terms of reference that define their composition, role, responsibilities and authority. These terms of reference are aligned with regulatory requirements and best governance practices, and are reviewed each year. Board committees also adhere to board-approved policies.

Board committees consist of a majority of independent non-executive directors.

Executive structure and board committees



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

Audit and Risk committee:	8
Investment and Finance committee:	7
Tender committee:	12
Social Ethics and Sustainability committee:	6
People and Governance committee:	4

In April 2013, the Board Build Programme Review committee was established to provide a governance, monitoring and review-oversight role for the capacity expansion programme.

Please see www.eskom.co.za/IR2013/012.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/IR2013/013.html.

Director induction and orientation

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

Executive Management committee

The Executive Management committee is a committee established by the chief executive and helps the chief executive guide the overall direction of the business and exercise executive control in managing day-to-day operations. The Executive Management committee held 16 meetings during 2012/13. Refer to page 38 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 and are therefore appointed by the shareholder, 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/IR2013/014.html for Executive Management committee members' qualifications, significant directorships and appointment dates.

Changes in Executive Management committee composition in 2012/13

There were no changes to the Executive Management committee during 2012/13. Paul O'Flaherty, the finance director and group executive for Group Capital, has tendered his resignation as finance director and will leave his post at the conclusion of Eskom's annual general meeting on 10 July 2013. The process to fill both vacancies is in progress in line with the succession planning programme.

Leadership's responsibilities

Corporate citizenship and sustainability

The board aims to align its strategic decisions with the government's policy. The board drives Eskom's goal to be a good corporate citizen and is assisted by Eskom's committees and subsidiaries:

- The Social Ethics and Sustainability committee focuses on sustainability and corporate citizenship
- The Tender committee ensures that Eskom's procurement activities encourage social transformation through skills development and procurement equity
- The Eskom Development Foundation NPC runs development programmes for disadvantaged communities

Corporate governance *continued*

A subsidiary governance framework ensures that sustainability goals are aligned across the organisation.

Ethical business conduct

Eskom's board is accountable to monitor the effective implementation of the group's ethics-management programme.

The programme aims to assess Eskom's risks and opportunities relating to ethical business conduct, foster ethical standards and raise awareness regarding ethics through training, reporting and advice.

The programme also includes an ethics help desk and whistle-blowing hotline on 0800 112 722.

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

Internal control

The board, through the Audit and Risk committee, is responsible for ensuring that internal controls are effective. An integrated framework to evaluate and improve controls across the company has been approved and is being implemented.

The Assurance and Forensics (internal audit) department reviews internal control systems and reports its findings to management and the Audit and Risk committee.

Combined assurance

In line with King III, Eskom applies a combined assurance model to ensure coordinated assurance activities.

The combined assurance model maps the level of assurance provided by three lines of defence against risk:

- Line management and managerial controls
- Functional areas like risk management and the associated frameworks, policies, reporting and oversight
- Independent and objective, internal and external assurance of the overall effectiveness of integrated governance

The Assurance and Forensic department provides independent and objective assurance, consulting and investigative services to improve Eskom's operations. It does so in collaboration with the Special Investigating Unit.

The department is periodically subjected to an independent quality assessment; the latest review which was performed during the current financial year found that the department generally conforms to quality standards.

External auditors independently audit and report on 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. The Security Risk Management department develops strategies to protect assets, interests, information, people and processes, and gives assurance that the required measures are implemented.

Nuclear safety

All aspects of electricity production at the Koeberg nuclear power station are directly accountable to 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 which is currently under review.

Legislation and guidelines

Eskom adheres to myriad laws, legislation and codes, including the Companies Act (2008) and the Public Finance Management Act (1999).

King III, the Protocol on Corporate Governance in the Public Sector, and various international guidelines guide Eskom regarding best practice. Eskom has applied most King III principles. However, because it is a state-owned company, some of these cannot be applied. 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/IR2013/015.html.

Eskom has amended its memorandum of incorporation to bring it in line with the Companies Act. The amended memorandum is being finalised with the Minister of Public Enterprises.

During 2011/12, Eskom implemented the compliance management charter and the compliance strategic framework. Eskom is substantially in compliance with significant legislation affecting its operations.

Preferential Procurement Policy Framework Act

Eskom's exemption from the Preferential Procurement Policy Framework Act 5 of 2000 (PPPFA) expired on 7 December 2012.

Eskom started the migration process to align its procurement practices to PPPFA on 1 March 2013 and is fully compliant from 1 April 2013.

Eskom paid R447 million on new contracts negotiated between 8 December 2012 to 31 March 2013 in terms of the exemption previously granted. All these transactions have taken place in the normal course of business and have been subject to Eskom's approved procurement policy.

Corporate governance *continued*

Remuneration

Eskom's approach to remuneration and benefits is designed to position it as a preferred employer. Eskom aims to attract and retain skilled, high-performing employees. To achieve this, Eskom pursues the following remuneration principles:

- Ensure that 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

Eskom's remuneration structures fall into four categories 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 and an annual bonus (13th 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.

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 board committee.

Non-executive fees

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 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 and short- and long-term incentives is reviewed annually.

International and local benchmarks are considered in determining remuneration. The remuneration strategy is aligned with the 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 or her contribution to organisational performance, and the group's success.

The remuneration of Executive Management committee members consists of the following:

- A guaranteed amount, consisting of a fixed cash portion and compulsory benefits. This is reviewed annually
- Short-term incentives, consisting of rewards for achieving set objectives set by the chief executive and approved by board committee (refer to the key performance indicators on page 125 – 129)

- Long-term incentives, consisting of rewards for achieving objectives set by the shareholder (refer to the key performance indicators on page 125 – 129)

Executive Management committee members received no increases on their guaranteed portion of earnings in 2012/13. In terms of their performance contracts, 35% of their performance rating is based on individual performance; the remaining 65% is based on Eskom's collective performance weighted towards each members' divisional responsibilities. Cognisance must be taken

of the responsibilities and risk that directors and executives carry, given their broad accountability.

Linkages to the chief executive's compact (performance targets) are indicated on the key performance indicators table. Refer to page 129 (footnotes 1 and 2).

The table on the next page sets out the directors' and group executives' remuneration for the year ended 31 March 2013. For detailed remuneration information see www.eskom.co.za/IR2013/016.html.



A typical distribution line in the Cullinan area

Directors' and group executives' remuneration

Name	2012/13 R 000	2011/12 R 000
Non-executive directors	6 400	6 149
Zola Tsotsi (chairman)	1 374	908
Mpho Makwana (previous chairman and acting chief executive in 2010/11)	–	638
Other non-executives	5 026	4 603
Executive directors	14 437	13 776
Brian Dames	8 464	8 284
Paul O'Flaherty	5 973	5 492
Other Executive Management committee members	36 647	34 078
Bhabhalazi Bulunga (group executive: Human Resources)	3 179	3 107
Thava Govender (group executive: Generation)	4 485	4 228
Erica Johnson (group executive: Enterprise Development)	5 972	5 397
Steve Lennon (group executive: Sustainability)	5 430	4 368
Dan Marokane (group executive: Technology and Commercial)	4 555	4 375
Tsholofelo Molefe (group executive: Group Customer Services)	2 904	2 921
Ayanda Noah (group executive: Distribution)	4 659	4 418
Mongezi Ntsokolo (group executive: Transmission)	5 463	5 264
Total remuneration	57 484	54 003



Live-line maintenance on high-voltage lines near Laingsburg in the Karoo



1923-2013

Performance on strategic objectives and future focus areas

This section deals with Eskom's performance during the year to 31 March 2013, placed in the context of its eight strategic objectives, as detailed in "About the company" (see page 30). It includes relevant key performance indicators for each objective; actuals for the current period and historical data for comparison; operational highlights and challenges faced; a performance commentary on each key performance area; as well as future focus areas.

Integrated Resource Plan 2010 and the MYPD 3 tariff

Integrated Resource Plan 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. By 2030, Eskom estimates that about 16 000MW of older generating capacity is projected to be decommissioned, and 45 228MW of new generating capacity will need to be built, over and above Eskom's current capacity expansion programme.

When the IRP 2010 was published, Eskom and the Department of Public Enterprises prepared a view reflecting the potential role Eskom would play in the delivery of the new build capacity presented. The final decision on Eskom's role will be made by the Department of Energy.

The cost of its potential role was modelled as a scenario in the MYPD 3 application. The model assumed an average electricity demand growth of 2.9% up to 2030, with an average gross domestic product growth of 3.5%. The MYPD 3 application did not cover new build projects beyond Kusile, and the awarded average 8% tariff increase per year from 2013/14 to 2017/18 will not provide sufficient revenue to improve Eskom's financial profile. Eskom will require clarity on the funding of any additional capacity that it may be expected to build.

The revised integrated resource plan is expected to be available towards the end of 2013. Nuclear power is likely to be a favourable baseload generating option. Although Cabinet appointed Eskom as the owner and operator of a future nuclear fleet in November 2012, a nuclear procurement agency has not yet been appointed.

MYPD 3 price determination

Eskom applies to NERSA, an independent regulatory body, for the revenue it needs to sustainably operate its business. NERSA assesses this application in terms of the

Electricity Regulation Act (2006), and then makes a determination on the electricity price path over a number of years. MYPD 1 and 2 both spanned three years, with MYPD 2 ending on 31 March 2013. The MYPD 3 prices are effective for five years from 1 April 2013 to 31 March 2018.

Eskom's application

One of the goals of electricity price increases is to move towards more cost-reflective tariffs as defined in the Electricity Pricing Policy (EPP) to enable Eskom to keep producing electricity sustainably while securing the financing it needs to build new power stations and transmission lines.

Eskom submitted its revenue and tariff structure application for MYPD 3 to NERSA in 2012. The application was based on current regulatory rules and policy, and Eskom's mandate to keep the lights on.

Eskom applied for an average annual increase of 13% to cover its operating, input and debt-servicing costs over the next five years, plus 3% a year for IPPs, for an average tariff increase of 16% per year over the period. The total revenue application came to R1.1 trillion.

The application assumed the following:

- Eskom's goal would be to provide a secure and reliable supply of electricity
- Primary energy would increase at a rate of 8.6%, with coal increasing at 10%
- Operating costs would increase at 8% per year
- Eskom's application had to comply with the Electricity Pricing Policy
- Eskom would be allowed to claim real pretax returns of at least 8.16%, the target determined in NERSA's regulation. In the event, Eskom asked for an average of less than 4% over the period, resulting in a pretax return of 7.8% only in 2017/18
- The government would continue to guarantee Eskom's debt to the value of R350 billion and Eskom would not commit itself beyond that

Integrated Resource Plan 2010 and the MYPD 3 tariff *continued*

- Eskom would secure financing up to the completion of its current capacity expansion programme
- Eskom would reach cost reflective tariffs by the end of the MYPD 3 period
- Provision was to be made for the 3 725MW renewable energy IPP programme and the Department of Energy's 1 020MW "peaker" gas plant
- A mandatory energy conservation scheme to prompt South Africa's largest energy users to curb their usage would be put in place, but only implemented if necessary

Eskom roadshows, NERSA's public hearings and the tariff decision

Eskom held roadshows across the country to provide information on the MYPD 3 application

to stakeholders. Participants were urged to provide input and ask questions.

In January and February 2013, NERSA held public hearings on Eskom's MYPD 3 application in all nine provinces, during which stakeholders submitted about 200 written comments and made 162 oral representations.

On 28 February 2013, NERSA approved total revenue of R863 billion over the next five years, giving an average annual increase of 8% in electricity tariffs. The new tariffs took effect for Eskom customers from 1 April 2013, and will come into effect from 1 July 2013 for municipal customers.

Implication of the approved 8% tariff increase

NERSA's decision will result in a revenue shortfall of R225 billion over the next five years. The disallowed revenue for the first two years is a relatively smaller component, approximately R33 billion, while the remainder is in relation to the subsequent three years. It is clear that the shortfall cannot be made up through efficiencies alone. While Eskom will strive to achieve additional efficiency, there is a need to reshape the business and also discuss alternative options with Eskom's shareholder. The following implications are being considered:

- Eskom's mandate in terms of security of supply
- Financial sustainability and the associated impact on Eskom's credit profile
- Areas of further efficiencies, cost curtailments and reductions as well as re-engineering the business
- Alternative funding options available to Eskom
- Policy and mandate implications, which are to be discussed with the Minister of Public Enterprises. There is a need to ensure alignment with the shareholder on issues such as coal price regulation, the future role of integrated demand management, further government support, and Eskom's role in developing projects beyond Kusile power station.

Eskom has implemented the average 8% increase for non-municipal customers on 1 April 2013 and will implement this average increase for municipal customers on 1 July 2013. A review of the impact of the NERSA decision has been made by Eskom and is being discussed with its shareholder. Eskom's strategic response will be shared once finalised.

Refer to page 104 for details of the Integrated Delivery Programme.

Becoming a high-performance organisation



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

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

Operating highlights

- There have been improvements in the following technical key performance measures in 2012/13:
 - The number of line faults per 100km of line reduced substantially, from 2.41 (2011/12) to 1.74
 - The number of system minutes lost (for incidents less than one minute) improved, from 4.73 (2011/12) to 3.52
 - The number of transmission interruptions also improved
 - The SAIDI index improved, from 45.75 (2011/12) to 41.89
 - SAIFI performance also improved, with the index decreasing from 23.73 (2011/12) to 22.19
- The 2012 Grid Planning Transmission Development plan was published. This includes the N-1 system strengthening plan
- Group information technology operations improved significantly and no major incidents or data losses have been experienced
- The contact centre's KeyCare performance indicator, which measures Eskom's interactions with its large industrial customers, was above target for the year
- As at 31 March 2013, 6 987 learners were in the pipeline, exceeding the target of 5 907. The youth programme numbers were also above target (5 701 against a target of 5 000)

Operating challenges

- Eskom's safety performance remains a challenge. Regrettably, three Eskom employees and 16 contractor employees died on the job
- Eskom's unplanned capability loss factor (UCLF), a measure of plant health, deteriorated to 12.12% for the year (2011/12: 7.97%)
- Three major transmission incidents occurred during the year
- High levels of equipment and electricity theft continue to affect plant performance and increase the cost of supplying electricity
- Customer arrear debt levels are increasing and there is a negative trend in debtors days of both large and small power users

Focusing on safety

Eskom's safety principle is that no operating condition or urgency of service justifies exposing anyone to negative risks arising out of Eskom's business or causing them injury or damage to the environment. 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 incident rate. The lost-time incident rate is a proportional representation of the occurrence of lost-time injuries over 12 months per 200 000 working hours.

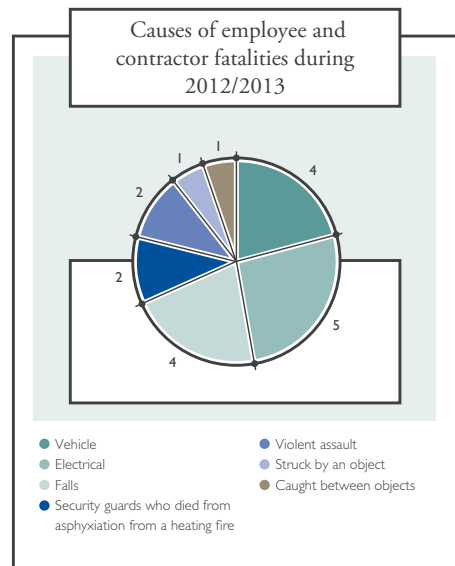
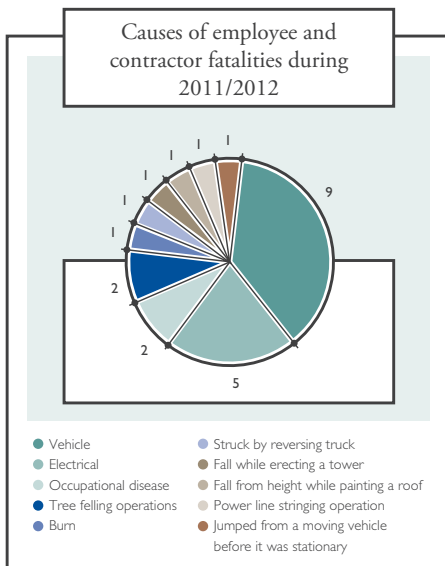
Becoming a high-performance organisation *continued*

Key indicators for Eskom's safety performance

Indicator and unit	Target 2017/18	Actual 2012/13	Actual 2011/12	Actual 2010/11
Employee lost-time incident rate, index	0.20	0.39	0.41	0.47
Fatalities (employees and contractors), number	–	19	24 ¹	25

1. Reclassification of a bee-sting incident that took place on 14 February 2012 as non-work related, as the cause of death was confirmed by the specialist forensic pathologist to be natural causes.

Causes of employee and contractor fatalities, 2011/12 and 2012/13



Improving Eskom's safety record is paramount. The following safety-improvement initiatives are being implemented to bring the number of fatalities and injuries down to zero:

- A key performance indicator was introduced to monitor compliance with safety behaviours
- A health and safety agreement between Eskom and its trade unions was concluded
- The Eskom contractor safety management plan was approved

- A safety, hygiene, environment and security inspectorate unit will be formed to ensure adherence to legislative requirements in these fields
- Eskom's zero-harm dashboard monitors the progress of key strategic safety initiatives across the organisation

Through these measures, coupled with visible leadership regarding safety, Eskom aims to create a strong, sustainable company culture of safety.

Eskom is constantly working with suppliers, customers and contractors to integrate safety, health and environmental processes into their operations. Contractors working under Eskom's supervision or on its premises are expected to comply with Eskom's safety, health and environment policies.

Public safety is also important to Eskom. Operation Khanyisa is a campaign run by Eskom and its partners to educate the public about the dangers and serious legal consequences of electricity theft. The campaign includes an SMS number (32211) where people can anonymously report electricity theft.

Improving operations

Key indicators of Eskom's operations performance

Indicator and unit	Definition of indicator	Target 2017/18	Compact target 2012/13	Actual 2012/13	Actual 2011/12	Actual 2010/11
UCLF %	Measures the lost energy due to unplanned production interruptions resulting from equipment failures and other plant conditions	10.40	6.00	12.12 ¹	7.97	6.14
PCLF %	Planned energy loss is energy that was not produced during a period because of planned shutdowns or load reductions due to causes under plant management control	9.26	–	9.10	9.07	7.98
EAF %	EAF measures plant availability, plus energy losses not under the control of plant management (external) and internal non-engineering constraints	79.34	–	77.65	81.99	84.59
SAIDI, hours per year	System average interruption duration index – measures the availability of supply	39.00	≤47.00	41.89	45.75	52.61
SAIFI, events per year	System average interruption frequency index – measures the reliability of supply	17.00	–	22.19	23.73	25.31
Total system minutes lost for events <1 minute, minutes	Total number of system minutes lost (for incidents of less than one minute)	3.40	≤3.40	3.52	4.73	2.63
Major incidents, number	Records the number of incidents with a severity greater than one system minute	1	–	3	1	–

1. The 12.12% cumulative UCLF consists of energy losses of 7.54% (excluding losses due to the Duvha Unit 4 outage, emission control and short-term outages) plus energy losses of 1.17% for the Duvha Unit 4 outage and energy losses of 3.41% due to decisions by management for emission control and short-term outages (figures are only available from April 2012).

Becoming a high-performance organisation *continued*

Generation

Eskom aims to become a world-class generating utility, capable of providing electricity without interruptions due to plant unavailability. Eskom operates 27 power stations with a total nominal capacity of 41 919MW.

Eskom's generation fleet met demand requirements without load-shedding in 2012/13. This required deferring several planned maintenance outages, which has had a significant adverse effect on plant health and certain aspects of performance.

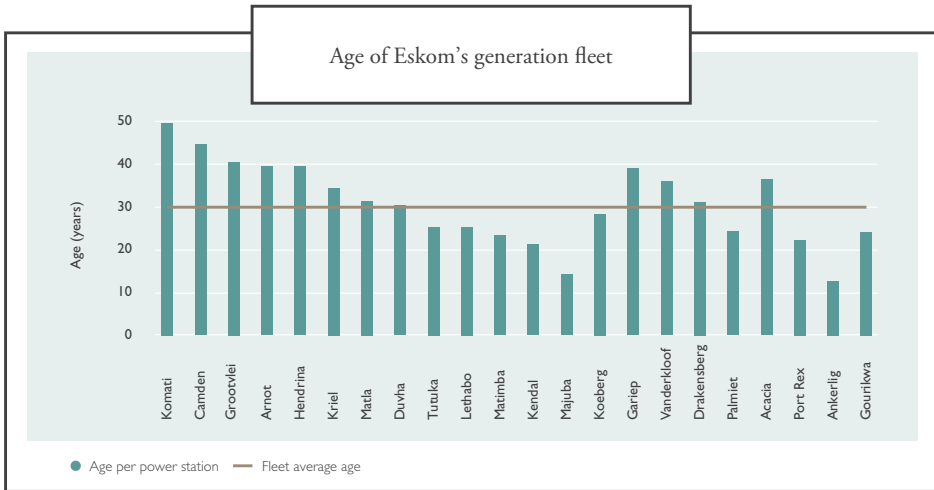
Eskom's operating strategy for generation constantly considers the following factors in balancing national demand and supply:

- **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 and the maintenance backlog is increasing,** 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. The inability to do maintenance also affects plans to improve/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 suboptimal-quality coal
- **Delays in commissioning new capacity** means that the electricity system remains too constrained to do planned maintenance to existing plants, resulting in plant health deteriorating even further
- **Deteriorating performance from Hydro Cahora Bassa** in Mozambique

The primary trade-off has been that maintenance has been deferred and that, where possible and where safety would not be compromised, generating units have been kept in operation despite having known defects. This trade-off has resulted in a significant deterioration in plant conditions and consequently, a deterioration in reliability and an increase in unplanned outages. The technical key performance areas below need to be understood in the context of this operating paradigm.

The UCLF percentage for 2012/13 was both higher than the target and the 2011/12 figure. This had a negative impact on the EAF percentage for 2012/13. The high UCLF percentage is an indication of the deteriorating health of an ageing fleet that has been subject to a policy of deferring maintenance to keep the lights on. Kendal, Matimba and Lethabo stations in particular are experiencing increases in unplanned availability.



This figure excludes the smaller stations, namely Colley Wobbles, First Falls, Ncora, Second Falls and Klipheuwel.

The following factors contributed to the high UCLF % for 2012/13:

- Duvha Unit 4 was offline until January 2013 (refer to www.eskom.co.za/IR2013/017.html for further details relating to the recovery project undertaken to return Duvha Unit 4 back into service). This accounts for 1.17% of the UCLF %
- Emissions and short-term outages related UCLF % comprises mainly boiler tube failures, system efficiency, bearing vibrations, vacuum, fans and particulate emissions related energy losses. These account for 3.41%
- The other partial load losses accounted for 2.58%

The generation excellence programme and the maintenance backlog strategy have been implemented to improve plant availability and reliability. The generation excellence programme includes the Power Station Enhancement project and the Energy Efficiency Improvement programme:

- **The Power Station Enhancement project** focuses on outage and plant availability enhancements. The programme has already yielded UCLF benefits, with verified gains of unplanned outages in the focus plant areas at Matla power station (1.97% improvement) and Arnot power station (0.44% improvement)
- **The Energy Efficiency Improvement programme** aims to improve the heat-rate of the boiler units by 1% before 31 December 2015. Eskom's average heat rate performance across the 13 coal-fired power stations improved by 1.8%, from 11.46MJ/kWh in 2011/12 to 11.25MJ/kWh, in 2012/13

For further details on Eskom's maintenance backlog reduction strategy see page 71.

Koeberg nuclear power station

On 20 February 2013, Koeberg Unit 1's reactor and turbine tripped. Following repairs and

Becoming a high-performance organisation *continued*

during start-up of the plant, low flow was observed due to an isolation valve that had failed shut. To safely repair the valve, it was necessary to remove all the nuclear fuel from the reactor and place it in interim storage in the spent-fuel pool, as for a normal refuelling outage. The unit was returned to service on 22 April 2013.

Post-Fukushima status update

The nuclear accident at Fukushima associated with the March 2011 tsunami off the coast of Japan contains lessons for nuclear power plants worldwide. Eskom, like other international nuclear utilities, undertook an assessment of the impact of external events, including earthquakes and tsunamis, on the safety of Koeberg. The assessment was submitted to and approved by the National Nuclear Regulator which concluded that Koeberg is adequately designed, maintained and operated to withstand all external events considered in the original design, and that there are no findings to warrant curtailing of operations or to question the design margins. The safety assessment identified a number of potential improvements to further reduce risk beyond the design requirements. The focus of these improvements is on the site's ability to be self-sufficient for an extended period. These are being discussed with the National Nuclear Regulator and are either being implemented or will be installed during future outages.

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/IR2013/018.html.

Transmission

Eskom's power stations generate electricity, which then flows through its transmission and distribution networks to its end customers. Eskom's transmission grid consists of 154 substations and 29 297km of transmission lines.

This network is used whenever Eskom needs to balance electricity supply and demand in real time, trade electricity internationally, or buy energy from IPPs.

Eskom's transmission technical performance is assessed in terms of the number of system minutes lost and the number of major incidents. Transmission performance has improved compared to 2011/12 for system minutes (for events of less than 1 minute) as well as the number of line faults. In particular, a substantial reduction was achieved in the number of line faults per 100km which was a key focus area during 2012/2013: the number of line faults decreased from 2.41 per 100km in 2011/12 to 1.74 per 100km in 2012/13.

Three major incidents were recorded. These were related to severe plant failures:

- In August 2012 abnormal snow loading caused multiple transmission tower and earth wire failures, resulting in a major incident with widespread load reduction in KwaZulu-Natal
- In October 2012, a major incident occurred at Athene substation when an isolator failed during maintenance to isolate an impending substation risk
- A severe transformer failure occurred at Midas substation in March 2013 during a lightning storm, which resulted in an extended outage for several mining customers in the Carletonville area

Corrective action plans are constantly being implemented to sustainably manage technical risks.

Criminal incidents

The theft of transmission tower steel resulted in 10 transmission towers on the Apollo-Dinaledi 400kV line collapsing on 30 April 2012.

Since then, less severe incidents have also occurred in Gauteng.

Security patrol frequency has been increased and aerial inspections have been conducted in identified high-risk areas. Public awareness campaigns and engagement with scrap-metal dealers in affected areas were conducted. Technologies to help reduce tower component theft are being pursued.

Distribution

Eskom's distribution network relays electricity from the transmission network to most of Eskom's end users. Eskom's distribution network in South Africa consists of 343 983km of lines, making it one of the largest power line systems in Africa.

Eskom's technical distribution performance is assessed in terms of its SAIFI and SAIDI. Its SAIFI performance improved to 22.19 interruptions per year (2011/12: 23.73) and SAIDI performance improved to 41.89 hours per year (2011/12: 45.75).

The improved distribution performance is the result of investments in reliability improvement measures over the past few years, especially on poorly performing networks, coupled with careful management of planned and unplanned interruptions.

Benchmarking

Eskom participated in a 2012 utility study by an independent international consulting group to benchmark its network interruption performance against electricity distributors in North America.

The distributors in the study had different measurement and reporting methodologies, network design characteristics, planning philosophies and operating practices. As a result, a wide range of network interruption performance levels were reported. This makes any direct comparison difficult, especially since Eskom's distribution performance is greatly affected by the performance of long rural

lines with limited redundancy and feedback capabilities. (Most urban electricity distribution in South Africa is carried out by municipalities.) This is not necessarily the case for North American distributors.

Average SAIDI performance for North American distributors in 2012, including major events and planned interruptions, ranged between 42.5 minutes per year and 47.5 hours per year, with a mean of 10.1 hours per year. Eskom's SAIDI for 2012/13 was 41.89 hours for the year.

Average SAIFI performance for North American distributors, including major events and planned interruptions, ranged between 0.5 and 24.3 interruptions per year, with a mean of 3.2 interruptions per year. Eskom's SAIFI for 2012/13 was 22.19 interruptions for the year.



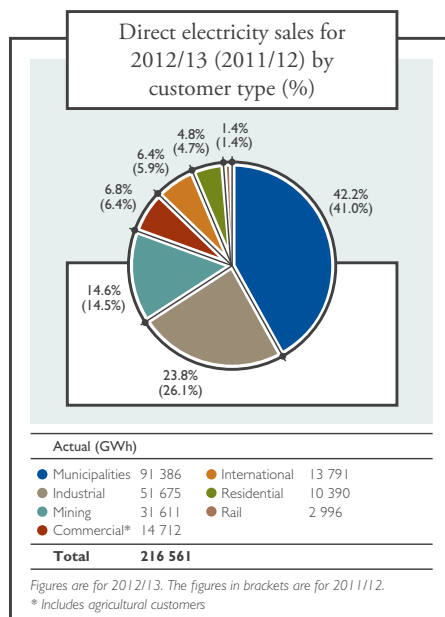
The Cullinan technical services team fixes a distribution line

Becoming a high-performance organisation *continued*

Being customer-centric

Eskom's customer-centricity programme aims to ensure that its customers are fully satisfied and serviced, and that they consistently rate Eskom highly.

Eskom's customer satisfaction levels are assessed in terms of a customer service index and the Eskom KeyCare rating. The results help Eskom identify those aspects of service that require improvement.



Key performance indicators for being customer-centric

Indicator and unit	Target 2017/18	Actual 2012/13	Actual 2011/12	Actual 2010/11
Customer service index %	89.7	86.8	85.6	84.4
Eskom KeyCare %	102.0	105.8	105.9	101.2
Arrear debts as percentage of revenue %	0.60	0.81	0.53	0.75
Customer service (large power users, municipalities and other), average debtors days	–	25.2	21.8	18.9
Customer service (small power users excluding Soweto debt), average debtors days	–	48.2	42.9	45.1
Customer service large power top customers excluding disputes, average debtors days	–	12.3	14.4	15.5

Eskom achieved an average score of 105.8% for its KeyCare indicator in 2012/13. KeyCare measures the satisfaction of Eskom's large industrial customers. Performance was stable despite the potential negative impact of the tariff increases requested in Eskom's MYPD 3 application.

Eskom uses a composite index to measure its service to residential, small and medium customers. The weighted customer service index combines two external customer service surveys and four internal customer service process measures. Eskom achieved a customer service index of 86.8% in 2012/13, its best performance in many years, but failed to meet its target by a narrow margin.

The following measures were implemented to improve service:

- An operational improvement plan was implemented
- Meter estimations were improved on a national level
- Mobile service hubs were launched in the Eastern Cape and KwaZulu-Natal to take Eskom's service offerings to remote areas

Municipal arrear debt

Municipal arrear debt continues to rise. The key factors contributing to escalating municipal arrear debt are the high turnover of key municipal staff, revenue losses, poor revenue collection, insufficient grant funding, budgeting processes and reliance on government grant funding.

Eskom started the disconnection process for four municipalities during the year, in line with the Promotion of Administrative Justice Act (2000). Disconnection was averted as arrangements with these municipalities were put in place to settle their debts.

Eskom continuously monitors municipalities' payments and circumstances to enter into reasonable payment agreements. It also makes significant effort to build stronger relationships with these municipalities.

Soweto debt

Of particular concern is Soweto's arrear debt. Eskom supplies electricity to approximately 180 000 households and on average, the payments received are less than 20% of the revenue billed. Eskom proposes implementing split-metering technology with protective enclosures for the greater Soweto service area. Eskom is also exploring long-term strategies to manage this risk while supporting the government's developmental goals.

Energy losses and theft

There are two broad categories of energy losses:

- Technical energy losses naturally occur when electrical energy is transferred from one point to another. The medium through which electrical energy is transferred imposes a resistance to the flow and some of the energy is dissipated as heat
- Non-technical energy losses can be calculated as the difference between total energy losses and technical losses. They are typically caused by theft (illegal connections, meter tampering), errors in data and billing, among others

In 2012/13, Eskom's total energy losses were 9.08%, of which non-technical losses accounted for between 1.78% and 2.85%. This is above the target allowed by the regulator: Distribution losses increased to 7.12% (2011/12: 6.32%), while transmission losses decreased to 2.80% (2011/12: 3.08%). For more information on energy losses refer to www.eskom.co.za/IR2013/019.html.

During 2012/13 losses due to conductor theft (including theft of copper, cable, transformers and tower-related structures) totalled R50.5 million (2011/12: R63.3 million), and involved 5 187 incidents (2011/12: 9 584 incidents). These incidents not only result in financial loss but impact on Eskom's ability to provide a quality service to customers.

Benchmarking

Customer services takes part in benchmarking studies, conducted by an independent international consulting group, to compare its performance with similar international utilities. Please refer to the 2012 integrated report for further details on the benchmarking.

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. It is also committed to developing the skills of 10 000 learners annually, per the National Skills Accord.

Key performance indicators for skills development

Indicator and unit	Target 2016/17 ¹	Compact target 2012/13	Actual 2012/13	Actual 2011/12	Actual 2010/11
Total engineering learners in the system, number	2 073	1 949	2 144	2 273	1 335
Total technician learners in the system, number	805	757	835	844	692
Total artisan learners in the system, number	2 705	2 543	2 847	2 598	2 213
Youth programme, number	5 000	5 000	5 701	5 159	–

1. Targets for 2017/18 not available, hence 2016/17 targets have been used.

Eskom has sustained its skills base and a significant number of learners have received training over the past five years. In 2012/13, 5 826 technical learners (engineers, technicians and artisans with three- to four-year learning/ bursary contracts) were in the pipeline (2011/12: 5 715). There were also 1 161 non-technical learners and 5 701 participants in the youth programme, which trains young people to contribute to the country's socio-economic development. Some of these young people were funded directly by Eskom, and some by suppliers to the capacity expansion programme that have agreed to specific youth training targets.

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. This programme encourages learners to sign up for technical courses at higher education institutions.

Eskom's Academy of Learning 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.

Immersion training

Eskom has developed a range of interactive learning videos to help train inexperienced engineers and technicians, helping to speed up the skills-transfer process in an environment where a dwindling number of specialists are expected to train up a growing number of skilled workers.

Investing in appropriate technologies

Eskom invested R195.3 million into researching and testing technologies with the potential to reduce its carbon footprint and improve its environmental and safety performance in 2012/13. This is 4% higher than research investment in the previous year (R187.7 million).

Research into projects that may improve Eskom's environmental performance include:

- A small-scale solar concentrator at Rosherville that will enable Eskom to research technologies that would feed into work on the concentrated solar power plant at Upington and solar augmentation at coal-powered stations
 - A concentrated solar-panel system at Megawatt Park that tracks the sun and converts solar power directly to electricity more efficiently than traditional solar panels do. This technology is particularly good for high solar regions like South Africa
 - Underground coal gasification, a technology that could be used to extract previously unmineable coal resources, improving Eskom's supply of primary energy
 - Dry processing to purify coal by removing stone, is a major source of the ash, sulphur and abrasive components found in coal.
- This research focuses on removing these components using dry (waterless) techniques to reduce the volume of coal to be transported, improve coal burn rates and lower emissions
- Real-time coal analysis to check the quality of coal supplied to a power station and so ensure that the coal is of the required quality
 - The potential for communities to self-generate electricity through a combination of renewable energies (solar, wind and biogas) and large-scale (200kW) energy storage, all of which would be dynamically managed using smart-grid technologies
 - The effect of electric vehicles on the power grid. Nissan South Africa will provide Eskom with 10 Nissan Leaf electric vehicles before their South African release date to test their usability and energy demand on the grid
 - A simulator to model the effects of Eskom's water strategy to help the company understand the business risks related to factors like water policies, costs and competition
 - Demonstrations of the Octavius emissions-reduction system. Octavius stands for "optimisation of CO₂ capture technology allowing verification and implementation at a utility scale". This is part of an international research project funded by the European Commission

Eskom's information technology solutions

Effective and secure information systems are essential for efficient management, accurate and timely customer billing, creditor and employee payments, and effective power generation and transmission over the national grid.

Eskom's information technology sourcing strategy and business plan was approved in 2012/13, and enabling agreements are being implemented with major suppliers. Eskom is exploring using cloud computing and mobile technologies to ensure employees have the information they need on hand. It is also analysing its information systems to ensure compliance with the Protection of Personal Information Act. For more information on Eskom's IT initiatives and operational performance see www.eskom.co.za/IR2013/020.html.

Becoming a high-performance organisation *continued*

Research into technologies that may improve Eskom's technical performance include:

- Testing scanning systems that monitor the condition of boilers for corrosion to select those that are most appropriate in a given circumstance
- Weldcore™, a tool jointly developed by Eskom and the Nelson Mandela Metropolitan University to test the condition of rotor blades in high-pressure turbines and repair the test site
- New designs for transmission towers
- Mitigation measures to prevent wooden distribution poles from catching alight due to pollution and weather conditions

Future focus areas for becoming a high-performance organisation

Focusing on safety

- Continue focusing on leadership in safety and the safety boot camps, with particular emphasis on contractor safety
- Obtain OHSAS 18001 certification across the organisation. OHSAS is an international occupational health and safety management system specification
- Strengthen the behaviour-based safety programme to assess people's safety related behaviour in the workplace as well as workplace conditions
- Enhance training and capacity related to occupational hygiene and safety for employees and contractors
- Undertake health risk assessments to develop a risk profile for Eskom

Improving operations

Generation

- As part of a sustainable generation business strategy, Eskom will follow a maintenance strategy based on an 80:10:10 principle for the next five years, where, on average, Eskom's fleet should have an EAF of 80%, leaving 10% for planned maintenance outages and 10% for unplanned outages

- In 2013/14 a 10% PCLF level will be targeted. Eight percent will be used to create a maintenance schedule with limited flexibility and 2% will be utilised for short-term, including weekend maintenance
- Perform maintenance to comply with environmental legislation where no exemptions have been obtained
- Should unplanned outages require less than 10% of the fleet's EAF, the gap created will be used for planned maintenance
- Build between four and nine additional open-cycle gas turbine units of similar design to the existing units at Ankerling to expedite an increase in generation capacity, particularly to meet peak demand

Transmission

- Strengthen the network to achieve Grid Code N-1 compliance, so improving redundancy and reliability
- Improve the system technical performance
- Sustain business management system compliance (ISO 9001 and ISO 14001 certification)

Distribution

- Continue improving SAIDI and SAIFI performance
- Identify and implement innovation to enhance efficiency activities
- Actively collaborate with industry players on electricity distribution industry issues

Being customer-centric

- Improve integrity of customer data for segmentation purposes and to gain a better understanding of different customer needs
- Enhance debt-management strategies

Building strong skills

- Produce 500 graduates for Eskom's information technology department, where they will receive ongoing training
- Increase employees' skill levels, with skills development ranging from technical to business-related skills

Leading and partnering to keep the lights on



Eskom is committed to preventing load-shedding. However, under normal constrained supply-and-demand conditions this objective conflicts with the need to maintain the generating plants especially as there is not enough surplus energy to allow generating units to go offline to do much-needed maintenance within the timeframe usually required.

Eskom is working hard to deliver on capacity expansion projects that will increase its generating capacity to allow downtime on existing units for maintenance.

These two goals – keeping the lights on and delivering on the capacity expansion programme – contribute to the overall strategic objective of leading and partnering to keep the lights on.

Operating highlights

- Avoided load-shedding despite severe challenges in balancing supply and demand
- Achieved a total peak demand savings of 595MW and annualised energy savings of 2 244GW for the year through the integrated demand management programme
- Added 261MW of generating capacity to the grid in 2012/13 – 200MW from Komati power station's unit 1, 20MW from Camden power station's unit 7, 6MW from Camden power station's unit 6 and 5MW from Camden power station's unit 8. Plant enhancements added 30MW of capacity to Koeberg Unit 2
- Received board approval and Public Finance Management Act clearance to proceed with the Sere wind farm. The main wind-turbine generator contract has been awarded
- Commissioned 706.6km of the 765kV transmission lines

- Identified potential projects in the southern African region to support South Africa's future electricity requirements, in line with the Integrated Resource Plan 2010
- The Department of Energy has provided R1.0 billion for solar water-heating energy rebates and solar water-heating mass roll-outs

Operating challenges

- Balancing the conflicting needs of meeting electricity demand and shutting down power plants or units to perform maintenance was – and continues to be – a challenge
- The target for transmission capacity expansion was not met due to contractor performance, extreme weather conditions, equipment quality issues, environmental permits not being granted and challenges to secure land
- Labour unrest leading to site closures at Medupi power plant. Contractor performance regarding welding and post-welding treatments and delivery of the control and instrumentation system also affected the plant's construction schedule
- Reduced funding for future integrated demand-management programmes, combined with increased technology costs, could seriously affect long-term market participation in the programme

Leading and partnering to keep the lights on *continued*

Keeping the lights on

“Keep the lights on” is a collective term that Eskom uses to refer to the complex interplay between the ability of its electricity demand-management initiatives, both internal and

national, to reduce South Africa's energy usage and consequently widen the margin between supply and demand, allowing much-needed maintenance to be done so that Eskom can continue to avoid load-shedding.

Key performance indicators for keeping the lights on

Indicator and unit	Target 2017/18	Compact target 2012/13	Actual 2012/13	Actual 2011/12	Actual 2010/11
Management of national supply/demand constraints, (load-shedding, yes/no)	No	No	No	No	No
Demand-side management energy efficiency, GWh ²	7 732 ¹	1 827	2 244	1 422	1 339
Internal energy efficiency, annualised GWh ²	45.00 ¹	20.00	28.86	44.96	26.20

1. Target for 2017/18 represents a cumulative figure.

2. The actual figures reported for each year are for projects claimed in the relevant financial year.

Managing supply-and-demand constraints

Eskom has successfully avoided load-shedding since 2008 by:

- Keeping generating units in operation despite them having known defects, provided that doing so did not compromise safety
- Implementing demand-side management initiatives
- Increasing the use of the open-cycle gas turbines
- Purchasing additional capacity from IPPs
- Deferring maintenance on power plants

Lower-than-expected electricity demand due to a weak economy and struggling commodity market further contributed to Eskom being able to keep the lights on in 2012/13, with peak demand (excluding load reductions) being 1.9% less in 2012 (35 525MW) compared to 2011 (36 212MW).

The reduced demand and demand-response initiatives translated into lower-than-expected sales of 216 561GWh for 2012/13. These sales

were supplemented by higher-than-expected sales of electricity generated for export to neighbouring countries (see “Cross-border sales”).

Despite the dip in demand and sales, these peak demand values are uncomfortably close to Eskom's nominal generating capacity.

This will continue to be the case until Medupi power station starts delivering first power to the grid at the end of 2013. After this, the situation will improve somewhat, but not enough for Eskom to adopt the aggressive maintenance strategy it needs to meet environmental emission limits, improve plant performance and reliability, and achieve long-term sustainability.

A recovery team is in place to ensure that load-shedding will be avoided while new capacity is being built, but this can only be achieved by implementing demand-reduction measures in partnership with Eskom's industrial, municipal and residential customers.

Cross-border sales and purchases

	Unit	Actual 2012/13	Actual 2011/12	Actual 2010/11
Sales	GWh	13 791	13 195	13 296
Purchases	GWh	7 698	9 939	10 190
Net sales	GWh	6 093	3 256	3 106

Cross-border sales were 3 886GWh higher than expected, mainly due to events in Botswana and Namibia that required Eskom's assistance. In Botswana, the commissioning of the 600MW Morupule B coal-fired station by Botswana Power Corporation (BPC) was delayed. BPC's existing 120MW coal-fired Morupule A also experienced technical problems and had to be taken out of service for refurbishment. Eskom is supplying Botswana in terms of an agreement that ends in December 2013.

In Namibia, NamPower successfully commissioned the additional Ruacana hydro-powered unit. However, the Cunene river system experienced the lowest water levels in several years, diminishing generation capacity.

Cross-border energy purchases during 2012/13 were lower than expected due to problems with plant availability at Hydro Cahora Bassa due to flooding. As a result, Eskom's international sales and purchases have, on balance, resulted in heavier electricity demand.

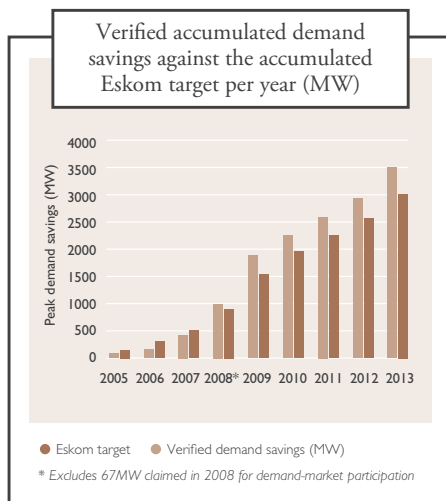
Eskom continues to pursue regional supply options, specifically hydro options in Mozambique and Zambia, as identified in the IRP 2010. It is also focusing on transmission-strengthening projects in Mozambique, Zimbabwe, Botswana, Zambia and Namibia, which would allow power to be securely imported into South Africa in future.

Leading and partnering to keep the lights on *continued*

Demand-side management and energy efficiency

Demand-side management interventions encourage customers to use electricity more efficiently, so reducing the gap between supply and demand in the short to medium term. Also known as integrated demand solutions, these initiatives support national security of supply and minimise the negative economic implications of a power shortage on the country.

During 2012/13, Eskom achieved a total peak demand savings of 595MW and annualised energy savings of 2 244GWh (see following figure). The accumulated verified demand savings for the combined financial years 2004/05 to 2012/13 is 3 587MW. This means that demand-side management has now “freed up” about six 600MW generators, the equivalent of a typical power station.



Eskom's demand-management initiatives are designed to achieve rapid energy-savings responses in the short term. These are supported by energy-efficiency marketing initiatives that aim to promote immediate and long-term behavioural change. During 2012/13, Eskom spent R3.0 billion (2011/12: R1.5 billion) on integrated demand management initiatives. Eskom, in evaluating the business case for integrated demand management on a collective and individual project level, compares the project cost per unit of energy saved with the cost of generating that unit of electricity. The cost of generation differs during the day, based on the mix of power stations used to generate a specific profile. Likewise, integrated demand management technologies and programmes influence demand profiles, which varies per technology and programme, so changing the generation profile that is required to meet that demand. The integrated demand management impact is thus measured in terms of the impact on the generation cost profile, or the “avoided cost of generation”.

Integrated demand management cost per unit is consistently less than the avoided cost of generation, specifically during peak hours when the generation is expensive due to probable running of the open-cycle gas turbines. Implementation is much quicker, the impact on the environment is minimised and the customer benefits through a reduced electricity bill.

During times of generation capacity constraint, integrated demand management helps to keep the country's lights on, with concomitant, social and economic benefits.

Demand-management initiatives include:

The Demand Response Programme, which targets Eskom's commercial and industrial customers, offering them financial incentives to reduce their electricity demand. The programme consists of a number of subprogrammes that:

- Aim to help Eskom's key customers reduce their electricity demand
- Provide a financial incentive to customers who can use emergency generators when the system is constrained
- Enter Eskom into power buyback agreements, whereby Eskom financially compensates customers for not consuming electricity

The Residential Mass Rollout Programme.

This targets the residential market and consists of a number of subprogrammes. The two most important of these are the compact fluorescent lamp replacement programme, which involves going door-to-door in residential areas and installing energy-efficient technologies like compact fluorescent lamp bulbs and geyser timers, and the solar-water heater rebate programme .

See www.eskom.co.za/IR2013/021.html for more on integrated demand-management initiatives.

Energy-efficiency marketing initiatives include:

Power Alert, which televises the status of the load on the electricity grid between 17:00 and 21:00, so encouraging the public to be more conscious and conservative about energy use during this peak time.

The 49M campaign is a long-term behavioural-change initiative that seeks to encourage energy-efficiency attitudes and practices in all consumers, particularly residential users, with the ultimate goal of reducing their consumption by 10%.

Decreasing the maintenance backlog

Eskom's ageing electricity supply network and power stations require ongoing essential maintenance and upgrades. The continued deferral of routine maintenance, delays in commissioning Duvha Unit 4, the failure of Koeberg Unit 1, reduced imports from Hydro Cahora Bassa and coal-quality issues at certain sites, especially Tutuka, have increased the generating fleet's UCLF percentage (see "Becoming a high-performance organisation" for information on Eskom's UCLF). This has reduced the opportunities for planned maintenance outages and increased the need for ad hoc maintenance, in effect slowing down the pace at which planned maintenance can be performed.

As at 31 March 2013, the total maintenance backlog stood at 30 (31 March 2012: 26), of which 14 were design-based maintenance and 16 were ad hoc repair outages. Gross expenditure on power station maintenance for 2012/13 was R12.2 billion (2011/12: R9.8 billion).

Maintenance backlog reduction strategy

Five standard maintenance tasks need to be done on a regular basis (see the table on the next page). These tasks can take anywhere from a week or two for a boiler inspection, which must be done every 12 to 18 months, to two months for a general overhaul, which should be done every six to 12 years. During this time, the generating unit being worked on is usually offline, which means that the rest of the generating fleet needs to compensate for the commensurate decrease in generating capacity.

Leading and partnering to keep the lights on *continued*

Maintenance schedule for a coal-fired power station

Activity	Cycle time (years)	Duration (days)
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

A project to coordinate a comprehensive, synchronised maintenance and refurbishment plan is under way. This project uses demand-side initiatives to create windows of opportunity to do the required work. This will improve plant and grid efficiency while reducing the possibility of plant failure and load-shedding.

Most maintenance is scheduled for the summer months, when the electricity demand is usually lower, but the system is nevertheless still

very tight. To help reduce the maintenance backlog and ensure the sustainability of the generating plant, Eskom will schedule more maintenance in winter than what has normally been the case in previous years.

Delivering capacity expansion

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 36.2GW. The programme will increase this by 17.1GW by 2018/19. 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 total cost of the programme from inception to 2018/19 is estimated to be R340 billion (excluding capitalised borrowing costs).

Key performance indicators for delivering on capacity expansion

Indicator and unit	Cumulative five-year target to 2017/18	Compact target 2012/13	Actual 2012/13	Actual 2011/12	Actual 2010/11
Generation capacity installed and commissioned, MW	8 702	260	261	535	315
Transmission lines installed, km	6 450	900	787.1	631	443
Transmission capacity installed, MVA	35 040	3 545	3 580	2 525	5 940
Capital expenditure (excluding interest during construction) ¹ , R billion	337.15	–	60.13	58.82	47.93

1. Total capital expenditure relates to Eskom-wide expenditure.

The central challenge facing this programme is remaining on schedule in the face of supplier issues and labour action. Eskom's construction programme has been affected by the country's current labour environment in 2012/13. Ongoing labour unrest among Eskom's contractors remains a challenge and may cause schedule delays on major construction projects. It may also seriously compromise the safety of Eskom's employees and infrastructure, and damage Eskom's reputation both locally and internationally.

Eskom is currently negotiating with contractors and labour a new partnering agreement for Medupi and Kusile. This will replace the current project labour agreement and is intended to foster an improved spirit of collaboration on

site and ensure standardisation and consistency of labour practices.

Eskom is using an integrated approach to managing schedules, budgets and risks associated with the expansion programme. This involves using lessons learned and putting in place procedures, tools and systems to improve the effectiveness and efficiency of all capital programmes. These include instituting a project life-cycle methodology, and project development and readiness assessment.

Between 2005 and 31 March 2013, the programme has increased Eskom's generating capacity by 6 017MW, its transmission lines by 4 686km and its transmission substation capacity by 23 775MVA.

Generation capacity plan, 2013/14 to 2018/19 (capacity installed/first power to the grid)

Project (MW)	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Cumulative total
Grootvlei (return to service)	30						30
Komati (return to service)	100						100
Medupi (coal-fired)	794	1 588	1 588	794			4 764
Kusile (coal-fired)		800	800	800	1 600	800	4 800
Ingula (pumped-storage)		1 332					1 332
Sere wind farm (renewable)		100					100
Total (MW)	924	3 820	2 388	1 594	1 600	800	11 126

In addition, Eskom has commenced the development of a 100MW concentrating solar power plant in Upington which is expected to be commissioned in 2017.

An independent review of the schedules and costs relating to Kusile and Ingula has been

performed and noted that the schedules and costs to complete are achievable. An independent review of Medupi's schedule and costs is also currently underway and will be communicated when complete.

Leading and partnering to keep the lights on *continued*

Capacity expansion highlights in 2012/13

- Medupi's coal stockyard received its first coal delivery from the Exxaro mine on 11 October 2012
- The Ingula project settled all main underground works claims up to 31 March 2012. Eskom and the main civils contractor agreed to an accelerated programme. Ingula hosted President Jacob Zuma and members of the Cabinet on 10 November 2012
- Work to install an additional 30MW of generating capacity at Grootvlei Unit 5 began
- Schedule-recovery business cases to achieve Kusile Unit 1's commercial operation date were approved

Capacity expansion challenges in 2012/13 Medupi

- Irregularities regarding welding and post-welding heat treatments of high-pressure tubing conducted in December 2012 require rework
- The project's contractor failed the control and instrumentation factory acceptance test performed in December 2012. Eskom is working with the contractor to minimise the impact of this delay
- Labour unrest led to site closures, causing delays
- Eskom is working with contractors to meet the date for synchronisation and commercial operation

Kusile

- The boiler contractor's weld-reject rate continues to be a problem, causing further schedule slippage
- Most contractors failed to work through the builders' December break, as agreed

Komati

- A high-pressure turbine incident on Unit 3 after first synchronisation resulted in the commissioning of the 100MW unit being delayed to May 2013

Recovery plans and mitigation strategies are in place in all of the above cases. These are being reviewed and monitored on a continual basis.

Ongoing risks facing the capacity expansion programme

Ongoing risks to the capacity expansion programme primarily relate to engineering, construction, procurement and economic fluctuations. Other risks and challenges include:

- Safety
- A shortage of project staff (such as project managers, planners, contract managers), suppliers and contractors
- Upward pressure on capital costs on the back of high global demand for equipment
- Timely completion of environmental impact assessments and obtaining environmental authorisations, permits, rights and land servitudes
- Inadequate and non-standardised processes and tools to manage and monitor progress
- Managing the sourcing of commodities and high exposure items
- Labour unrest
- The effect of demobilisation of construction projects on local communities. An initiative to mitigate the economic impact of demobilisation in the Lephalale area once Medupi has started coming online is being implemented



The Medupi project: key facts and figures

Location

Lephalale, Limpopo

Output

4 764MW (six 794MW units). When complete, it will be the largest dry-cooled coal-fired power station in the world

Technology

- Medupi is the first coal-fired plant in Africa to use super-critical power-generation technology, meaning it will be able to operate at higher temperatures and pressures, resulting in higher efficiency
- Medupi's coal conveyors and stackers are capable of delivering coal at a rate of 4 000 tons per hour, 24 hours a day. The total length of the overland conveyor from Exxaro Grootegeluk Mine to the coal stockyard is 5.4km

Expenditure on regional development

- R5.5 million was spent on educational initiatives for the Lephalale communities in 2012/13
- R11.5 million was spent on upgrading 2.2km of the D1675 road leading to the project site
- R10 million was spent on upgrading the electricity infrastructure by installing 10MVA transformers
- R31 million was spent on upgrading the Paarl sewage-treatment plant

Local skills development

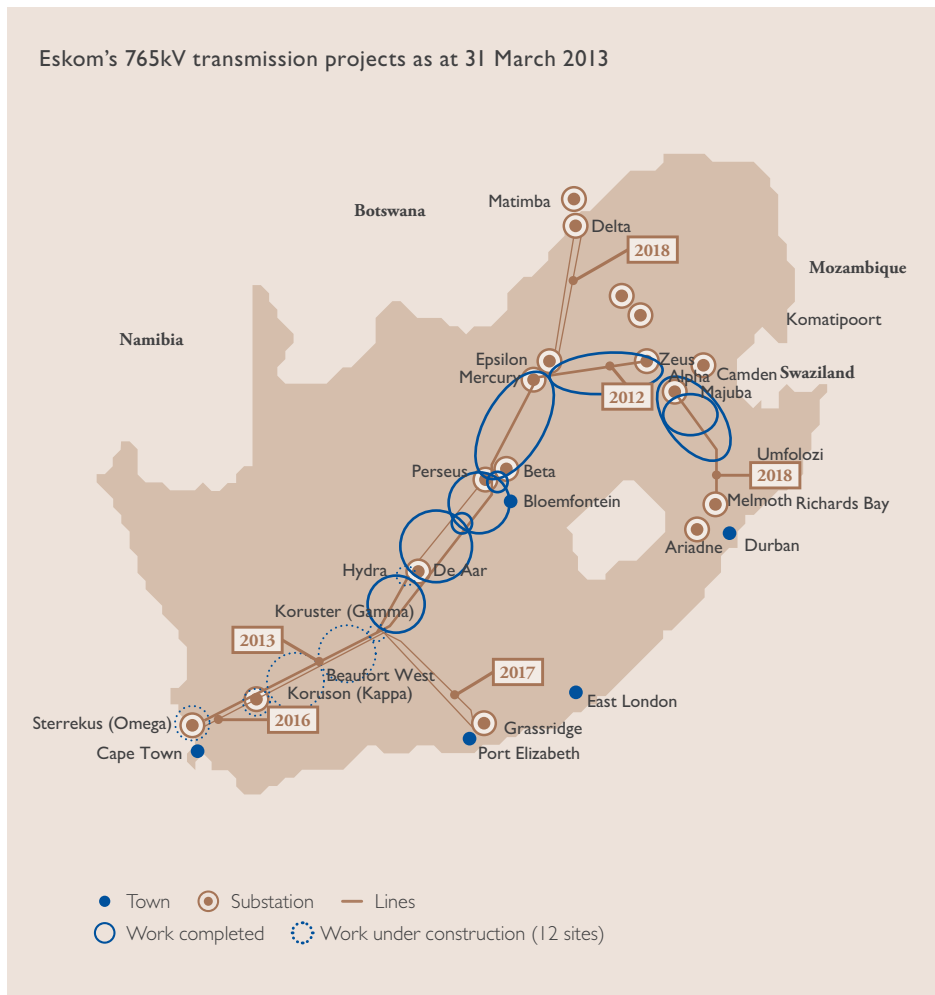
- A total of 16 854 people were employed on site. Of these, 7 313 (43%) are from the Lephalale municipal area
- Of the 9 579 people employed as unskilled and semi-skilled labour, 6 665 (70%) were from Limpopo province

Leading and partnering to keep the lights on *continued*

Transmission lines and capacity installed and commissioned

Eskom strung 787km of transmission lines in 2012/13 including:

- The 205km Duvha Leseding line (part of the Northern Grid Projects), which was commissioned in May 2012
- The 268km Zeus-Mercury and 234km Mercury-Perseus 765kV lines, which were commissioned in December 2012



Capital expenditure

Eskom's overall capital expenditure was R60.1 billion for 2012/13, excluding interest capitalised during construction. The performance was affected by labour unrest at Medupi and contractor performance. Delays in obtaining approval from NERSA and in terms of the Public Finance Management Act for Majuba rail and Sere, and in obtaining water licences for the Medupi 400kv line, exacerbated the under expenditure.

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

Division	Actual 2012/13	Actual 2011/12	Actual 2010/11
Group Capital	37 690	39 730	30 436
Generation	8 512	6 590	6 341
Transmission	893	1 554	1 503
Distribution	8 317	7 941	8 190
Subtotal	55 412	55 815	46 470
Future fuel	2 634	1 992	1 063
Eskom Enterprises	376	473	209
Other areas including service and strategic functions	1 711	535	190
Total capital expenditure	60 133	58 815	47 932

In the preceding table, group capital refers to the capital expenditure related to the capacity expansion programme. Capital expenditure for the remaining divisions relates mainly to maintenance and refurbishment: major

overhauls and spares for the generating fleet, strengthening and maintaining the distribution network, making new connections for the government's universal electrification programme, and ensuring that the transmission grid is compliant and stable.

Benchmarking

For benchmarking of new power-station construction costs refer to www.eskom.co.za/022.html.

Future focus areas for leading and partnering to keep the lights on

- Continue to manage the supply-and-demand constraints
- Formulate a strategy to ensure the integrated demand management programme's sustainability, including its role in executing a national energy efficiency and demand-side management programme
- Continue the residential mass rollout initiative
- Keep to the capacity expansion programme schedule, especially for Medupi and Kusile
- Finalise, and get approval for, the concentrating solar plant's design
- Complete the design for the biomass co-firing concept at Arnot power station. Source a viable torrefied fuel supply
- Supply and install biomass equipment at Kriel power station. Complete studies into fuel-supply and techno-economic sustainability
- Initiate the process to build new generating capacity as set out in the IRP 2010

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

Improving environmental performance remains a focus area for Eskom. Progress continues in areas such as biodiversity, environmental management systems, waste management and skills development.

However, the constrained electricity system has hampered Eskom's ability to undertake critical maintenance and projects that would improve particulate emissions and water usage performance at power stations. As a result, particulate emissions, water usage and legal contraventions are all above target. In 2012/13, R1.7 billion was allocated to environmental capital projects (2011/12: R0.6 billion) and R1.3 billion to environmental operations projects (2011/12: R0.9 billion). These projects primarily focused on improving emissions and water performance, and rehabilitating coal mines.

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 in the Southern African Development Community region.

Operating highlights

- Obtained approval for Eskom's climate-change adaptation strategy and supported the government in furthering the outcomes of the 17th Conference of the Parties to the United Nations Convention on Climate Change and the National Climate Change Response policy
- Made good progress with placing contracts for the Sere wind farm

- Appointed a managing engineer for the concentrating solar thermal power station
- Commissioned photovoltaic plants at power stations and Megawatt Park's parking lot rooftop. A concentrated photovoltaic installation, which tracks the sun and instantly converts it to electricity without storing it first, was installed at the entrance to Megawatt Park. These projects will save Eskom an estimated 2 845 tons of carbon emissions per year
- Participated in international initiatives like United Nations Global Compact LEAD and the Rio +20 "Sustainable Energy for All" conference

Operating challenges

- Eskom's environmental performance deteriorated in 2012/13, largely due to the constrained supply-demand system making it difficult to schedule outages to conduct maintenance that would improve particulate emissions and water usage
- Environmental compliance issues have delayed the underground coal gasification project
- Distribution infrastructure caused a number of vulture fatalities



Reducing Eskom's environmental footprint

Provisions for environmental measures (R million)

	Actual 2012/13	Actual 2011/12	Actual 2010/11
Power station related environmental restoration – nuclear plant	7 177	5 428	4 470
Power station related environmental restoration – other power plants	6 762	4 731	3 867
Mine related closure, pollution control and rehabilitation	4 309	2 476	2 037

Refer to note 30 of the annual financial statements at www.eskom.co.za/IR2013/023.html.

Key performance areas for reducing Eskom's environmental footprint

Indicator and unit	Target 2017/18	Compact target 2012/13	Actual 2012/13	Actual 2011/12	Actual 2010/11
Relative particulate emissions, kg/MWh sent out	0.24	0.30	0.35	0.31	0.33
Specific water consumption, L/kWh sent out	1.21	1.32	1.42	1.34	1.35
Environmental legal contraventions, number	8	–	47	50	63



Bird diverters are strung on high-voltage power lines by helicopter

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

Reducing particulate and gaseous emissions

Despite making progress in implementing the strategy in 2012/13, relative particulate emissions worsened to 0.35kg/MWh sent out in 2012/13 due to coal quality issues and being unable to perform mitigating maintenance.

Eskom's strategy is to reduce particulate and gaseous emissions to minimise the impact of its operations on human health and comply with regulated emission standards.

All power stations are equipped with electrostatic precipitators, or fabric filter plants, to reduce particulate emissions from flue gas. Coal-fired power stations also have fugitive emission management plans in place to prevent dust dispersion from the ash-disposal sites, coal stockyards and unpaved roads. These plans require that the stations are equipped with dust-bucket monitoring at the coal stockyard and ash-disposal sites to quantify fugitive emissions. Dust-bucket monitoring will be implemented at all the coal-fired power stations.

Reducing water consumption

Eskom's water-management processes and practices aim to reduce fresh-water usage and eliminate liquid effluent discharge. More environmentally friendly sources of water have been identified, including mine-water recovery and effluent reuse. Investigations with mining partners are ongoing.

Specific water consumption increased to 1.42L/kWh sent out in 2012/13. The target of 1.32L/kWh sent out was missed due to many factors, including very low rainfall at critical times, the high number of start-ups, air heater washing and the inability to obtain half-station shutdowns to stop significant leaks at some stations.

Eskom addresses water management by conducting research, and implementing policies and strategies to ensure compliance with legislative requirements. It has formed water-management task teams that work with power stations to reduce water usage and legal contraventions. Refer to "Investing in appropriate technologies" on page 65 for further details on research initiatives.

Eskom is a signatory to the United Nations Global Compact's CEO Water Mandate, a unique public-private initiative to help companies develop, implement and disclose water sustainability policies and practices. It reports on its compliance to the Water Mandate's principles on an annual basis. See www.eskom.co.za/IR2012/024.html for more information on Eskom's commitment to the CEO Water Mandate.

Reducing environmental legal contraventions

Continued focus on environmental legislative compliance has seen the number of legal contraventions drop to 47 during 2012/13, compared to 50 for 2011/12. However, the target of 25 contraventions was not achieved. Of the contraventions, 20 were water related (water leaks and spills, sewage spills and ash line leaks) and 15 involved particulate emission limits being exceeded at power stations.

The remaining contraventions were related to vegetation management, environmental impact assessment non-compliance and oil spills.

Eskom aims to achieve full compliance regarding all legal requirements and has initiated several activities over the past three years to address shortcomings, including ISO 14001 certification. Some improvements have been achieved.

Reducing Eskom's carbon footprint

Climate change strategy

Eskom has a comprehensive climate-change strategy based on six pillars:

Diversification of the generation mix to lower carbon-emitting technologies

Energy-efficiency measures to reduce demand and greenhouse gas 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

South Africa's response to climate change is guided by the National Climate Change Response policy, which was approved by Cabinet in November 2011. The National Climate Change Response aims to promote sustainable growth and development. Its policies will guide South Africa's contribution to international negotiations regarding what it can and cannot do regarding mitigation. The policy was drafted by the Department of Environmental Affairs in partnership with Eskom and other stakeholders.

Investing in renewable energy

Eskom aspires to reduce its relative emissions of carbon dioxide by diversifying its energy mix in the years leading up to 2025. After this, it plans to reduce absolute emissions of carbon dioxide.

No single technology can provide the perfect solution for economically reducing greenhouse-gas emissions, so Eskom constantly models electricity-generating options to find the optimal balance between the conflicting goals of affordability and environmental protection. Eskom's renewable energy unit focuses on large power-generation technologies – wind, photovoltaic and concentrating solar power – that will play an extremely important role in reducing both the relative and absolute emissions. "Relative emissions" is a measure of emissions intensity, which is the amount of emissions per unit of output. "Absolute emissions" refers to Eskom's total emissions, calculated in units of carbon dioxide equivalents.

The Southern Africa Development Community region has an abundance of renewable and other primary energy sources. In time, it could play a significant role in meeting the country's electricity requirements while helping to improve its energy mix and, therefore, environmental performance. A number of projects are already being advanced in neighbouring countries, with a primary focus on hydro and natural gas resources, and transmission strengthening.

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

The 100MW Sere wind farm will be fully commissioned by December 2014 and will save approximately 230 000 tons of carbon emissions per year. The 100MW concentrating solar thermal power plant station near Upington, due to be commissioned in 2017, will also help reduce Eskom's carbon footprint by saving about 450 000 tons of carbon emissions per year. These flagship environmental projects are funded by a diverse set of institutional partners and are being developed in line with South Africa's Clean Technology Fund Investment Plan.

Other renewable-energy projects

Photovoltaic installations

It is envisaged that an estimated 150MW of capacity will be installed on the rooftops of Eskom's power stations, offices and transmission sub-stations for Eskom's internal use.

Solar boosting

Eskom is investigating using solar boosting (using solar power as an additional heating medium) to supplement coal at its coal-fired power stations.

Biomass fuels

To reduce greenhouse-gas emissions from its coal-fired power stations, Eskom is exploring co-firing of biomass fuel. Should the business case prove feasible, Eskom aims to co-fire biomass to replace 10% of coal usage by weight in coal-fired power stations by 2026. To achieve this goal, Eskom is looking to source suitable biomass within South Africa and sub-Saharan Africa.

Eskom is also evaluating the use of municipal solid waste as biomass feedstock for power generation.

Ocean energy

A 2002 Eskom study concluded that South Africa had a sufficient ocean resource to explore the option of ocean energy. A techno-economic study and technology evaluation are being performed to assess ocean energy conversion technologies and determine which technology should be researched further for possible application in South Africa.

Future focus areas for reducing Eskom's environmental footprint and pursuing low-carbon growth

- Continue participating in international and national climate change and sustainable development platforms such as Caring for Climate, the National Climate Change committee and technical working groups for implementing the National Climate Change Response policy
- Implement a climate adaptation strategy and integrate this into Eskom's business
- Finalise Eskom's Green Financing Strategy and explore alternative funding sources
- Implement environmental recovery (water and air quality) to ensure compliance as a minimum standard
- Construct the Sere wind farm
- Retrofit fabric filter plants to decrease particulate emission discharge
- Implement the defunct mines environmental liability management plans, develop a green mining framework and an integrated logistics strategy



Coal is fed onto a conveyor belt that runs into a power station

Securing Eskom's future resource requirements

Eskom needs to secure land and primary energy for its existing and new assets to operate. This primary energy – which includes coal, water, uranium, limestone and biomass – needs to be of the required quality, and delivered on time and at an optimal cost.

Securing coal, is an increasing 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 an effect on the coal price. Increased 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. Its performance is assessed using the following indicators:

- Average coal stock days
- Coal delivery (see "Implementing coal haulage and the road-to-rail migration plan" on page 88)
- Coal quality, which is measured indirectly via a power plant's UCLF and EAF measurements (see "Becoming a high-performance organisation" on page 58)
- Specific water consumption (see "Reducing Eskom's environmental footprint" on page 80)
- Primary energy costs, including future fuel
- Volume of coal burnt

Operating highlights

- Average coal stock levels improved to 46 days as at 31 March 2013 (March 2012: 39 days). This is the highest year-end stock level to date
- Medium-term contracts were secured to close shortfalls in coal supply

- Construction of the Komati water scheme augmentation project is on track for water delivery by the end of May 2013 and well within the project budget
- Construction of Mokolo and Crocodile water augmentation project phase 1 is progressing well, with partial water delivery expected by end May 2013 and full water delivery by June 2014
- Eskom's Water Conservation and Water Demand Management Awareness campaign launched during National Water Week
- Feasibility studies have commenced for the Kriel-Matla Mine Water Reclamation project

Operating challenges

- Achieving contractual performance on coal-supply agreements remains a challenge, as does consistently supplying some power stations with coal of acceptable quality
- Eskom needs to purchase more expensive coal from the short-/medium-term market due to poor volume performance at five of the six cost-plus mines
- A number of coal mines contracted to Eskom are still awaiting approval of their integrated water use licences from the Department of Water Affairs
- The target for water transfers was not achieved due to the unavailability of infrastructure and low plant reliability on the water schemes
- Eskom experienced poor security of diesel and fuel oil supply



Securing Eskom's coal requirements

Primary energy balances – coal (R million)

	Actual 2012/13	Actual 2011/12	Actual 2010/11
Coal inventory balance	5 330	3 798	3 709
Future fuel balance (coal portion)	7 098	5 020	3 703

For further detail on primary energy costs for the year, refer to page 100.

Key performance indicators for securing Eskom's coal requirements

Indicator and unit	Actual 2012/13	Actual 2011/12	Actual 2010/11
Coal burnt, Mt	122.95	125.21	124.68
Coal purchased, Mt	126.44	124.27	126.23
Coal stock days	46	39	41

During the past year Eskom revised its Coal Supply Strategy and developed an implementation plan to ensure the successful execution of the strategy. The Coal Supply Strategy approved by the board in 2012 is aligned to Eskom's strategic imperatives.

The Coal Supply Strategy has been developed with the knowledge that Eskom is facing an uncontracted demand for coal of up to 2 100Mt through to 2051 and considers the changing coal supply landscape, the consolidation of the supplier market into four main suppliers, the export of Eskom grade coal to China and India, the above-inflation cost increases in the mining industry and the lack of new coal mining projects being developed. Given these variables, Eskom has identified strategies to counter potential coal supply shortfalls and to meet both government and Eskom's transformation objectives. The Coal Supply Strategy encompasses the following five elements:

- Progress coal supply from the Waterberg
- Drive policy changes for the dedication of coal resources for power generation in Mpumalanga

- Pursue new technologies for coal beneficiation such as briquetting and blending
- Develop black-owned emerging coal and limestone miners to secure available resources, increase competition and transform the supply chain
- Set up the basis of engagement for the coal and limestone portfolio of a State Owned Mining Company

Eskom is implementing a set of actions to facilitate the implementation of the Coal Supply Strategy, the key elements of which are the following:

- The creation of a mine development fund to advance black emerging coal and limestone mining projects
- Identify and contract with emerging miners
- Conclude a full scale combustion test at Majuba power station with coal from the Waterberg
- Conclude a contract with Transnet for transformation of Waterberg coal to Mpumalanga
- Conclude a water supply agreement with the Department of Water Affairs for water supply to the Waterberg area

The actual quantities of coal burnt and purchased in 2012/13 are lower than target primarily due to the energy sent out being below target.

The amount of coal procured from Eskom's tied collieries has been below committed levels. This decline in production increases the unit cost of coal procured and results in more medium-term coal having to be procured at an increased cost to address the shortfall.

Eskom is progressing on securing coal and limestone supply agreements to Kusile power station. There are currently two contracts in place and additional contracts will be secured during 2013/14.

Securing Eskom's future resource requirements *continued*

Eskom held discussions on coal security with several government departments, including the Department of Mineral Resources, Department of Public Enterprises, Department of Energy and the National Planning Commission during the course of 2012/13. A draft bill to amend the Mineral and Petroleum Resource Development Act has been issued. This bill takes some of the outcomes of the above discussions into consideration.

Securing Eskom's water requirements

During 2012/13, Eskom contributed to the second draft of the National Water Resources Strategy. The aim of this involvement was to secure Eskom's future water supplies. Eskom has also worked 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.

Key performance indicators for securing Eskom's water requirements

Indicator and unit	Actual 2012/13	Actual 2011/12	Actual 2010/11
Water usage, megalitres (ML)	334 275	319 772	327 252

Strategy for the Waterberg coalfields

The largely untapped Waterberg coalfields lie in the Limpopo province, 600km north-west of Mpumalanga, where most of Eskom's coal-fired power stations are based. This area does not have many water reserves, which are necessary for mining coal, and the existing rail infrastructure is not capable of meeting the needs of Eskom or the export coal industry.

Eskom is working closely with Transnet Freight Rail and the Department of Water Affairs to develop funding models for the rail and water infrastructure that is required to tap these resources. Eskom is also in discussions with mining suppliers for long-term coal-supply contracts, and is considering a second phase of the water-augmentation project to ensure timely availability of water.

If the project proceeds as envisioned, rail imports to Mpumalanga from the Waterberg coalfields could begin in 2019.

Securing Eskom's nuclear fuel requirements

The current uranium and enriched uranium contracts are sufficient to satisfy Koeberg's demand until 2017.

The current fuel-fabrication contracts cover the period up to 2015/16.



Palmiet pumped-storage scheme in the Western Cape is a joint venture between the Department of Water Affairs and Eskom, transferring water between the Palmiet and Steenbras Rivers for delivery to Cape Town

Primary energy balances – nuclear (R million)

	Actual 2012/13	Actual 2011/12	Actual 2010/11
Nuclear fuel (inventory balance)	856	1 217	1 029
Future fuel balance (nuclear portion)	1 023	432	386

Future focus areas for securing Eskom’s future resource requirements
Securing Eskom’s coal requirements

- Implement ISO 14001 (environmental management) and OHSAS 18001 (occupational health and safety) standards for certification
- Optimise stockyard operations
- Complete testing for beneficiation (purification), which may provide a solution to some of the coal-quality challenges

Eskom’s water requirements

- Conclude the second phase of the Mokolo and Crocodile Water (West) Augmentation project’s water-supply agreement with the Department of Water Affairs to ensure water security to the Lephalale area in the Limpopo province
- Work closely with bulk water suppliers to improve the health of bulk water-supply infrastructure to ensure annual inter-basin and water transfers
- Roll out the water-conservation project and the water-demand management campaign
- Diversify Eskom’s water mix through the use of treated effluent and waste water such as excess mine water from coal mines
- Develop and implement Eskom’s long-term water infrastructure and resources plan



Construction of the new Komati water scheme

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

Eskom is in the process of revising its Integrated Logistics Strategy. Central to the strategy is a migration from road-to-rail for coal as well as biomass and limestone transportation to power stations. Eskom is also investigating ways in which any economic impact to road transporters as a result of the migration from road-to-rail and their employees can be mitigated (Road Change-over strategy).

In 2009, the board approved the Long Term Coal Logistics Strategy, since then a number of other initiatives have gained impetus:

- A pilot project to investigate the use of biomass as a primary energy resource for Eskom's power stations was initiated
- The use of sorbents in Flue Gas Desulphurisation (FGD) plants at power stations is being implemented
- An Emerging Mining Strategy is in development
- The Waterberg Integrated Strategy has been approved by the board

The current transportation situation is not improving as coal sources in close proximity to the power stations are either being depleted or cannot be extracted due to difficult mining methods or environmental constraints, hence coal is procured from sources that are far from the power stations and this coal is being delivered by road. Eskom is also developing and Emerging Mining Strategy, which will assist the smaller miners with opening mines and establishing a proper transformation infrastructure.

In addition, the procurement of limestone for the use in FGD plants, and biomass in

the future, will require more resources to be transported to the power stations. Some of these resources are situated across the South African border extending the haulage routes considerably. To this end, Eskom is currently reviewing its Long Term Coal Logistics Strategy. The updated strategy consists of two parts namely, the Integrated Logistics Strategy and the Road Transport Change-over strategy.

Eskom's road-to-rail migration strategy is being implemented with the cooperation of Transnet Freight Rail. Eskom has already built containerised coal terminals at Camden and Tutuka power plants.

The Majuba heavy-haul line will have enough capacity to transport 14 million tons of coal from Ermelo to Majuba power station each year. Approval in terms of the Public Finance Management Act to proceed with this part of the project was granted in December 2012 and the civil construction contract was placed during February 2013. Site establishment commenced during March 2013.

Strikes in the road-freight and colliery industries are already putting Eskom's coal supplies at risk. These issues have to be addressed sensitively, and in good time.



Operating highlights

- Safety performance on the coal heavy-haulage road network has improved, with a 31% decrease in year-on-year public fatalities
- The Tutuka coal terminal is now operational. Rail deliveries are ramping up
- The fleet size for coal road transport has been optimised

Operating challenges

- Both Eskom and Transnet are experiencing operational challenges regarding the rail transport of coal
- Extended strikes in the transport and mining industry affected the coal-supply value chain

from operational performance and safety perspectives

- Removing coal trucks from the road has been a difficult transition to manage

Migrating coal transport from road-to-rail

Eskom failed to meet its target of transporting 12.2 million tons by rail in 2012/13 due to a delay in appointing the operator of the Tutuka Coal Terminal and operational capacity challenges on the side of Transnet Freight Rail. Instead, only 10.1 million tons of coal was transported.

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

Indicator and unit	Cumulative five-year target to 2017/18	Compact target 2012/13	Actual 2012/13	Actual 2011/12	Actual 2010/11
Coal haulage (road-to-rail), Mt	78.6	12.2	10.1	8.5	7.1

Future focus areas for implementing coal haulage and the road-to-rail migration plan

- Ramp up existing rail operations to increase coal deliveries by rail to 11.5 million tons in 2013/14
- Co-develop an integrated rail network in Mpumalanga to increase coal-supply flexibility to the power stations
- Build the private Majuba heavy-haul line between Ermelo and Majuba power station
- Build a coal terminal at Grootvlei and commence operations in the next two years



The Majuba Rail project entails the construction of a 68km heavy haul railway line from Ermelo to Majuba power station in Amersfoort

Pursuing private-sector participation

Eskom acts as a catalyst for independent power producers (IPPs) to participate in South Africa's electricity industry, so enhancing South Africa's security of electricity supply.

Operating highlights

- Eskom signed power-purchase agreements with IPPs for the first tranche of the Department of Energy's renewable energy IPP programme
- Eskom approved 4 753MW of IPPs (including the renewable energy IPP programme)

Operating challenges

- The deadlines for connecting IPPs to the grid are exceptionally tight

Purchasing and installing IPP capacity

Eskom's performance regarding private-sector participation is assessed in terms of IPP capacity installed, and energy purchased from existing IPPs and municipalities.

Key performance indicator for pursuing private-sector participation

Indicator and unit	Target 2017/18	Actual 2012/13	Actual 2011/12	Actual 2010/11
IPP installed capacity, GW	4.7	1.1	1.0	0.9

IPP and municipal purchases (MW)

	Actual 2012/13	Actual 2011/12	Actual 2010/11
Short- to medium-term contracts	482	493	373
Municipal generation ¹	585	515	515
Wholesale electricity pricing system	68	–	–
Total	1 135	1 008	888

1. Municipal generation relates to purchases from City Power (Kelvin power station in Gauteng) and the City of Tshwane (Rooiwal and Pretoria West power stations).



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. 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.

By 31 March 2013, Eskom had signed power purchase agreements with IPPs for a total generating capacity of 2 664MW. Eskom's board had approved an additional 2 089MW, bringing the total approved IPP generating capacity up to 4 753MW (including the Department of Energy's renewable energy IPP procurement programme).

Eskom purchased 1 135MW of generating capacity and 3 516GWh of power from IPPs in 2012/13 at an average cost per unit of 83.6c/kWh. The amount paid for IPP and municipal purchases amounted to R2.9 billion (2011/12: R3.3 billion).

For more information in the IPP programmes refer to www.eskom.co.za/IR2013/025.html.

Future focus areas for pursuing private-sector participation

- Continue connecting IPPs to the grid
- Ensure that the contract management requirements for IPPs as required by the electricity regulations on new generation capacity are fully implemented



Wind energy is one of the options for independent power producers

Transformation

Eskom is aligned to the government's development and workplace transformation goals. In particular, it ensures that its suppliers and contractors for the capacity expansion programme are, as far as possible, local and black-owned, with particular preference for black women-owned businesses. The contracts Eskom puts in place with its larger suppliers and contractors also usually require that these companies commit to skills development.

Eskom's supplier-localisation drive is complemented by its corporate social investment, which aims to improve society at large through targeted direct investments into community education, health and developmental projects. These corporate social investments are managed by the Eskom Development Foundation NPC (the Foundation). Eskom also has a rigorous internal transformation policy to ensure workplace equity.

Eskom's most direct and widespread contribution to social improvement is in rolling out the government's universal electrification programme.

Operating highlights

- Eskom's transformation framework and five-year delivery plan was developed in 2012/13. This focuses on creating a balanced workforce in line with the economically active population of the country and developing a skilled and competent workforce

- Committed local-content expenditure in the capacity expansion programme increased from 77.2% in 2011/12 to 80.2% in 2012/13, exceeding the target of 52%
- B-BBEE expenditure of 86.3% for the company exceeded the target of 70% for 2012/13
- 144 558 homes were electrified during 2012/13
- During the year the Foundation approved funding for 343 projects valued at R194.3 million with 652 347 project beneficiaries

Operating challenges

- Eskom's relationship with organised labour has been strained
- The number of women suitably qualified for technical and leadership roles is limited
- Expenditure on businesses owned by black women, black youth and people living with disabilities was below target for all three groups



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 for Eskom's socio-economic contribution

Indicator and unit	Target 2017/18	Compact target 2012/13	Actual 2012/13	Actual 2011/12	Actual 2010/11
Corporate social investment, (committed) R million	–	–	194.3	87.9	62.3
Total electrification connections, number ¹	579 000	–	144 558	155 213	149 914
Job creation due to capacity expansion ²	42 845	–	35 759	28 616	21 477
Local content in all capacity expansion contracts, %	65	52.0	80.2	77.2	79.7
B-BBEE attributable spend (company), % of total measured procurement spend	90.0	70.0	86.3	73.2	52.3
Procurement from black-owned entities (company), % of total measured procurement spend	20.0	–	22.1	14.6	–
Procurement from black women-owned entities (company), % of total measured procurement spend	35.0	–	4.7	3.3	4.3

1. Cumulative target for the five-year period from 2013/14 to 2017/18.

2. Target is for 2015/16 as no target is available for 2017/18.

Corporate social investment

The Foundation is the vehicle through which Eskom's corporate social investment initiatives are implemented. It is funded solely by Eskom, with a mandate to contribute to improving the quality of life in communities where Eskom operates. The Foundation focuses on initiatives to develop small- and medium-sized enterprises, education, health, food security, community development, energy and the environment.

In 2012/13 the Foundation, amongst other initiatives:

- held the 14th annual business opportunities and franchise expo
- ran the fifth annual business investment competition
- approved funding for paediatric mobile clinics
- approved funding for the Eskom Contractor Academy programme

Of the 343 projects approved for funding during 2012/13, 290 related to philanthropic and welfare projects.

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

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

Eskom's capacity expansion programme directly created 7 143 new jobs in 2012/13, of which 2 146 positions were filled by workers from districts surrounding the project sites. The programme has directly created 35 759 jobs since its inception in 2005, 45% (16 100 jobs) of which were filled by local workers.

In 2012/13, 1 398 people were identified for skills development, bringing the total number of people identified for skills training through the

Transformation *continued*

programme since 2005 to 8 624. Of this, 2 763 are still undergoing training and 6 851 have completed their training at various sites across the country.

Overall procurement expenditure on B-BBEE

The Eskom group's total procurement expenditure for 2012/13 was R133.5 billion, including primary energy. Total measured procurement expenditure was R116.9 billion, of which 82.1% (company: 86.3%) was attributable to B-BBEE, exceeding the target of 70%.

Black women-owned businesses accounted for 4.7% of the total measured procurement spend, falling short of the target. Strategies are being developed to improve procurement from black-owned businesses, with a particular focus on businesses owned by black women, black youth and people living with disabilities.

Electrification

More than 4.3 million households have been electrified by Eskom within its supply area since 1991, when the electrification programme

started. Municipalities are responsible for electrifying households within their licensed supply areas.

Meeting universal access to electricity targets depends on the availability of funding via the integrated national electrification programme.

The electrification of schools is funded by the Department of Basic Education through the Accelerated Schools Infrastructure Delivery Initiative. The electrification of clinics is funded by the Department of Energy through the National Electrification Fund. The investment and connections targets for electrifying schools and clinics due in 2012/13 were not met due to delays in concluding agreements with farmers for the supply to schools on farmland, way leave matters and the fact that, some schools consisted of mud structures that cannot be electrified for safety reasons. Other schools had either been structurally vandalised or closed down.

Electrification of grid schools and clinics

	Unit of measure	Actual 2012/13	Actual 2011/12	Actual 2010/11
Capital investment	Rm	36	2	158
Total connections	number	142	19	854

Improving internal transformation

Eskom's internal transformation performance is measured in terms of the key performance areas shown in the following table.

Key performance indicators for internal transformation

Indicator and unit	Target 2017/18	Actual 2012/13	Actual 2011/12	Actual 2010/11
People living with disabilities (group), %	3.00	2.43	2.36	2.36
Racial equity in senior management (company), % of black employees	74.00	58.32	53.90	52.52
Racial equity in professionals and middle management (company), % of black employees	79.00	69.57	65.69	64.05
Gender equity in senior management (company), % of female employees	38.00	28.21	24.31	23.51
Gender equity in professionals and middle management, % of female employees	42.00	34.60	32.43	31.56

Employment equity and people with disabilities

The Eskom group employs 46 266 people. Eskom implemented an employment-equity plan, Equity 2020, to create a workplace and workforce profile that is diverse and inclusive, and to ensure that diversity becomes the "Eskom way".

The Eskom group currently has 1 137 employees with recognised disabilities (2011/12: 1 032). Although the actual disability percentage of 2.43% is below the target, it is well above the national norm of 0.7%, as prescribed in the Employment Equity Commission's report of 2009, and the government's target of 2% for the public service.

Future focus areas for transformation

- Improve relationships with employees and organised labour
- Focus on employment equity initiatives
- Implement strategies to increase procurement contracts with businesses owned by black women, black youth and people living with disabilities
- Design a supplier development and localisation data management system
- Monitor suppliers' skills-development and job-creation initiatives more closely to ensure that targets are met

Ensuring Eskom's financial sustainability

Eskom's financial sustainability relies on being able to balance its revenue with its financial outputs in a way that allows for sustainable growth. This will allow the company to meet its mandate of supplying the country with a reliable electricity supply.

Eskom obtains its revenue from its sales, which are affected by a range of factors, including South Africa's economic growth rate and the electricity tariff, which is regulated by NERSA.

Eskom is currently eight years into a capacity expansion programme, requiring considerable capital outlay. This capital is sourced from various local and international funding sources and relies on Eskom's credit rating, which is linked to South Africa's sovereign rating. Eskom aspires to achieve cost reflective tariffs which in turn will lead to a standalone investment-grade rating. This would allow Eskom to obtain funding for its capacity expansion programme at preferential rates. However, the reduced tariff for MYPD 3 has significantly delayed this goal. Eskom's credit rating will be linked to the sovereign for the foreseeable future.

Operating highlights

- 82.9% of the R300 billion funding plan, which was developed before the MYPD 3 determination had been secured. Of this, R40.5 billion was drawn down during 2012/13

- Introduced inflation-linked bonds, which were well received by investors
- Eskom's treasury economics team came second in the Thompson Reuters ranking
- Group Finance received ISO 9001 certification
- Legislation that exempts integrated national electrification programme (INEP) grants from tax was promulgated on 1 February 2013 and will apply to the 2014 financial year. The total grant for the 2013/14 financial year is R2.1 billion

Operating challenges

- The 8% tariff increase awarded by NERSA and its effect on Eskom's financial sustainability
- The increasing number of defaulting municipalities may have cash-flow implications for Eskom
- Managing the outstanding residential and Soweto arrear debt remains a challenge
- The three main rating agencies downgraded Eskom's credit rating



The Ingula pumped-storage scheme is the new peaking station in the new build programme



Performance indicators for ensuring Eskom's financial sustainability

Indicator and unit	Target 2017/18	Compact target 2012/13	Actual 2012/13	Actual 2011/12	Actual 2010/11
Electricity revenue per kWh (including environmental levy), c/kWh	120.47	–	58.49	50.27	40.27
Electricity operating cost per kWh (including depreciation), c/kWh	82.51	–	54.15	41.28	32.78
Interest cover ratio (company)	3.04	0.72	0.27²	3.27	1.40
Debt/equity ratio (including long-term provisions), (company) ratio	1.58	2.10	1.96	1.69	1.66
Working capital ratio	1.43	–	0.68	0.76	0.85
Free funds from operations, R million	101 430	–	18 110	30 483	16 953
Free funds from operations as percentage of total debt %	27.30	8.00	8.04	15.15	9.51
Gross debt/earnings before interest, taxes, depreciation and amortisation, ratio	3.00	–	16.16	6.46	7.55
Debt service ratio	1.80	–	2.01	3.50	1.90

1. Financial group targets for 2017/18 are not available, so the Eskom company targets for 2017/18 have been presented.

2. The interest cover ratio includes the unwinding of interest, but excludes the impact of the remeasurement of the government loan of R17.3 billion income which is based on the MYPD 3 determination.

Funding progress

Eskom remains in a solid position from a short- to medium-term funding point of view, although the credit-rating downgrades and the lower-than-requested MYPD 3 tariff award may have a negative impact on its ability to secure future funding at a reasonable cost going forward. It currently has adequate short-term liquidity reserves and, at the beginning of 2012/13, had already prefunded a portion of the year.

Eskom continues to make steady progress in finalising funding for the capacity expansion programme up to the completion of Kusile. It has largely identified sources of funding and continues to make progress in both securing and drawing down on funding facilities.

In funding the new build programme, Eskom is conscious of balancing its use of the government guarantee facility against building its own balance sheet, with the aim of reducing reliance on the state, potentially to achieve a standalone investment-grade rating. The lower-than-expected tariff increase for MYPD 3 will necessarily extend Eskom's reliance on

state support by a number of years. Eskom is reviewing a number of scenarios to determine the potential effects of a longer phase-in to a cost-reflective tariff.

Eskom continues to plan its funding activities in preparation for its IRP 2010 allocation. The magnitude of the plan's build programme will require a funding approach that supports Eskom's aim of reducing reliance on state support and potentially includes technology or equity partners for certain aspects.

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 funding (sukuk), preference share-type funding (including hybrid instruments) and project-based funding will also be explored. Eskom's current funding plan does not take allocations of capital projects in terms of the IRP 2010 post-Kusile into account.

Ensuring Eskom's financial sustainability

continued

Activities remain focused on funding the balance of requirements to the end of the committed capital expansion programme, per the approved corporate plan, plus a liquidity buffer of R20 billion. To date R249 billion of the R300 billion funding plan has been secured. For further details on the R300 billion funding plan refer to www.eskom.co.za/IR2013/026.html.

The latest projections indicate that Eskom has sufficient cash from cash on hand, investments, net operational cash flows and current secured facilities available to fund the business through to the beginning of the 2014 calendar year.

Credit rating and liquidity levels

Eskom's credit rating continues to reflect its highly leveraged financial profile, the execution risks associated with its large capacity expansion programme, and a degree of regulatory uncertainty.

Eskom continues to monitor the effects of its funding initiatives and operations on the ratios that impact on its credit rating. On 17 October 2012, Standard & Poor's downgraded Eskom's credit rating to BBB and on 1 December 2012 Moody's downgraded it to Baa3, both with a negative outlook. On 11 January 2013, Fitch downgraded Eskom's local currency rating to BBB+ after downgrading South Africa's sovereign rating. Fitch has, however, revised its outlook for Eskom from negative to stable.

Eskom's credit rating with credit rating agencies

Rating	Standard & Poor's	Moody's	Fitch	
			Local currency	National scale
Foreign currency	BBB	Baa3	–	AA+
Local currency	BBB	Baa3	BBB+	F1+
Standalone	B	Ba3	None	None
Outlook	Negative	Negative	Stable	Stable



Eskom's Operation Khanyisa campaign addresses electricity theft and non-payment

Concerns raised by rating agencies about Eskom's ability to finance the current capacity expansion programme and meet the requirements set out in the IRP 2010 without a cost-reflective tariff were previously mitigated by the government's strong support as shareholder. The lower-than-expected MYPD 3 tariff ruling will delay Eskom achieving a cost-reflective tariff. Consequently, and notwithstanding cuts to Eskom's capital and operating cost budgets, the company will need to raise significant additional funding to support the shortfall created by the new tariff award. The lower tariff award may also negatively affect credit rating agencies' views of Eskom.

Any further downgrades of the sovereign could result in Eskom's credit profile deteriorating. If downgraded, Eskom's risks would include further delays in achieving a cost-reflective tariff and a reduction in Eskom's ability to maintain adequate liquidity levels. If Eskom's credit ratings deteriorate to sub-investment grade, it could trigger termination payments on certain loans, which would result in a substantial increase in Eskom's debt obligations, limit Eskom's funding and hedging options, and result in increased cost.

If unmitigated, other risk factors affecting Eskom's ability to raise capital at a reasonable cost include:

- The depreciation of the rand, which would increase the cost of imported equipment, affecting the rand value and cost of foreign loans
- Significant increases in environmental taxation, including carbon taxes, which are not recoverable from Eskom's customers
- Non-payment for electricity as a result of increased electricity tariffs
- Inappropriate cash liquidity levels
- Regulatory uncertainty

- Power-system crises that might result in a loss of investor confidence
- Continued repercussions from the global financial crisis could also negatively affect Eskom's ability to raise capital, especially if governmental support for such capital-raising is withdrawn

These risks are closely monitored and action plans to address them are constantly being revised.

Bond issuance

Eskom planned to raise R9 billion with issuance of domestic debt off the listed domestic medium-term note programme in 2012/13. Due to the favourable market conditions and investor appetite, Eskom raised R11.9 billion.

To further diversify and complement its domestic funding instruments, Eskom created two new inflation-linked bonds, the EL28 and the EL29, each with an issue size of R3 billion in 2012/13. The final maturity value, based on an average inflation of 6% over the period, will result in a projected capital redemption amount of approximately R8 billion each. These bond listings proved to be very successful, with issue spreads of between 20 and 31 basis points over the government benchmark bonds during the auction period.

Eskom continues to favour domestic market borrowing due to lower cost and longer tenor relative to foreign debt, including the new long-dated fixed coupon interest bonds, which will mature in 2037, 2043 and 2048. Current indications are that demand in the inflation-linked bond market will continue to support Eskom's funding activities.

Ensuring Eskom's financial sustainability

continued

Results of operations

Eskom achieved a group net profit of R5.2 billion for 2012/13 (2011/12: R13.2 billion). Operating profit before fair value gains and losses on embedded derivatives and net finance costs was R9.9 billion (2011/12: R22.0 billion). Compared to 2011/12, the 16% tariff increase resulted in a 16.4% average increase in electricity revenue per kilowatt-hour. This increase was offset by a 31.2% increase in operating costs per kWh compared to the previous year.

Sales and revenue

Group revenue for 2012/13 was R128.9 billion (2011/12: R114.8 billion). Electricity sales for the year amounted to 216 561GWh, representing a 3.7% decrease on the previous year (2011/12: 224 785GWh). The decrease is attributed to the effect of lower demand for electricity, demand-response initiatives including power buybacks, industrial action at large customers in the mining sector and major customer breakdowns. These were offset by higher-than-anticipated sales to international customers.

Operating costs

Primary energy costs for the year amounted to R60.7 billion (2011/12: R46.3 billion). Per unit, primary energy costs increased by 36.1% per unit of electricity sold, from 20.6c/kWh in 2011/12 to 28.1c/kWh in 2012/13. The 7.5c/kWh increase is mainly due to:

- Coal usage costs going up by 3.9c/kWh (52.7% of the increase)
- The cost of using open-cycle gas turbines going up by 1.6c/kWh (21.6% of the increase)
- The environmental levy increasing by 1c/kWh to 3.5c/kWh from 1 July 2012 (12.2% of the increase)
- Demand-market participation, power buyback and co-generation costs increased by 0.5c/kWh (6.8% of the increase)

- Other expenditure including coal handling, fuel for gas-fired start-ups, water usage and international purchases made up the remaining 6.7% of the increase

Group employee numbers increased by 2 793 from 43 473 to 46 266 during the year. Group gross employee costs (before capitalisation) for the year amounted to R28.7 billion (2011/12: R24.4 billion).

Group arrear bad debt was 0.81% of external revenue for the year (2011/12: 0.53%). The residential debt in Soweto continues to grow. Electricity debtors (before impairment provision) increased from R14.6 billion at 31 March 2012 to R16.7 billion at 31 March 2013. The allowance for impairment for trade and other receivables increased by R1.0 billion, from R3.3 billion in 2011/12 to R4.3 billion in 2012/13.

The group's other operating expenses for the year came to R23.1 billion (2011/12: R15.3 billion). These consist primarily of integrated demand-management costs, and repairs and maintenance. Integrated demand management cost Eskom R3.0 billion in 2012/13 (2011/12: R1.5 billion), while the group's gross repairs and maintenance cost R18.4 billion (2011/12: R12.0 billion).

Net fair value on financial instruments and embedded derivatives

The net fair value loss on financial instruments, excluding embedded derivatives, was R1.7 billion for the year (2011/12: R2.4 billion). These 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 special pricing agreements) was a fair value loss of R5.9 billion for the year (2011/12: R0.3 billion gain). Embedded derivative liabilities amounted to R11.5 billion (2011/12: R5.5 billion).

Eskom submitted an application to NERSA to review the last remaining special pricing agreement it has, with the aluminium smelters in KwaZulu-Natal, in October 2012. Ultimately, Eskom would like to renegotiate this deal at a rate that is close to cost-reflectivity.

Finance costs

After capitalising borrowing costs and including the unwinding of interest on provisions, the net finance income for the group for 2012/13 was R3.0 billion (2011/12: R4.0 billion cost). Gross finance income was R2.8 billion (2011/12: R3.5 billion) while the gross finance cost was R18.4 billion (2011/12: R16.0 billion) before the impact of remeasuring the government loan, amounting to an income, before capitalisation of R17.3 billion (2011/12: R5.5 billion). The remeasurement of the government loan is based on the new MYPD 3 price path. The borrowing costs capitalised for the year was R3.7 billion (2011/12: R5.0 billion), while the unwinding of interest amounted to R2.4 billion (2011/12: R2.0 billion).

For details on the capital expenditures incurred for the year refer to the table on page 77.

Liquidity resources

The group's cash and cash equivalents decreased from R19.4 billion at 31 March 2012 to R10.6 billion at 31 March 2013. Cash and cash equivalents, together with liquid investment in securities, amounted to R28.0 billion as at 31 March 2013 (31 March 2012: R40.5 billion).

The group's net cash inflow from operating activities for 2012/13 was R27.7 billion (2011/12: R38.5 billion). The group's working-capital ratio was 0.68, compared to 0.76 as at 31 March 2012.

Cash flows used for investing during the year stood at R58.4 billion (2011/12: R60.0 billion). The capital-expenditure cash flows included in this item, excluding capitalised interest, amounted to R57.9 billion (2011/12: R59.5 billion).

The net cash inflows from financing activities for the year were R21.8 billion (2011/12: R28.7 billion). The raising of borrowings and the issuing of securities has been managed to match the reduced capital expenditure. The debt-to-equity ratio for the group (including long-term provisions) was 1.84 as at 31 March 2013 (2011/12: 1.57). The free funds from operations as a percentage of gross debt was 8.04% for the group at 31 March 2013 (2011/12: 15.15%) while the gross debt as a percentage of earnings before interest, tax, depreciation and amortisation was 16.16% (2011/12: 6.46%).

Future focus areas for ensuring Eskom's financial sustainability

- Re-engineer the business to adapt to the limits imposed by the 8% annual average tariff increase that the NERSA granted for the next five years
- Maintain funding momentum for the capacity expansion programme
- Use alternative funding solutions for future Eskom initiatives
- Continue renegotiating the remaining special price agreement

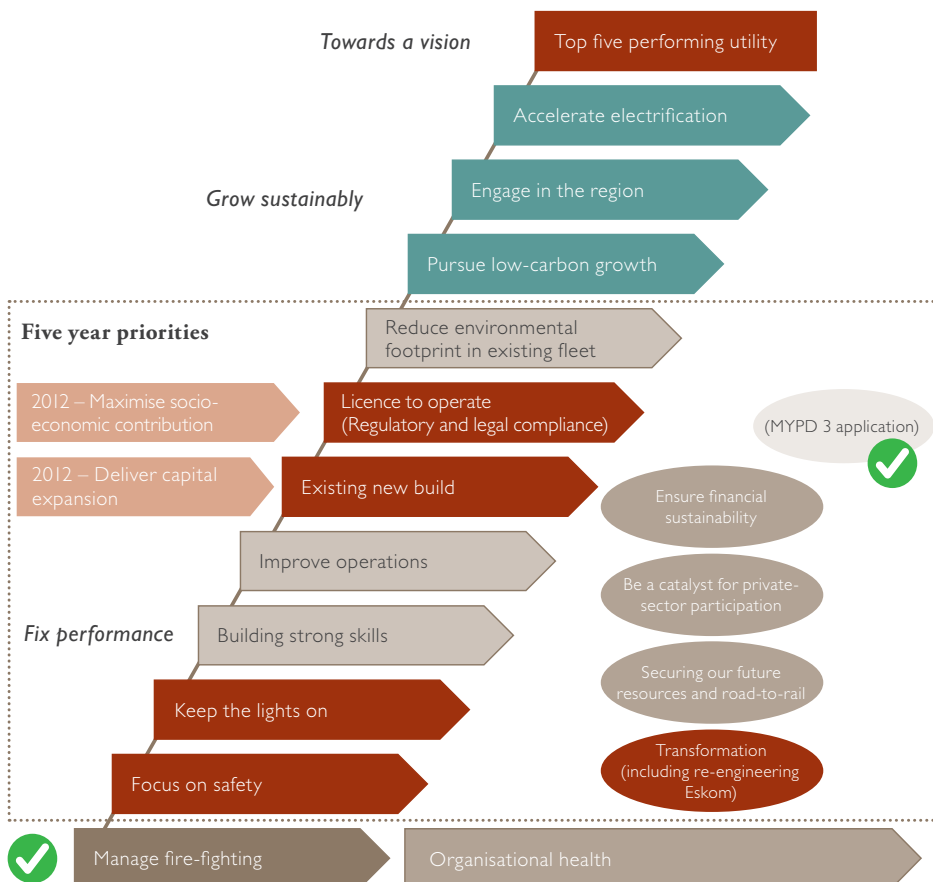


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Future priorities

Future priorities

Eskom's board-approved priorities for 2013/14 to 2017/18 are set out in the diagram below. Those highlighted in red are priorities that Eskom will focus on in 2013/14.



Future priorities *continued*

Eskom will focus on five areas in 2013/14 that require step changes to shift performance and grow sustainably. These focus areas are:

Safety. Eskom must exhibit a safety culture driven by leadership and individual behaviour.

The Integrated Delivery Programme. Eskom is determining how to best use the revenue allowed to it by the MYPD 3 decision. This will involve reconsidering how Eskom operates and its ability to keep the lights on. The possibility of re-engineering the business will be considered and policy implications of such measures will be evaluated in collaboration with the shareholder.

To focus the business on these challenges, the board and the Executive Management committee have established an Integrated Delivery Programme under the leadership of the chief executive. The programme focuses on three areas:

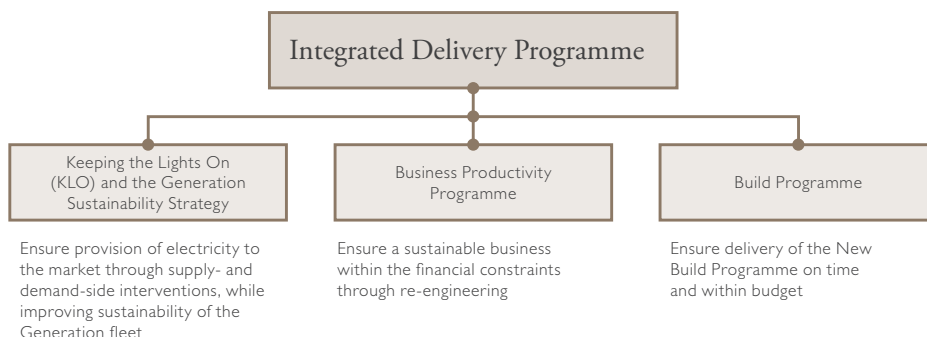
- Keeping the Lights On and the Generation Sustainability Strategy to be lead by the divisional executive responsible for the Office of the Chief Executive
- Business Productivity Programme lead by the divisional executive, Primary Energy
- Build programme led by the group executive, Group Capital

Keeping the lights on. Eskom needs to create a sustainable Generation business, bring back predictability to the performance of the Generation fleet and minimise the economic and societal impact through a predictable response to balancing supply and demand. To this end the Generation Sustainability Strategy has been developed to create a sustainable Generation business and to manage the balance between supply and demand. The plan includes a maintenance strategy based on an 80:10:10 principle discussed on page 66.

NERSA, in its MYPD 3 pronouncement on the IDM submission, reduced the IDM funding to 40% of the applied value, but kept the MW savings at 85% of the submitted savings target. Eskom views this as a significant risk and will engage NERSA to re-adjust the targets to an acceptable R/MW ratio that is realistically aligned to the approved funding, thereby ensuring sustainability of the programme and continued market uptake.

Eskom aims to return to philosophy based maintenance to ensure the sustainability of its assets. Eskom has to do this while dealing with immediate constraints to meet emissions requirements and the longer term

The Integrated Delivery Programme structure



requirements to meet air quality legislation. It may be necessary to do additional work to extend the life of the current fleet.

Eskom is signing short-term generation contracts with IPPs within and outside South Africa, increasing the use of the open-cycle gas turbines, enhancing generation performance, improving coal quality and giving IPPs access to the transmission grid.

Build programme. This addresses the focus on delivering the current capacity expansion programme to the completion of Medupi, Kusile and Ingula power stations.

Business Productivity programme. Ensure a sustainable business within the financial constraints through re-engineering.

Transformation. In 2013/14 Eskom will focus on:

- Building a balanced workforce that is adequately skilled to deliver on current and future organisational objectives
- Skills development, increasing local content, industrialisation, job creation and supplier development to accommodate government local development initiatives and policies

- Contributing to improving the quality of life in communities where the company operates

Sustainable business development opportunities

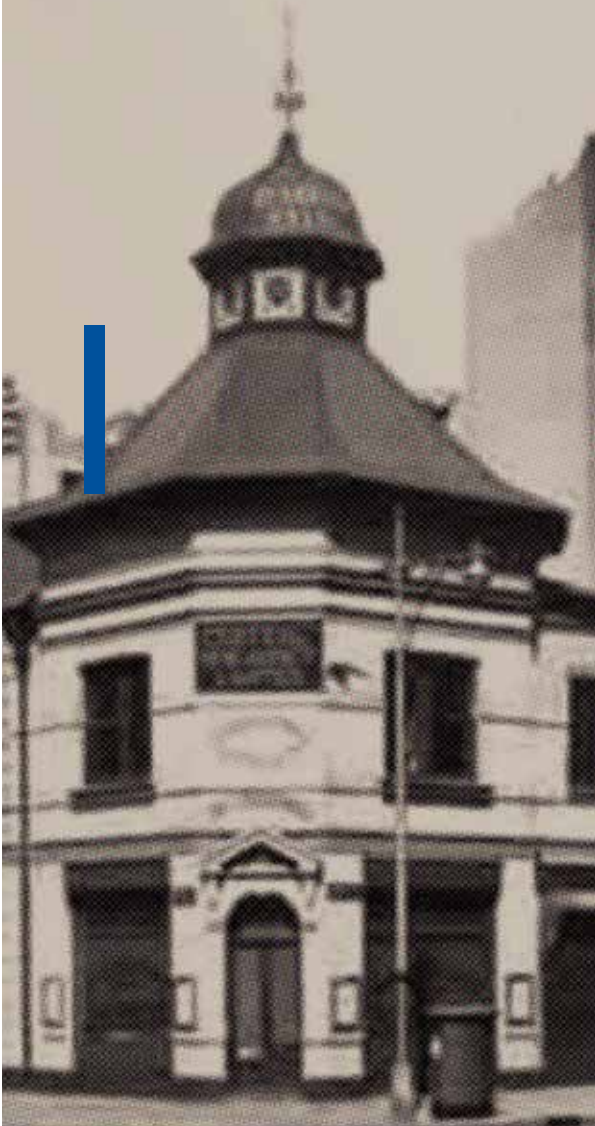
Eskom has identified the following opportunities for business growth:

- **Regional growth.** There are 200 million people in the southern African region. Significant unmet demand and strong participation in economic growth around access to resources, addressing climate change and enhancing regional infrastructure present opportunities for Eskom to enter into strategic partnerships with other role players looking to establish a regional presence
- **Its ability to influence structure and regulation** of the electricity supply industry
- **Its ability to collaborate with the government** on developmental and infrastructural plans
- **Its power to stimulate economic growth** through the supplier development and localisation programme
- **Its ability to develop pipelines of skilled people** by focusing on youth employment



Safety is a major concern in the Eskom business

1923-2013



*Summarised
group annual
financial
statements*

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The summarised group annual financial statements have been prepared under the supervision of the finance director, PS O'Flaherty CA(SA). The financial statements, that these financials summarise, were audited in compliance with section 30 of the Companies Act.

The audited financial statements of the group and Eskom as at and for the year ended 31 March 2013 are available for inspection at the company's registered office and on the Eskom website at www.eskom.co.za. These summarised group annual financial statements have been released on 10 July 2013.

Approval of the summarised group annual financial statements

The summarised group annual financial statements from page 110 to page 122 for the year ended 31 March 2013 have been extracted from the audited financial statements and prepared in accordance with the recognition and measurement requirements of International Financial Reporting Standards (IFRS), the presentation and disclosure requirements of IAS 34 *Interim financial reporting*, and in the manner required by the Companies Act of South Africa, 71 of 2008. In the opinion of the directors, based on the information available to date, the summarised group annual financial statements fairly present the financial position of the group at 31 March 2013 and the results of the operations and cash flow information for the year then ended. The summarised group annual financial statements have been approved by the board of directors and signed on its behalf by:



Zola Tsotsi
Chairman

30 May 2013



BA Dames
Chief executive

30 May 2013



PS O'Flaherty
Finance director

30 May 2013

Independent auditors' report on the summarised financial statements

The accompanying summarised group financial statements, which comprise the summarised statement of financial position at 31 March 2013, and the related summarised income statement and summarised statements of comprehensive income, changes in equity and cash flows for the year then ended and related notes, are derived from the audited group financial statements of Eskom Holdings SOC Limited for the year ended 31 March 2013. We expressed an unmodified opinion on those financial statements in our auditors' report dated 30 May 2013.

The summarised group financial statements do not contain all the disclosures required by International Financial Reporting Standards and the requirements of the Companies Act of South Africa as applied in the preparation of the audited group financial statements of Eskom Holdings SOC Limited. Reading the summarised group financial statements, therefore, is not a substitute for reading the audited group financial statements of Eskom Holdings SOC Limited.

Directors' responsibility for the summarised group annual financial statements

The board of directors is responsible for the preparation of the summary of the audited group financial statements on the basis described in note 2.

Auditors' responsibility

Our responsibility is to express an opinion on the summarised group financial statements based on our procedures, which were conducted in accordance with International Standard on Auditing 810, *Engagements to report on summary financial statements*.

Opinion

In our opinion, the summarised group financial statements derived from the audited group financial statements of Eskom Holdings SOC Limited for the year ended 31 March 2013, are consistent, in all material respects, with those financial statements, on the basis described in note 2.



KPMG Inc

Per **AH Jaffer**

Chartered Accountant (SA)

Registered auditor

Director

30 May 2013

85 Empire Road
Parktown
2193



SizweNtsalubaGobodo Inc

Per **JE Strauss**

Chartered Accountant (SA)

Registered Auditor

Director

30 May 2013

20A Morris Street East
Woodmead
2191

Summarised group statement of financial position

as at 31 March 2013

	2013 Rm	2012 Rm
Assets		
Non-current assets	378 775	318 877
Property, plant and equipment and intangible assets	344 271	292 209
Investments in equity-accounted investees	296	261
Future fuel supplies	8 121	5 452
Investment in securities	8 574	8 749
Loans receivable	8 425	7 435
Derivatives held for risk management	5 420	1 780
Other assets	3 668	2 991
Current assets	53 241	63 050
Inventories	12 251	9 930
Investment in securities	8 776	12 281
Loans receivable	114	79
Derivatives held for risk management	1 906	362
Trade and other receivables	14 925	14 313
Other assets	4 649	6 635
Cash and cash equivalents	10 620	19 450
Non-current assets held-for-sale	8	438
Total assets	432 024	382 365

	2013 Rm	2012 Rm
Equity		
Capital and reserves attributable to owner of the company	109 139	103 103
Liabilities		
Non-current liabilities	264 446	222 672
Debt securities	106 526	90 732
Borrowings	84 250	76 983
Embedded derivative liabilities	10 095	4 639
Derivatives held for risk management	840	1 273
Deferred tax liabilities	15 806	13 807
Deferred income	10 907	9 612
Employee benefit obligations	10 282	8 560
Provisions	20 087	12 740
Other liabilities	5 653	4 326
Current liabilities	58 439	56 115
Debt securities	2 517	7 170
Borrowings	9 663	7 682
Embedded derivative liabilities	1 386	900
Derivatives held for risk management	572	3 590
Employee benefit obligations	3 629	3 054
Provisions	6 648	4 078
Trade and other payables	28 999	23 487
Taxation	9	3
Other liabilities	5 016	6 151
Non-current liabilities held-for-sale	–	475
Total liabilities	322 885	279 262
Total equity and liabilities	432 024	382 365

Summarised group income statement

for the year ended 31 March 2013

	Note	2013 Rm	Restated ¹ 2012 Rm
Revenue	13	128 869	114 847
Primary energy ²		(60 748)	(46 314)
Net employee benefit expense	14	(23 599)	(20 169)
Depreciation and amortisation expense		(9 968)	(8 810)
Net impairment loss		(1 011)	(640)
Other operating expenses		(23 123)	(15 253)
Operating profit before net fair value loss and net finance income/(cost)		10 420	23 661
Other income		1 155	712
Net fair value loss on financial instruments, excluding embedded derivatives		(1 655)	(2 388)
Net fair value (loss)/gain on embedded derivatives		(5 942)	334
Operating profit before net finance income/(cost)		3 978	22 319
Net finance income/(cost)		3 027	(3 956)
Share of profit of equity-accounted investees, net of tax		35	41
Profit before tax		7 040	18 404
Income tax		(1 857)	(5 156)
Profit for the year		5 183	13 248
Attributable to:			
Owner of the company		5 183	13 248

1. Refer to note 15.

2. 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.

Summarised group statement of comprehensive income

for the year ended 31 March 2013

	2013 Rm	2012 Rm
Profit for the year	5 183	13 248
Other comprehensive income	853	2 502
Available-for-sale financial assets – net change in fair value	43	231
Cash flow hedges	1 992	3 093
Foreign currency translation differences for foreign operations	(49)	74
Net actuarial (loss)/gain on post-retirement medical aid benefits	(772)	20
Income tax on other comprehensive income	(361)	(916)
Total comprehensive income for the year	6 036	15 750
Attributable to:		
Owner of the company	6 036	15 750

Summarised group statement of changes in equity

for the year ended 31 March 2013

	2013 Rm	2012 Rm
Balance at beginning of the year	103 103	87 259
Total comprehensive income for the year	6 036	15 750
Common control transaction ¹	–	94
Balance at end of the year	109 139	103 103
Comprising		
Share capital ²	–	–
Equity reserve	30 520	30 520
Cash flow hedge reserve	2 959	1 712
Available-for-sale reserve	321	290
Unrealised fair value reserve	(3 648)	(2 251)
Insurance reserve	–	90
Foreign currency translation reserve	17	66
Accumulated profit	78 970	72 676
Total equity	109 139	103 103

1. The common control transaction arose in the prior year when the acquisition of the Pebble Bed Modular Reactor SOC Limited was considered to be a business combination between entities under common control.

2. Nominal amount.

Summarised group statement of cash flows

for the year ended 31 March 2013

	2013 Rm	Restated ¹ 2012 Rm
Cash flows from operating activities		
Cash generated from operations	28 832	38 662
Net cash flows from/(used in) financial trading assets	1 701	(1 353)
Net cash flows (used in)/from financial trading liabilities	(2 317)	1 612
Net cash flows used in current derivatives held for risk management	(331)	(280)
Net cash flows from non-current assets held-for-sale	–	42
Income taxes paid	(216)	(161)
Net cash from operating activities	27 669	38 522
Cash flows used in investing activities		
Proceeds from disposal of property, plant and equipment and intangible assets	36	351
Acquisitions of property, plant and equipment and intangible assets	(55 381)	(57 444)
Expenditure on future fuel supplies	(2 533)	(2 043)
Increase in non-current loans receivable	(990)	(1 477)
Other cash flows from investing activities	460	600
Net cash used in investing activities	(58 408)	(60 013)
Cash flows from financing activities		
Debt raised	31 120	22 308
Debt repaid	(7 149)	(5 769)
Decrease in investment in securities	5 047	17 497
Decrease in finance lease liabilities	(31)	(46)
Interest received	2 765	3 218
Interest paid	(9 968)	(8 501)
Net cash flows from non-current assets held-for-sale	–	20
Net cash from financing activities	21 784	28 727
Net (decrease)/increase in cash and cash equivalents	(8 955)	7 236
Cash and cash equivalents at beginning of the year	19 450	12 087
Cash and cash equivalents resulting from common control transaction	–	127
Cash and cash equivalents at the beginning of the year attributable to non-current assets held-for-sale	125	–
Cash and cash equivalents at end of the year	10 620	19 450

1. Refer to note 15.

Selected notes to the summarised group financial statements

for the year ended 31 March 2013

1. General information

Eskom Holdings SOC Limited, a public company and holding company of the group, is incorporated and domiciled in the Republic of South Africa. Eskom is a vertically integrated operation that generates, transmits and distributes electricity to industrial, mining, commercial, agricultural, municipalities, and residential customers and to international customers in southern Africa.

2. Basis of preparation

The summarised group financial statements of Eskom as at and for the year ended 31 March 2013 comprise the company and its subsidiaries (together referred to as the group) and the group's interest in associates and joint ventures. The summarised group financial statements do not include all of the information required for full financial statements and should be read in conjunction with the Eskom Holdings SOC Limited 31 March 2013 financial statements. The annual financial statements of the group as at and for the year ended 31 March 2013 are available for inspection at the company's registered office and on the Eskom website at www.eskom.co.za. The summarised group financial statements are prepared in accordance with the recognition and measurement requirements of International Financial Reporting Standards (IFRS), the presentation and disclosure requirements of IAS 34 *Interim financial reporting*, and in the manner required by the Companies Act of South Africa, 71 of 2008. The financial statements have been prepared on the going-concern basis.

The summarised group financial statements are prepared on the historical cost basis except for the following items which are measured at fair value:

- embedded derivative assets and liabilities
- financial instruments classified under held-for-trading
- financial instruments classified under available-for-sale
- post-retirement employment medical benefits

3. Significant accounting policies

The accounting policies applied by the group in these summarised group financial statements are consistent with those applied in the prior year. There were no new or revised standards and interpretations implemented during the year ended 31 March 2013.

4. Critical accounting estimates and judgements

Estimates and judgements are evaluated continually and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results.

The significant estimates and judgements made by management in applying the accounting policies and the key sources of estimating uncertainty were substantially the same as those applied to the financial statements as at and for the year ended 31 March 2012 except for the forward electricity price curve. The forward electricity price used to value the embedded derivatives and the government loan at 31 March 2013 is based on the MYPD 3 tariff increase of 8% for the period 2013/14 to 2017/18, whereafter a forecasted return on the regulatory assets base is used until maturity.

5. Issuances, repurchases and repayments of debt securities

The nature of the group's issuances, repurchases and repayments of debt securities are consistent with those reported previously. The details of the debt raised and repaid by the group are disclosed in the statement of cash flows.

6. Dividend paid

No dividend was paid to the shareholder during the year ended 31 March 2013 (2012: nil).

7. Segment information

Management has determined the reportable segments, as described below, based on the reports regularly provided, reviewed and used by the Executive Management committee (Exco) to make strategic decisions and assess performance of the segments.

The following summary describes the operations in each of the group's reportable segments:

Generation	Consists of the generation and primary energy functions. These functions procure primary energy and generate electricity for sale.
Transmission	Consists of the transmission grids, systems operations and the South African Energy (international buyer). These functions operate and maintain the transmission network for transmitting electricity and also sell bulk electricity to international customers.
Distribution	Distribution consists of nine provincial operating units. These units provide, operate and maintain the distribution network for distributing.
Group Customer Services	Group Customer Services consists of the customer service and integrated demand management functions and sells electricity to local key large, redistributors, large and small customers.
Group Capital	Group Capital is responsible for the planning, development and monitoring of all capital projects and the execution of capacity expansion projects.
All other segments	Relates to operating segments which are below the quantitative thresholds for determining a reportable segment in terms of IFRS 8 <i>Operating segments</i> . These include the group's subsidiaries.
Corporate and other	Relates to all service and strategic functions which do not qualify as a reportable segment in terms of IFRS 8 <i>Operating segments</i> .

Selected notes to the summarised group financial statements *continued*

for the year ended 31 March 2013

The segment information provided to Exco for the reportable segments is as follows:

	Genera- tion	Transmis- sion	Distribu- tion	Group Customer Services	Group Capital	All other segments	Corporate and other	Inter- segment transactions	Group
	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
2013									
External revenue	–	5 999	570	120 773	–	1 527	–	–	128 869
Inter-segment revenue/recovery	86 395	4 739	18 703	(109 855)	–	8 089	–	(8 071)	–
Total revenue	86 395	10 738	19 273	10 918	–	9 616	–	(8 071)	128 869
Primary energy	(52 353)	(5 011)	–	(3 105)	(279)	–	–	–	(60 748)
Net employee benefit expense	(6 302)	(1 379)	(6 119)	(1 344)	(699)	(2 823)	(4 933)	–	(23 599)
Depreciation and amortisation expense	(5 210)	(954)	(2 662)	(12)	(68)	(244)	(882)	64	(9 968)
Net impairment (loss)/reversal	(3)	–	2	(1 020)	1	11	(2)	–	(1 011)
Other operating expenses	(16 045)	(2 317)	(7 480)	(4 784)	204	(5 827)	5 516	7 610	(23 123)
Operating profit/ (loss) before net fair value gain/(loss) and net finance income/ (cost)	6 482	1 077	3 014	653	(841)	733	(301)	(397)	10 420
Other income	387	686	326	185	73	390	618	(1 510)	1 155
Net fair value (loss)/ gain on financial instruments, excluding embedded derivatives	(8)	(4)	48	(2)	(1 535)	22	(176)	–	(1 655)
Net fair value loss on embedded derivatives	–	–	–	(5 942)	–	–	–	–	(5 942)
Operating profit/ (loss) before net finance income/(cost)	6 861	1 759	3 388	(5 106)	(2 303)	1 145	141	(1 907)	3 978
Net finance income/ (loss)	3 153	569	(464)	(46)	(30)	(123)	(32)	–	3 027
Share of profit of equity-accounted investees	–	–	–	–	–	9	26	–	35
Profit/(loss) before tax	10 014	2 328	2 924	(5 152)	(2 333)	1 031	135	(1 907)	7 040
Income tax	–	–	–	–	–	(274)	(2 117)	534	(1 857)
Profit/(loss) for the year	10 014	2 328	2 924	(5 152)	(2 333)	757	(1 982)	(1 373)	5 183
Other information									
Segment assets	106 798	29 190	56 560	10 261	173 884	22 106	50 622	(17 397)	432 024
Segment liabilities	34 247	2 569	21 328	18 373	13 010	15 055	232 148	(13 845)	322 885
Capital expenditure (including borrowing costs capitalised)	15 290	6 271	9 271	18	28 157	396	2 255	(612)	61 046

7. Segment information (continued)

	Genera- tion	Transmis- sion	Distribu- tion	Group Customer Services	Group Capital	All other segments	Corporate and other	Inter- segment transactions	Group
	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
2012									
External revenue	–	4 873	354	108 260	–	1 360	–	–	114 847
Inter-segment revenue/cost recovery	72 705	7 061	21 858	(101 783)	–	6 914	123	(6 878)	–
Total revenue	72 705	11 934	22 212	6 477	–	8 274	123	(6 878)	114 847
Primary energy	(38 708)	(5 057)	–	(2 200)	(349)	–	–	–	(46 314)
Net employee benefit expense	(5 861)	(1 245)	(5 551)	(1 284)	(260)	(2 448)	(3 520)	–	(20 169)
Depreciation and amortisation expense	(4 837)	(800)	(2 215)	(17)	(115)	(233)	(698)	105	(8 810)
Net impairment (loss)/reversal	(5)	3	(5)	(587)	1	(47)	–	–	(640)
Other operating expenses	(11 162)	(2 059)	(8 518)	(1 285)	(209)	(4 981)	3 836	9 125	(15 253)
Operating profit/ (loss) before net fair value (loss)/ gain and net finance (cost)/income	12 132	2 776	5 923	1 104	(932)	565	(259)	2 352	23 661
Other income	1 456	344	277	313	132	285	467	(2 562)	712
Net fair value (loss)/ gain on financial instruments, excluding embedded derivatives	(1 814)	(73)	(16)	21	(980)	4	470	–	(2 388)
Net fair value gain on embedded derivatives	–	–	–	334	–	–	–	–	334
Operating profit/ (loss) before net finance (cost)/ income	11 774	3 047	6 184	1 772	(1 780)	854	678	(210)	22 319
Net finance (cost)/ income	(2 783)	(363)	(196)	133	(28)	(44)	(675)	–	(3 956)
Share of profit of equity-accounted investees	–	–	–	–	–	6	35	–	41
Profit/(loss) before tax	8 991	2 684	5 988	1 905	(1 808)	816	38	(210)	18 404
Income tax	–	–	–	–	–	(184)	(5 031)	59	(5 156)
Profit/(loss) for the year	8 991	2 684	5 988	1 905	(1 808)	632	(4 993)	(151)	13 248
Other information									
Segment assets	90 095	24 042	49 934	8 898	144 877	19 747	58 016	(13 244)	382 365
Segment liabilities	23 750	3 002	18 657	10 697	10 584	13 394	210 218	(11 040)	279 262
Capital expenditure (including borrowing costs capitalised)	13 253	4 969	8 805	76	34 853	450	1 490	(542)	63 354

Selected notes to the summarised group financial statements *continued*

for the year ended 31 March 2013

Inter-segment purchases and revenue of electricity are allocated between the Generation, Transmission, Distribution, Group Customer Services and Group Capital segments based on cost recovery plus return on assets.

Exco assesses the performance of the operating segments based on a measure of profit or loss consistent with that of the financial statements.

The amounts provided to Exco with respect to total assets and liabilities are measured in terms of the IFRS. These assets and liabilities are allocated based on the operation of the segment and the physical location of the assets.

Geographical information	Group Revenues		Group Non-current assets	
	2013 Rm	2012 Rm	2013 Rm	2012 Rm
South Africa	122 690	109 705	355 228	299 910
Foreign countries	6 179	5 142	106	72
	128 869	114 847	355 334	299 982

The group's reportable segments operate mainly in South Africa, which is Eskom's country of domicile.

Revenue is allocated based on the country in which the customer is located after eliminating intersegment transactions. There are no significant revenues derived from a single external customer by any of the reportable segments.

Non-current assets disclosed for geographical information comprise non-current assets other than deferred tax assets and financial instruments.

8. Material events subsequent to 31 March 2013

There were no significant events after the reporting date.

9. Material changes in property, plant and equipment

Property, plant and equipment increased by R50 768 million for the group during the year ended 31 March 2013 as compared to those disclosed in the financial statements as at and for the year ended 31 March 2012. This expenditure relates mainly to the cost incurred on the capital expansion programme.

10. Material changes in contingent liabilities

There were no significant changes in contingent liabilities during the year ended 31 March 2013 from those reported in the financial statements as at and for the year ended 31 March 2012.

11. Material changes in capital commitments

Capital commitments increased by R5 142 million, from R201 599 million to R206 741 million, for the group during the year ended 31 March 2013 as compared to those disclosed in the financial statements as at and for the year ended 31 March 2012. This increase is mainly as a result of additional costs for the capital expansion programme.

12. Issued share capital

There was no change in the issued share capital during the year ended 31 March 2013.

	2013 Rm	2012 Rm
13. Revenue		
Electricity revenue	126 663	112 999
Other revenue, excluding electricity revenue	2 206	1 848
	128 869	114 847
14. Net employee benefit expense		
Gross employee benefit expense	28 661	24 399
Employee benefit expense capitalised to property, plant and equipment	(5 062)	(4 230)
	23 599	20 169

15. Restatement of comparative information

Eskom Energie Manantali (EEM)

During the prior year, the IFRS 5 requirements were applied to EEM with the result that EEM was classified as a discontinued operation as the settlement agreement between EEM and SOGEM was due to expire on 31 July 2012. The results of EEM were presented as discontinued operations.

In the current financial year, the relationship between EEM and SOGEM was reconsidered after the interim operating and maintenance contract was approved until 30 June 2013 and processes are in place to finalise a contract for an additional 10-year period.

The investment in EEM is therefore no longer held-for-sale and has been reclassified as a continuing operation.

Selected notes to the summarised group financial statements *continued*

for the year ended 31 March 2013

The impact of the restatement of comparative information is as follows:

	Previously reported	Adjustments	Restated
	Rm	Rm	Rm
Income statement for the year ended 31 March 2012			
Operating profit before net fair value loss and net finance cost	23 684	(23)	23 661
Other income	699	13	712
Net fair value loss on financial instruments, excluding embedded derivatives	(2 388)	–	(2 388)
Net fair value gain on embedded derivatives	334	–	334
Operating profit before net finance cost	22 329	(10)	22 319
Net finance cost	(3 963)	7	(3 956)
Finance income	3 536	7	3 543
Finance cost	(7 499)	–	(7 499)
Share of profit of equity-accounted investees, net of tax	41	–	41
Profit before tax	18 407	(3)	18 404
Income tax	(5 156)	–	(5 156)
Profit for the year from continuing operations	13 251	(3)	13 248
Loss for the year from discontinued operations	(3)	3	–
Profit for the year	13 248	–	13 248
Cash flow statement for the year ended 31 March 2012			
Cash flows from operating activities			
Cash generated from operations	38 669	(7)	38 662
Other net cash flows from operating activities	(140)	–	(140)
Net cash generated from operating activities	38 529	(7)	38 522
Cash flows from financing activities			
Interest received	3 211	7	3 218
Interest paid	(8 501)	–	(8 501)
Other net cash flows from financing activities	34 010	–	34 010
Net cash from financing activities	28 720	7	28 727



The two units at Palmet pumped-storage scheme are located underground at the base of 25 storey deep shafts



1923-2013

Appendices

8

Appendix A

Key performance indicators

Key indicator and unit	Targets		Annual actuals					Five-year trend
	Target 2017/18 ³	Compact target 2012/13	Actual 2012/13	Actual 2011/12	Actual 2010/11	Actual 2009/10	Actual 2008/09	
✓ Becoming a high performance organisation								
Focusing on safety								
Employee lost-time incident rate index ¹	0.20	–	0.39 ^{RA}	0.41 ^{RA}	0.47 ^{RA}	0.54 ^{RA}	0.50 ^{RA}	✓
Fatalities (employees and contractors), number	–	–	19 ^{RA}	24 ^{14RA}	25 ^{RA}	17 ^{RA}	27 ^{RA}	✓
Improving operations								
UCLF, % ^{SC.1.2}	10.40	6.00	12.12 ^{15RA}	7.97 ^{RA}	6.14 ^{RA}	5.1 ^{RA}	4.38 ^{RA}	▲
PCLF, %	9.26	–	9.10	9.07	7.98	9.04	9.54	●
EAF, % ¹	79.34	–	77.65 ^{RA}	81.99 ^{RA}	84.59 ^{RA}	85.21	85.32	▼
SAIDI, hours per year ^{SC.1.2}	39.00	≤47.00	41.89 ^{RA}	45.75 ^{RA}	52.61 ^{RA}	54.41 ^{RA}	51.51 ^{RA}	✓
SAIFI, events per year ¹	17.00	–	22.19 ^{RA}	23.73 ^{RA}	25.31 ^{RA}	24.65 ^{RA}	24.16 ^{RA}	✓
Total system minutes lost for events <1 minutes, minutes ^{SC.1.2}	3.40	≤3.40	3.52 ^{RA}	4.73 ^{RA}	2.63 ^{RA}	4.09 ^{RA}	4.21 ^{RA}	✓
Major incidents, number ¹	1	–	3 ^{RA}	1 ^{RA}	– ^{RA}	1 ^{RA}	3 ^{RA}	●
Being customer centric								
Customer service index ¹	89.7	–	86.8	85.6	84.4	85.1	84.7	▲
Eskom KeyCare, index	102.0	–	105.8	105.9	101.2	98.1	101.2	▲
Arrear debts as a % of revenue, %	0.60	–	0.81	0.53	0.75	0.83	1.54	✓
Customer service (large power users, municipalities and other), average debtor days	–	–	25.2	21.8	18.9	18.9	16.4	▲
Customer service (small power users excluding Soweto debt), average debtor days	–	–	48.2	42.9	45.1	40.5	47.5	●
Customer service large power top customers excluding disputes, average debtor days ⁴	–	–	12.3	14.4	15.5	15.4	16.5	✓

Appendix A

Key performance indicators *continued*

Key indicator and unit	Targets		Annual actuals					Five-year trend
	Target 2017/18 ³	Compact target 2012/13	Actual 2012/13	Actual 2011/12	Actual 2010/11	Actual 2009/10	Actual 2008/09	
Building strong skills¹								
Total engineering learners in the system, number ^{SC.1.2}	2 073	1 949	2 144 ^{RA}	2 273 ^{RA}	1 335	955	968	▲
Total technician learners in the system, number ^{SC.1.2}	805	757	835 ^{RA}	844 ^{RA}	692	681	588	▲
Total artisan learners in the system number ^{SC.1.2}	2 705	2 543	2 847 ^{RA}	2 598 ^{RA}	2 213	2 144	1 979	▲
Youth programme, number ^{SC.1.2}	5 000	5 000	5 701 ^{RA}	5 159	–	–	–	▲
Leading and partnering to keep the lights on								
Keeping the lights on								
Management of the national supply/demand constraints, load-shedding, (yes or no) ^{SC.1.2}	No	No	No ^{RA}	No ^{RA}	No ^{RA}	No ^{RA}	Yes	▲
Demand-side management energy efficiency, annualised GWh ^{SC.1.2.7}	7 732 ⁵	1 827	2 244 ^{RA}	1 422 ^{RA}	1 339 ^{RA}	–	–	▲
Internal energy efficiency, annualised GWh ^{SC.2.8}	45,0 ⁵	20,0	28,9 ^{RA}	45,0 ^{RA}	26,2 ^{RA}	–	–	▲
Delivering capital expansion								
Generation capacity installed, MW ^{SC.1.2}	8 702 ⁵	260	261 ^{RA}	535 ^{RA}	315 ^{RA}	452 ^{RA}	1 770 ^{RA}	▼
Transmission lines installed, km ^{SC.1.2}	6 450 ⁵	900	787 ^{RA}	631 ^{RA}	443 ^{RA}	600 ^{RA}	418 ^{RA}	▲
Transmission capacity installed, MVA ^{SC.1.2}	35 040 ⁵	3 545	3 580 ^{RA}	2 525 ^{RA}	5 940 ^{RA}	1 630 ^{RA}	1 375 ⁶	▲
Total capital expenditure (excluding interest during construction), R billion ¹	337,15 ⁵	–	60,13	58,82	47,93	48,70	43,66	▲

Key indicator and unit	Targets		Annual actuals					Five-year trend
	Target 2017/18 ³	Compact target 2012/13	Actual 2012/13	Actual 2011/12	Actual 2010/11	Actual 2009/10	Actual 2008/09	
Reducing Eskom's environmental footprint and pursuing low carbon growth opportunities								
Reducing environmental footprint in existing fleet								
Relative particulate emissions, kg/MWh sent out ^{SC.1.2}	0.24	0.30	0.35 ^{RA}	0.31 ^{RA}	0.33 ^{RA}	0.39 ^{RA}	0.27 ^{RA}	▲
Specific water consumption, L/kWh sent out ^{SC.1.2}	1.21	1.32	1.42 ^{RA}	1.34 ^{RA}	1.35 ^{RA}	1.34 ^{RA}	1.35 ^{RA}	▲
Environmental legal contraventions, number ¹	8	–	47 ^{RA}	50 ^{RA}	63 ^{RA}	55 ^{RA}	114 ^{RA}	▼
Transformation								
Maximising socio-economic contribution								
Corporate social investment, Rm	–	–	194.3 ^{RA}	87.9 ^{RA}	62.3 ^{RA}	58.7 ^{RA}	79.5 ^{RA}	▲
Job creation, number ¹	42 845 ^{1.2}	–	35 759	28 616	21 477	–	–	▲
Total number of electrification connections, number ¹	579 000 ⁵	–	144 558	155 213	149 914	149 901	112 965	▲
Employment equity								
Employment equity – (group) disability, % ¹	3.0	–	2.4 ^{RA}	2.4 ^{RA}	2.4	2.3	3.2	▼
Racial equity in senior management (company), % of black employees ¹	74.0	–	58.3 ^{RA}	53.9 ^{RA}	52.5	47.3	46.9	▲
Racial equity in professionals and middle management (company), % of black employees ¹	79.0	–	69.6	65.7	64.1	62.9	62.1	▲
Gender equity in senior management (company), % of female employees ¹	38.0	–	28.2 ^{RA}	24.3 ^{RA}	23.5	21.6	20.7	▲
Gender equity – professionals and middle management, % of female employees ¹	42.0	–	34.6	32.4	31.6	30.3	29.8	▲

Appendix A

Key performance indicators *continued*

Key indicator and unit	Targets		Annual actuals					Five-year trend
	Target 2017/18 ³	Compact target 2012/13	Actual 2012/13	Actual 2011/12	Actual 2010/11	Actual 2009/10	Actual 2008/09	
Procurement equity (company)								
Procurement from B-BBEE compliant entities, % ^{SC1,2}	90.0	70.0	86.3 ^{RA}	73.2 ^{RA}	52.3 ^{RA}	28.6 ¹⁰	63.2	▲
Local sourcing in procurement, % ^{SC1,2}	65.0	52.0	80.2 ^{RA}	77.2	79.7	73.9	–	▲
Procurement from black-owned entities, % ¹	50.0	–	22.1	14.6	–	–	–	▲
Procurement from black women-owned entities, % ¹	35.0	–	4.7 ^{RA}	3.3 ^{RA}	4.3	12.1 ⁹	10.0 ⁹	●
Procurement from black youth-owned entities, % ¹	30.0	–	1.0	–	–	–	–	–
Implementing coal haulage and the road-to-rail migration plan								
Coal road-to-rail migration, (additional tonnage transported on rail) Mt ^{SC1,2}	78.6 ⁵	12.2	10.1 ^{RA}	8.5	7.1	5.1	4.3	▲
Pursuing private-sector participation								
IPP installed capacity, MW	4 700	–	1 135	1 008	888	–	–	▲
Ensuring Eskom's financial sustainability								
Ensuring financial sustainability (shareholder compact ratios)								
Cost of electricity for the company (excluding depreciation, including immediate priorities), R/MWh ^{SC1,2}	825.09	481.60	496.35 ^{RA}	374.19 ^{RA}	296.36 ^{RA}	255.09 ^{RA}	237.29	▲
Interest cover ratio ^{SC1,2,13}	3.04	0.72	0.27 ^{RA}	3.27 ^{RA}	1.40 ^{RA}	0.77 ^{RA}	(4.72)	▼
Debt/equity (including long-term provisions), ratio ^{SC1,2}	1.58	2.10	1.96 ^{RA}	1.69 ^{RA}	1.66 ^{RA}	1.68 ^{RA}	1.32	▲
Free funds from operations as % of total debt (Group) ^{SC1,2}	27.30	8.00	8.04	15.15	9.51	1.92	15.89	▼

Key indicator and unit	Targets		Annual actuals					Five-year trend
	Target 2017/18 ³	Compact target 2012/13	Actual 2012/13	Actual 2011/12	Actual 2010/11	Actual 2009/10	Actual 2008/09	
Ensuring financial sustainability								
Electricity revenue per kWh (including environmental levy), c/kWh	120.47	–	58.49	50.27	40.27	31.95	24.67	▲
Electricity operating cost per kWh (including depreciation), c/kWh	82.51	–	54.15	41.28	32.78	28.23	25.94	▲
Working capital ratio	1.43	–	0.68	0.76	0.85	0.89	0.78	▼
Free funds from operations for the group, Rm	101 430	–	18 110	30 483	16 953	2 356	13 865	▲
Gross debt/earnings before interest, tax, depreciation and amortisation, ratio	3.00	–	16.16	6.46	7.55	8.40	(13.00)	▲
Debt service cover ratio	1.80	–	2.01	3.50	1.90	1.43	0.75	▲

Keys:

- ▲ The key performance indicator is positive over the five years from 2008 to 2013.
- ▼ The key performance indicator is negative over the five years from 2008 to 2013.
- The key performance indicator has been stable over the five years from 2008 to 2013.

Notes:

RA Reasonable assurance provided by the independent assurance provide (refer page 132).

SC Key indicator forms part of the Shareholder Compact for 2012/13.

1. This measure is taken into account for short-term performance measurement (in relation to executive remuneration). For further remuneration details see www.eskom.co.za/IR2013/027.html.
2. This measure is taken into account for long-term performance measurement (in relation to executive remuneration). For further remuneration details see www.eskom.co.za/IR2013/028.html.
3. Financial group targets for 2017/18 are not available so the Eskom company targets for 2017/18 have been presented.
4. Top customers' average debtors' days excluding disputes for 2009/10 onwards. For 2007/08 and 2008/09 a consolidated top customers' debtors days figure is provided.
5. Represents a cumulative target for the five-year period: 2013/14 to 2017/18.
6. This includes construction by the Transmission division.
7. The basis of measurement changed during the 2010/11 year; prior to that verified savings of 372MWRA (2009/10) and 916MWRA (2008/09) were achieved.
8. Reporting basis changed during the 2010/11 year; hence no comparatives are available prior to 2010/11.
9. For 2008/09 and 2009/10, the black women-owned expenditure percentage was calculated on the attributable spend.
10. Attributable spend based on top 295 suppliers.
11. Targets are for 2016/17, the targets for 2017/18 will be developed as part of the workforce planning exercise.
12. Job creation target as for 2015/16 as there is no target available for 2017/18.
13. The interest cover ratio includes the unwinding of interest, but excludes the impact of the remeasurement of the government loan of R17.3 billion income as this is based on the MYPD 3 determination.
14. Reclassification of a bee-sting incident that took place on 14 February 2012 as non-work related, as the cause of death was confirmed by the specialist forensic pathologist to be natural causes.
15. The 12.12% cumulative UCLF consists of energy losses of 7.54% (excluding losses due to the Duvha Unit 4 outage, emission control and short-term outages) plus energy losses of 1.17% for the Duvha Unit 4 outage and energy losses of 3.41% due to decisions by management for emission-control and short-term outages (Figures are only available from April 2012).

Appendix B

Awards

Nkonki SOC Integrated Reporting awards

In June 2012, Eskom emerged as the overall winner of the Nkonki SOC Integrated Report Awards 2012. Eskom also scooped several other awards in the categories of ethical leadership and corporate citizenship and compliance with laws, codes, rules and standards.

Investment Analysts Society of Southern Africa award

At the 27th annual Investment Analysts Society awards, held in June 2012, Eskom emerged as the winner in the basic materials and resources category. Eskom was the first non-listed company to receive such an award.

Mail & Guardian Greening the Future awards

Eskom's Ingula project received the runner-up award for conservation in the Mail & Guardian annual "Greening the Future" awards for its work in biodiversity conservation at the Ingula pumped storage scheme. The Greening the Future awards are held every year to showcase national projects that make a difference to the broader environmental field.

Ernst & Young Excellence in Integrated Reporting awards

Eskom was adjudged an excellent integrated reporter at the inaugural Ernst & Young Excellence in Integrated Reporting awards in September 2012.

Loerie award

Eskom received a Craft Certificate in Cinematography at the prestigious Loerie awards in September 2012.

Institute of Risk Management in South Africa

Eskom was named the runner-up in the public-sector category in the Institute of Risk Management in South Africa's annual awards, held in October 2012, for conceptualising and implementing provincial resilience teams.

SAP implementation award

As part of its Back2Basics programme, Eskom implemented a major SAP solution in October 2011. At the end of October 2012, at the SAP Africa user conference, known as Saphila, Eskom won the silver prize in the large implementation category.

Appendix C

Sustainability responsibilities, approval and assurance statement

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. Eskom's declaration on its GRI B+ application level is located on page 19. The King Code advocates that sustainability reporting and disclosure should be independently assured. KPMG Services (Pty) Limited provided reasonable assurance on selected sustainability key indicators marked with an "RA" in Appendix A of this report and limited assurance on Eskom's self-declared GRI B+ application level. KPMG's assurance report is presented in the Eskom supplementary and divisional report. For a more comprehensive understanding of Eskom's sustainability performance and its assurance, please refer to the supplementary and divisional report at www.eskom.co.za/IR2013/029.html.

The board acknowledges its responsibility to ensure the integrity of the integrated report. The directors have collectively reviewed the content of the integrated report and believe it addresses the material issues and is a fair presentation of the integrated performance of the group.



BA Dames
Chief executive

30 May 2013



PS O'Flaherty
Finance director

30 May 2013

Appendix C

Sustainability responsibilities, approval and assurance statement *continued*

Assurance provider's report on extracted sustainability information To the directors of Eskom Holdings SOC Limited

We have conducted an engagement to agree the extracted key performance indicators (or "indicators"), marked "RA" and presented in Appendix A ("the Appendix"), with the assured key performance indicators presented in the Eskom supplementary and divisional report of Eskom Holdings SOC Limited for the year ended 31 March 2013 ("the Eskom supplementary and divisional report"), and report thereon.

The extracted key performance indicators presented in the Appendix are in support of the material issues presented in the integrated report. The assured key performance indicators presented in the Eskom supplementary and divisional report were selected by the directors for assurance. In our report, dated 30 May 2013, on the sustainability information presented in the Eskom supplementary and divisional report, we expressed unmodified conclusions *inter alia* on the selected key performance indicators, prepared in accordance with Global Reporting Initiative G3 guidelines.

The directors are responsible for identifying the material issues and extracting the appropriate supporting key performance indicators. We report that we have agreed the extracted key performance indicators presented in Appendix A, marked "RA", with the assured key performance indicators presented in the Eskom supplementary and divisional report, also marked "RA".

The extracted key performance indicators presented in the Appendix are not intended as a fair summary of the assured indicators presented in the Eskom supplementary and divisional report. For a better understanding of the sustainability information reported in the Eskom supplementary and divisional report, the scope of our assurance engagement, the respective responsibilities of the directors and assurance provider, a summary of our work performed in the context of the assurance provided and our independent assurance opinions on the identified subject matters, users are referred to the Eskom supplementary and divisional report, which may be accessed at www.eskom.co.za/IR2013/030.html.



KPMG Services (Pty) Limited
Per **PD Naidoo**
Director
Johannesburg
30 May 2013



A Jaffer
Director
Johannesburg
30 May 2013

Appendix D

Online references

King III checklist: www.eskom.co.za/IR2013/031.html

Global reporting initiative checklist: www.eskom.co.za/IR2013/032.html

Eskom's interim integrated report for the six months ending 30 September 2012:
http://financialresults.co.za/2012/eskom_ar2012/interim-report/

Eskom's supplementary and divisional report, which provides detailed performance information from a divisional perspective: www.eskom.co.za/IR2013/033.html

Eskom's annual financial statements: www.eskom.co.za/IR2013/034.html

The Eskom Development Foundation Report, detailing Eskom's corporate social investment activities: www.eskom.co.za/csi

The Eskom Factor Report, detailing Eskom's broader impact on, and contribution to, society: www.eskomfactor.co.za/

Appendix E

Abbreviations, acronyms and glossary

Abbreviations and acronyms

B-BBEE	Broad-based black economic empowerment
EAF	Energy availability factor (see glossary)
GW	Gigawatt
GWh	Gigawatt hour (1 000MWh)
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
OHSAS	Occupational health and safety standards
PCLF	Planned capability loss factor
SAIDI	System average interruption duration index
SAIFI	System average interruption frequency index
UCLF	Unplanned capability loss factor (see glossary)

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
Billion	A thousand million (1 000 000 000)
Biomass co-firing	Co-firing is defined as the burning of more than one fuel simultaneously within a furnace. Biomass co-firing refers to the addition of a carbon based biological material that is derived from living and/or recently living organisms as a supplementary fuel
Decommission	To remove a facility (such as a reactor) from service and store it safely
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 creates cash flows that would otherwise require a contract to be modified according to a specified variable such as currency
Energy availability factor	A 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
Free basic electricity	Amount of electricity deemed sufficient to provide basic electricity services to a poor household (usually about 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

Appendix E

Abbreviations, acronyms and glossary

continued

Free funds from operations as a percentage of gross debt	Free funds from operations/gross debt multiplied by 100
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 closures
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	Any entity, other than Eskom, that owns or operates, in whole or in part, one or more power-production 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 by rotating available capacity between all customers when demand is greater than supply to avoid blackouts

Lost-time incident rate	Proportional representation of the occurrence of lost-time injuries over 200 000 hours in a 12-month period
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
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 or loss for the year after tax/average total equity
Return on average total assets	Profit or loss for the year after tax/average total assets
Split metering	Split meters reduce the amount of non-technical losses. These devices use two-way communications to detect tampering
System minutes	Global benchmark for measuring the severity of interruptions to customers. One system minute is equivalent to the loss of the entire system for one minute at annual peak. A major incident is an interruption with a severity \geq one system minute
Technical losses	Naturally occurring losses that depend on the power systems used

Appendix E

Abbreviations, acronyms and glossary

continued

Torrefied fuel	A fuel source which has been pre-treated (by means of low temperature pyrolysis) to enhance the fuel quality for combustion purposes
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 is unexpectedly shut down and 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
Way leave	A right of way over another's ground or property to access electricity infrastructure
Working capital ratio	$\frac{\text{(Total current assets less financial instruments with group companies less investments in securities less embedded derivative assets less derivatives held for risk management less financial trading assets less cash and cash equivalents)}}{\text{(Total current liabilities less financial instruments with group companies less debt securities issued less borrowings less embedded derivative liabilities less derivatives held for risk management less financial trading liabilities)}}$

Appendix F

Contact details

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Eskom Holdings Secretariat Bongiwé Mbomvu (Company secretary) PO Box 1091 Johannesburg 2000		Eskom Holdings SOC Limited Company registration number: 2002/015527/06	

Back cover image:
Commissioner Street, Johannesburg, 1920s



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