

partnering for a
sustainable future

Integrated Report 2011

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- Did not achieve target
- Achieved or exceeded target

 www.eskom.co.za
Whenever this symbol is present please refer to the website for more information

▶ GRI Indicator reference
A full GRI Indicator table can be found on our website
www.eskom.co.za/annreport11/

Scope of report

The annual report for the year ended 31 March 2011 is an integrated report, presenting not only the financial but also the economic, environmental, social, sustainability and technical aspects of Eskom's business and performance. Eskom aspires to be the leader in such integrated reporting.

Eskom and its subsidiaries¹ are aligned with international sustainability best reporting practices, including the Global Reporting Initiative (GRI) Sustainability Reporting Guideline, and the 2008 AA1000 Accountability Principles Standard. Eskom is also a member of the working group of the Integrated Reporting Committee of South Africa. The committee's recently published discussion document, *Framework for Integrated Reporting and the Integrated Report*, has guided this report.

Additional information on the internet

The report is also available on the Eskom website, at (www.eskom.co.za/annreport11). The online version provides additional sustainability information. In the print version, symbols indicate where additional information is available in the internet version.

Structure and content of this report

The 2011 integrated annual report opens with the profile section, leadership overview, regulatory and corporate governance sections.

The rest of the report has been structured around the different areas of the business that were in operation for the year ended 31 March 2011. Each of these areas has reported on its business performance in relation to the relevant identified material issues (See: Material issues on page 19), the highlights, challenges and future priorities for that area, and the key benchmarking exercises each is undertaking to drive performance.

Eskom's material issues have been categorised into three areas:

- Stakeholders' views and concerns
- Eskom's strategic objectives and key performance areas
- Legal and/or shareholder requirements.

The category which an issue belongs to is indicated with the following icons.

Material issues – categories

Stakeholder issue



Eskom strategic objective



Legal/shareholder requirement



¹ Eskom Holdings Limited has the following directly owned operating subsidiaries: Eskom Enterprises (Pty) Limited, Escap Limited, Eskom Finance Company (Pty) Limited and Eskom Development Foundation (section 21 company).

Achievements

President Jacob Zuma officially opens the Camden power station: the first in the world to be brought back on line after a long period of inactivity, October 2010

Eskom signs its first Emission Credits Purchase Agreement with European-based bank, BNP Paribas, September 2010

There has been no load shedding since April 2008

Eskom has put a funding plan in place for the next seven years

The Development Bank of Southern Africa approves a R15 billion loan facility that will support Eskom's capacity expansion programme, November 2010

Contribution to the success of the 2010 FIFA World Cup™.

Initiated the 49M campaign to educate South Africa about energy savings

Construction of the Medupi and Ingula projects is progressing well

Launched operation Khanyisa to combat electricity theft

Consolidated procurement and supply chain functions into Group Commercial

History of Eskom

The Electricity Supply Commission (Eskom) was established.

1923

Dr Hendrik van der Bijl was the first Chairman. Witbank, Colenso and Salt River power stations were commissioned

1929

New goldfields on the Witwatersrand and the rise in gold price boosted electricity demand.

1930

Vaal and Klip power stations were built and the distribution network was extended

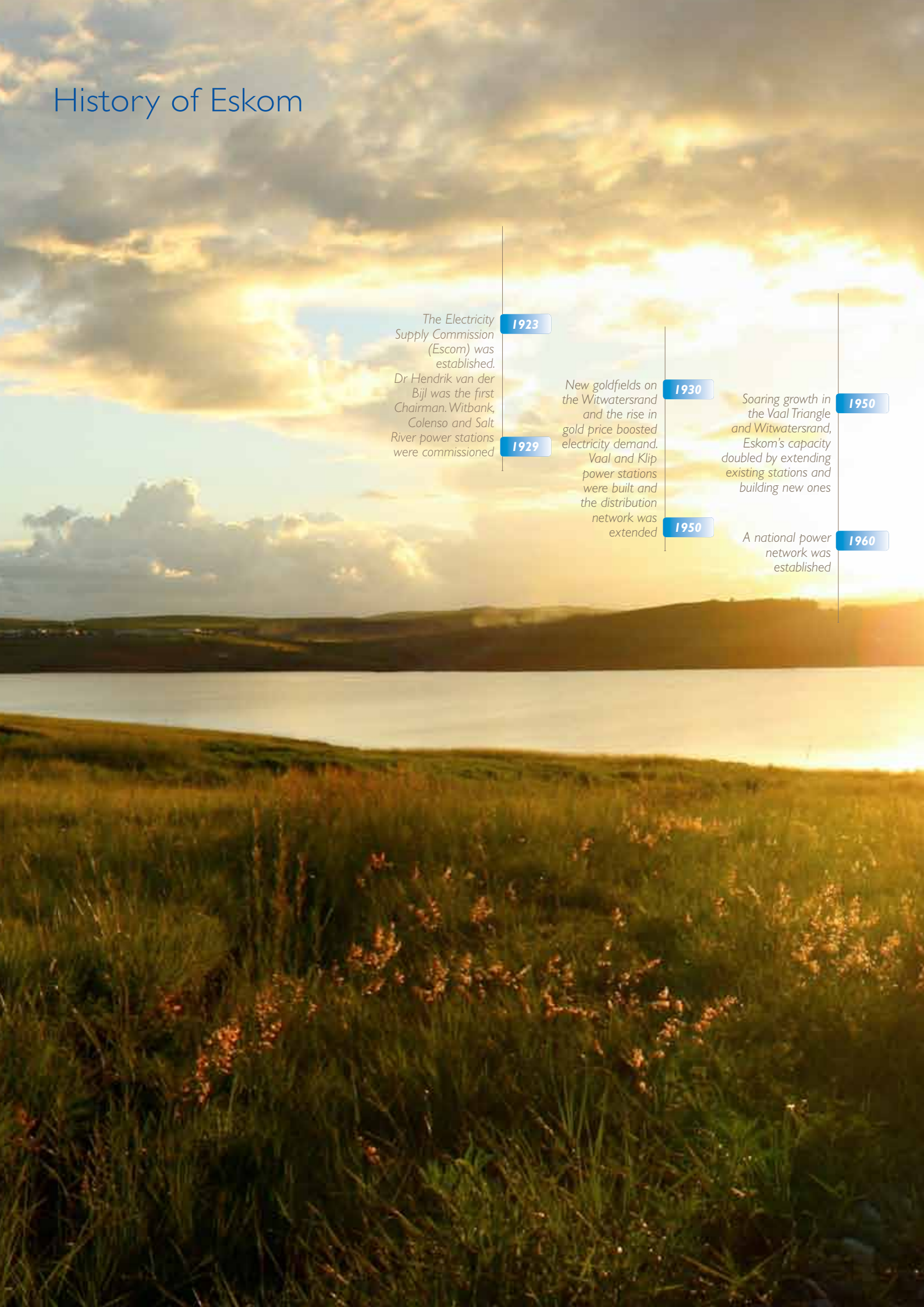
1950

Soaring growth in the Vaal Triangle and Witwatersrand, Eskom's capacity doubled by extending existing stations and building new ones

1950

A national power network was established

1960



Profile

		GRI Reference
<i>Achievements</i>	<i>IFC</i>	
<i>Scope of report</i>	<i>IFC</i>	2.1, 3.1 – 3.3, 3.6 – 3.8
<i>Nature of business, major products and services</i>	<i>2</i>	2.2 – 2.8, 3.6, 3.7
<i>Purpose, values and strategic objectives</i>	<i>8</i>	4.8
<i>Key facts about Eskom</i>	<i>11</i>	2.8
<i>Sustainability reporting in Eskom</i>	<i>16</i>	3.5, 3.11, 4.14 – 4.17
<i>Application of GRI principles</i>	<i>20</i>	3.5, 3.11
<i>Integrated risk management</i>	<i>21</i>	1.2, EC2

Two hydro stations were commissioned for peak load. The decision was taken to build Koeberg, the first nuclear station in Africa. Gas turbine, coal and pumped storage stations were commissioned.

1970

Electricity tariffs rose by 22%

1975

Construction started on Koeberg

1976

Eskom was renamed Eskom in 1987 and an Electricity Council replaced the Commission

1987

Electrification started on a massive scale and the real price of electricity was reduced to stimulate economic growth

1990

In 2001 Eskom received the Global Power Company of the Year Award

2001

Eskom was converted to a company in 2002

2002

Surplus electricity ran out and power shortages became apparent in 2007

2007

Nature of business, major products and services

Background

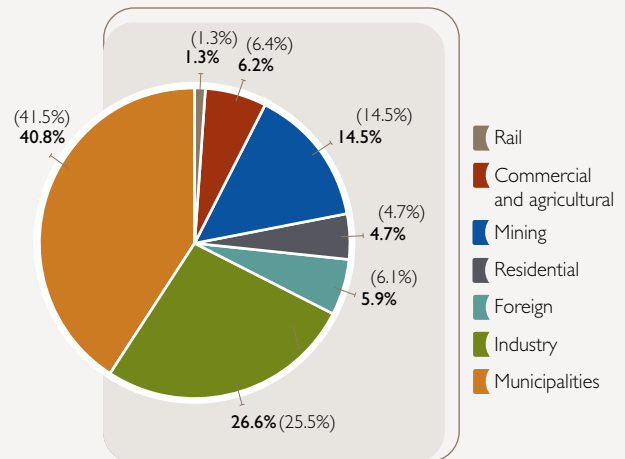
Eskom was established in South Africa in 1923 as the Electricity Supply Commission. In July 2002, it was converted into a public, limited liability company, wholly owned by government.

Eskom is one of the top 20 utilities in the world by generation capacity (net maximum self-generated capacity: 41 194MW). Eskom generates approximately 95% of the electricity used in South Africa and approximately 45% of the electricity used in Africa. Eskom directly provides electricity to about 45% of all end-users in South Africa. The other 55% is resold by redistributors (including municipalities).

Eskom generates, transmits and distributes electricity to customers in the industrial, mining, commercial, agricultural and residential sectors, and to redistributors. Eskom sells electricity directly to about 3 000 industrial customers, 1 000 mining customers, 49 000 commercial customers, 84 000 agricultural customers and more than four million residential customers (of whom the majority are pre-paid customers). Most of the sales are in South Africa, with other southern African countries accounting for a small percentage. (See: table on page 329.)

Eskom electricity sales for the year ended 31 March 2011 (31 March 2010)

Electricity sales (GWh) by customer type



The demand-side management exhibition stand showcased energy-efficient technologies at various expos across the country.



The energy-efficient lighting exhibition drew great interest at the 2010 Design Indaba.

Capital programme

Additional power stations and major power lines are being built to meet South Africa's rising demand for electricity. In 2005, Eskom embarked on a capacity expansion programme, the largest in its history, which will increase its generation capacity by 17 120MW and its transmission lines by 4 700km. The capacity expansion programme aims to both meet increasing demand and to diversify Eskom's energy sources. In the six years ended 31 March 2011, the programme has cost R140 billion (including capitalised interest). The total cost of the programme to completion in 2018 is estimated to be R340 billion (excluding capitalised interest).

Eskom has approved and committed to:

- Building the Medupi and Kusile coal-fired power stations, two new gas-turbine plants, and the Ingula pumped storage plant
- Recommissioning three coal-fired plants that were previously mothballed
- Upgrading other existing plants
- Building new infrastructure, including new transmission lines and two renewable energy plants.

The completion of the Kusile power station in 2017/18 will constitute the last stage of Eskom's committed capacity expansion programme. There has been no approval or commitment to any capacity expansion projects after that.

Eskom must raise capital to pursue its committed capacity expansion programme and improve and refurbish its current operations. Capital expenditure (including expenditure on the capacity expansion programme) up until the 2017 financial year is expected to be between R450 billion and R500 billion (excluding capitalised interest). Total capital expenditure will be funded from operating cash flows, shareholder loans and debt financing (raised locally and internationally), and from the proposed R20 billion government equity recapitalisation over the next three years.

Strategy

Eskom buys and sells electricity in the countries of the Southern African Development Community (SADC). The future involvement in African markets beyond South Africa¹ is currently limited to projects that have a direct impact on ensuring a secure supply of electricity for South Africa itself. However, Eskom is investigating additional opportunities in the Southern African Development Community region (See: imperative 3 in the "Vision and values" section on page 8).

Much of Eskom's strategy and many of its future projects are aligned with government's *Integrated Resource Plan 2010*, which sets out a long-term electricity plan for South Africa.

Eskom is regulated under licences granted by the National Energy Regulator of South Africa² (NERSA) and the National Nuclear Regulator³. Eskom's operations are also subject to authorisations issued by other relevant authorities, such as the departments of Environmental Affairs and provincial and local government. These are to protect the public interest and the environment. (See: "Regulatory and Legal Framework" on page 32)

The group's facilities and operations are subject to environmental legislation and regulations to protect the public interest and ensure effective environmental control. In addition, much of the group's strategy and many of its future priorities are set to be aligned with government's *Integrated Resource Plan 2010*, which sets out a long-term electricity plan for South Africa. The National Energy Regulator of South Africa determines the price of electricity in South Africa. The approach is a cost recovery plus reasonable return on investment type, with annual revenues and tariff levels referenced to Eskom's four main cost elements: fuel cost (primary energy); non-fuel operating and maintenance cost; depreciation; and return on assets (based on depreciated replacement value).

Subsidiaries

Eskom Enterprises (Pty) Limited, and its subsidiaries provide lifecycle support and plant maintenance, network protection as well as support for the capacity expansion programme for all Eskom Holdings Limited divisions. (See legal structure on page 4).

Eskom Finance Company (Pty) Limited grants employee home loans, and Escap Limited manages and insures business risk.

Eskom's corporate social investment is principally channelled through the Eskom Development Foundation, a wholly owned subsidiary of Eskom Holdings and a section 21 company.

Offices and operations

Eskom's head office is in Johannesburg and its operations are spread across South Africa. In December 2008, a small office was opened in London, primarily for quality control over the equipment being manufactured in Europe for the capacity expansion programme.

Eskom Enterprises operates primarily in South Africa, but it has two subsidiaries that have an interest in electricity operation and maintenance concessions in Mali, Senegal, Mauritania and Uganda.

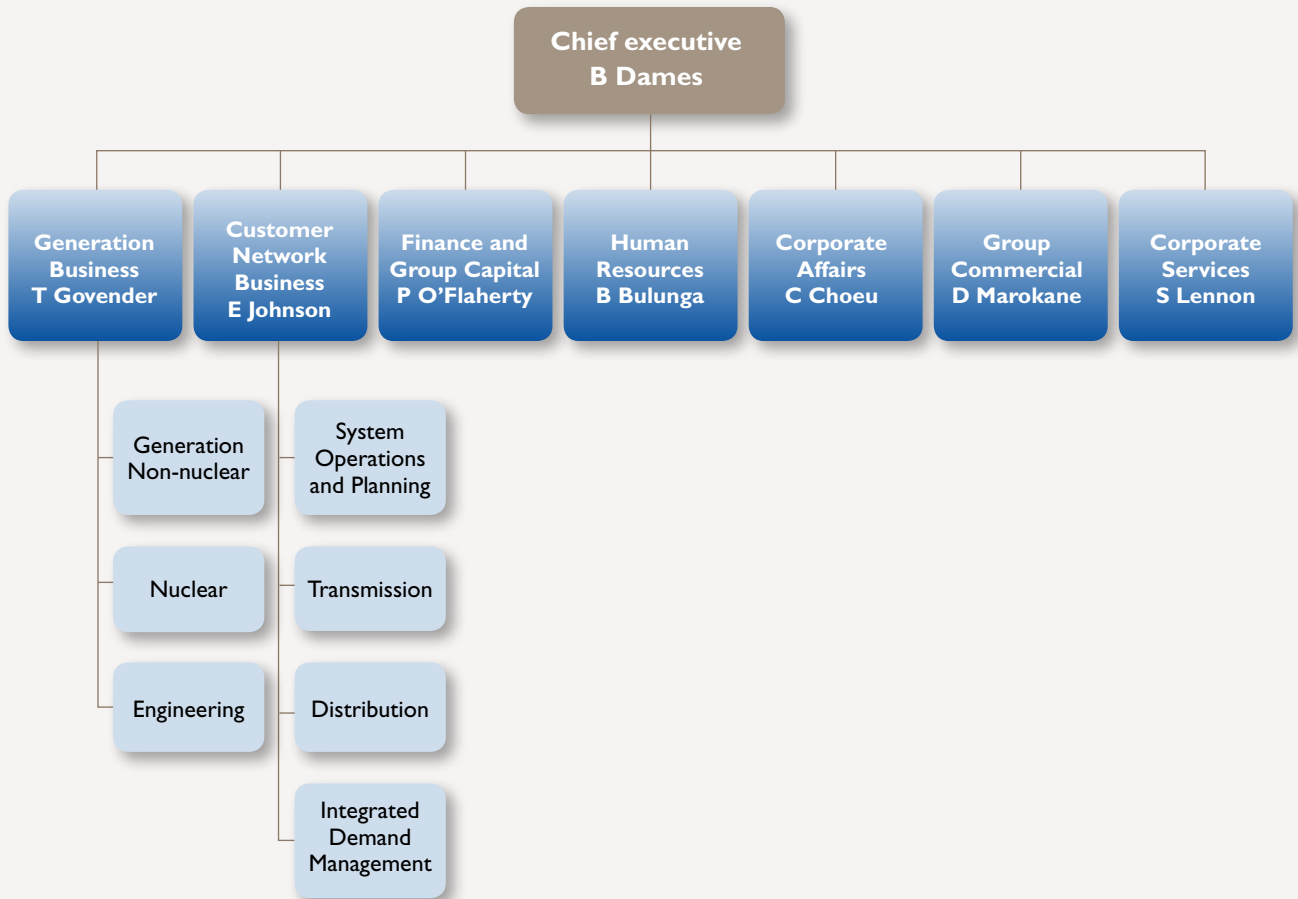
1. Southern African Development Community countries connected to the South African grid, and countries in the rest of Africa.

2. Originally under the Electricity Act (41 of 1987) and more recently under the Electricity Regulation Act (4 of 2006).

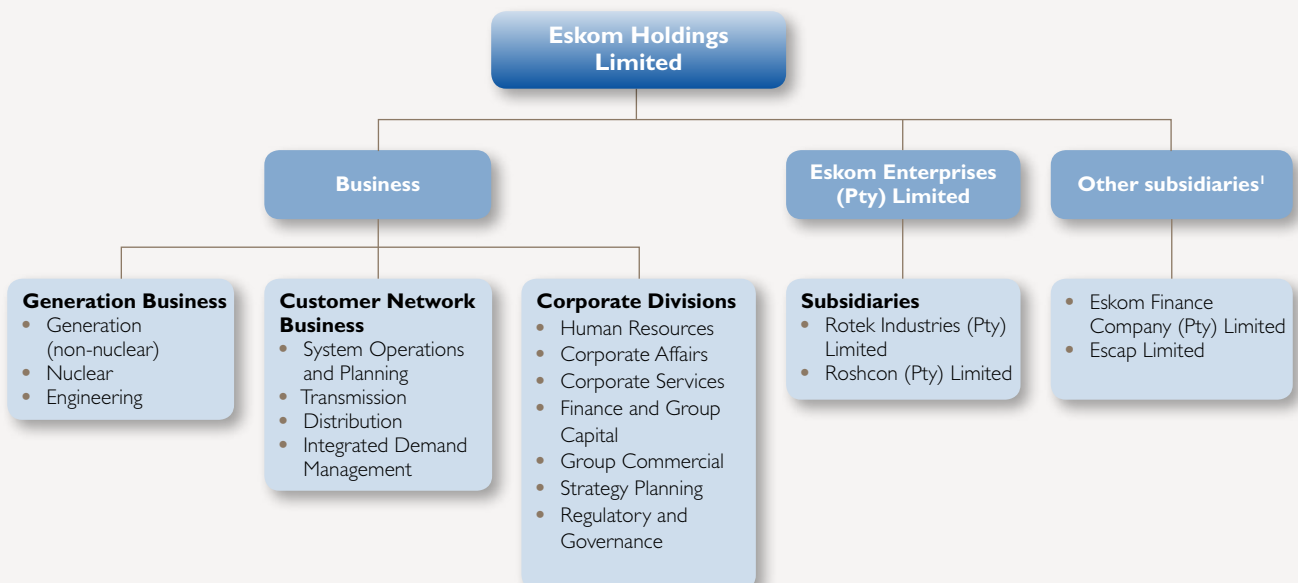
3. Under the National Nuclear Regulatory Act (47 of 1999).

Nature of business, major products and services continued

The operating structure for the year ended 31 March 2011 was:



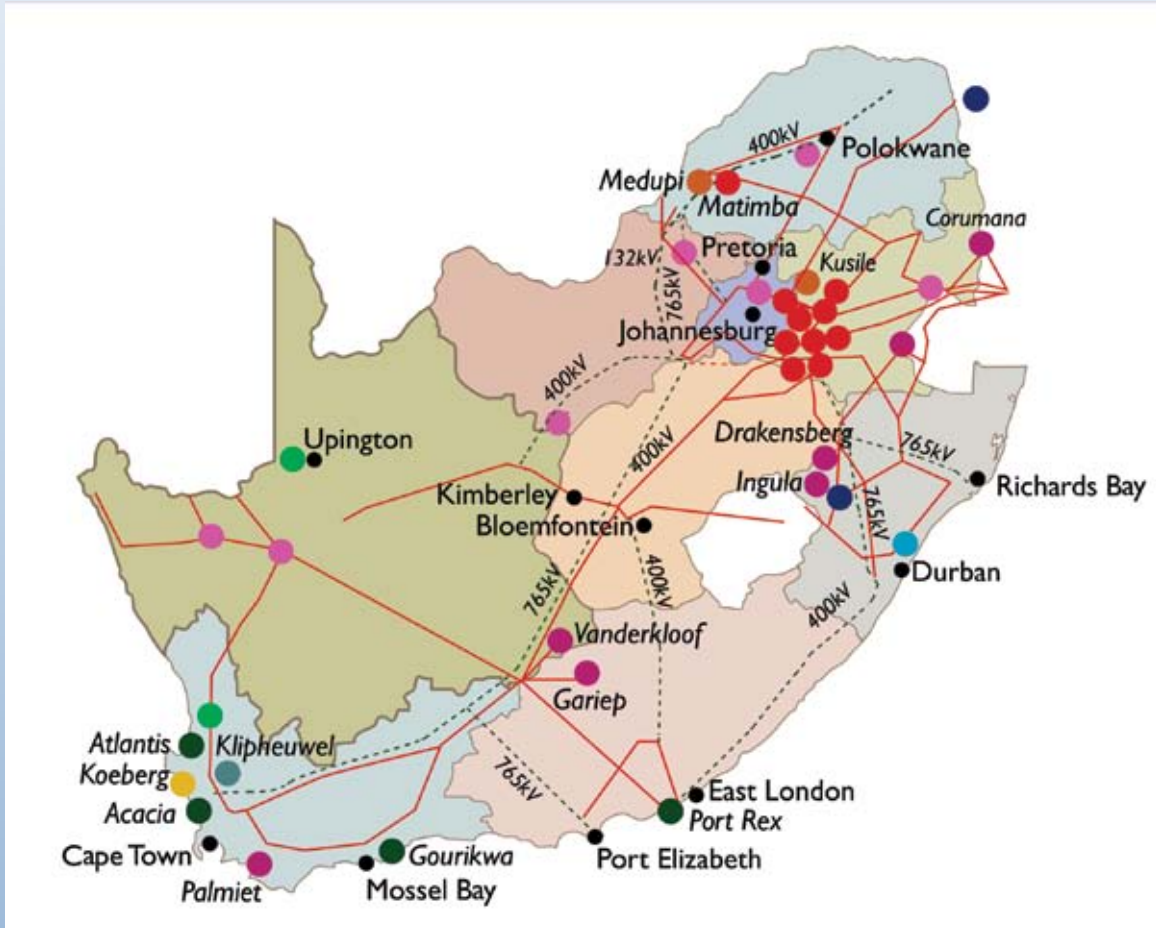
Eskom's legal structure for the year ended 31 March 2011 is:



1. Only includes major subsidiaries.

South African grid map

The map indicates the South African power network



Key

- Existing grid system
- - - Possible future grid system
- Future hydroelectric power station
- Future thermal power station
- Hydroelectric power station
- Interconnection substation
- Town
- Future renewables
- Renewables
- Thermal power station
- Future interconnection substation
- Nuclear power station
- Future gas station
- Gas power station

Eskom's developmental role

Providing reliable and affordable electricity is not only a commercial undertaking – it is also critical to the hopes and dreams of South Africa. Government introduced its new growth path in October 2010, outlining its strategic and economic objectives for the next decade. As a state-owned enterprise, Eskom plays a central developmental role: as an enabler of government's vision and as a supporter of economic growth in South Africa.

Furthermore, South Africa's growing international stature and its rising participation in various global forums must be supported by a sound domestic economy.

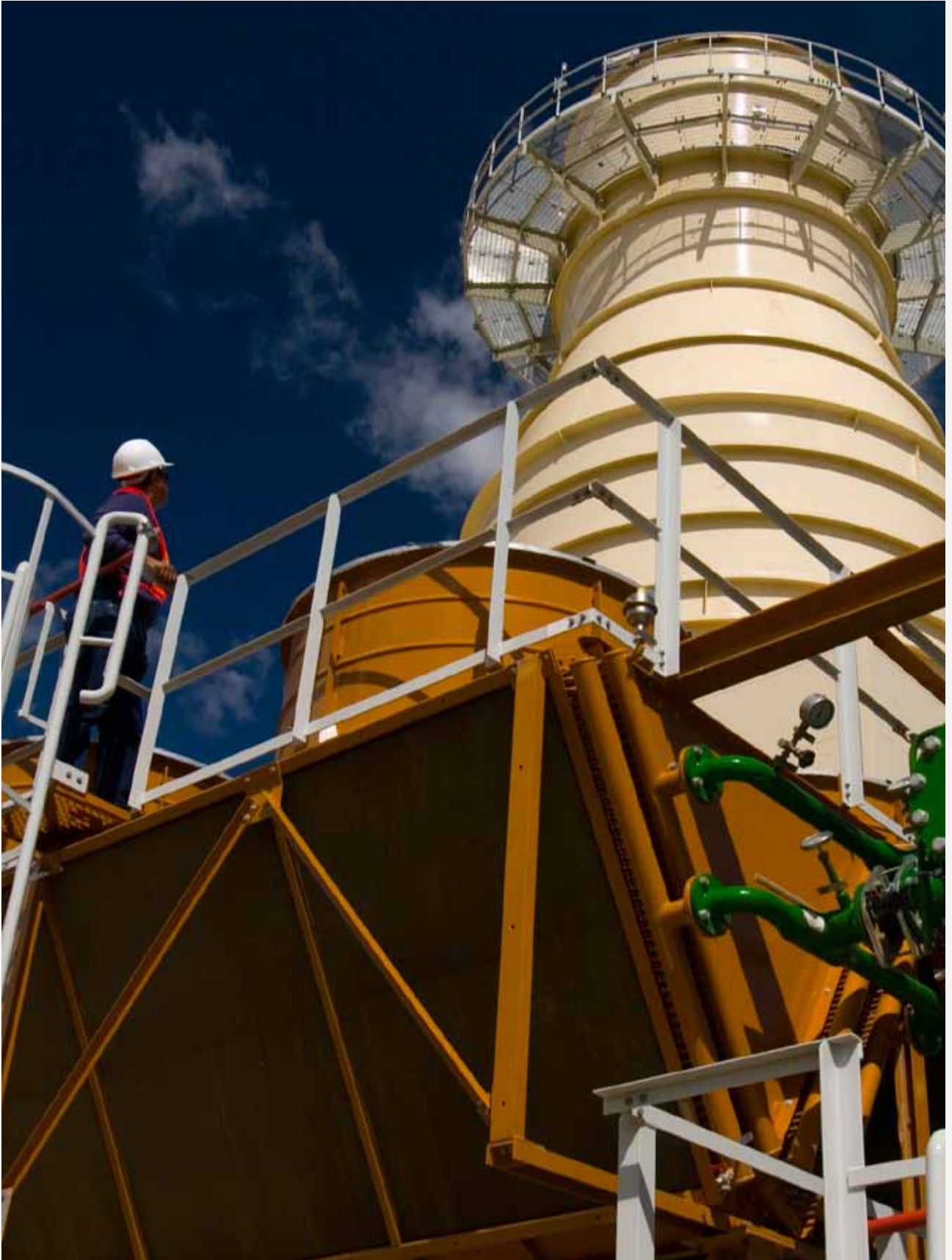
In December 2010, Eskom's chief executive, Brian Dames, was appointed to the executive committee of the World Business Council for Sustainable Development. This is important not only for South Africa's own economic prosperity but also for Africa as a continent and southern Africa in particular. For example, the

invitation for South Africa to join the BRIC countries (Brazil, Russia, India, China) from April 2011 puts additional responsibilities on South Africa to meet both global and African developmental objectives – and consequently on energy supply.

Support for governmental priorities

- **Improving education:** Eskom will train 5 000 per annum and provide apprenticeships to 10 000 young people by 2015
- **Improving healthcare:** Eskom is rolling out HIV/Aids initiatives and providing effective psycho-social support
- **Creating decent work:** Eskom will provide 100 000 employment opportunities by 2015 and secure 50% local content in the capacity expansion programme
- **Fighting crime and corruption:** Eskom has introduced anti-fraud and anti-corruption initiatives and the assurance and forensic team is proactively involved in major projects
- **Rural development and land reform:** Eskom electrifies rural areas and is investing R24 billion to reduce the backlog by 984 000 connections until 2016/17.

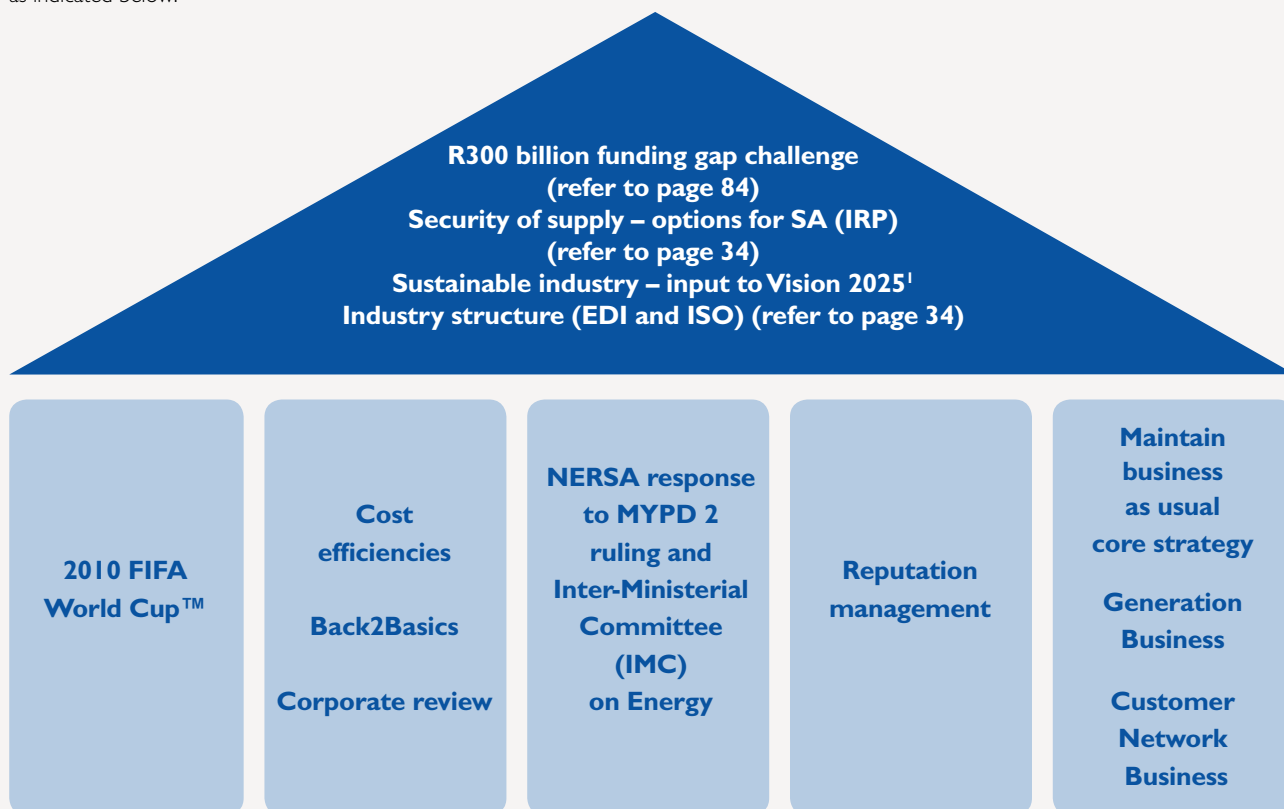




Purpose, values and strategic objectives

Eskom priorities for the year ended 31 March 2011

Eighteen months ago, Eskom was experiencing the after-effects of rotational load shedding in 2008, it had no financially sustainable plan and it was six months away from the 2010 FIFA World Cup™. Key priorities were set (as noted in Eskom's previous integrated report) and were dealt with as indicated below:



2010 FIFA World Cup™: Eskom made a significant contribution to the successful hosting of the 2010 FIFA World Cup™ – refer to the profile section on page 20.

Back2Basics project: Eskom has implemented a “Back2Basics” programme across all business units to enable effective decision making and improve operational performance by simplifying, standardising and optimising processes and systems – refer to the *Finance and Group Capital* section on page 77 for progress on this initiative.

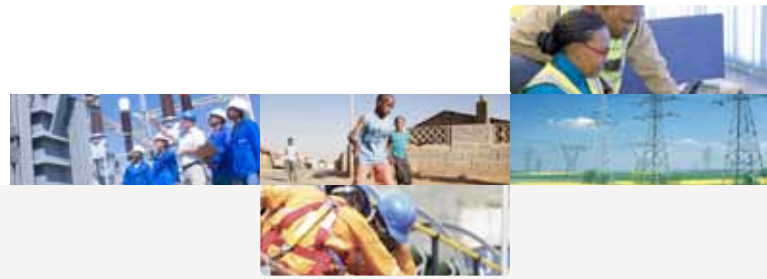
Corporate review: This project entails analysing corporate functions, benchmarking this against similar institutions and identifying possibilities for rationalisation within existing operations. This project aims to improve the effectiveness and efficiency of corporate functions. *This is ongoing as part of Eskom's strategic review.*

Reputation management: The objective is to stem the flow of negative media coverage in the short term and recover and turn around Eskom's image and reputation in the long term, while at the same time gearing Eskom's corporate communication strategy – refer to the *Corporate Affairs* section on page 136 for positive progress made.

Generation Business: Over the past year the aim was to add new capacity, manage existing plant, strive for cost efficiencies, focus on operational excellence and safety – refer to the *Group Capital and Generation Business* sections on pages 85 and 144 respectively set out performance on these focus areas.

Customer Network Business: The objective was to integrate demand management across Eskom, improve revenue management, sign power purchase agreements, and facilitate the national integrated resource plan – refer to the *Customer Network Business* section on page 168.

¹. Eskom has engaged with the National Planning Commission in this regard.



Participation in subcommittee of Inter-Ministerial Committee (IMC) on Energy: Government established the Inter-Ministerial Committee on Energy to address the key challenges in the electricity industry and to facilitate progress towards an optimal regulatory and policy environment – one that is credible, predictable, legitimate and transparent. Eskom is providing input into this important process – refer to the *Regulatory and Legal Framework* section on page 32 which sets out the status quo on this initiative.

Strategic review

A comprehensive strategy review is being undertaken to set milestones and objectives for the short, medium and long term. This review involves leadership, organised labour, stakeholders and the organisation as a whole. Ten priority work streams were created, and about 100 full-time senior team members and independent specialists debated Eskom's strategic issues.

Based on Eskom's mandate, as defined in the shareholder compact, Eskom's purpose, values and strategic imperatives were thoroughly revised to be in line with current national and global realities.

Purpose

To provide sustainable electricity solutions to grow the economy and improve the quality of life of people in South Africa and in the region

Zero harm, integrity, innovation, sinobuntu (caring), customer satisfaction and excellence

Values

The review is focusing on longer term challenges such as balancing electricity demand and supply, securing future resource requirements, reducing Eskom's carbon footprint, supporting government priorities and ensuring financial sustainability.

Eskom's business model – a vertically integrated utility



Purpose, values and strategic objectives continued

The business model and the strategic review process need to balance three aspects

Socio-economic aspects, e.g.

- ▶ Skills development beyond own need
- ▶ Implementation of electrification

Commercial aspects, e.g.

- ▶ Being customer-centric
- ▶ Ensuring financial sustainability
- ▶ Adding value to shareholder



Environmental aspects, e.g.

- ▶ Meeting national emissions legislation
- ▶ Supporting government's climate change response strategy

Eskom plays a central role to support the new growth path

Future focus of Eskom



- Availability and reliability of plant**
- Portfolio management**
- Efficiency of operations**
- Capacity**
- Environment**



- Capacity**
- Efficiency of operations**
- Availability and reliability of plant**
- Regulatory management**



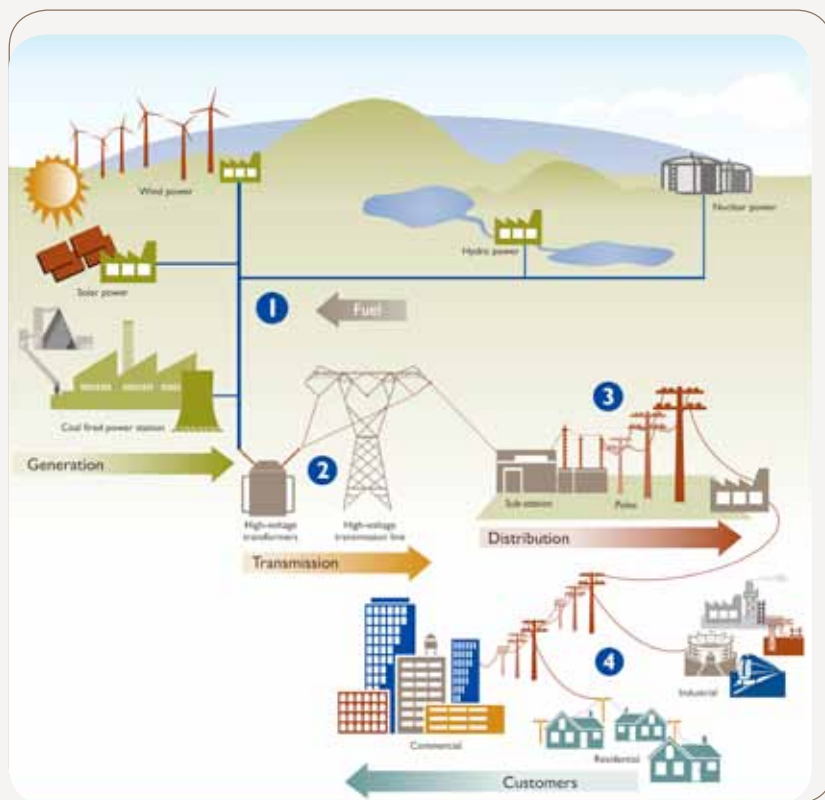
- Customer segmentation**
- Sales channels**
- Customer satisfaction**
- Efficiency and cost to serve customers**
- Reputation**



- Cost reduction**
- Value maximisation**
- Procurement**
- Capacity**
- Back2Basics**

Key facts about Eskom

Electricity: from power station to customer



Electricity flow – from power station to customer

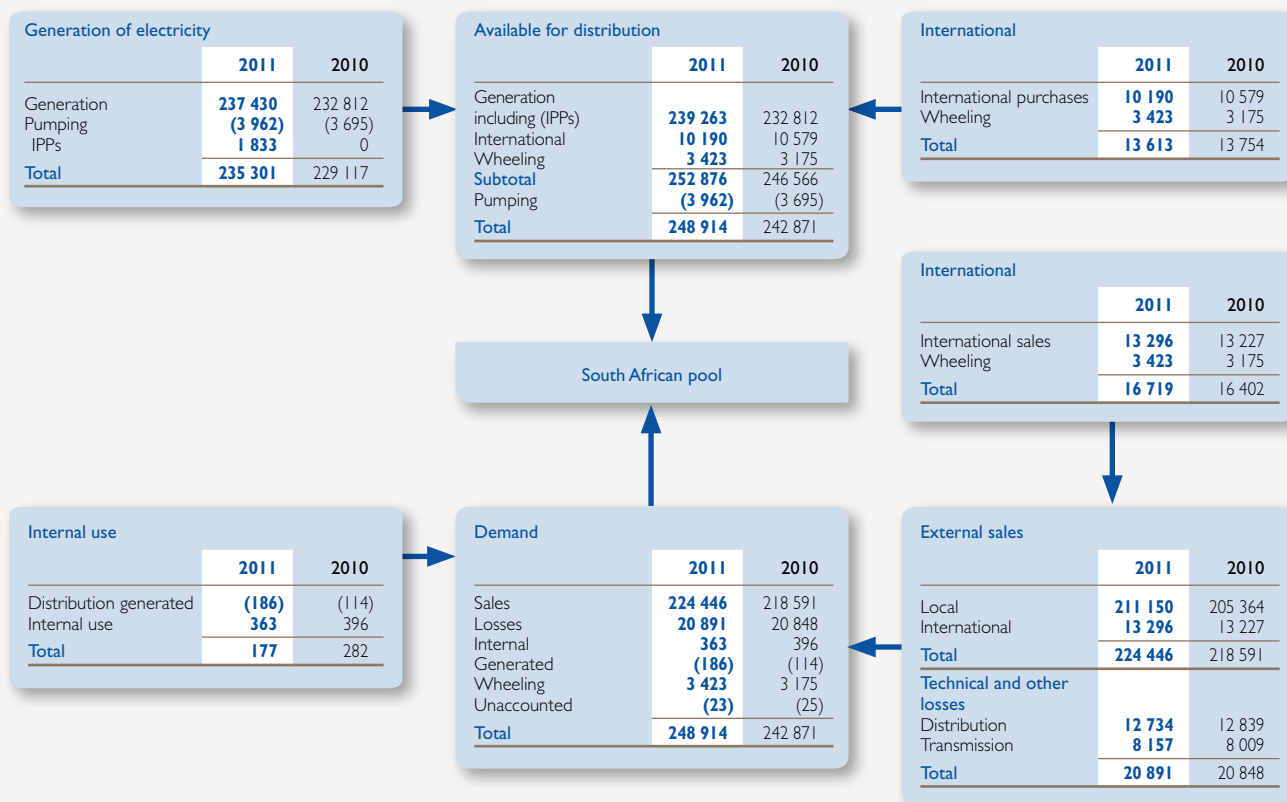
Input		2011	2010	2009
Coal	Mt	124.7	122.7	121.2
Water	ML	327 252	316 202	323 190
Liquid fuels (diesel and kerosene)	ML	63.6^{RA}	16.1 ^{RA}	28.9 ^{LA}
Output				
Total electricity produced by Eskom	GWh	237 430	232 812	228 944
Total electricity sold	GWh	224 446	218 591	214 850
Carbon dioxide	Mt	230.3^{RA}	224.7 ^{RA}	221.7 ^{RA}
Nitrogen oxide (NO _x)	kt	977^{RA}	959 ^{RA}	957 ^{LA}
Nitrous oxides	t	2 906	2 825	2 801
Sulphur dioxide	kt	1 810^{RA}	1 856 ^{RA}	1 874 ^{RA}
Particulate emissions	kt	75.8^{RA}	88.2 ^{RA}	55.6 ^{RA}
Ash produced	Mt	36.2^{RA}	36.0 ^{RA}	36.7 ^{LA}
Calculated public effective radiation dose	mSv	0.0043	0.0040	0.0045

RA – Reasonable assurance provided by the independent assurance provider. (Refer page 200).
 LA – Limited assurance provided by the independent assurance provider. (Refer page 200).

Key facts about Eskom continued

Energy flow

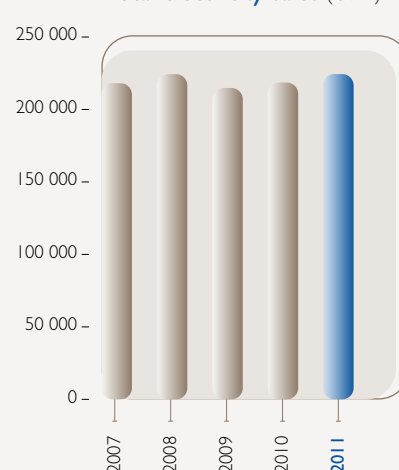
The following diagram illustrates the flow of energy for the year ended 31 March 2011 as well as the comparatives for the year to 31 March 2010. All numbers in GWh.



Electricity sales and revenue

	2011	2010	2009	2008	2007
Sales in South Africa (GWh)	211 150	205 364	202 202	210 458	204 531
International sales (GWh)	13 296	13 227	12 648	13 908	13 589
Total electricity sales (GWh)	224 446	218 591	214 850	224 366	218 120
Growth in GWh sales (%)	2.7	1.7	(4.2)	2.9	4.9
Electricity revenue in South Africa (R million)	86 358	66 970	50 766	41 585	37 874
International electricity revenue (R million)	4 127	2 972	2 334	1 971	1 515
Total electricity revenue (R million)	90 485	69 942	53 100	43 556	39 389
Growth in electricity revenue (%)	29.4	31.7	21.9	10.6	11.4
Customers (number)	4 653 750	4 463 301	4 361 007	4 152 312	3 963 164
Peak demand (MW)	36 664	35 850	35 959	36 513	34 807

Total electricity sales (GWh)



Electricity production by own stations and electricity purchased by Eskom

	2011	2010	2009	2008	2007
Coal-fired (GWh)	220 219	215 940	211 941	222 908	215 211
Hydro-electric (GWh)	1 960	1 274	1 082	751	2 443
Pumped storage (GWh)	2 953	2 742	2 772	2 979	2 947
Gas turbine (GWh)	197	49	143	1 153	62
Nuclear (GWh)	12 099	12 806	13 004	11 317	11 780
Wind energy (GWh) ⁶	2	1	2	1	2
Total own production (GWh)	237 430	232 812	228 944	239 109	232 445
Electricity purchased by Eskom					
• Foreign purchases (GWh) ¹	13 613	13 754	12 189	11 510	11 483
• Local independent power producers and co-generation (GWh)	1 833	0	0	0	0
Consumed by Eskom pumped storage	(3 962)	(3 695)	(3 816)	(4 136)	(3 937)
Net production and import volumes	248 914	242 871	237 317	246 483	239 991
Reserve margin (including imports) (%)	14.9	16.4	10.6	5.6	7.8
Demand-side management savings (MW)	354^{RA}	372 ^{RA}	916 ^{RA}	650	170

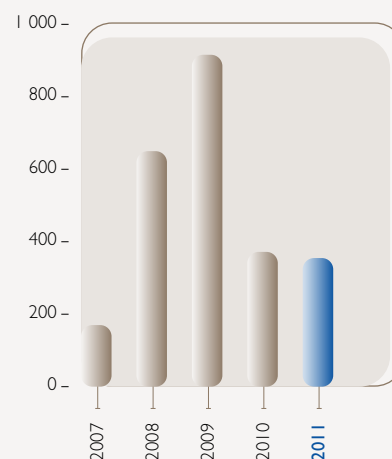
Eskom's power station net maximum capacity²

	2011	2010	2009	2008	2007
Coal-fired (MW)	34 952	34 658	34 294	33 566	33 036
Hydro-electric (MW)	600	600	600	600	600
Pumped storage (MW)	1 400	1 400	1 400	1 400	1 400
Gas turbine (MW)	2 409	2 409	2 409	1 378	925
Nuclear (MW)	1 830	1 800	1 800	1 800	1 800
Wind energy (MW)	3	3	3	3	3
Total capacity (MW)	41 194	40 870	40 506	38 747	37 764

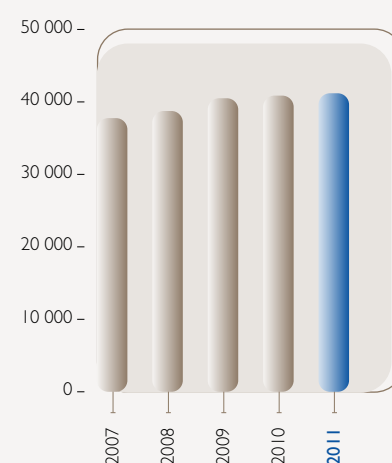
Eskom's transmission and distribution equipment

	2011	2010	2009	2008	2007
Transmission lines (km)	28 790	28 482	28 243	28 164	27 619
Distribution lines (km)	46 712	46 018	45 302	44 680	44 044
Reticulation lines (km)	308 899	305 151	297 783	293 424	288 040
Underground cables (km)	11 018	10 687	10 379	9 921	8 622
Transformer capacity (MVA)					
• Transmission	130 005	123 990	124 140	122 180	118 630
• Distribution	102 053	99 408	96 372	93 956	90 184

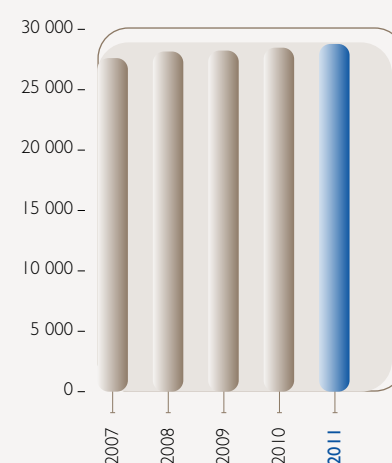
Demand-side management savings (MW)



Power station net maximum capacity (MW)



Transmission lines (km)



1. Foreign imports include wheeling of electricity.

2. The megawatts that a station can supply to the grid after taking out the power used by the power station in the generation process.

RA – Reasonable assurance provided by independent assurance provider. (Refer page 200).

Key facts about Eskom continued

Capacity expansion programme

	2011	2010	2009	2008	2007
Generation capacity installed and commissioned (MW)	315^{RA}	452 ^{RA}	1 770 ^{RA}	1 043	1 351
Transmission lines installed (km)	443^{RA}	600 ^{RA}	418 ^{RA}	480	430
Transmission transformer capacity installed (MVA)	5 940^{RA}	1 630 ^{RA}	1 375 ¹	1 355	1 000
Distribution lines installed (km)	4 773	8 392	5 439	7 319	6 984
Distribution transformer capacity installed (MVA)	2 645	3 036	2 776	3 412	2 967

Environmental information

	2011	2010	2009	2008	2007
Coal burnt in power stations (Mt)	124.7	122.7	121.2	125.3	119.1
Specific water consumption by power stations (L/kWh sent out)	1.35^{RA}	1.34 ^{RA}	1.35 ^{RA}	1.32	1.35
Net raw water consumption (ML)	327 252	316 202	323 190	322 666	313 064
Relative particulate emissions (kg/MWh sent out)	0.33^{RA}	0.39 ^{RA}	0.27 ^{RA}	0.21	0.20
Carbon dioxide (CO ₂) emissions (Mt)	230.3^{RA}	224.7 ^{RA}	221.7 ^{RA}	223.6	208.9
Calculated public effective radiation dose (mSv)	0.0043	0.0040	0.0045	0.0047	0.0034

Safety

	2011	2010	2009	2008	2007
Employee fatalities (number)	6^{RA}	2 ^{RA}	6 ^{RA}	17	8
Contractor fatalities (number)	18^{RA}	15 ²	21 ^{RA}	12	18
Public fatalities (indirect) (number)	43	41	28	42	41
Lost-time incident rate (index)	0.47^{RA}	0.54 ^{RA}	0.50 ^{RA}	0.46	0.35

Developmental initiatives

	2011	2010	2009	2008	2007
B-BBEE attributable spend (R billion) ³	41.9^{RA}	20.8 ^{LA4}	46.3	–	–
B-BBEE attributable spend (%) ³	52.3^{RA}	28.6	63.2	–	–
BEE spend – narrow based (R million)	–	–	35 209	25 447	16 557
Electrification, homes connected (number)	149 914	149 901	112 965	168 538	152 125
Corporate social investment (R million)	62.3^{RA}	58.7 ^{RA}	79.5 ^{RA}	69.8	74.7
People working on capital expansion projects (employees and subcontractors) (number) ⁵	21 197	15 741	3 426	–	–
Eskom trainees/bursars (pipeline) (number)	5 283^{RA}	5 255 ^{RA}	5 907	5 638	5 136

1. This includes construction by transmission division.

2. Restated due to late notification of a fatality by a contractor.

3. Company.

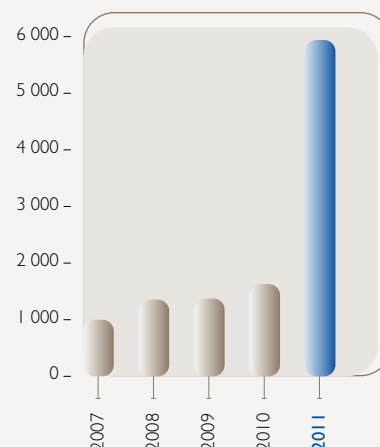
4. Attributable spend for 2010 comprises the top 295 suppliers out of the 11 790 active vendors. However in the current year, the reported number encompasses the entire supplier population.

5. Non-skilled semi-skilled jobs of which some are very short term (such as site clearance). Prior to 2008, this programme was in the preparation phase.

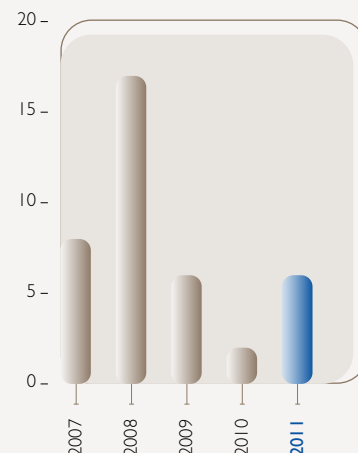
RA – Reasonable assurance provided by independent assurance provider. (Refer page 200).

LA – Limited assurance provided by independent assurance provider. (Refer page 200).

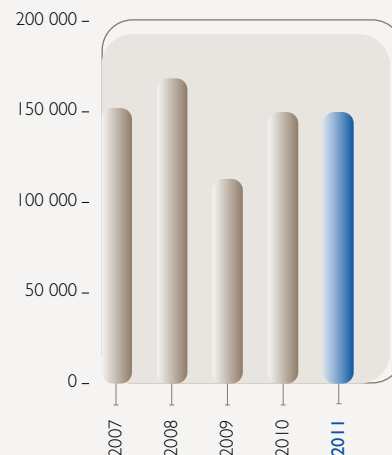
Transmission transformer capacity installed (MVA)



Employee fatalities (number)



Electrification, homes connected (number)



Employees

	2011	2010	2009	2008	2007
Employees (number)	41 778	39 222	37 857	35 404	32 674
Training cost (Rm)	998	758	823	784	748
Average total cost per employee R'000	452	425	375	313	287

Group financial performance

	2011	2010	2009	2008	2007	
Income statement						
Earnings before interest and taxes (before profit or loss on embedded derivatives)	Rm	4 920	(2 115)	3 215	6 452	
Net profit/(loss)	Rm	8 356	3 620	(9 668)	(168)	6 476
Free funds from operations	Rm	17 019	2 356	13 865	8 793	— ¹
Electricity revenue per kWh	c/kWh	40.3	31.9	24.7	19.4	18.0
Electricity operating costs per kWh (including depreciation and amortisation)	c/kWh	32.8	28.2	25.9	18.6	15.6
Bad debts as % of revenue	%	0.75	0.83	1.54	1.09	0.55
Interest cover ²	Ratio	1.54	0.86	(4.38)	1.20	15.19
Statement of financial position						
Total assets	Rm	328 145	246 135	199 302	166 170	143 312
Total equity	Rm	87 259	70 222	59 578	61 129	58 357
Return on average assets	%	2.91	1.63	(5.29)	(0.11)	4.77
Return on average equity	%	10.61	5.58	(16.02)	(0.28)	11.91
Average debtor days for Distribution	Days	22.2	22.0	20.8	19.5	19.5
Average debtor days for Transmission	Days	16.0	16.1	18.1	16.5	—
Average coal stock days	Days	41^{RA}	37 ^{RA}	41 ^{LA}	13	29
Cash flow						
Net cash from operating activities	Rm	22 284	9 118	11 764	(1 912)	13 954
Net cash used in investing activities	Rm	(45 995)	(47 524)	(42 945)	(22 930)	(16 908)
Capex spend (included in investing activities)	Rm	(44 325)	(44 882)	(43 632)	(24 252)	(17 533)
Net cash from financing activities	Rm	20 330	35 500	38 871	26 193	2 267
Cash and cash equivalents	Rm	12 087	15 541	18 382	10 893	9 542
Funding						
Free funds from operations/total debt	%	9.56	1.92	15.89	13.98	— ¹
Gross debt/earnings before interest, tax, depreciation and amortisation	Ratio	8.19	9.50	(13.00)	10.81	3.38
Working capital ratio	Ratio	0.87	0.91	0.78	0.85	0.67
Debt:equity ratio	Ratio	1.62	1.62	1.22	0.40	0.14
Debt service cover ratio	Ratio	1.97	2.53	0.75	0.68	11.43

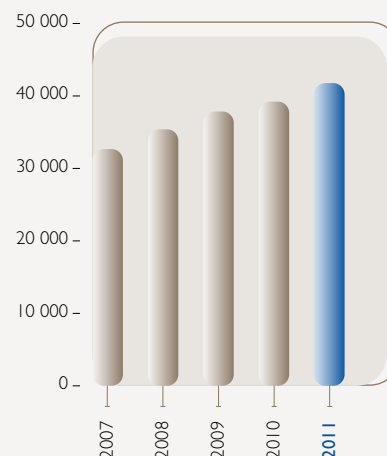
1. Due to changes in treasury cash flow disclosure, this number is not available.

2. Operating profit before fair value loss on embedded derivatives and net finance cost)/(net finance cost before unwinding of discount on provisions, change in discount rate and borrowing cost capitalised. (The low debt/equity ratio in 2007 distorts the interest cover ratio.)

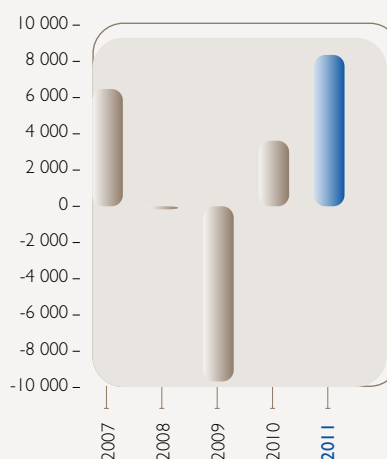
RA – Reasonable assurance provided by independent assurance provider. (Refer page 200).

LA – Limited assurance provided by independent assurance provider. (Refer page 200).

Group employees (number)



Net profit (R million)



Sustainability reporting in Eskom

What sustainability means to Eskom

South Africa's sustainable economic growth depends on reliable, cost-effective energy. Increasingly, the competitiveness of any economy is based largely on the availability of a sustainable energy mix.

This is particularly significant, if not critical, for the South African economy – the structure of the economy, its resource base and its beneficiation manufacturing are highly energy-intensive and energy-dependent.

Eskom's six-year business plan details a significant increase in generation capacity to unlock economic potential in a wide range of sectors such as mining, manufacturing and agri-business. By diversifying the sources of energy, Eskom will make a meaningful contribution to the sustainability of energy supply and to better environmental management. Eskom is a "leading indicator" of investment and job creation for sectors such as mining and energy-intensive manufacturing that depend on a reliable supply of energy.

Climate change

At present, South Africa has no obligations to reduce greenhouse gas emissions, but is committed to sustainable development policies and measures. South Africa must contribute to global efforts to combat climate change, while ensuring the sustainability of its economy and society. Eskom supports this national approach in the form of a six-point climate change plan. This plan centres around diversification into technologies other than coal, energy efficiency initiatives, innovation through research, demonstration and development, adaptation to the negative impacts of climate change, and investment through carbon market mechanisms.

Eskom needs to balance its economic, financial, operational, environmental and social performance imperatives to stay sustainable. This balance requires alignment between Eskom and its stakeholders, including government as a shareholder, in terms of expectations and a shared vision for Eskom.

Sustainability governance

The board sustainability committee deals with integrated sustainability issues and approves or recommends policies, strategies and guidelines, particularly on climate change, environment, health, nuclear issues, quality and safety.

The executive management committee (Exco) guides the implementation of Eskom's sustainability strategy including environmental management and climate change development issues and occupational health and safety matters. It also reviews sustainability strategies for consideration by the board.

Measuring sustainability performance

Eskom had itself evaluated by SAM Research AG against the Dow Jones sustainability Indices (DJSI) in 2010. The score reflects Eskom's performance across economic, environmental and social criteria compared to its industry average (calculated as the average score of all assessed companies eligible for the DJSI world, regional indices or country indices). The values for the total score, the dimension and the criteria scores are on a scale from 0 to 100%.

Eskom scored above average with a score of 62 against an average score of 53. The economic dimension scored 67 against the average of 58, while the environmental dimension scored 50 against the average of 46. In the social dimension, Eskom scored 71 against the average of 56. The score for codes of conduct/compliance/corruption and bribery was 88 against an average of 70, and environmental and social reporting scored 93 and 100 against averages of 66 and 61 respectively.

In 2010, Eskom also had itself assessed against the Johannesburg Stock Exchange Socially Responsible Investment index's 2010 sustainability criteria, which range from the environment and society to economic sustainability and good corporate governance. According to the report Eskom "achieved a performance level that not only complies with the minimum requirements for inclusion in the index, but which is also very close to the best performer level in the category for companies with a high environmental impact".



Eskom's own sustainability performance index

Eskom's own sustainability performance index was developed in 2002/2003 through stakeholder meetings with experts. Material issues that affect Eskom's sustainability were identified, and 20 key performance indicators were defined and clustered to capture financial (operating profit before tax and return on average capital employed), environmental (legal compliance), social (broad-based black economic empowerment and electrification) and technical performance (the energy available factor to customer service and the reserve margin).

Eskom's overall performance was 2.6 (2010: 2.5). The index shows three years of declining performance, two years of stabilising performance and this year a score of 2.6 – DSM targets were achieved, financial performance improved and the total number of system minutes lost also improved. Areas with lower scores were safety, environmental legal compliance, energy availability and the reserve margin.

The centre of excellence for enterprise performance management (part of the Finance and Group Capital division) is taking the sustainability index forward. The centre will ensure the right range and depth of performance indicators to measure whether the corporate strategic objectives for sustainability are being achieved.

Sustainability reporting

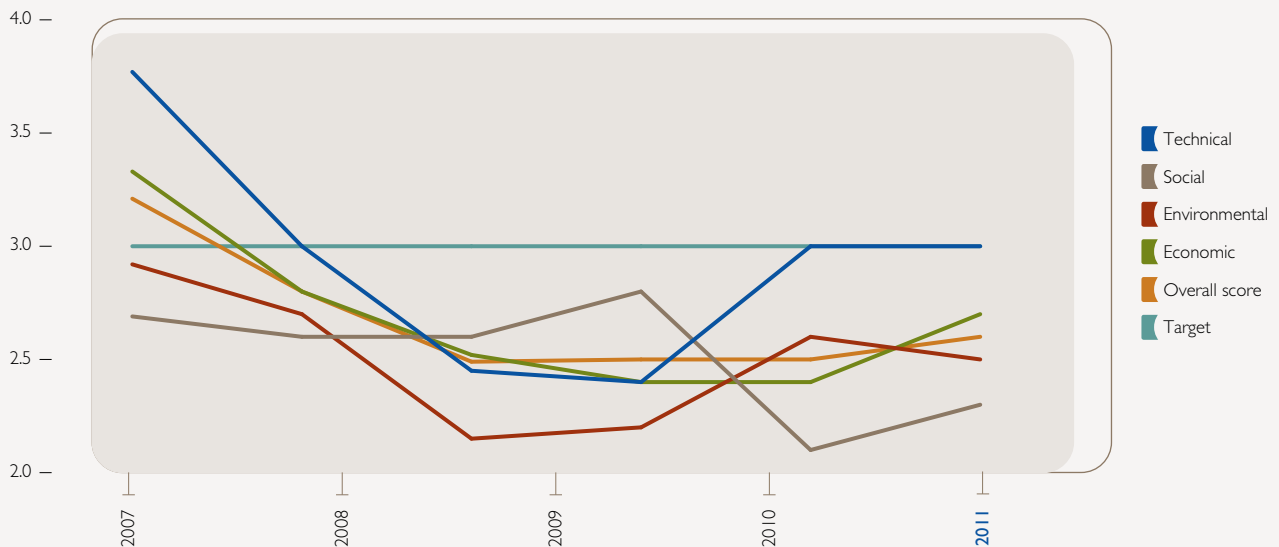
Identifying and choosing material issues

Eskom has identified the material issues to report on by analysing the views and expectations of both employees and stakeholders. What are the significant economic, environmental and social impacts of the business? What are the significant risks to the company? And what are the key challenges facing our society? An issue is material if it has an impact that could substantively influence Eskom's assessments and decisions and those of its stakeholders.

There is much that could be reported on in relation to Eskom's sustainability. To this end, numerous external sources were reviewed, including:

- Eskom's shareholder compact
- Shareholder resolutions and other feedback from ongoing dialogue
- Eskom's corporate plans, objectives and strategies and performance
- Risks
- Policies and initiatives related to Eskom's business
- Customer feedback from focus groups, forums, committees and other methods
- Input from stakeholder dialogues
- Input from investors and investor groups committed to sustainable investing
- Partners, non-governmental organisations, suppliers and other stakeholders

Eskom's sustainability performance index



Sustainability reporting in Eskom continued

Eskom strategic objectives



Stakeholder issues



Legal shareholder requirements



- Media coverage
- Industry benchmarking
- The Global Reporting Initiative (GRI), the United Nations Global Compact principles and other guidelines
- Parliamentary questions
- Independent reviews of Eskom's 2010 Integrated Annual Report
- Queries, reviews and assessments from investors and rating agencies
- Topics arising from the Parliamentary Portfolio Committees on Public Enterprises and Energy.

The material non-financial performance issues were defined from the following internal sources:

- Feedback from executive management
- Engagements with employees
- Employee surveys and other inputs from employees
- Trend-spotting on issues relevant to Eskom's business

Responding to stakeholders

Eskom engages with its stakeholders¹ in a wide range of ways, including road shows, newsletters, presentations to portfolio committees, and one-on-one meetings. These exchanges provide valuable insights. Some stakeholder concerns can be addressed fairly easily, while others have the potential to bring about significant process changes. Therefore, the frequency of engagements between different stakeholder types, is diverse and specific to that particular engagement and/or initiative. Eskom has prioritised resolving or incorporating immediate stakeholder concerns, while attempting to

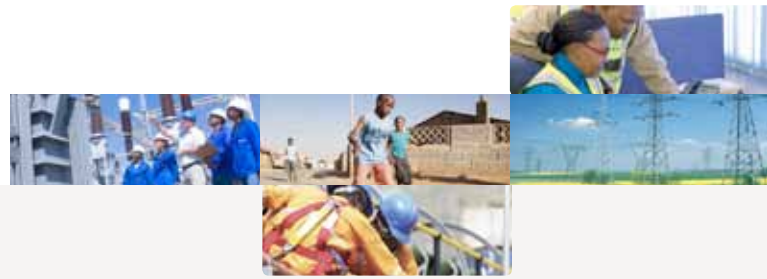
respond to those that require longer-term interventions. Platforms for engagements are created with the broadest spectrum of stakeholders, such as national roadshows by Eskom executives, key customer forums, etc.

Key stakeholders and their material issues

Main stakeholders

- Academics
- Analysts (*economic/business, environmental, political and social*)
- Business (*broad and niche*)
- Civil society (*general public, communities land owners and farmers, NGOs*)
- Customers
- Financial markets and investors
- Government (*national, provincial and local spheres*)
- Industry (*independent power producers; Energy Intensive User Group; Amalgamated Municipal Electricity Undertakers; South African Wind Energy Association, etc.*)
- Industry experts
- Internal stakeholders (*board of directors, executive committee, management and employees*)
- Media
- Organised business
- Organised labour
- Parliamentary portfolio committees and select committees
- Regulators
- Suppliers.

¹. Person, groups or organisations that have an interest in our business, because they can affect or be affected by our operations.



Material issues discussed in this 2011 integrated report

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Accountable

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Application of GRI principles

Eskom has followed the Global Reporting Initiative G3 guidelines for this report and has declared a GRI B+^{LA} application level with the possibility of an A+ rating into the future. In addition to this B+ application, Eskom has applied the GRI *Electric Utility Sector Supplement*, a tailored version of the guidelines in the preparation of this report. In addition, Eskom's internal guidelines supported the reporting process.

An assurance provider was engaged to provide assurance on selected sustainability information in this report against the International Standard on Assurance Engagements 3000: Assurance Engagements other than Audits or Reviews of Historical Information. This report is presented on page 200.

Eskom has applied the following AA1000APS principles in compiling this integrated sustainability report:

- **Inclusivity:** The stakeholder engagement processes inform the structure and, more importantly, the issues Eskom reports on. This is in addition to the internal process of business planning, setting objectives and performance targets, and integrated risk management.

- **Materiality:** The main material issues, both current and future, covered in this report were highlighted by stakeholders. Eskom's business focus areas and priorities have also influenced the material issues reported on. This has been strengthened by a group-wide integrated risk management process. The process of identifying the material issues to be reported on can be found on the inside front cover.
- **Responsiveness:** The intention is to ensure that Eskom has provided the information that stakeholders have requested. Eskom aims to respond to stakeholders' specific needs, both through this integrated reporting process as well as through our other stakeholder engagement mechanisms.

Eskom's sustainability performance index on page 17, together with the benchmarking against sustainability indices and performance areas and indicators in this report, reflect the opportunities and constraints Eskom faces in executing its sustainable development strategy.

Secure supply for the 2010 FIFA World Cup™

The year 2010 was an extraordinary year, not only for South Africa but also for Eskom. In preparation for the 2010 FIFA World Cup™, Eskom, in consultation with its regional partners and major customers, implemented several initiatives to ensure that the event took place without any incidents. After years of planning, hard work, unwavering commitment and dedication, all Eskom employees worked together to ensure an uninterrupted power supply to the tournament for 64 consecutive games, from kick-off to the final whistle.

Stakeholder collaboration, at a national and regional level, was critical throughout: in the run-up, during the tournament, and afterwards. Each region had an electricity task team, with Eskom and municipalities the critical members. Regional and national stakeholders and international Southern African Power Pool trading partners made a significant contribution to ensuring that the lights stayed on for this global event.

Situational awareness centres were formed across the country. Their primary function was to record, action, communicate and report on incidents (technical and non-technical) and have heightened response times. Eskom's relationship with national security agencies improved markedly over this period.

From an energy supply point of view, the Generation division was able to meet electricity demand without load shedding. No major plant maintenance was conducted during the period. Eskom ran a power station plant performance and safety competition. Kendal power station won, with the best energy availability factor, lowest number of trips, lowest unplanned energy losses and best safety performance.

Generation division successfully accomplished the following:

- Met the commitment to provide a total reserve of about 4 200MW (2 500MW unplanned and 1 700MW real-time reserve)
- Executive site visits to confirm the operational readiness of power stations and mines
- Implemented an integrated security plan for plant
- Initiated contingency plans to address risks to the system where power station unit maintenance moved into the World Cup period
- Submitted to an independent review of Generation's readiness for the World Cup by KEPCO, the Korean power utility, which commended Eskom's overall readiness to deliver reliable power supply.

The goodwill, relationships and intense collaboration to keep the lights on must continue: with Southern African Power Pool trading partners, industrial, commercial and residential customers, and stakeholders. The electricity supply industry forums, which consisted of critical stakeholders (Eskom, municipalities, the Department of Energy, tertiary institutions, business chambers, among others), resulted in a greater level of trust, co-operation and the sharing of best practices. This had huge benefits for the industry.

Employees did Eskom proud: from leadership and project management to operations and overall team work. They have left a legacy of quiet confidence that will stand Eskom in good stead.

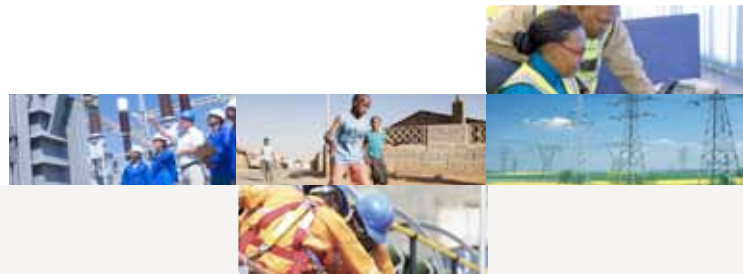
 Detailed information on energy efficiency initiatives and regional reliability teams can be found at www.eskom.co.za/annreport11/001.html

A total of R21.6 million was incurred by the Eskom Group on World Cup tickets, apparel and travel costs to stadia:

R000	2011	2010	2009	Total
Tickets acquired	131	9 045	3 452	12 628
Travel costs	363	–	–	363
World Cup apparel and other	8 253	402	–	8 655
	8 747	9 447	3 452	21 646

LA – Limited assurance provided by the independent assurance provider (refer to page 200).

Integrated risk management



Emerging risks

Emerging risks form part of the relationship between the external environment and any organisation, and Eskom reviews risk regularly. Emerging risks with a wider systemic impact and linked to significant long-term trends include:

- The global recession
- South African economic development
- Nuclear safety
- Financial market volatility
- Regulatory compliance
- Commodity price volatility
- Managing talent
- The Chinese economy
- Underinvestment in production innovation and infrastructure
- Corporate social responsibility and social acceptance
- Environmental pressure.

The global recession

The world economic recovery remains in a two-speed mode. The developed economies are growing at a considerably slow pace while the developing nations are by and large steaming ahead. The United States is struggling to overcome its economic problems that were accumulated over the years, Europe is fighting off multiple country, sovereign debt crises, and the emerging economies are trying to fend off inflationary pressures. The economic stimulus packages that were introduced in different countries may have prevented the worsening of the financial crisis but structural problems that were inherent in the crisis are unlikely to be resolved in the short term. High levels of unemployment and difficult conditions in the labour market are set to continue, with negative implications for household incomes, consumption and investment.

The geo-political developments in North Africa and the Middle East have added pressure on the global oil prices. This marked increase in

oil prices has potential to derail the world economic recovery in more ways than one. Firstly, the oil price could choke economic growth if prices become prohibitive. Secondly, the inflationary pressures that were already gathering steam could be given an impetus by higher oil prices, prompting a quicker monetary policy response than would otherwise be necessary.

With slow growth predicted for developed markets, the main growth engines like China and India are expected to continue growing at a brisk pace, thereby leading the global recovery efforts. The increasing demand for raw materials by these economies augurs well for South Africa as a commodity exporter. This development is expected to contribute towards the expected increase in the level of domestic electricity consumption as commodity-linked sectors respond to improving market conditions.

South African economic development

Given the improving global conditions, the South African economy is expected to gain momentum in its own recovery path. From a contraction of 1.7% in 2009, the economy bounced back to a growth of 2.8% in 2010 and it could post even higher growth levels in the coming years. This buoyant level of GDP growth is projected to be supported by strong growth in household consumption and a steady increase in capital formation.

The rand remains the main catalyst for inflation outcomes and interest rate projections. A stronger rand exchange rate has mitigated the impact of higher oil prices and rising global food inflation. The consumer price index is expected to increase gradually in the short term and to remain within the inflation target band over the medium term. The threat of higher inflation poses an upside risk on interest rates in the short to medium term. Nevertheless, monetary policy is expected to be tightened at a steady pace so that economic growth is not stifled.

Earthquake and tsunami in Japan

There have been renewed concerns about nuclear safety following the failure of a number of safety systems at the Fukushima nuclear power station in Japan after the tsunami. The subsequent environmental impact of the radiation leakage has prompted the question: How would Koeberg power station have coped with a similar disaster? Refer to page 158 for details on the safety measures in place at Koeberg power station.

Financial market volatility

The credit crunch and the high cost of capital are likely to persist until global credit markets stabilise. Corporate credit markets are beginning to show signs of improvement but lending standards remain stringent. Banks are focusing on credit risk for loan pricing, and bank credit availability will remain limited in the foreseeable future, with companies needing to explore alternate funding sources to ensure liquidity. Bank credit availability will remain restricted with bank loan markets shrinking and public debt and equity markets becoming tighter.

Regulatory compliance

Uncertain conditions and demands have forced compliance and ethics functions to make difficult resource trade-offs, rationalise cost savings and abandon long-standing assumptions. It is likely that intense scrutiny and regulation of business practices, not only in the financial sector but across the whole spectrum – including oil and gas, and the power and utilities sectors – will result from the global financial crisis and events in the Mexican Gulf. This will be accompanied by heightened government vigilance. Regulatory compliance will therefore continue to be a major risk, especially in view of the current deep corporate distrust and stakeholder vigilance, which require unprecedented compliance responsiveness with very limited resources. Uncertainty about regulation affects the ability of investors, as well as companies, to act.

Commodity price volatility

Commodity price volatility is caused by rising oil and commodity prices as a result of increased demand and greater competition for scarce resources. This will lead to increased running costs, the inability to source required resources on time, increased requirements for stockpiling and increased competitive and inflationary pressure.

A new emerging risk is the shortage of the rare earth minerals that are essential components of clean energy technology, computers and electronics. China currently supplies 97% of these minerals and may wish to exploit this position of power.

Managing talent

The market for skilled professionals is highly competitive. Engaging and retaining suitable employees remains an issue for human resources managers. At the same time, the recovery from the recession has not been accompanied by the creation of new jobs. Unemployment has increased, and people are also remaining unemployed for longer periods. These trends entail additional costs in a financially uncertain market. Increased unemployment could also lead to labour unrest, political instability and even slower growth in developed countries.

Chinese economy

China appears to have navigated the global recession and financial crisis successfully. But much of its domestic growth has been a result of high credit growth, so there is the risk of a sharp and potentially recessionary correction. Given the size of the Chinese economy, this correction will have a significant impact on global financial stability, particularly for China's trading partners, if it should happen before the global economy is more resilient.



Brazil's finance minister has warned that South American countries are bracing themselves for a trade war; because both China and the United States are influencing their currencies in a questionable way to make their exports more competitive.

Underinvestment in product innovation and infrastructure

Product innovation and infrastructure development are critical for meeting the challenges of climate change and the increased demand for energy. Vast segments of water, energy and transport infrastructure across the globe are structurally deficient or functionally obsolete, requiring considerable annual investment to avoid catastrophic failure. Governments already struggling with fiscal deficits and increased debt may not be in a position to be the major drivers of infrastructural development.

Corporate social responsibility and social acceptance

Demonstrating a high level of corporate social responsibility has become increasingly important, including the social acceptance of a company's long-term plans. These social demands can affect getting development plans accepted – particularly in the energy sector, due to Eskom's extensive use of fossil fuels and the resultant CO₂ emissions. Public opinion can be driven by perceptions and not necessarily by actual risk. But companies can no longer afford to dismiss public opinion.

As new communications technologies and platforms develop and social networking gains prominence, more and more information is being distributed outside companies. Digital data is easier to copy and distribute, as demonstrated by Wikileaks. So far, governments have borne the brunt of the leaks, but corporations are not immune. Documents leaked from a big trading firm and a bank have already been published. Evidence of malpractice and information on strategic planning can damage corporations.

Environmental pressure

Environmental regulation, consumer demands and strategic responses remain a pressing long-term issue across all sectors, particularly with increasing public awareness of climate change and environmental preservation. Companies will have to invest resources in maintaining their corporate image and reducing their environmental impact. As economic growth resumes and environmental degradation continues, environmental pressure will re-emerge as a powerful force in shaping business. This is also an opportunity for companies to influence their emissions through more energy-efficient ways of living and working.

Eskom opportunities

The organisation has identified the following opportunities:

- Regional growth opportunities: 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 roleplayers looking to establish a regional presence.
- New sources of funding for low-carbon technologies.
- Ability to influence the structure of the energy industry.

Significant strategic and operational risks

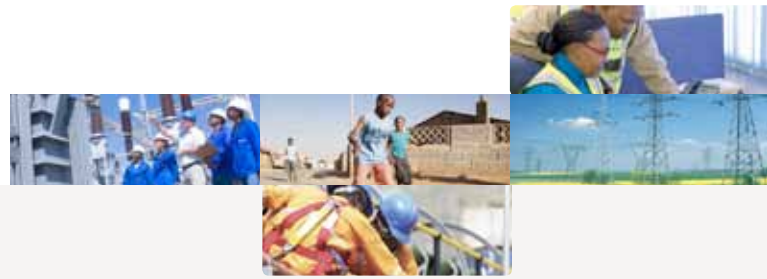
Risks are identified throughout the organisation and are evaluated using standardised risk criteria. The following high-level strategic and operational risks have been identified. Ownership of risks generally lies with the relevant division and they are managed at that level.



The new Kusile coal-fired power station with the site offices in the foreground.

Integrated risk management continued

Risk	Description and treatment	Accountable division
<p>Lack of an effective, stable and predictable policy and regulatory environment or unforeseen changes in the regulatory environment</p>	<p>Description The move towards sustainability of the electricity industry in South Africa and one that is attractive to investment requires an effective framework that evolves with the needs of the industry in a predictable and transparent manner. This would provide the necessary clarity to various stakeholders including Eskom for continued investment and service provision. Particular attention is required for the implementation of the IRP 2010 proposals, promotion of private sector participation in the generation industry, requirements for integrated demand management, addressing the challenges of the Distribution industry and the migration to cost-reflective tariffs.</p> <p>Treatment Eskom is pro-actively identifying issues that need to be addressed and is engaging with all the stakeholders to highlight the relevant risks faced within the sector and the steps required to mitigate such risks.</p>	<p>See <i>Regulatory and Legal Framework</i> on pages 32 – 35</p>
<p>Competition for coal</p>	<p>Description Eskom's coal-fired power stations depend on a continuous supply of coal. The increasing export market for coal, fuelled by rising international coal prices, could result in coal being diverted for the export market and Eskom not having access to sufficient coal, and/or to coal of an acceptable quality. This can lead to the increased cost of coal for Eskom and possible coal shortages. In addition, there are efficiency implications for using poorer quality coal as well as associated increases in maintenance.</p> <p>Treatment The controls in place include stakeholder engagement with new and existing suppliers, with a priority focus on coal contracts covering both long-term contractual tonnage supply and coal quality.</p>	<p>See <i>Primary Energy</i> on page 103</p>
<p>Competition for water</p>	<p>Description Eskom's concerns about sufficient water resources are due to: conflicting demands for the right to use scarce water and a lack of access to water to meet basic human needs; depleted environmental flows; growing pollution; and the implications of climate change on rainfall patterns. The pressure on water resources has implications for electricity planning and can lead to production shortages. Eskom also faces more stringent licence conditions to save water.</p> <p>Treatment Water is a strategic focus area. Eskom is looking at water recovery and conservation programmes, in addition to ongoing interaction with regulatory authorities about access to water.</p>	<p>See <i>Primary Energy</i> on page 105 and <i>Generation</i> on page 154</p>



Risk	Description and treatment	Accountable division
<p>Breakdowns and suboptimal levels of technical performance</p>	<p>Description</p> <p>There are many inherent operational risks in the generation, transmission and distribution of electricity, including:</p> <ul style="list-style-type: none"> • Gradual deterioration of plant, equipment and components at power stations and other energy-related facilities over time • Non-compliance with operational protocols • Suboptimal maintenance, outage scoping and execution • Unplanned maintenance and breakdowns, including natural disasters (floods, wind, snow, fire) • Cable theft • Low reserve margin for generation capacity • Reduced window for planned maintenance due to low reserve margin • Lack of operating skills and supervisory capacity • Strikes and other organised labour industrial action • Load shedding. <p>Treatment</p> <p>Eskom has maintenance, refurbishment and technical planning projects to enhance plant performance to enable the existing infrastructure to accommodate the current demand. The Back2Basics programme aims to standardise, optimise and simplify operating and maintenance procedures, processes and systems.</p>	<p>See Generation on pages 149, 152, Distribution on page 183, Transmission on page 177, Human Resources on page 128</p>
<p>Health and safety risks to employees and the public</p>	<p>Description</p> <p>There are significant health and safety risks associated with Eskom's operations. Any fatality is unacceptable, causing distress and significant disruptions and cost.</p> <p>Treatment</p> <p>Eskom has made the wellbeing of its employees, its contractors and the public a gatekeeper in its performance management model. Safety is comprehensively regulated and strict control regimes are in place throughout the organisation, including safety training programmes, internal and external safety awareness campaigns and targeted elimination and reduction initiatives for specific types of health and safety incidents</p>	<p>See Corporate Services on pages 114 – 116</p>

Integrated risk management continued

Risk

Description and treatment

Accountable division

Financial market volatility and the impact on Eskom's financial sustainability

Description

Eskom has significant debt (some guaranteed), which could adversely affect the group's business and the ability to service such debt or raise new debt. Eskom must raise capital to pursue its committed capital expansion programme and to improve its operations. The global financial crisis and economic downturn could continue to adversely affect the South African economy and financial markets, which in turn negatively affects Eskom's ability to expand and improve its operations if it is unable to raise capital on favourable terms or if government support of such capital-raising is withdrawn.

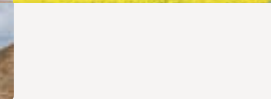
The following risks may also impact on raising capital:

- The National Energy Regulator of South African may approve less than the requested tariffs after 1 April 2013
- Eskom's credit rating may be downgraded
- An increase in domestic interest rates may increase the Group's borrowing costs
- Depreciation of the rand could affect Eskom's ability to make payments in relation to additional foreign borrowings and other debt, including that for additional imported capital equipment
- Eskom is subject to environmental taxation that could reduce the profitability of its generation from non-renewable sources
- Eskom is not permitted by the National Energy Regulator of South Africa to charge completely cost-reflective tariffs, and has a revenue shortfall relative to its operating costs (including an adequate return on assets) and its capital investment costs. There is no assurance that Eskom will receive cost-reflective tariffs in the future
- Eskom depends on key customers, including municipalities and a limited number of large companies in specific sectors of the economy. The financial viability of these customers could expose Eskom to significant revenue recovery risk
- Eskom is subject to non-payment by customers, the theft of electricity (illegal connections) and the theft of distribution cables and other losses
- Eskom is exposed to fluctuations in commodity prices and certain indices through certain of its electricity supply agreements and through certain of its capital equipment purchases
- The risks inherent in nuclear power generation expose Eskom to significant potential liabilities and risks
- Provision has been made in the balance sheet for the considerable decommissioning costs for the Koeberg nuclear power station, including the spent fuel rods. However this provision is not currently required to be specifically funded.

Treatment

Eskom is engaging all relevant stakeholders (government, regulators and financing institutions) to secure adequate and affordable funding. Customer communication and engagement programmes are being expanded and customer relationships monitored. Cost-saving drives are under way, and Eskom is monitoring budgetary performance. New capital projects need to be pre-funded before they are authorised to proceed.

See Profile on page 18, Finance on page 82 and Distribution on page 184



Risk	Description and treatment	Accountable division
<p>Capacity to meet the demand for electricity</p> <p>Effectiveness of efforts to encourage South Africa to use electricity more economically</p>	<p>Description</p> <p>Eskom may not be able to meet the demand for electricity in South Africa, in part due to higher than expected economic growth and inadequate demand management responses by consumers to use electricity more efficiently. Uncoordinated supply and demand initiatives, delays in integrating the independent power producers, and delays in the capacity expansion programme could all contribute. This is a knock-on effect of not providing sufficient time for Eskom to carry out its maintenance programme.</p> <p>Treatment</p> <p>Eskom has embarked on integrated demand management initiatives aimed at reducing the demand for electricity. There is continuous engagement with stakeholders in this regard. This has been executed simultaneously with asset management, capacity expansion and refurbishment programmes that will allow existing infrastructure to accommodate the demand for electricity.</p>	<p>See <i>Integrated Demand Management</i> on page 191 <i>Corporate Affairs</i> on page 139</p>
<p>Attracting and retaining suitably qualified and skilled employees</p>	<p>Description</p> <p>The market for talented and skilled professionals is highly competitive. If Eskom is unable to attract and retain suitably qualified and skilled employees, its business and operations could be materially compromised. In addition, the high rate of HIV infection in South Africa may have an adverse effect on productivity and ultimately on business performance.</p> <p>Treatment</p> <p>The controls in place to treat this risk include strategic workforce planning, training, leadership development and appropriate remuneration practices.</p>	<p>See <i>Human Resources</i> on page 128</p>
<p>Pressure to improve environmental performance</p>	<p>Description</p> <p>Eskom's operations have a significant impact on the environment. Environmental regulation and consumer demands and appropriate strategic responses remain a pressing long-term issue, particularly with increasing public awareness of climate change and environmental preservation.</p> <p>The risk is non-compliance with environmental legislation and the ability to meet future legal requirements, including the introduction of carbon taxes, while considering competing or conflicting business priorities.</p> <p>Treatment</p> <p>The controls to treat the causes associated with this risk include ensuring management's commitment to addressing shortcomings, executing the technical plan for zero liquid effluent discharge, and developing air quality improvement plans. Eskom is also implementing integrated compliance management, developing its influence over legislation, and addressing conflicting business requirements.</p>	<p>See <i>Corporate Services</i> on pages 112 – 114</p>
<p>Delays in the capacity expansion programme or compromised quality due to scheduling and design requirements</p>	<p>Description</p> <p>Due to the size and complexity of the capacity expansion programme, Eskom may fail to implement the programme successfully, or on time. Decisions to undertake investments may be delayed due to external events.</p> <p>Treatment</p> <p>Eskom is integrating its planning initiatives and communicating with relevant stakeholders to improve energy planning and execution.</p>	<p>See <i>Group Capital</i> on page 86 and <i>Generation Engineering</i> on page 164</p>

Integrated risk management continued

Risk	Description and treatment	Accountable division
<p>Impact of inaccurate key electricity demand assumptions on the scheduling of production and maintenance</p>	<p>Description There is a risk of an energy shortfall if key assumptions related to the supply-demand gap and lead times to respond are incorrect. Inaccurate assumptions may be caused by uncertain demand projection, significant reliance on demand management, reliance on initiatives not within Eskom's control, an inability to adequately maintain the existing fleet due to non-delivery of identified levers, uncertainty about the future of regional power development, and inadequate systems and processes to track these developments.</p> <p>Treatment The controls in place are continuous engagement with stakeholders, forecasting initiatives, a focus on maintenance quality, demand management, identification and tracking of new alternatives and a focus on efficiency.</p>	<p>See Generation on page 145 and System Operations on page 173</p>
<p>Possible loss of critical information</p>	<p>Description Effective and secure information systems are essential for efficient management, accurate billing, and effective power generation and transmission. The confidentiality, integrity and availability of information systems could be affected by factors such as human error; ineffective design or ineffective controls, and deliberate attack.</p> <p>Upgrades of technology systems and planned upgrade programmes may not be installed or completed on time or on budget.</p> <p>Treatment The controls in place to treat the causes associated with this risk range from information system standards and control frameworks to third-party security assessments, vulnerability assessments and reviews of the infrastructure and applications.</p>	<p>See Corporate Services on page 120</p>

LIGHTING

Regulatory and Legal Framework

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Regulatory and Legal Framework



Mohamed Adam Senior General Manager (Regulation and Governance) and Corporate Counsel

<i>Progress this year</i>	<i>Future priorities</i>
<ul style="list-style-type: none"> • Implemented the multi-year price determination (MYPD 2) and initiated preparation for MYPD 3 • Implemented inclining block tariff for non-prepayment customers • Strengthened internal regulatory processes and interfaces. Enhanced stakeholder consultation on various matters • Implemented independent power producer projects under the medium-term power purchase programme • Contributed to the development of the national integrated resource plan (IRP 2010) • Regulatory strategy: <ul style="list-style-type: none"> – Prioritised and identified regulatory topics – Implemented initiatives to enhance communication and transparency – Improved co-ordination with the National Energy Regulator of South Africa on key priorities – Approved internal compliance charter and strategic framework • Finalised preparations for implementing the Companies Act (71 of 2008) and the Consumer Protection Act (68 of 2008) • Consolidated the Governance, Legal and Regulatory Affairs structure • Made progress with single buyer ring-fencing 	<ul style="list-style-type: none"> • Pricing: <ul style="list-style-type: none"> – Contribute to implementing mechanisms to enhance stable and predictable pricing – Finalise implementation of the MYPD 3 application – Align with National Energy Regulator of South Africa's reporting requirements – Implement inclining block tariff for prepayment customers – Implement the renewable energy feed-in tariff programme • Implement the Companies Act and the Consumer Protection Act • Focus on implementing the improved internal compliance framework • Finalise the shareholder compact for 2011 • Implement co-generation independent power producer projects • Enhance governance best practices

Overview

Eskom has to operate effectively within the evolving regulatory, policy and legal framework. The compliance framework must be improved and Eskom must implement compliance best practices.

Regulation and Governance Unit

In the third quarter of the 2010 financial year, Eskom's Regulatory Affairs function was integrated with the company secretary and legal departments to create the Regulation and Governance Unit. The role of the unit is to ensure that Eskom operates within the terms of its licence by providing holistic support on governance, legal and regulatory matters. This support includes shaping the policy and regulatory environment within which Eskom operates.

Regulation

Mandate of the regulation department:

- Refining Eskom's regulatory strategy
- Co-ordinating its interface with NERSA
- Ensuring regulatory compliance and helping integrate regulatory matters into business decisions throughout the organisation.

Key responsibilities and activities are to:

- Develop and oversee Eskom's regulatory strategy
- Identify and prioritise regulatory topics
- Identify and minimise regulatory risk (increase predictability)
- Clarify the roles of corporate versus operating units
- Influence the external energy policy environment
- Build relationships with the National Energy Regulator of South Africa and significant stakeholders
- Co-ordinate and lead discussions with the National Energy Regulator of South Africa on key priorities
- Consolidate submissions in strategic areas
- Provide guidance on inter-operating unit issues to ensure alignment with overall strategy.

The regulatory interface co-ordinating forum, with representation from all the operating units, co-ordinates regulatory matters across Eskom.

Legal

Mandate of the legal department:

- Provide strategic and objective legal advice and effective business solutions
- Manage legal risk
- Ensure Eskom's compliance with applicable legislation.

Key responsibilities and activities:

- Enable Eskom to achieve material compliance with international, national, and local laws and regulations (including Eskom's regulatory licences)
- Position Eskom to achieve its future compliance requirements. The focus is on ensuring that the legal, policy and regulatory framework being put in place allows Eskom to achieve its strategic objectives.

A key focus area of the legal department is to ensure Eskom's readiness for implementation of the Companies Act (71 of 2008), the Companies Amendment Act 2011 and the Consumer Protection Act 2008.

Company secretary

Mandate of the company secretary:

- Influence and ensure effective governance and secretariat best practices to enable Eskom to be a well-governed, ethical and trusted company.

Key responsibilities and activities:

- Provide an effective secretariat service to the board, Exco and its committees
- Develop governance policies and procedures (including the delegation of authority)
- Develop, implement and monitor governance training programmes
- Identify and implement effective governance best practices
- Ensure the effective flow of information from board, the executive management committee and its committees
- Facilitate Eskom's readiness for new governance codes and laws including the Companies Act.

Regulatory and Legal Framework continued

Regulatory and legal framework

The absence of sufficient competition in the electricity sector in South Africa necessitates economic regulation of the industry to ensure that the interests of customers, licensees and other stakeholders are balanced, while also ensuring the industry's sustainability.

The regulatory, legislative and policy framework in the energy sector has also been evolving. Some significant developments are set out later in this section.

Eskom is also regulated in the broader sense beyond electricity regulation. In 2002 Eskom was converted into a public company in terms of the Eskom Conversion Act (13 of 2001) and as such the legislative framework applicable to any corporate entity in South Africa is applicable to Eskom. These include the Companies Act, the National Environmental Management Act, the competition laws, labour laws and tax legislation, to mention a few. In addition, Eskom is also subject to legislation specifically applicable to state-owned entities – notably the Public Finance Management Act, Promotion of Access to Information Act and the Promotion of Administrative Justice Act.

It is therefore imperative that Eskom operates effectively within the policy, legal and regulatory framework. The compliance framework is being improved to ensure that Eskom implements best practices in this responsibility.

Regulatory framework

Eskom is regulated by the National Energy Regulator of South Africa (NERSA) in accordance with the Electricity Regulation Act (4 of 2006).

Key objectives of the Electricity Regulation Act:

- Efficient, effective, sustainable and orderly development and operation of electricity supply infrastructure in South Africa
- Long-term sustainability of the industry
- Investment in the industry
- Universal access to electricity
- Diverse energy sources and energy efficiency
- Competitiveness and customer choice
- Fair balance between the interests of customers and end users, licensees, investors and the public.

The National Energy Regulator of South Africa's key powers:

- Issues licences for the operation of generation, distribution and transmission facilities
- Regulates imports, exports and the trading of electricity
- Determines and approves electricity prices and tariffs and the conditions under which electricity may be sold.

The National Energy Regulator of South Africa has significant influence and oversight over Eskom's business. Eskom is regulated by separate licences for the generation, transmission and distribution of electricity. It also has a nuclear licence from the National Nuclear Regulator, which regulates the operation of its nuclear power station and all elements of the nuclear value chain.

Interactions with government

In addition, Eskom is subject to direct and indirect oversight by government, as shareholder and policy maker. Eskom needs to interact across all areas of government regarding the regulatory environment in which it operates, and it has the benefit of a number of relationships with various ministries and government departments.

Some of the key areas are outlined below.

Shareholder – Minister of Public Enterprises

The Minister of Public Enterprises is the shareholder representative of the South African Government and has oversight responsibility for Eskom. This relationship is governed by a shareholder compact. The shareholder compact sets and agrees on Eskom's strategic intent, key performance areas and targets. The compact includes strategic objectives, policies, financial, technical and other key performance indicators and reporting requirements. Eskom provides quarterly and annual reports to the Department of Public Enterprises on its performance against the compact. Eskom's performance against the shareholder compact for 2010/11 is set out in the leadership overview on page 66.

Eskom's responsibilities, approvals and reporting in terms of the Public Finance Management Act are managed through the Department of Public Enterprises. The department is also a conduit for Eskom's relationship with other government departments, as highlighted below. Eskom's compliance with the Public Finance Management Act is discussed in the directors' report on page 210.

Policy – Minister of Energy

The Minister of Energy, together with the Department of Energy (DoE) is the key policy ministry responsible for the energy industry, including the electricity sector, mainly governed through the Electricity Regulation Act (4 of 2006) and its associated regulations.

Additional financial oversight and reporting – National Treasury

In certain instances, Eskom needs approval from the Minister of Finance and provides information to National Treasury through the DPE and to the extent required in terms of the Public Finance Management Act. In addition, National Treasury has been instrumental in providing a government loan and guarantees in favour of Eskom. Further information about the loan and guarantees is set out in the Finance division section on page 84.

Environmental compliance

Eskom is committed to managing and mitigating the impact of its operations on the environment. Eskom is subject to a wide array of laws and regulations that ensure that environmental rights, as set out in the South African Constitution, are achieved. These rights relate to preventing pollution and ecological degradation, promoting conservation, and securing ecologically sustainable development.

Various independent authorities, including the National Nuclear Regulator, the Department of Water Affairs and the Department of Environmental Affairs, and the provincial and local emission licensing authorities, monitor Eskom's activities as they impact on the environment. These authorities issue environmental authorisations for infrastructure projects, and permits and licences for emissions, waste management and water use, among others.

Further information on environmental compliance is set out in the Corporate Services, Customer Network, Group Capital and Generation Business sections on pages 96, 106, 112, 149, 150, 153, 178, 190, 198.

Economic planning and integration

Eskom's operations, in particular the capital expansion programme, have a significant macroeconomic impact beyond the energy sector, and as such the organisation needs to build synergies in other areas

of government. The infrastructure development needs to be aligned with national planning and economic development initiatives. Eskom's construction programme could be leveraged to achieve sustainable benefits for local industry and manufacturing capability, and it needs to be aligned with South Africa's industrial policy and industrial policy action plan.

Nuclear operations – National Nuclear Regulator

The role of the National Nuclear Regulator is to protect people, property and the environment against nuclear damage through safety standards and regulatory practices, to regulate safety across the nuclear sector, and to issue nuclear licences. The activities of Eskom's Koeberg power station are regulated in this way.

Legal framework

Key recent developments

Companies Act (71 of 2008)

The workgroup to prepare Eskom and its subsidiaries for the implementation of the Companies Act from 1 May 2011 considered the governance, legal, insurance and financial implications of the Act, among others, in conjunction with an external law firm, which has signed off on Eskom's readiness to implement the Act.

Consumer Protection Act 2008

The workgroup to prepare Eskom for the implementation of the Consumer Protection Act from 1 April 2011 had to consider various business areas and activities. Some of the issues only became clear after the draft regulations were published (towards the end of 2010), such as the requirements for auctions. An external law firm provided advice and will sign off on Eskom's readiness to implement this Act.

Key emerging legislation and policies

Eskom commented and made submissions to parliamentary portfolio committees on the year's new and evolving bills. Some of these were:

Protection of Information Bill

This bill deals with the classification of information and will be applicable to state-owned enterprises.

Regulatory and Legal Framework continued

State Liability Amendment Bill

This Bill provides for the attachment of government moveable assets in the event of non-payment of a court judgement sounding in money. The Bill and the Act do not apply to Eskom as a judgement debtor, but Eskom will use it as a judgement creditor if necessary.

Protection of Personal Information Bill

This Bill deals with the way public and private bodies may rightfully collect, store and use personal information about their contacts. It will impact on Eskom, from its employees to commercial relationships with customers and suppliers.

Carbon tax discussion paper

The Ministry of Finance issued for comment the discussion paper on the introduction of carbon taxes in the future. See page 77 in the Finance section for Eskom's comments.

Energy policy framework

Some of the most important recent developments in the electricity sector are summarised below.

Development of the Integrated Resource Plan for Electricity (2010 – 2030)

At a Cabinet meeting held during March 2011, Cabinet approved the IRP for Electricity (2010 – 2030) as the basis for South African power generation for the next 20 years. The plan has been promulgated by the Department of Energy.

The approved plan is geared towards a low carbon future and aligned with the country's long-term mitigation scenarios which allow greenhouse gas emissions to peak, plateau and decline in line with national government's aspiration. Between 2011 and 2030, 42% of the new build programme excluding the current committed Eskom build programme will be from renewable energy sources. By 2030, it is anticipated that the percentage of energy generated from CO₂ free sources (including nuclear energy) will be nearly 30%.

Electricity regulations on new generation capacity¹

On 10 November 2010, the Minister of Energy promulgated electricity regulations (in terms of the Electricity Regulation Act) on new generation capacity. These draft regulations are a review of the regulations promulgated on 5 August 2009 and are yet to be finalised and promulgated. The regulations provide guidance on future investments in generation capacity by both Eskom and independent power producers, in accordance with the integrated resource plan.

Eskom supports the introduction of independent power producers, which have an important role to play in addressing South Africa's energy needs. They will contribute to diversifying the source and nature of energy production, introduce new skills and capital into the industry, and enable the benchmarking of pricing and performance.

Independent system operator (ISO)

On 11 February 2010, in the State of the Nation speech, the President of South Africa announced the establishment of an independent system operator; a mechanism to support the introduction of independent power producers by creating a non-conflicted buyer of power.

At a Cabinet meeting on 16 March 2011, Cabinet approved the tabling in Parliament of the Independent System and Market Operator Bill. It is envisaged that this Bill will make provision for the establishment of an independent system and market operator for the electricity supply industry of South Africa, and for matters associated therewith. Cabinet encouraged stakeholders in the power generation sector to participate in the deliberations on this Bill.

This restructuring of the electricity supply industry will have a significant bearing on how the industry is to be regulated in the future.

Regional electricity distributors (REDs)

In October 2006 Cabinet had approved the proposal to create six regional electricity distributors. The plan for restructuring the electricity distribution industry in South Africa was reviewed by Cabinet during the year and will now not proceed.

Electricity regulatory rules

As the regulatory environment in South Africa continues to mature, a myriad of regulations, codes, rules, directives and guidelines for electricity supply will be developed. Over the past year, there have been a number of developments.

National Energy Regulator of South Africa renewable energy feed-in tariffs (REFIT) 1 and 2 programmes

Eskom will be in a position to implement the renewable energy feed-in tariff for the (REFIT) 1 and 2 programmes as published by NERSA once the outstanding issues have been addressed. These renewable energy programmes were aimed at facilitating the introduction of private sector participation in the renewable energy generation industry.

¹ Issued in terms of the Electricity Regulation Act (4 of 2006).

In terms of the new generation regulations, the following are needed to implement these programmes:

- The evaluation criteria to be applied in pre-qualification and bid selection by the National Energy Regulator of South Africa need to be finalised
- The proposed power purchase agreements and standard risk allocation need to be finalised
- A ministerial determination of the buyer and the licensing of such a buyer is required
- The targeted megawatts for each REFIT technology need to be confirmed.

In addition, the Department of Energy and National Treasury initiated an implementation process for an independent power producer renewable energy programme. It is envisaged that the programme will be implemented during the next financial year.

The National Energy Regulator of South Africa is currently initiating consultations to review REFIT 1 and 2. Significant changes have been proposed to the tariffs for identified renewable technologies.

Multi-year price determination (MYPD 2)

Eskom completed its first year of the three years in the MYPD 2 period. Eskom implemented a transition mechanism to deal with the introduction of inclining block tariffs (IBT) for residential customers. The full implementation of IBT was rolled out on 1 April 2011.

The price decision of MYPD 2 was a key factor in Eskom resolving its funding problem, as highlighted during the MYPD 2 application process. Investors have welcomed the price principle and trajectory included in implementing the Electricity Pricing Policy (EPP) within a five-year horizon. Eskom increased its average electricity price by 25,8% from 1 April 2011.

MYPD 3

The process for each three-year price determination is a complex one and needs adequate preparation. Eskom is in the process of

preparing for the next three-year revenue application, the MYPD 3 revenue application, which will need to be implemented with effect from 2013/14.

The process will include appropriate stakeholder consultation. In addition, it would entail a review of the regulatory rules in some areas, continuation of some of the principles agreed in the MYPD 2 rules and the phasing in of the depreciated replacement value of assets and the return thereon over a five-year period as per the Electricity Pricing Policy. Some of the key areas to be addressed include:

- Regulatory asset base
- Cost of capital
- Primary energy
- Demand-side management
- Embedding inclining block tariffs for all residential customers.

SA Grid Code

The South African Grid Code defines the minimum rules, procedures and standards that govern the connection, operation, maintenance, planning and development of the interconnected power system. The Grid Code is a living document that is revised and updated regularly to align with the evolving electricity supply industry.

- NERSA has approved the Wind Grid Code which describes the minimum requirements to be met by wind power plants to satisfy system needs.
- The "Limitation of liability" clause dealing with "inter-party" liability of customers connected to the transmission network was approved by NERSA.
- Primary fuel security requirements that specify the minimum primary energy requirements for each generation technology to ensure security of supply have been approved by NERSA.
- Load-shedding management practices. An industry standard has been adopted by NERSA.

Looking ahead

Eskom intends to be one of the top-five utilities in the world. To achieve this, Eskom must be a well-governed and ethical company.

To support this aspiration, the Regulation and Governance unit will focus on:

- Clarifying Eskom's role in the future capacity needed for South Africa
- Implementing mechanisms to ensure the protection of the poor
- Facilitating the entrance of independent power producers
- Implementing an effective demand management framework (including the energy conservation scheme and demand-side management interventions)
- Securing coal, water and other resources for power generation
- Implementing the Companies Act, the Consumer Protection Act and the compliance framework
- Ensuring an effective compliance and regulatory framework.

From the next financial year, the internal audit function – assurance and forensics – will also be a part of the Regulation and Governance unit, which will be structured as a division, namely the Regulation and Legal division.

Eskom will continue to play an active role in contributing to the advancement of the regulatory environment to ensure that:

- Current, potential and future consumers are protected
- Eskom is sustainable
- National policy objectives are realised.

Corporate governance

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Corporate governance

Overview

Effective corporate governance is essentially about effective ethical leadership. One of the fundamental governance challenges for an organisation's leadership is integrating strategy, governance and decision making with sustainability.

In this integrated report Eskom reveals to what extent it has integrated sustainability issues into its decision making. This can be seen in its purpose, its strategic objectives and the manner in which it reports on business performance.

This section of the report addresses Eskom's initiatives to strengthen the structures, processes and practices that contribute to and support good governance.

Changing governance landscape

Landmark corporate governance changes are evolving in South Africa – in particular, the overhaul of the Companies Act which has taken effect from 1 May 2011 and the introduction of the King Code and Report on Corporate Governance for South Africa 2009 (King III). Within Eskom there were changes in Eskom's leadership during 2010, and Eskom embarked on a comprehensive review of its strategy. All of this has contributed to the changing governance landscape of Eskom.

Eskom's governance structure, policies, processes and procedures were reviewed during the year to ensure that they are optimal to support its future direction and to be in line with best practices. This will enable the organisation to better respond to these and other challenges – as well as achieve its new strategic direction now and into the foreseeable future.

Legislation and guidelines

Eskom has adhered to the statutory duties and responsibilities imposed by the Companies Act and augmented by the Public Finance Management Act (1 of 1999). In addition, Eskom is guided on best practices by King III and the *Protocol on Corporate Governance in the Public Sector*, as well as international developments. Eskom's systems and processes are regularly reviewed to ensure that compliance is monitored in this regard.

The new Companies Act recognises a state-owned company as a separate category of company and provides that the acronym "SOC" be added to the company and subsidiaries' names, as follows:

- Eskom Holdings SOC Limited (Reg No 2002/015527/06)
- Eskom Enterprises SOC Limited (Reg No 1999/002761/07)
- Escap SOC Limited (Reg No 1993/03340/06)
- Eskom Finance Company SOC Limited (Reg No 1990/001322/07)

The Act also recognises a non-profit company as a separate category, and requires that the acronym "NPC" be added to the name. The Eskom Development Foundation will therefore change its name to the Eskom Development Foundation NPC (Reg No 1998/25196/08).

In 2009, Eskom established the Companies Act task team and the King III task team to ensure that Eskom was prepared for implementation of the amended Companies Act and King III. The teams identified, assessed and addressed provisions impacting on Eskom's operations, identified gaps in the process and reported progress to various governance structures. Eskom is proceeding with the implementation of recommendations of the task teams and, in certain instances, implementation plans are in place to address longer-term issues.

Some committees were restructured, as follows:

- Audit and risk committee established by combining the previously separate committees
- People and governance committee established by combining the nomination and governance committee with the human resources and remuneration committee
- Executive management committee (Exco) ceased to be a board committee and became a committee of the chief executive.

Further work is continuing with regard to the Memorandum of Incorporation which is being reviewed together with the Department of Public Enterprises.

Eskom has applied the King III principles and practices. As a state-owned enterprise, some of these cannot be applied. In other instances, Eskom has adopted alternative practices to those recommended by King III. Explanations are presented in the table on page 39. Where there are not approved policies, processes or procedures yet, these are reflected as areas for improvement. Draft documents do exist, and these will be approved by the relevant governance structures in the next reporting cycle.

Applying the King III principles and practices

Number and description of King III principle or practice not in place		Explanation
2.16.1	Board should elect a chairman on an annual basis	Determined by shareholder (DPE)
2.17.1	Board should appoint a chief executive	Determined by shareholder in conjunction with the Board
2.18.10	Board should be able to remove any director without shareholder approval	Consultation with the shareholder
1.1.6	Subsidiary mandates	Subject to Eskom's strategic review
2.27	Company's remuneration policy	Draft policy in place
2.24	Subsidiary governance framework	Draft framework in place
3.5.1	Combined assurance model	Practice being developed
5.1.2	IT charter	Charter being revised
5.3	IT governance framework	Framework being revised
6.1.1	Compliance register	Register being finalised
3.8.2.2	Internal financial control policy	Policy being developed as part of Back2Basics project
7.1.2.2	Internal control framework	Framework being developed as part of Back2Basics project
8.2.1	Stakeholder management strategy and policies	Strategy and policies being developed
8.6	Alternative dispute resolution process	Process being developed

Shareholding and shareholder's compact

The Government of the Republic of South Africa is Eskom's sole shareholder. The shareholder representative is the Minister of Public Enterprises. During the period under review, Mr Malusi Gigaba replaced Ms Barbara Hogan as Minister of Public Enterprises.

Each year Eskom, in consultation with the Minister of Public Enterprises, agrees on its performance objectives, measures and indicators in line with the PFMA and the National Treasury. Annual targets are annexed to a list of principles agreed between Eskom and its shareholder (the shareholder compact) and regular reports are provided. The performance of the organisation against performance objectives is indicated in the shareholder compact on page 66.

The compact does not interfere with the normal principles of company law. The relationship between the shareholder and board is preserved. The board ensures that proper internal controls are in place and that Eskom is effectively managed. The compact promotes good governance by helping to clarify roles and responsibilities of the board and the shareholder while supporting consensus on Eskom's mandate and key objectives.

An annual general meeting was held during the year.

Governing bodies

Composition of the board

Eskom has a unitary board structure with a majority of independent non-executive directors. The directors, appointed by the shareholder,

are drawn from diverse backgrounds (local and international) and bring a wide range of experience and professional skills to the board. These skills are supplemented at committee level by external committee members. However, as a result of the provisions of the new Companies Act and King III, the participation of such members, while not being directors on the board, is being reviewed.

Eskom's articles of association stipulate that the shareholder will appoint a chairman, chief executive and non-executive directors after consulting the board. The remaining executive directors are appointed by the board with shareholder approval.

Two new directors were appointed to the board during the year and Mr Mpho Makwana was appointed chairman in July 2010. The board reviewed the independence of the chairman in the light of the unusual circumstances Eskom faced at that time and which necessitated that, as an interim measure, a suitably experienced and skilled person was required to lead Eskom through a difficult period. Mr Mpho Makwana therefore served as acting chairman and acting chief executive for a short period.

Mr Brian Dames was appointed chief executive and ex-officio director in July 2010, having previously served in various senior executive positions in Eskom.

Dr Boni Mehlomakulu and Dr Bernie Fanaroff were appointed as directors during the year. Dr Fanaroff has previously served as external committee member on the sustainability and remuneration committees.

Corporate governance continued

At the end of the year, the board included 11 non-executive directors and two executive directors. The shareholder is in the process of filling the remaining vacancies as Eskom's articles of association provide that the maximum number of directors is 17.

Good corporate governance requires that the composition of the board be regularly reviewed. The rotation of directors at regular intervals is standard practice, as it ensures that the board remains dynamic in its thinking and abilities. However, the process must be managed in such a way that it does not lead to a disruption in business operations, and the board must remain well balanced in terms of skills, expertise and demographics (race, gender and people with disabilities).

The term of office of non-executive directors is a period of three years, subject to review at the annual general meeting. Retiring directors are eligible for re-appointment.

Executive directors are full-time employees and subject to Eskom's conditions of service.

Board meetings are scheduled annually in advance. Special meetings are convened as necessary to address specific issues. Directors or external committee members who on an exceptional basis cannot physically attend meetings may communicate electronically. The record of attendance of the 10 board meetings during the reporting period is reflected below.

Delegation of authority

The board has the authority to lead and control, the business of Eskom, including the authority to delegate its powers. Its aim is to ensure that Eskom remains a sustainable and viable business of global stature. Its responsibilities are facilitated by a well-developed governance structure of board committees. The board delegates management of the day-to-day operations of the business to the chief executive. He is assisted by the executive management committee (Exco), as well as Exco subcommittees. A clear and comprehensive delegation of authority framework is in place to assist decision making without diluting director accountability and responsibility. The framework is undergoing extensive review as a result of the strategic review.

Board evaluation

The performance of the board and individual directors is evaluated annually. Due to the leadership challenges during 2010, a board evaluation was not conducted during the reporting period and an evaluation will therefore be finalised as soon as possible in the next financial year. The performance of board committees is evaluated against their terms of reference. The people and governance committee facilitates the evaluation of senior management.

Director induction and orientation

New directors and external committee members go through an induction programme to improve their understanding of Eskom's legislative framework, governance processes, delegation of authority and business operations. Eskom also runs a continuous training programme to address the needs of each director or group of directors. Directors are briefed on new legislation and regulations. The induction and training programmes include visits to business sites.

Board and board committee meeting attendance

Members	Board	Audit and risk ¹	Investment and finance	Tender	Sustainability	People and governance ²
Number of meetings	10	5	4	10	4	6
LCZ Cele	10	5		10		
BA Dames ⁴	7	2 ³	2		2	3
SD Dube	10			10		6
BL Fanaroff ⁵	9				1	6
LG Josefsson	8	4			2	
HB Lee	3					
WE Lucas-Bull	8		4		1	6
PM Makwana	10				2	5
B Mehloimakulu ⁶	7		3	4		
J Mirenge	7	4	3			
JRD Modise	5	4	1			
PS O'Flaherty	10	5 ³	4	7		
U Zikalala	9	3		3	4	
External committee members						
MJ Husain				5		
MM Matutu					4	

1. Including one meeting as the previously constituted audit committee.

2. Including one meeting each of the previously constituted human resources, remuneration and ethics committee and the nomination and governance committee.

3. As an invitee.

Exco meeting attendance

Members

Number of meetings	13
BE Bulunga	12
C Choeru ⁷	11
BA Dames	12
T Govender ⁸	4
E Johnson	10
SJ Lennon	12
D Marokane ⁹	9
PM Makwana ¹⁰	3
PS O'Flaherty	13

Notes:

4. Member appointed June 2010.
5. Member appointed May 2010.
6. Member appointed April 2010.
7. Member appointed to Exco in June 2010.
8. Appointed as acting divisional executive in September 2010. Not an Exco member.
9. Member appointed to Exco in September 2010.
10. Member released from interim Exco membership in June 2010.

Directors' remuneration

Please refer to the note on page 309 in the annual financial statements for details of directors' remuneration.

Company secretarial function

Directors have unrestricted access to the advice and service of the company secretary. Directors may seek independent professional advice on the authority of the board and at Eskom's expense.

Board committees

As part of the 2010 governance review, the number and mandates of committees assisting the board in carrying out its responsibilities were analysed. The result was a rationalisation of the committees as previously noted and a revision of the mandates of the remaining committees.

The committees' reports and recommendations to the board ensure transparency and full disclosure of committee activities. The terms of reference of each committee were reviewed to align with the new Companies Act and King III. These terms define the composition, role, responsibilities and delegated authority of each committee. All committees comprise a majority of independent non-executive directors and each is chaired by an independent non-executive director. Attendance of committee meetings is recorded in the previous table.

In addition to the terms of reference, a board committee exercises its delegated authority in accordance with specific policies approved by the board on occasion.

Audit and risk committee

The committee comprised five independent non-executive directors. Members collectively have sufficient qualifications and experience to fulfil their duties and – in terms of integrated reporting and Eskom's governance structures – have sufficient understanding of financial and sustainability reporting; internal financial controls; external audit process; internal audit process; corporate law; risk management; sustainability issues and information technology governance.

The roles and responsibilities of the committee include:

- Serving as the audit and risk committee for the Eskom Group
- Recommending the appointment of the external auditors and overseeing the external audit process
- Monitoring the internal control system to protect Eskom's interests and assets
- Reviewing the accuracy, reliability and credibility of statutory financial reporting, the annual financial statements and Eskom's integrated report, as presented by management prior to board approval
- Reviewing any accounting and auditing concerns raised by internal and external audit, the annual financial statements and interim reports, the various reports to shareholders, the preliminary announcement of results or other financial information to be made public
- Ensuring that an effective internal audit function is in place and that the roles and functions of external audit and internal audit are clear and co-ordinated to provide an objective overview of the operational effectiveness of the company's systems of internal control, risk management, governance and reporting. It assesses the performance of the internal audit function, and the adequacy of available internal audit resources
- Considering and appropriately dealing with complaints received relating to the financial statements, accounting practices or internal audit
- Ensuring that the company has implemented an effective policy and plan for risk management that will protect the company's ability to achieve its strategic objectives
- Approving policies related to Eskom's Treasury function
- Ensuring that a combined assurance model is applied
- Obtaining assurance for information technology (IT) as it relates to the management of IT assets, governance and controls, risks and disaster recovery.

The internal audit general manager and the external auditors have unrestricted access to the chairman of the committee and the chairman of the board.

Corporate governance continued

Refer to page 207 for the report of the audit and risk committee detailing how it carried out its functions.

Five committee meetings¹ were held during the year. They were also attended by the external auditors, the chief executive, the finance director and relevant company officials.

Investment and finance committee

The committee has four independent non-executive directors and two executive directors. The committee's primary function is to review the investment strategy (project and capital expenditure) and make recommendations to the board. It evaluates and approves business cases for new ventures or projects, approves criteria and guidelines for investments and approves investments within its delegated authority. Investment decisions are made within a framework of policies which are approved by the board.

Four committee meetings were held during the period under review.

Tender committee

The committee includes three independent non-executive directors, the finance director and Mohamed Husain, an external committee member. The tender committee assists with board decisions relating to tenders and contracts within its delegated authority and approves procurement policies. It ensures that Eskom's procurement system is equitable, transparent, competitive and cost effective.

Ten committee meetings were held.

Sustainability committee

The committee comprises four independent non-executive directors, the chairman of the board, the chief executive and Martin Matutu, an external committee member. The committee deals with integrated sustainability issues and makes recommendations on policies, strategies and guidelines, particularly related to safety, health, good corporate citizenship, the environment, climate change, quality and nuclear issues.

The committee also scrutinises nuclear safety at Eskom facilities to ensure that standards exceed all regulatory and internal requirements and remain consistent with international best practice.

The intention is to convert the sustainability committee into the social and ethics committee as required by the new Companies Act.

Four committee meetings were held.

People and governance committee

The committee comprises three independent non-executive directors, the chairman of the board and the chief executive. The chief executive recuses himself when matters relating to his remuneration and benefits are discussed.

The committee makes recommendations on remuneration and other human resource-related policies; board and committee composition, training and evaluation; succession planning; and oversight of governance matters, including ethics.

Six committee meetings² were held.

Executive management committee (Exco)

Exco comprised the chief executive, the finance director and six divisional executives during the year. In anticipation of the new Companies Act, Exco was restructured as a committee of the chief executive.

The committee assists the chief executive in guiding the overall direction of the business and in exercising executive control. Its task is to assist with the effective management of the day-to-day operations of the business.

Thirteen Exco meetings were held.

Attendance of all committees is reflected in the table on page 40.

Compliance with the Public Finance Management Act (PFMA)

The board is the accounting authority in terms of the PFMA and Eskom is listed as a Schedule 2 public entity. This Act also applies to subsidiaries and entities owned or controlled by Eskom, which are also classified as Schedule 2 entities.

The PFMA regulates financial management and governance. Eskom ensures that all directors and employees are aware of the provisions of the PFMA through regular training programmes. Directors comply with their fiduciary duties as set out in the PFMA. Board responsibilities are also specified in the PFMA.

Framework for general compliance with applicable laws and regulations

In 2002 Eskom was converted into a public company in line with the Eskom Conversion Act (13 of 2001) and as such the legislative framework applicable to any corporate entity in South Africa is

1. Including one meeting as the previously constituted audit committee.

2. Including one meeting each of the previously constituted human resources, remuneration and ethics committee and the nomination and governance committee.

applicable to Eskom – for example the Companies Act, the National Environmental Management Act, the competition laws, labour laws and tax legislation, to mention a few. In addition, Eskom is also subject to legislation specifically applicable to state-owned entities – notably the Public Finance Management Act, Promotion of Access to Information Act and the Promotion of Administrative Justice Act.

It is therefore important that Eskom is able to operate within the policy, legal and regulatory framework in an effective manner. There is a need to improve the compliance framework and ensure that Eskom implements best practices in this regard.

To this end, during the year under review the board approved the compliance charter which broadly sets out the mandate, authority and responsibility for compliance. Furthermore, Exco approved the compliance strategic framework which provides the foundation for a comprehensive integrated compliance management programme for the organisation.

A project team has been put together to fast-track some of the initiatives in the strategic framework, notably those relating to the establishment of a compliance capability throughout the business. These include a review of the consolidated legal register; setting up divisional compliance offices as well as analysis of the roles of the various specialised compliance functions with a view to standardising compliance operations.

From a consolidated perspective, reporting commenced on a quarterly basis to the board audit and risk committee on the status of various reporting obligations of major Acts. The report currently covers approximately 560 compliance items and will be expanded and refined as the strategic framework is rolled out.

Integrated risk management (IRM)

The effective management of risk is central to the achievement of Eskom's vision of providing sustainable electricity solutions to grow the economy and improve the quality of life of the people of South Africa and the region. By understanding and managing risk, Eskom can provide greater certainty and security for its employees, customers and all stakeholders.

The Eskom board, through the audit and risk committee, acknowledges its overall accountability for ensuring an effective results-driven, IRM process. Exco has implemented a risk monitoring system that enables management to respond appropriately to all significant risks that could impact on business objectives.

Responsibility for the management of risk resides with line management in all operating units and projects. Those accountable for the management of risks also ensure that the necessary controls remain in place and are effective at all times. Control effectiveness focuses on improving Eskom's ability to manage risk effectively, so that it can quickly and confidently act on opportunities to improve and sustain the quality and continuity of supply, create value and achieve sustained growth.

Risk management in Eskom is performed at departmental, regional, operating unit and subsidiary level and is reported upward to corporate (bottom-up). After consolidation of these integrated risk reports, Exco and the board audit and risk committee review and evaluate the risk profile to determine the major operational, strategic and business continuity risks (top-down). See the risk section in the Profile on page 23.

Ethical business conduct

Good corporate governance requires an organisation's leadership to "set the tone at the top" and oversee the management of ethics, make ethical decisions and lead by example. Eskom's board is accountable for Eskom's ethics management programme. Operational responsibilities lie with Exco, and all leaders and managers in the organisation.

Assistance and advice is also available from the ethics office, which forms part of the functions of the company secretary. The ethics office assists the chief executive in setting the framework, rules, standards and boundaries for ethical behaviour; and provides ethics training and an advisory service to employees, assisting them in dealing effectively with ethics issues and ethical dilemmas in the workplace.

The Eskom code of ethics, *The Way*, was revised during the year to reflect two newly approved Eskom values, new Companies Act provisions and the King III requirements. The supplementary ethics code procedure was also revised and approved by the board for implementation. This procedure assists directors and employees to apply the code of ethics in their daily activities and decision making to deal with specific ethics issues in the workplace; and to offer compliance information on other ethics-related policies.

Eskom's conflict of interest policy, the declaration of interest procedure, the electronic declaration form, and declaration monitoring procedure have all been revised in line with the new Companies Act and King III, and approved for implementation. A separate electronic declaration system and procedure for board members has also been

Corporate governance continued

implemented to replace the manual process for declaring interests and business courtesies. Eskom is also a signatory to the UN Global Compact which includes an anti-corruption clause, as well as the World Economic Forum's partnership against corruption initiative.

The board and Exco are kept informed of Eskom's ethical culture and issues of concern through quarterly ethics status reports.

Internal control

The board is accountable for ensuring effective controls. Management is charged with the responsibility of establishing an effective internal control environment, which is developed and maintained on an ongoing basis to provide reasonable assurance to the board regarding:

- integrity and reliability of the financial statements;
- safeguarding of assets;
- economic and efficient use of resources;
- compliance with applicable legislation and regulations;
- verification of the accomplishment of established goals and objectives; and
- detection and minimisation of fraud, potential liability, loss and material misstatement.

Internal controls including information technology are established not only over financial matters, but also operational, compliance and sustainability issues. Controls are the means by which management seeks to mitigate risks to an acceptable level of exposure. Controls are contained in organisational policies and procedures, structures and approval frameworks. These provide direction, establish accountability and ensure adequate segregation of duties. Each contains self-monitoring mechanisms.

The board has mandated an initiative to design and embed an appropriate integrated framework that systematically evaluates and continuously improves controls across Eskom.

The internal audit department, which comprises corporate audit, corporate technical audit, corporate technical investigations and forensic and anti-corruption, reviews the internal control systems and reports findings and recommendations for improvement to management and the audit and risk committee. Internal audit provides a written assessment of the effectiveness of Eskom's system of internal control and risk management.

The audit and risk committee monitors and evaluates the duties and responsibilities of management and of internal and external audit to ensure that all major issues reported have been satisfactorily resolved. Finally, the audit and risk committee reports all important matters considered necessary to the board.

Effective control is the responsibility of management at every level of the organisation.

Internal audit

The internal audit department comprises corporate audit, corporate technical audit, corporate technical investigations and forensic and anti-corruption. They provide independent, objective assurance, consulting and forensic services that add value to and improve Eskom's operations such as plant technical condition, personnel safety and health, environmental issues and investigations of all major events on all Eskom plant. The department brings a systematic, disciplined approach to the evaluation and improvement of the effectiveness of risk management, control and governance processes.

The general manager of internal audit, in the discharge of his/her duties, shall be accountable to management and the audit and risk committee to:

- provide a regular assessment of the adequacy and effectiveness of the organisation's corporate governance, risk and control processes;
- report significant issues, including potential improvements, relating to corporate governance, risk and control processes;
- periodically provide information on the status and results of the annual audit plan and the sufficiency of the department resources; and
- co-ordinate with and provide oversight of other control and monitoring functions.

The activities and practices in internal audit are conducted in accordance with recognised professional standards. Independent reviews of such compliance are carried out periodically.

Internal audit uses a risk-based audit approach. The audit plan is based on risk assessments and other considerations, such as the achievement of organisational business objectives. The audit plan is updated as required to reflect significant changes in Eskom's risk profile resulting from changes in the business operations, customer needs or regulatory requirements. The general manager of internal audit attends the exco meetings.

Internal audit is supported by the board and audit and risk committee and is authorised by its charter to have unrestricted access to all functions, records, property and personnel.

External auditors independently audit and report on the financial statements.

Security risk management

The board ensures that an integrated crime prevention plan is implemented to minimise Eskom's exposure to crime, particularly fraud. The security risk management department develops strategies to protect Eskom's assets, interests, information, people and processes and gives assurance that the required measures are implemented.

Exco is kept informed about security issues through the recently established national security forum and Eskom's security committee.

Nuclear safety

The nuclear safety assurance function is kept independent from the nuclear electricity production function. Nuclear safety and compliance with licence requirements is the responsibility of Nuclear Safety and Assurance, a separate department in Generation Business with its own technical experts and resources. Nuclear business is directly accountable to the chief officer (Generation Business) for all aspects of electricity production at Koeberg power station, including safety.

In line with international best practice, Eskom has a three-tier system of nuclear safety governance:

- The top tier is the sustainability committee of the board, which dedicates several meetings a year to nuclear matters. The meetings are attended by international nuclear experts who bring a broad perspective to the deliberations
- The middle tier, the nuclear management subcommittee presided over by the chief officer of the Generation Business, monitors, reviews and makes recommendations on issues such as nuclear policy, standards, benchmarks and rules, and Eskom's overall business requirements
- The third tier, the safety review committees, brings together experts from various parts of Eskom to evaluate nuclear safety issues and make recommendations to senior management and the other tiers.

Corporate citizenship and sustainability

In Eskom's view, being a good corporate citizen means that its business must be run ethically, taking into account its impact on all stakeholders.

This includes contributing to a safe working environment, environmental responsibility, promoting government's new growth path and corporate social responsibility and improving the life of all South Africans.

The chief executive – as chief safety officer – is accountable for overall sustainability and safety performance.

Exco guides the strategy and sets performance targets for sustainability, occupational health and safety and environmental matters, in line with Eskom's safety health, environment and quality policy, the National Environmental Management Act (107 of 1998), as amended, and the Occupational Health and Safety Act (85 of 1993), as amended. Strategies are reviewed by the sustainability committee of the board.

An Exco subcommittee assesses occupational health, safety and environmental performance and reviews major incidents to ensure that corrective action is taken.

Eskom's contribution to government's new growth path may be assessed at three different levels:

- Eskom's systemic effects on the economy – economic growth is impossible without reliable and cost-effective energy. Increasingly, the competitiveness of nations rests largely on the availability of a sustainable energy mix. This is particularly significant, if not critical, for the South African economy because the structure of the economy, its resources base and its beneficiation manufacturing are highly energy intensive and energy dependent
- Eskom's contribution to job creation and training through its build programme and the Academy of Learning
- Eskom's role as a model state-owned enterprise.

Eskom's CSI contributes to the development of the disadvantaged and promotes, *inter alia*, skills development, job creation, education and health. Many CSI initiatives are executed by the Eskom Development Foundation.

Subsidiaries

Eskom Enterprises (Pty) Limited and its subsidiaries provide lifecycle support and plant maintenance, network protection and support for the build programme for all Eskom divisions. It also has subsidiaries in South Africa, Mali and Uganda.

Eskom's other wholly owned operating subsidiaries are Eskom Finance Company (Pty) Limited, Eskom Development Foundation and Escap Limited.

All Eskom's subsidiaries are subject to Eskom policies, governance and financial controls. These comply with the PFMA and Companies Act, or their equivalent legislation when foreign-registered, and follow good governance principles and practices.

While each subsidiary remains accountable to Eskom through a formal shareholder compact, Eskom is also developing a subsidiary governance framework in accordance with principle 2.24 of King III to facilitate the flow of information between the holding company and its subsidiary companies.



Leadership overview

	GRI Reference
<i>Letter from the chairman</i>	48 ▶ 1.1, 2.9, EU23, EC4, EC9
<i>Board of directors</i>	54 ▶ 4.2, 4.3
<i>Letter from the chief executive</i>	56
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ROTRAI

ABNORMAL

TRACTOMAS



MATINBA GP

Letter from the chairman

Mpho Makwana
Chairman of Eskom Holdings



As you will see throughout this report, Eskom is organising itself to deliver on its mandate for the decades ahead. We believe we have now positioned the organisation's three major components – its managerial infrastructure and plans, its people, and the necessary financial resources – to help build South Africa and southern Africa's exciting future.

It is a privilege for me to deliver this integrated report, the second since the transition phase when the roles of chairman and chief executive were entrusted to an interim chairman. On 15 June 2010, Brian Dames and I were announced as chief executive and chairman respectively by the Cabinet of our Republic. We – Brian, the executive team, the board and I – continue to be resolute in ensuring that the confidence and honour bestowed upon us are not misplaced, especially in this phase that is indeed one of the most challenging, yet exciting periods of Eskom's history.

At Eskom, we are all acutely aware of its developmental impact, the significance of the utility's performance in terms of the wellbeing of all South Africans as well as southern African societies. We understand that our competitiveness as a nation – ultimately, our most important variable in creating sustainable jobs, exports and growth – greatly depends on the availability and pricing of electricity.

Our economy is resource-based and equally, our 21st century civilisation is dependent on a reliable supply of electricity. The quality of life of all our people, too, dramatically depends on the availability of electricity, and on the environmental conditions in which we all live. Therefore, the implications of what we do are never far from our minds.

This report then seeks to provide all interested stakeholders, both in South Africa and internationally, with a broad overview of what we do, why and how we do it and the choices we face. It is broader than most annual financial statements, since we believe that there is deep interest in our performance, our plans, our progress – and our approach to the significant challenges that both South Africa and Eskom face in terms of generating power, distributing it, costing it, and facing the environmental impact of our activities and choices. I would like to position the various elements of this report by introducing three major themes below.

Eskom – the organisation

We have re-tooled the leadership and managerial infrastructure, our capital expenditure funding plans and tariff structures are in place, and we are looking to the future. Ahead of us lies a 12-year journey towards our centenary as well as a 19-year journey towards doubling South Africa's electricity capacity. Between 2011 and 2030 we need to balance the demands of a complex build programme with security of supply.

Since the beginning of 2010, a number of new appointments have been made:

- Brian Dames assumed his role as chief executive on 1 July 2010
- Paul O'Flaherty assumed his role as finance director on 1 January 2010
- Dan Marokane was appointed chief officer (Group Commercial) on 1 September 2010

- Bhabhalazi Bulunga was appointed as divisional executive (Human Resources) on 1 February 2010
- Chose Choeu was appointed as divisional executive (Corporate Affairs) on 1 June 2010.

We have embarked on a review of our entire strategy to reflect the changing outlook for Eskom. Eighteen months ago, we were experiencing the after-effects of rotational load shedding in 2008 as an emergency response, we had no financially sustainable plan, we were six months away from the daunting challenges of the 2010 FIFA World Cup™ – and we were in danger of doubting our own abilities and capabilities. The strategy reflected these immediate challenges, but our outlook now needs to be based on our longer-term challenges of balancing supply and demand, and the environmental challenges ahead. Our new strategy plans to address this shift in organisational focus from "surviving the crisis" to "providing for the future".

Under the leadership of our chief executive, we have taken this new thinking on the road. We engaged with more than 10 000 of our 41 778 employees to discuss our preparations for the 2010 FIFA World Cup™, our 2009/2010 results, introduced the new chief executive and talked about our new vision.

In support of Eskom's commitment to HIV/Aids testing and counselling and, as part of these engagements, during March 2011 Eskom, together with one of its principal contractors, hosted an event at the Medupi power station construction site to promote HIV testing and counselling. The event was graced by the Deputy President of our Republic, Mr KP Motlanthe, the Minister of Health, Dr PA Motsoaledi and the Minister of Public Enterprises, Mr MKN Gigaba. The Deputy President, together with both ministers addressed the employees regarding the importance of HIV prevention and the National HIV Counselling and Testing Campaign. In response more than 2 000 employees – representing almost 70% of the employees on the site – reported for voluntary HIV testing, while more than 1 800 employees underwent screening for tuberculosis. The Eskom board and executive committee are dedicated to strengthening the organisation through such ongoing open communication and investments in people, processes and technology.

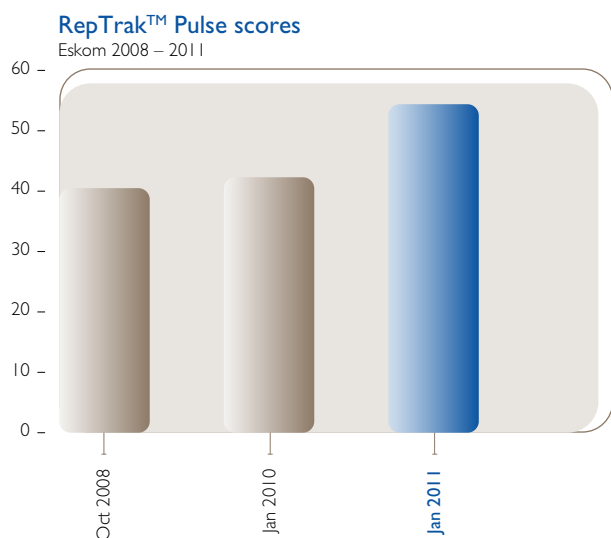
This re-tooling of the managerial process, as we see it, has been an essential step in preparing us for the new phase we have entered in Eskom's rich history. A short review of our recent performance – elaborated on in this report – reflects the momentous nature of the previous year.

Central to everything we do, we need to engage with relevant stakeholders across the spectrum of all our activities. Therefore, we have embarked on deep and meaningful connections with organised

Letter from the chairman continued

business and organised labour in each of the nine provinces, and other important stakeholders.

Government established an inter-ministerial committee (IMC) in 2009 to consider matters related to Eskom's second multi-year price determination (MYPD 2). We have worked intensively with the IMC since its inception and have supported all the key outcomes of the various working groups.



Our strategic objectives are aimed at meeting our stakeholder expectations and providing the necessary electricity infrastructure to support growth. We understand that our reputation is critical to achieving these strategic objectives, which is why it is pleasing to note the steady improvement in our reputation. Each year we measure our reputation through the globally recognised RepTrak™ score as measured through the Reputation Institute's RepTrak™ process. We will continue to prioritise all efforts to improve our reputation including the implementation of an internal reputation training programme for all our employees. We recognise that our employees are the guardians of Eskom's reputation and are the ones who will deliver on our promises and meet stakeholders' expectations through continuously improved engagements.

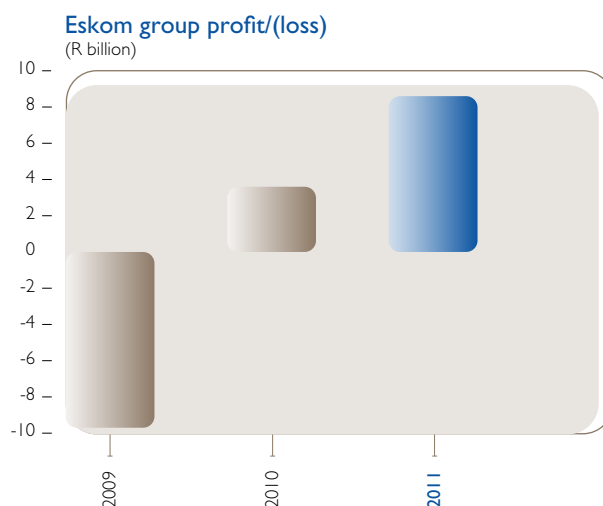
Our reputation score improved steadily over the past three years. Our current RepTrak™ Pulse is 54.4 points, up 12.1 points from last year and 13.9 points from 2008/9.

Eskom's performance

Most fundamental, we believe, to the success and long-term sustainability of the organisation, has been securing a sound financial basis that enables the growth in electricity infrastructure required. The financial resources, combined with our human capital, create our capacity to act.

Funding

Eighteen months ago, we had no financial model. We now have a detailed, agreed, seven-year funding plan, for the most intensive capital expansion project in South Africa's history.



A milestone in the funding effort has been the issuing of a bond in the international market in the past few months. Although government guarantees were available, this issue was particularly significant as Eskom was able to issue this bond directly off its balance sheet, indicating its ability to obtain funding independently. The bond issuance generated bids to the value of USD3.9 billion. An amount of USD1.75 billion was taken up by Eskom. The over-subscription demonstrates the confidence that international investors have in Eskom's ability to manage its affairs in a sustainable and profitable manner.

In addition, we have issued our first ever interim results. Our credit rating outlook is sound and we are fully operational again, with a finance director who has just completed his first year in Eskom's service – after we were without a finance director for 18 months.

We believe that the immediate financial future has now been secured, allowing us to concentrate fully on the enormously challenging capital expenditure programme underway.

Capital projects

Our approved capital investment programme (including the capacity expansion programme) of approximately R450 to R500 billion over the next six years (excluding capitalised interest) is the largest individual stimulus to the South African economy. This programme that started in 2005 includes investment in new generation capacity and is progressing according to plan. It will add approximately 17 000MW of new generation capacity by 2018. To date more than

5 000MW have been completed. Our largest projects, Medupi, Kusile and Ingula, are also proceeding according to plan.

The return to service of previously mothballed power stations is part of the investment programme. On 23 October 2010 the President of our Republic, President JG Zuma officially re-opened Camden power station, which is the first in the world to be brought back on line after such a lengthy period of inactivity. The opening of Camden is a testament to the turnaround of the electricity sector in South Africa, as Eskom celebrates ingenuity in resuscitating such old technology, while building the latest that technological advancements can offer.

Contribution to the South African economy

We are a major contributor to the national economy and therefore our financial viability is a fundamental and key focus area in the business. We are by far the largest buyer of coal in South Africa, with Eskom spending almost R25 billion on the procurement of coal this year.

We seek to use our expenditure to the best possible advantage of South Africa, both from the capital programme as well as our normal business activities:

- Major developmental elements and targets continue to form part of key deliverables of the capacity expansion contracts. Eskom has over the past few months created a new structure that will develop commercial strategies in support of new small businesses. This entails identifying fledgling suppliers that have the potential to become a supplier into the Eskom supply chain. Sub-contracting with local suppliers is key – local content represents 79.6% of contracts placed in the current year and amounts to R9.6 billion
- Generally, Eskom leverages associated activities such as procurement, and its corporate social investment programmes, for the development of communities in need. Through the Eskom Foundation, Eskom has impacted 254 beneficiary organisations with more than 300 000 beneficiaries for the year
- In addition, Eskom acts as a leading indicator of investment and job creation for sectors such as mining and energy-intensive manufacturing, as they depend on the reliable supply of energy
- In his state of the nation address in February 2011, the President of our Republic, President JG Zuma, emphasised the importance of job creation. In response to the government's new growth plan, Eskom has revised its baseline plans to raise its contribution to job creation associated with its capacity expansion programme over the next five years
- Eskom's youth programme will support 5 000 young people to find their way into employment. Overall, we expect that by 2015 approximately 100 000 people will be employed or find

employment in Eskom, in the supply chain, or through secondary effects

- Specifically, Eskom has committed to the development of 10 000 learners by 2015. These skills development initiatives will also serve to provide the much needed skills for Eskom.

Through our corporate social investment programme, we are making a change in South Africa. Other developmental drives include the electrification of millions of homes, the focus on local content in our build programme that has positive spinoffs and supporting government's free basic electricity programme.

Eskom actively supports B-BBEE entities and spent R42 billion on B-BBEE during the year and R3.4 billion with black women-owned businesses.

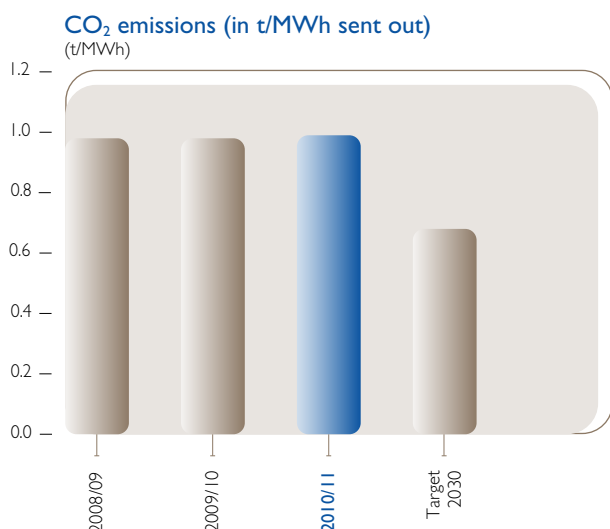
Environmental challenges

Climate change and its accompanying sustainability challenges is a global phenomenon. The eyes of the world will be on South Africa during the 17th meeting of the Parties of the United Nations Framework Convention on Climate Change (COP 17), which will be held in Durban from 28 November to 9 December 2011. We are very proud to be a strong supporter of this conference, driving the issues around climate change both nationally and in the international arena. While this builds on our support for previous COPs, we believe the impact of the COP programme is accelerating, and we want to make sure we are as supportive and pro-active as we can be.

With 93% of Eskom's electricity generated from coal-fired stations, this already implies a major environmental footprint. This also means an impact on water – a critical issue for South Africa where water scarcity is an important matter. For this reason the new Medupi and Kusile power stations will use dry cooling technology. Our relative water usage is 1.35L/kWh sent out and our plan is to reduce this by 10.4% to 1.21L/kWh by 2015/16.

The most topical of the environmental impacts is our carbon footprint. Due to the coal-centric nature of our generation mix, we are not satisfied with our current performance in this regard. Eskom's CO₂ emissions for the period were 230.3Mt, an increase of 2.5% on the previous year's 224.7Mt. We remain committed to reducing our emissions as conveyed in our climate change strategy. Our commitment is to see a reduction by 2030. Subject to the support from the shareholder and the allocation of nuclear and renewables to Eskom, this reduction follows what we anticipate to be our peak at 283Mt in 2022 to 235Mt by 2030. This will see our relative CO₂ emissions at 0.68t/MWh compared to the current 0.99t/MWh.

No company takes pride in the negative impacts of its business, and Eskom is no different. One of Eskom's objectives is to become a greener energy company.



In this context, Eskom will contribute through a comprehensive six-step approach that includes supply measures, such as the diversification of the generation mix, as well as demand-side interventions, such as supporting energy efficiency measures to reduce demand. Some are more macro in nature, such as ensuring that we adapt to the impact of climate change by increasing the robustness of infrastructure designs, fostering innovation, investments in the emerging global CO₂ market trading regime and progress through advocacy, partnerships and collaboration with environmental organisations. On all dimensions of this critical global debate, Eskom will seek to contribute and lead where necessary.

One change that we desperately need in South Africa is the more sustainable use of energy. Eskom has taken up the challenge and is leading a campaign to unlock the potential of 49 million South Africans to reduce their energy consumption and think of energy in a sustainable manner. The "49M" movement, launched and endorsed in March 2011 by Mr KP Motlanthe, the Deputy President of our Republic, together with the Ministers of Public Enterprises and Energy, is material to the continued mitigation of an extremely tight situation of supply versus demand. We also value the support from and partnerships with various key customers and organisations for this initiative. It is imperative that we pull together as a nation to harness our collective power in saving energy.

Focus on safety and health

Eskom will intensify its already strong focus on the health and safety of Eskom employees, contractors and the public. Together with its suppliers, customers and contractors, sound safety and health practices are integrated into all operations. Contractors working under Eskom supervision or on company premises are also expected to comply with Eskom's safety and health policy. In support of this Eskom has engaged with contractors in the form of contractor forums to ensure that the standard of safety management at Eskom sites is in line with best practice.

Reporting

Eskom is a leader in sustainability reporting – focusing on transparent reporting of our financial, technical, environmental and social impact performance. We include full disclosure of our compact with our shareholder as well as measurement against the norms of the Global Reporting Initiative (GRI) and strive to continually improve our performance in this regard. Eskom was declared to be at GRI B+ application level and the aspiration is an A+ application level, using the GRI Electric Utility Sector Supplement.

We are now taking our sustainability reporting one step further. Eskom has for the past 88 years played a tremendous role in the growth of our country, from an economic, social, technical and environmental perspective. As such we have taken the initiative to start fully quantifying our footprint in South Africa for the first time. The Eskom Factor report is being developed in accordance with the measuring impact framework of the World Business Council for Sustainable Development, and the first phase will be released in June 2011, highlighting both the positive and negative impacts of our operations in South Africa as a first step. Follow-ups into the future, including wider stakeholder involvement, will also address our international footprint, especially in southern Africa.

In conclusion

Eskom is busy organising itself to deliver on its mandate for the decades ahead. We believe we have now positioned the organisation's three major components – its managerial infrastructure and plans, its people, and the necessary financial resources – to help build South Africa and southern Africa's exciting future. We believe that our challenges fall roughly into three groups:

- Ensure reliable and affordable energy supply and specifically focus on the balancing of the supply of, and demand for, electricity until 2015

- Deliver the required generation capability for the foreseeable future
- Take a leading role in developing the appropriate response to the environmental challenges that face us all.

All of this happens in an intricate and complex web of relationships between the people at Eskom and the stakeholders around us. We believe we now have the resources in place to face our future challenges with both confidence and excitement.

Acknowledgements

I would like to thank my fellow board members for their counsel and guidance during what was a challenging period, as Eskom debated and adopted its corporate strategic review. They have spent an enormous amount of additional time in special board meetings this year to address the various challenges and I thank them for their invaluable time.

I thank Ms BA Hogan, former Minister of Public Enterprises, for her active interest in and support of Eskom. We salute Mr E Godongwana, the immediate past Deputy Minister of Public Enterprises and now Deputy Minister of Economic Development, for his valuable counsel.

Mr MKN Gigaba, the new Minister of Public Enterprises, assumed office during November 2010. In the financial year covered in this report, he has already demonstrated phenomenal support and we look forward to working with him in building a better and more sustainable future for Eskom. We further welcome the appointment of Mr DB Martins, Deputy Minister of Public Enterprises who also assumed office during November 2010. We look forward to all of us working together on this journey towards 2017.

I also wish to acknowledge the guidance and strategic direction from Ms ED Peters, Minister of Energy. We thank Messrs HP Maluleka and SJ Njikelana, chairpersons of the portfolio committees on Public Enterprises and Energy, respectively, as well as Ms MP Themba, chairperson of the select committee on Labour and Public Enterprises, for their continued support.

The next few years pose tough challenges. For a long-term industry our timetable, efficiency targets and the reduction of our carbon emissions are ambitious, but we are committed to achieving all our goals that we set for this financial year. Finally, I have a message for the 49 million South Africans: "Join us and remember your power to be part of the energy solution".



P Mpho Makwana

Chairman

31 May 2011

Board of directors¹

1. Mr PM (Mpho) Makwana (40)

Non-executive director

Chairman of the Board

BAdmin (Hons) (Pretoria), EDP (North Western)

Appointed to the board in July 2002, as acting chairman in November 2009, and as chairman in June 2010

Director: Epitome Investments (Pty) Limited, The Business Trust, Trustee: Lovellife Trust

2. Ms LCZ (Zee) Cele (58)

Non-executive director

BCom (Fort Hare), PostGrad Dip Tax, MAcc (Natal), Executive Leadership Development Programme (Cambridge, USA)

Appointed in August 2005

Director: Hulamin Limited, Sport for all Franchising (Pty) Limited, Three Cities Investments (Pty) Limited

3. BA (Brian) Dames (45)

Executive director and chief executive

BSc (Hons) (Western Cape), MBA and Graduate Diploma in Utility Management (Samford, USA)

Appointed as chief executive in June 2010

Director: Eskom Enterprises (Pty) Limited

4. Mr SD (Daniel) Dube (61)

Non-executive director

Diploma in Management (University of Leicester)

Appointed in July 2008

Director: Daniel Dube Training Consulting

5. Dr BL (Bernie) Fanaroff (63)

Non-executive director

PhD (Radio Astronomy) (Cambridge)

Bernie was appointed in May 2010

Director: Fanaroff Associates

6. Mr LG (Lars) Josefsson (60) (Swedish)

Non-executive director

MSc (Applied Physics) (Chalmers, Sweden)

Appointed in July 2002

Director: Robert Bosch GmbH, Eurelectric, Burntisland Fabrication Limited, Green Circle Bioenergy Inc.

7. Mr HB (Hee-Beom) Lee (62) (Korean)

Non-executive director

BA (Electronics Engineering) (Seoul National University), Graduate School of Public Administration (Seoul National University), MBA (summa cum laude) (George Washington University), PhD (Business Management) (Kyunghee University)

Appointed in July 2008

Director: National Academy of Engineering of Korea, Korean Air, STX Energy Group

¹. Only major directorships are reflected.



8. Ms WE (Wendy) Lucas-Bull (57)

Non-executive director

BSc (Wits)

Appointed in July 2002

Director: Peotona Group Holdings (Pty) Limited, Nedbank Group Limited, Anglo Platinum Limited

9. Dr B (Boni) Mehlomakulu (38)

Non-executive director

PhD (Chemical Engineering) (UCT)

Appointed in April 2010

Director: South African Bureau of Standards

10. Mr J (John) Mirenge (45) (Rwandan)

Non-executive director

Bachelor of Law (LLB) (Makerere University, Kampala),
Postgraduate Diploma in Legal Practice (Law Development
Centre, Kampala)

Appointed in July 2008

Director: MTN (Rwanda), Tristar Investments, Prime Holdings

11. Mr JRD (Jacob) Modise (44)

Non-executive director

BCom, BAcc, CA(SA), MBA (Wits), AMP (Harvard),
AMP (Samford, USA)

Appointed in July 2002

Director: ARB Electrical Wholesalers, Allied Electronics Corporation Limited, Batsomi Group

12. Mr PS (Paul) O'Flaherty (48)

Finance director

BCom, BAcc (Wits), CA(SA)

Appointed in January 2010

Director: Escap (Pty) Limited, Roshcon (Pty) Limited, Rotek (Pty) Limited, Eskom Enterprises (Pty) Limited

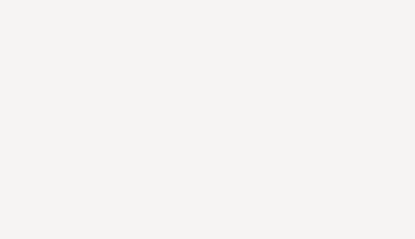
13. Ms U (Uhuru) Zikalala (51)

Non-executive director

MSc (Structural Engineering) (Patrice Lumumba, Moscow)

Appointed in August 2005

Director: Blue Flame Properties, Ulwazi-Bosch Skills Academy, Totchna Investment Solution



Changes in board composition in 2010:

- Mpho Makwana was acting chairman from November 2009 to June 2010.
- Mpho Makwana was appointed as chairman of the board in June 2010.
- Brian Dames was appointed as executive director in June 2010.
- Boni Mehlomakulu was appointed as non-executive director in April 2010.
- Bernie Fanaroff was appointed as non-executive director in May 2010.



Letter from the chief executive

Brian Dames
Chief executive



South Africa's electricity supply and demand balance will remain tight over the next several years. While addressing the country's electricity challenges can only be done in partnership with all South Africans, Eskom resolves to prevent load shedding, but this resolve will be severely tested.

Eskom alone cannot meet this challenge, but if 49 million South Africans and all companies save 10% of their electricity use, we can close the supply gap.

Since being appointed chief executive in July 2010, my priorities have been to keep the lights on, rebuild Eskom's reputation and regain the trust of our stakeholders.

During my first 100 days on the job, I directed the new executive team and all senior managers to review our purpose and redefine the kind of company we want to create. Eskom's most important job is to provide an uninterrupted supply of electricity to support economic growth, and to improve the quality of life of the people of South Africa and of our region. We seek to do so in a way that is financially and environmentally sustainable. Eskom needs to be both a good investment and a trusted, ethical and well-governed company highly rated by customers and staff.

I am proud to report that we are responding to these challenges. We have learnt from the past and are building a new Eskom.

We have embarked on a review of our entire strategy. We must become a high-performance organisation, keep the lights on while reducing our carbon footprint, secure future resources and ensure financial sustainability. We are working with our shareholder to finalise the new strategy and corporate plan.

In 2010, Eskom began transforming its performance, using improved controls and greater organisational discipline. In line with the requirements set out in the shareholder compact by the Department of Public Enterprises, we are making excellent progress in setting up an enterprise performance management system to continually measure performance across the organisation. For example, the chief executive and chairman "dashboards" now provide real-time information on key performance areas, and show true operational performance. Key performance indicators have been identified and aligned throughout the business. Simply put, everyone at Eskom knows what is required of them, and their role in meeting our strategic objectives.

This "line of sight" will allow management to take immediate and targeted action to fix problems. The project can be seen as part of the greater "Back2Basics" programme. The safety and wellbeing of our staff, contractors and the public is paramount, and we need to immediately improve our performance in this area.

Highlights and challenges experienced during the reporting period are set out below.

Highlights

- There has been no load shedding since April 2008, despite an extremely tight supply/demand balance
- Eskom kept the lights on when South Africa hosted a successful 2010 FIFA World Cup™
- We posted a net group profit of R8.4 billion that will be reinvested in the business, helping to fund the capacity expansion programme
- With government's guarantees and explicit support, Eskom has put a funding plan in place for the next seven years
- In November Moody's changed its outlook for Eskom from negative to stable (the rating stayed constant at Baa2). In January 2011, Standard & Poor's improved both South Africa's sovereign rating and Eskom's rating from negative to stable (BBB+)
- During January 2011, Eskom issued a US dollar bond which raised USD1.75 billion (R12 billion)
- Construction at Medupi power station and the Ingula pumped-storage scheme is progressing well
- Significant progress has been made in the placing of contracts for the Kusile power station project
- We launched a campaign to combat electricity theft, with Business Against Crime, Business Unity South Africa, Proudly South African, South African Local Government Association and Primedia as core partners
- South Africa saw the first successful prosecution for electricity theft in the high court
- We initiated the 49M campaign to educate South Africans about the importance of saving electricity, and to help create a culture of energy efficiency
- All procurement and supply chain functions have been consolidated into the Group Commercial division
- Coal stock days were increased to 41 days (2010: 37 days)
- Eskom developed an innovative, containerised rail solution to transport coal to the Camden power station.

Letter from the chief executive continued

Challenges

- Safety remains a major concern; there were 24 fatalities during the year, including staff and contractors, and this is unacceptable
- The power system will continue to be under severe pressure over the next five years – and particularly the next two years – because demand is growing faster than we can bring new power stations on line
- More maintenance is urgently required for existing plant
- An incident on 9 February 2011 at unit 4 (600MW) of Duvha power station removed the unit from service, and it will take more than a year to return it to full operation
- The distribution network performed poorly
- Customer service requires improvement
- The carbon footprint needs to be reduced
- Overdue electricity accounts remain a challenge
- Our environmental performance must be improved to reduce emissions and prevent legal contraventions.

Safety

No words can describe the tragic loss of life of staff, contractors and members of the public. I would like to acknowledge those people who died in the line of duty, and my thoughts go out to all their families, friends and colleagues. We are working with suppliers, customers and contractors to change the approach of leadership towards safety.

In memoriam

Employees

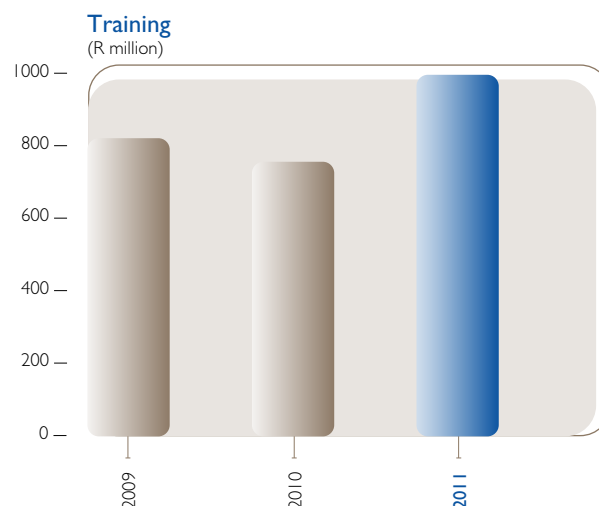
Michael Langa
 Josias Maleka
 Bonginkosi Benson Mhlauli
 Phillimon Nkosi
 Betheniel Tumisang Nkwe
 Hilton Andre Smit

Contractors

Thamsanga Dlamini
 Shigamani Paul Hobo
 Dumisani Khumaro
 Joel Phumowakhe Majola
 Gabangane William Masilela
 Alfred Mbonani
 Job Mkwanazi
 Bongani Christopher Mthembu
 Themba Jeremiah Ndaba
 Siviwe Nomavila
 Musa Phiri
 Bongani Wonder Releni
 Lekwaba Edison Sebela
 Mishack Simelane
 Siphon Simelane
 Siphon Skosana
 Meliseli Sweli
 Tumelo Timothy Tshela

People and transformation

The quality and commitment of Eskom's staff is critical to becoming a high-performance organisation. As a state-owned enterprise, Eskom has an important role to play in developing the capacity needed to sustain our own operations over the long term, and to grow skills for the broader economy. We are investing heavily in our workforce, and at R998 million (2010: R758 million), Eskom's investment in training and development is 5.7% of the wage bill, a level well above international norms.



We have repositioned the Eskom Academy of Learning as a professional centre of excellence. The Academy will focus on training engineers, technologists, technicians and artisans for the future. There are 5 283 (2010: 5 255) people in training, of whom 4 240 (2010: 3 780) are studying in the engineering and technical fields. Once they have completed their training, they will be absorbed into the business. In response to the request from our shareholder to contribute to the new growth path, we have also committed to partner with our suppliers to train an additional 5 000 learners, and set the target of

creating 10 000 apprenticeships, and 100 000 direct and indirect jobs by 2015 through all of Eskom's activities.

The Group has implemented a new and ambitious employment equity plan for the next three financial years to ensure that diversity becomes the "Eskom way" and we have met our targets for the year.

The code of practice for broad-based black economic empowerment sets a target of 50% for procurement spending from black-owned businesses. Eskom as a company is ahead of that target with an attributable black-economic empowerment spend of R41.9 billion, or 52.3% of the total. Work is still needed to raise the proportion of spending directed to businesses owned by black women, which now stands at just over 4% of attributable black economic empowerment spending.

We have revised our robust corporate social investment programme to focus on communities in areas where new power stations are under construction. The Eskom Foundation disbursed R62.3 million during the year on 254 projects, covering a range of economic and social development priorities, from early childhood education, to promoting small business, to rural development.

Financial health

In the 2009 financial year Eskom operated at a loss. In 2010 we returned the company to profitability and in the latest year profitability was strengthened. The surplus is being invested straight back into our capacity expansion programme. The return to profitability is also restoring a sense of confidence among our staff and stakeholders. Growing investor confidence underpins our efforts to raise funding on local and international markets to build new plant and bolster power-generating capacity.

The National Energy Regulator's decision to grant tariff increases that move towards cost-reflective levels has contributed significantly to this financial improvement, as did the return to growth in the broader economy. The biggest contributor to the increase in profits was the 29.4% increase in revenues, supported by higher sales of electricity and the tariff (24.8% in April 2010). Cost savings and efficiencies also contributed to improved profitability.

Group net profit for the year to 31 March 2011 was R8.4 billion (March 2010: R3.6 billion). The operating profit for the year, before fair value gains and losses on embedded derivatives and net finance costs for the Eskom Group, was R15.8 billion (March 2010: R4.9 billion).

Operative revenues per unit of electricity were more than adequate to cover operating costs, with revenue per kilowatt hour increasing

by 26.0% to 40.3c/kWh, while operating costs increased by 16.1% to 32.8c/kWh. The increase in operating costs was driven mainly by primary energy costs and by employee costs, which increased as staff numbers increased in response to growth in the business. Over the period ahead, we expect staff numbers to stabilise roughly at current levels.

Eskom enters 2011/12 with healthy cash reserves resulting in the partial pre-funding of capital spending.

Funding update

One of Eskom's most significant achievements of 2010/11 has been to move from a funding "gap" to a funding plan, thanks to the invaluable commitment and support of the South African government.

We are implementing this R300 billion funding plan and are confident that the financial building blocks in place will enable the capacity expansion programme to be completed over the next six years. About 71% of the funding has already been secured. The funding will support the construction of three large new power stations – Medupi, Kusile and Ingula. Eskom is also upgrading its transmission grid, refurbishing some existing power stations and improving distribution infrastructure.

Maintaining supply

Eskom has avoided load shedding since April 2008. The executive team is determined to keep the lights on in the challenging period that lies ahead.

Demand has recovered to levels seen before the global financial crisis, with electricity sales growing by 2.7% (2010: 1.7%) to 224 446GWh in the last year. Until new power stations are brought on line between 2012 and 2018, the balance between supply and demand will be tight, particularly during 2011 and 2012. Eskom cannot address that challenge on its own – a national partnership is required.

On the supply side, Eskom is working hard to improve the performance of its power stations. We are also partnering with independent power producers and municipalities to ensure additional non-Eskom generation. We have signed power-purchase agreements for 373MW with independent power producers, including Sasol, Sappi, Ipsa and Tangent, and will continue to pursue further opportunities. Short-term agreements were also signed with municipal generators and the aim is to extend these agreements for three to five years.

On the demand side, Eskom is working with key customers to manage demand and invest in energy-efficient technologies and processes. Some of our largest mining and industrial customers have achieved significant savings, but more is needed from a wider

Letter from the chief executive continued

range of large electricity users. We need to ask every electricity consumer to conserve power by switching off appliances when not in use. Without such concerted action, Eskom's resolve to avoid load shedding will be severely tested.

A safety net must be put in place to avoid load shedding in the event that the partnerships outlined above prove insufficient to close the energy gap. That safety net should include a mandatory energy conservation scheme that would require large power users to reduce load, as well as greater usage of our open-cycle gas turbines. Proposals along these lines are being discussed with our stakeholders and with government.

Since the beginning of 2011, Eskom has undertaken to communicate with stakeholders on the state of the power system on a quarterly basis, particularly over 2011 and 2012, when the system will be under the greatest pressure.

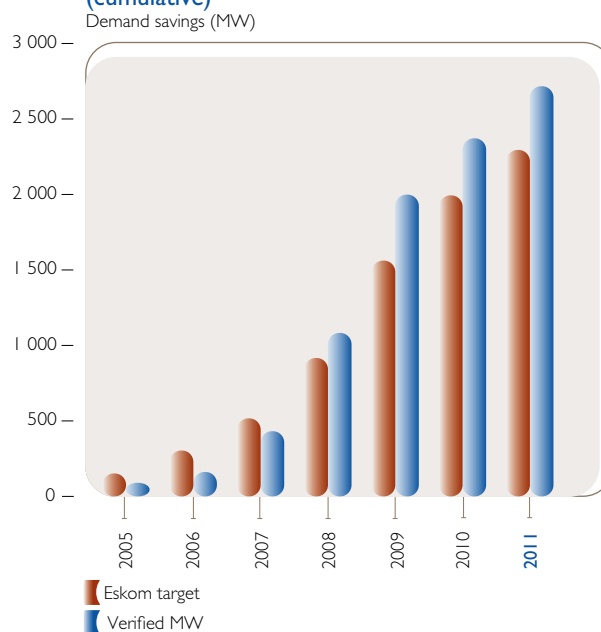
The 49M campaign¹ launched in partnership with government in March 2011 aims to build a culture of energy-efficiency among South Africans. The country needs to conserve electricity and treat it as the scarce resource that it is. This is crucial, not only to maintain continuous supply in the short term, but also to move the country towards a lower-carbon future. Eskom will continue to work with individual consumers, with its largest commercial customers and with leading international technology providers to ensure efficiency gains and energy conservation. We value the support of our partners, the Department of Public Enterprises, the Department of Energy, NEDLAC, SACCI, the Endangered Wildlife Trust, Food and Trees for Africa, WESSA, Massmart and the SABC and we call on all South Africans to join us.

Managing demand

Integrated demand management is a critical component in ensuring the reliability of electricity supply. During the reporting period, Eskom took a wide range of efforts to achieve the projected demand savings target of 301MW, with equivalent annualised energy savings of 994GWh.

We exceeded our target. Total evening peak demand savings over the period amounted to 354.1MW, against the target of 301MW. Annualised energy savings for this financial year are 1 339GWh against the target of 994GWh.

Demand-side management demand savings (cumulative)



Our solar water heating programme has gained momentum over the past year, with 60 183 claims received for the solar water heating rebate, of which 41 690 were paid by year-end. Steps to boost this programme also contributed to the energy and demand savings target. These mechanisms will continue into the next financial year to ensure timely delivery of energy and demand savings. Several new integrated demand management initiatives will be unveiled in the coming year.

Technical performance

Generation

While some power stations have achieved a high standard of technical performance, the older and "return-to-service" stations are not performing well. As a result, Eskom did not meet all of its year-end targets. The maximum demand, together with the greater need for maintenance, has put all available power stations under pressure.

Most of Eskom's existing power stations are in the middle of their projected operating spans and require more maintenance to improve their performance and reliability. However, with demand growing faster than we can create new supply, the system has been too tight to allow the space we need to shut down units for adequate

¹ There are 49 million people in South Africa

planned maintenance. Eskom targets a maintenance ratio of 10%, but the tightness of the system meant that we could achieve a ratio of only 7.98%. There is a growing maintenance backlog that will require plant shutdowns, and this must be addressed over the coming years. Energy savings by our customers would help to create the space needed to conduct this maintenance.

Coal quality and handling continued to negatively affect the performance of certain power stations, in particular Duvha and Matla. We have put measures in place to improve coal quality and coal handling at the affected stations.

In February 2011, Eskom experienced a serious incident at the Duvha power station that resulted in extensive damage to the 600MW unit 4 turbine and generator. The incident's cause is being investigated and it is estimated that the repair process will take more than 12 months.

Transmission and Distribution technical performance

The trend for Transmission system minutes lost remained favourable, and there were no major incidents during the reporting period. This performance was achieved despite the risks on the network not being significantly reduced. The long-term strategy to improve system-minute performance on a sustainable basis is, however, dependent on the implementation of network strengthening projects as per Eskom's Transmission development plan.

The SAIFI (system average interruption frequency index) performance has marginally deteriorated and SAIDI (system average interruption duration index) performance has marginally improved since the prior year. Initiatives to improve the performance of the network have not delivered the benefits that were anticipated, because of the impact of conductor and equipment theft and of adverse weather conditions on network performance. There has, however, been an increased focus on planned maintenance work and this should start to yield benefits.

Climate change

Eskom is working closely with the government to ensure that the Conference of the Parties of the United Nations Framework Convention on Climate Change (COP 17) in Durban later this year is a success. I am personally involved in some specific initiatives around the event. Clean electricity is a fundamental solution to the challenge of climate change. Eskom has been working with its partners to develop a global electricity utilities initiative that will cut across political and geographical boundaries. The initiative will highlight the significant contribution that progressive electricity utilities can make, and demonstrate how early action is already having an impact.

Eskom's response to climate change includes initiatives to reduce the carbon intensity of our existing and future plant, and making our energy mix less dependent on coal. The Southern African Development Community region offers significant clean generation capacity and growth opportunities, both for Eskom and for South Africa. These include hydro and wind power; in addition to extensive coal and gas reserves in the region.

Environmental performance

Eskom has a great impact on the environment – in the way we consume resources, generate electricity and use land.

Eskom's water usage has stabilised somewhat. The volume of water used in electricity generation increased slightly from 1.34L/kWh in 2010 to 1.35L/kWh in 2011.

Our coal-fired power stations improved particulate emissions performance from 0.39kg/MWh to 0.33kg/MWh, despite poor coal quality. There has been an increase in the contravention of environmental legislation from the previous year (from 55 to 64). These related to oil and diesel spills, unauthorised releases of water from power stations, particulate emissions and cutting of protected trees without a permit. This is not acceptable and Eskom has a programme in place to remedy the problem.



Kusile power station.

New build programme

Eskom has undertaken an ambitious infrastructure development programme. It began in 2005, with the aim of adding more than 17 000MW to the national electricity grid by 2018. We are on track to meet that target. To date, more than 5 000MW of new generation capacity and more than 3 000km of new transmission lines have been added to South Africa's energy grid.

Letter from the chief executive continued

Last year we reopened Camden power station, near Ermelo. This is the first of the return-to-service stations that were successfully recommissioned after years of inactivity. Work is progressing on the other two stations in this stable – Komati and Grootvlei, with the return-to-service programme on track to add a total of 3 720MW to the system by 2013. Construction of two massive new coal-fired stations – Medupi and Kusile – is making good progress, with the first unit of Medupi scheduled to be on line late in 2012, and Kusile's first unit at the end of 2014. The new Ingula pumped storage scheme will be commissioned in 2014.

The strengthening of the high-voltage power line network is gaining momentum. The acquisition of servitudes for new line routes has moved slowly and delayed this process, but these issues are being addressed.

Eskom's investment in infrastructure will not only help to provide the platform on which South Africa's economy can grow and thrive in the longer term; it also significantly boosts the economy in the shorter term, stimulating business activity and investment in a range of economic sectors. In our new construction projects, the local content commitment in the latest financial year was more than R9 billion, which was 79% of the total value of contracts awarded. These projects have significantly boosted local economies; and it is estimated that they are creating a net 40 000 jobs, directly and indirectly, during construction.

Electricity industry

Over the past year, there have been several major developments in South Africa's policy frameworks that have a bearing on electricity. The government has finalised its Integrated Resource Plan, which will direct the expansion of South Africa's electricity supply over the next 20 years. The plan sets out the timing and the mix of new generation capacity between 2010 and 2030, balancing the imperatives of economic growth, affordability, security of supply and reduced carbon emissions. The plan will form the basis on which the National Energy Regulator will license new-generation projects by private- or public-sector producers in South Africa and the region. We welcome the new plan and urge the implementation thereof with speed. This will augment Eskom's efforts to provide new-generation capacity and ensure a continuous supply of electricity for South Africa beyond 2017, when the projects to which Eskom is currently committed will be complete.

For several years, the government has periodically pursued plans for a restructuring of the electricity distribution system, through which six regional electricity distributors would assume the energy distribution function in South Africa. This plan would have required Eskom to transfer its distribution assets and business to these entities. The restructuring proposal was formally revoked on 8 December 2010.

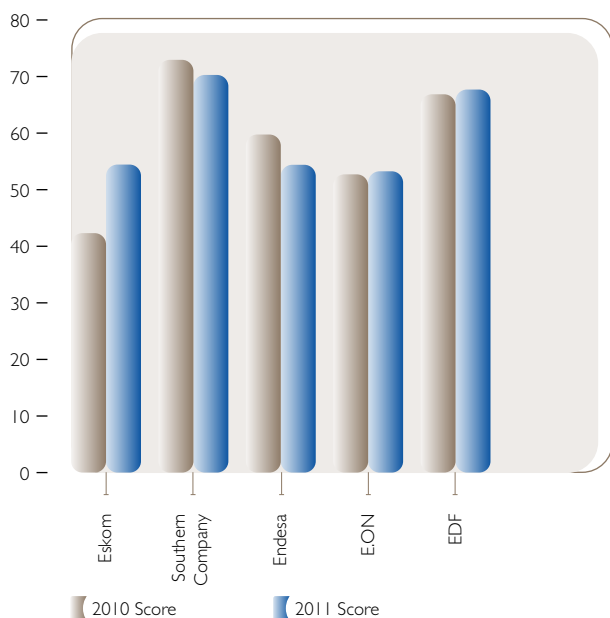
In February 2010, the government announced that an independent system and market operator will be established, independent from Eskom. The proposal for this entity arose in response to concerns about the slow pace of introduction of independent power producers in the electricity supply industry. As the first phase, a ring-fenced buyer office has been established within Eskom. The design and timing of the new entity will be guided by government policy. Pending this, Eskom will operate as the single buyer of electricity from independent power producers.

Eskom has also been discussing coal industry concerns with the government. These issues revolve around the supply of our power stations now and in the future. We are confident that the bulk of our coal supplies are secured up to 2018, but policy clarity is needed on a longer-term framework for the industry that strikes a balance between the need to develop the country's coal exports, and to ensure continuous supply for power generation at an affordable cost.

Our stakeholders

Since I became chief executive, Eskom has conducted a systematic programme of stakeholder engagements, with the aim of building Eskom's reputation and its credibility by being more transparent and responsive. Our nine cities programme has seen us visiting several provinces, meeting provincial and local government as well as stakeholders, customers, media and staff. We have also made a concerted effort to engage with our large customers and others on a systematic basis. The stabilisation of Eskom's leadership and efforts to build relationships over the past year have started to bear fruit. Each year, the Reputation Institute measures Eskom's reputation, as shown in the figure below. Our reputation score has improved steadily over the past three years. Our current RepTrak™ Pulse is 54.4 points, up from 42.2 last year and up by 13.9 points from 2008/09.

Global RepTrak™ Pulse scores



Eskom will continue to prioritise efforts to bolster its reputation, including stepped-up staff training. Our employees are the guardians of Eskom's reputation, and our ability to deliver on our promises and meet expectations through continuously improved service relies on our staff.

Outlook

South Africa's electricity supply-demand balance will remain tight over the next several years. While addressing the country's electricity challenges can only be done in partnership with all South Africans, Eskom resolves to prevent load shedding but this resolve will be severely tested. We will place a major focus on creating an enabling environment for other players to participate. However, there are still significant risks which need to be managed.

The outlook up to 2017, based on the integrated resource plan "moderate demand" scenario, suggests the likelihood of an energy shortfall between now and 2015. The supply/demand balance will be tightest for 2011 and 2012 until new capacity comes on stream. The base case forecasts a supply shortfall of 9TWh of energy in 2012, which is comparable to the energy produced by a 1 000MW power station in a year. Eskom alone cannot meet this challenge,

but if 49 million South Africans and all companies save 10% of their electricity use, we can close the supply gap.

Over the coming financial year Eskom will focus on:

- Improving our safety performance
- Keeping the lights on
- Building new power plants
- Contributing to the government's new growth path through training and job creation
- Improving customer service.

Acknowledgements

I would like to express my thanks to the board under the steady guidance of Mpho Makwana, the executive committee, Eskom staff members and the Eskom trade unions' leadership for the support I have received since being appointed chief executive. Eskom is fortunate in the level of collaboration we enjoy from the government and the Minister of Public Enterprises.

The achievements of the past year were possible only because of the hard work and dedication of all those who work at Eskom, especially all the shift workers who worked tirelessly to keep our plant running 24-hours a day. I thank them all. Working together we can achieve great things.

Above all, we rely on partnerships. As we demonstrated during the 2010 FIFA World Cup™, supporting each other and working as a team will be critical as we address the challenges ahead. Our turnaround strategy is well established and gaining momentum, but significant challenges remain – particularly supply-side issues over the next few years. Eskom cannot do it alone. In partnership with the nation, we can make Eskom a top 5 performing power utility.

Brian Dames
Chief executive

31 May 2011

Executive management committee (Exco)¹

1. **BA (Brian) Dames (45)**

Chief executive

BSc (Hons) (Western Cape), MBA and Graduate Diploma in Utility Management (Samford, USA)

Director: Chairman of Eskom Enterprises (Pty) Limited
Appointed as chief executive in June 2010

2. **BE (Bhabhalazi) Bulunga (55)**

Divisional executive – Human Resources

BA (Social Sciences) (University of Swaziland)

Appointed in February 2010

Provides human resources strategy, direction, policies and assurance as well as strategic services

Drives Eskom-wide culture change through change management and change programmes

3. **CAK (Chose) Choju (54)**

Divisional executive – Corporate Affairs

BA (Hons), MA (Political Economy) (Nelson Mandela Metropolitan University), MA (International Relations) (University of Denver, USA)

Appointed in June 2010

Manage negative media coverage in the short term and recover and turn around Eskom's image and reputation in the long term and gear Eskom's corporate communication machinery.

4. **T (Thava) Govender (43)²**

Acting chief officer – Generation Business

BSc (Chemistry and Biochemistry) (University of Durban Westville), BSc Hons (Energy Studies – Nuclear and Fossil) (RAU), Management Development Programme (Unisa)

Appointed in September 2010

Operates existing generating capacity, and ensures world-class engineering solutions

5. **EL (Erica) Johnson (42)**

Chief officer – Customer Network Business

BSc (Electrical Eng) (University of Cape Town), MSc (Electrical Eng) (University of Cape Town), MBA (Wits)

Director: Eskom Enterprises (Pty) Limited

Appointed in February 2008

Accountable for network and customer services business: planning, operations and maintenance of the transmission and distribution network; and management of the customer base, long-term electricity capacity planning and the revenue stream



1. Only major directorships are reflected

2. Not an Exco member

6. Dr SJ (Steve) Lennon (52)

Divisional executive – Corporate Services

MSc (Phys Metallurgy) and PhD (Phys Metallurgy) (Wits)

Professional scientist (Pr. Sci. Nat.)

Director: National Advisory Council on Innovation, Electric Power Research Institute, Eskom Enterprises (Pty) Limited
Appointed in September 2000

Provides functional leadership in the fields of assurance, risk, sustainability, innovation, corporate social investment, information management and research

7. DL (Dan) Marokane (39)

Chief commercial officer – Group Commercial

BSc (Chemical Engineering) (University of Cape Town),

MSc (Engineering) (Petroleum) (Imperial College, UK),

MBA (University of Cape Town)

Director: Acting chief executive of Eskom Enterprises (Pty) Limited, chairman of Roshcon (Pty) Limited and Rotek (Pty) Limited, director of Evergrin Investment (Pty) Limited
Appointed in September 2010

Provides a single entity for procurement: supplier management and development, contract negotiations, and inventory management, warehousing and logistics

Enables operational and cost efficiencies across other operational divisions

8. PS (Paul) O’Flaherty (48)

Finance director and divisional executive – Group Capital

BCom, BAcc (Witwatersrand), CA(SA)

Director: Escap Limited, Roshcon (Pty) Limited, Rotek (Pty) Limited, Eskom Enterprises (Pty) Limited

Member: Accounting Practices Committee of the South African Institute of Chartered Accountants

Appointed in January 2010. Appointed as divisional executive – Group Capital in September 2010

Provides financial strategy, policies, assurance and strategic financial services (including treasury, corporate finance, tax, corporate and regulatory reporting)

Manages Eskom’s major capital projects (new build and upgrades)



Performance against the shareholder compact

This is an overview of performance against the key performance indicators in Eskom's shareholder compact¹ with government, which is done at an Eskom company level. (See page 39 for more detailed information on the shareholder compact.)

Key performance area	Key performance indicator	Target 2011	Achieved 2011	Achieved 2010	Achieved 2009	
Provide adequate future electricity for South Africa	Generation capacity installed (Megawatts)	625	315 ^{RA}	452 ^{RA}	1 770 ^{RA}	●
	Transmission lines installed (kilometres of line)	446	443 ^{RA}	600 ^{RA}	418 ^{RA}	●
	Transmission MVA installed	3 565	5 940 ^{RA}	1 630 ^{RA}	1 255 ^{RA}	●
Ensuring reliability of supply of electricity to all South Africans	National load shedding (Generation Induced) or Un-served energy (system minutes)	No load shedding	None ^{RA}	None ^{RA}	641,5	●
	DSM energy efficiency annualised (GWh)	994	1 339 ^{RA}	n/a ²	n/a ²	●
Ensuring business sustainability of Eskom	Cost of electricity – (rand/MWh) (before embedded derivatives and depreciation)	327.28	296.36 ^{RA}	255.09 ^{RA}	237.29 ³	●
	Internal energy efficiency – annualised current year savings (GWh)	24.0	26.2 ^{RA}	n/a ⁴	n/a	●
	Water usage (L/kWh sent out)	1.35	1.35 ^{RA}	1.34 ^{RA}	1.35 ^{RA}	●
	Debt:equity ratio (company)	2.5	1.67 ^{RA}	1.69 ^{RA3}	1.32 ³	●
	Interest cover (company)	1.0	1.48 ^{RA}	0.72 ^{RA3}	(4.72) ³	●
Supporting the developmental objectives of South Africa	Percentage of local content in new-build projects	50.0%	79.7 ^{RA}	73.9 ^{RA}	n/a	●
	Skills development:					
	Eskom trainees/bursars (learner pipeline)	4 500	5 283 ^{RA}	5 255 ^{RA}	5 907	●
	Engineering trainees/apprentices	3 500	4 240 ^{RA}	3 780 ^{RA}	3 535	●
	Additional number of non-Eskom learners on Eskom-sponsored learning	450	550 ^{RA}	236 ^{RA}	n/a	●

1. The compact measures the performance of the electricity business.

2. The basis of measurement changed for the current year. In prior years, verified savings of 372MW^{RA} (2010) and 916MW^{RA} (2009) were achieved.

3. Restated.

4. Reporting basis has changed from 2010, therefore not comparable to 2011.

RA – Reasonable Assurance provided by the independent assurance provider (refer page 200).

Generation capacity

The 625MW target for capacity installation was not achieved due to ongoing challenges at Grootvlei unit 5 and Komati unit 4. At Grootvlei, there was a super-heater boiler tube leak. At Komati, the front end of the high-pressure rotor shaft sheared, due to an unexpected blow as a result of a turbine failure.

Transmission lines built

The target installation of 446km of transmission lines was missed by a small margin due to outstanding land and rights issues (outstanding approvals and permits); late access to land and unsuccessful land acquisition for servitudes due to landowner resistance; the unavailability of required outages and rain.

The divisional reports that follow contain a full analysis of Eskom's performance during the year ended 31 March 2011, from a financial, operational, safety and environmental point of view.



Finance and Group Capital

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Finance and Group Capital



Paul O'Flaherty Finance Director and Divisional Executive: Group Capital

Finance mandate

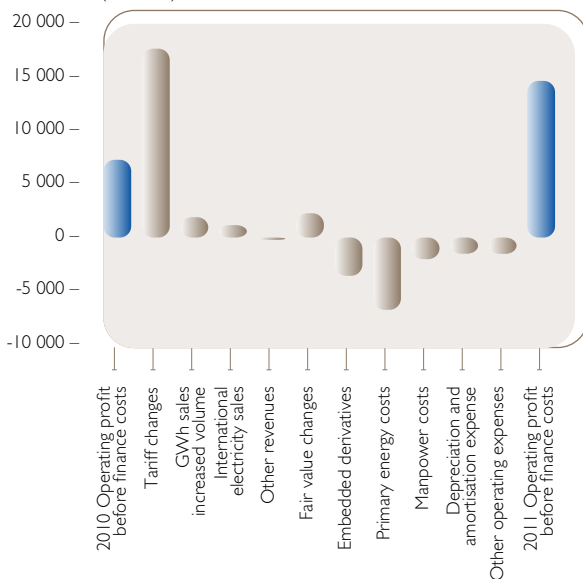
Provides financial strategy, policies, assurance and strategic financial services (including treasury, corporate and regulatory reporting, tax, as well as financial evaluation and advisory services) to the Eskom Group.

Group Capital mandate

To create a centre of excellence in the allocation of capital at group level and in the planning, development, monitoring and execution of projects.

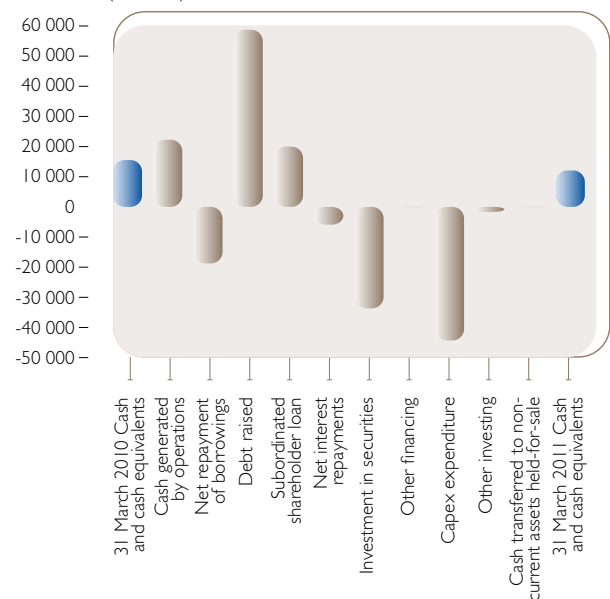
Net operating income

(R million)



Cash and cash equivalents

(R million)



Highlights	Challenges
<ul style="list-style-type: none"> • R300 billion seven-year funding plan agreed with shareholder and now in implementation phase • Moody's changed the outlook for Eskom from negative to stable (the rating remains constant at Baa2). During January 2011, Standard & Poor's improved both South Africa's Sovereign rating and that for Eskom from negative to stable • Construction at Medupi power station is progressing well • Significant progress has been made in the placing of contracts for the Kusile power station project • Successful US dollar bond issue of USD1.75 billion in January 2011 • Successful renegotiation of one of the remaining two special price agreements • Ranked third in the Ernst & Young: Excellence in Sustainability Reporting Awards and a category winner for best sustainable reporting in the Chartered Secretaries Annual Report Awards for the 2010 integrated report. 	<ul style="list-style-type: none"> • Ongoing investor caution until Eskom's capital restructure was resolved in September 2010 • Keeping up with the construction schedule in the capacity expansion programme • Repair Duvha unit 4 that was severely damaged during testing in February 2011.
Future priorities	
<ul style="list-style-type: none"> • MYPD 3 submission to NERSA • Maintaining funding momentum • Alternative funding solutions for future Eskom initiatives • Achieve committed commissioning dates for capacity expansion programme • Continue renegotiation of remaining special price agreement. 	

Financial performance overview



Key ratios for the group

	Measure	2011	2010
Income statement			
Earnings before interest and tax (before profit/(loss) on embedded derivatives)	R million	15 776	4 920
EBITDA	R million	21 734	12 920
EBITDA margin	%	23.26	17.30
Net profit	R million	8 356	3 620
Free funds from operations	R million	17 019	2 356
Electricity revenue per kWh	cents/kWh	40.27	31.95
Electricity operating costs per kWh (including depreciation and amortisation)	cents/kWh	32.78	28.23
Arrear debts as % of revenue	%	0.75	0.83
Interest cover	ratio	1.54	0.86
Electricity sales volumes	GWh	224 446	218 591
Balance sheet			
Total assets	R million	328 145	246 135
Total equity	R million	87 259	70 222
Working capital ratio	ratio	0.87	0.91
Debt:equity including long-term provisions	ratio	1.62	1.62
Return on average total assets	%	2.91	1.63
Return on average equity	%	10.61	5.58
Average days coal stock	days	41 ^{RA}	37 ^{RA}
Cash flow/funding			
Debt service cover ratio	ratio	1.97	2.53
Free funds from operations as percentage of gross debt	%	9.56	1.92
Gross debt/earnings before interest, tax, depreciation and amortisation	%	8.19	9.50
Cash and cash equivalents and investments in securities	R million	49 892	19 612

RA – Reasonable Assurance provided by the independent assurance provider (refer page 200).

Finance and Group Capital continued

Results of operations

During the 2011 financial year Eskom's aim was to create cost savings and efficiencies. Eskom is pleased to announce that it has achieved a group net profit for the year to 31 March 2011 of R8.4 billion (March 2010: R3.6 billion) and for the company a net profit of R8.0 billion (March 2010: R3.2 billion). The operating profit for the year, before fair value gains and losses on embedded derivatives and net finance costs was R15.8 billion (March 2010: R4.9 billion) for the group and R15.2 billion for the company (March 2010: R3.8 billion).

This strong financial performance resulted from the 24.8% tariff increase (including the environmental levy), granted by the National Energy Regulator of South Africa with effect from 1 April 2010, as well as cost savings and deferrals.

Overall, Eskom's electricity revenue per kWh sold increased on average by 26.0% from March 2010 to March 2011 (31.9 c/kWh to 40.3 c/kWh). Electricity-related operational costs per kWh increased on average by 16.1% from March 2010 to March 2011 (28.2 c/kWh to 32.8 c/kWh).

Revenue

Group revenue for the year to 31 March 2011 was R91.4 billion (31 March 2010: R71.1 billion), while company revenue was R90.9 billion (2010: R70.1 billion). Group revenue, which includes a small portion of non-electricity revenue, reflected an increase of 28.6% (2010: 31.3%). Included in electricity revenue is the environmental levy of R4.3 billion charged to customers (2010: R3.3 billion. The levy was only in effect for nine months in the 2010 financial year).

The sales of electricity for the year amounted to 224 446GWh, representing an increase of 2.7% (2010: 1.7%) compared to the previous year (218 591GWh). This is, however, below the budgeted sales of 227 727GWh (4.2% budgeted growth). The budget shortfall is mainly attributed to redistributors (municipalities) (1 161GWh), industrial customers, including smelters (1 477GWh), mining customers (723GWh) and prepaid customers (312GWh), due to the slower than anticipated recovery of the economy, the downscaling of certain mines and lower demand from certain smelters.

NERSA initiated the introduction of an inclining block tariff for residential customers, thereby replacing Eskom's existing residential tariff structures. The regulator's decision, which also includes measures for the protection of the poor, resulted in different increases per

tariff category. The inclining block tariff was implemented for metered residential customers, while implementation for prepaid residential customers was limited to reflecting the regulator's inclining block tariff price levels within the existing structures, with full implementation on 1 April 2011.

The inclining block tariff structure gives significant relief to low consumption customers, who make up the majority of residential customers. These low consumption customers are seeing reductions in their monthly bill, while higher consumption customers, using more than 1 500kWh per month, have higher than the average increases.

Primary energy costs

The primary energy costs for the year (group and company) amounted to R35.8 billion (2010: R29.1 billion). The costs include the environmental levy of R5.0 billion (2010: R3.5 billion) paid to government. The cost of primary energy as a percentage of electricity revenue was 39.6% (2010: 41.7%).

Primary energy costs increased by 19.8% from 13.3c/kWh for the previous year, to 15.9c/kWh for the current year. The 12.8% per ton increase in the cost of the coal burnt contributed 8.2% of the 19.8% increase, the environmental levy increase contributed 4.7% (the levy was only in effect for nine months in the prior year) and the cost of using independent power producers (R1.3 billion) contributed 4.3%. The increases in the cost of coal handling, coal-fired start-ups, gas-fired start-ups and nuclear fuel costs made up the remainder of the increase.

The environmental levy is treated as an inherent variable cost to the production of electricity from non-renewable sources, similar to fuel costs. The levy, introduced as a separate charge for all tariffs from July 2009, will be increased from 2c/kWh to 2.5c/kWh from 1 April 2011, to generate revenue for road repairs. Refer to page 104 for more details on the road repair programme.

The coal stock days at 31 March 2011 stood at 41^{RA} days, up from 37^{RA} days at 31 March 2010 and down from the 42 days at 31 December 2010.

Eskom is committed to facilitating the entry of independent power producers. Eskom has signed power purchase agreements for 373MW with five power producers and hopes to sign an additional 3MW soon. Short-term agreements were also signed with municipal generators, and the aim is to extend these agreements for a further three to five years.

RA – Reasonable Assurance provided by the independent assurance provider (refer page 200).

Operating costs

Group and company operating costs consist of:

Employee benefits

Group employee numbers increased by a net number of 2 556 to 41 778, up from 39 222 in 2010. Company employee numbers increased by a net number of 2 487 to 39 034, up from 36 547 in 2010.

Group gross employee costs of R20.4 billion (2010: R17.9 billion) represent a 14.1% increase, while company gross employee costs of R19.0 billion (2010: R16.5 billion) represent a 15.4% increase. The group and company capitalised R3.7 billion (2010: R3.2 billion) of employee costs to capital projects during the year.

Group depreciation costs

Group depreciation costs increased to R7.2 billion (2010: R5.7 billion) due to an increase in additions to property, plant and equipment. Company depreciation costs increased to R7.1 billion from R6.0 billion accordingly.

Arrear debt

Group bad debt as a percentage of revenue was 0.75% (2010: 0.83%). This is an area that will receive continuous focus over the forthcoming years as the tariff increases.

Electricity debtors increased from R7.0 billion at 31 March 2010 to R8.7 billion at 31 March 2011. The allowance for the impairment for trade and other receivables increased from R2.4 billion to R2.9 billion over the same period.

Debtor days	Measure	2011	2010	2009
Average debtor days: Distribution	days	22.2	22.0	20.8
Average debtor days: Transmission	days	16.0	16.1	18.1

Repairs and maintenance

The net repairs and maintenance for the company was R7.5 billion for the year (2010: R5.1 billion). This makes up the major portion of other operating expenses of the group of R12.1 billion (2010: R10.6 billion).

Eskom does not intend to cut back on repairs and maintenance programmes as they are critical to the organisation and are monitored closely. Ensuring that the maintenance outage plan is executed timeously remains a challenge as Eskom balances the need for planned maintenance on ageing plant with the availability of plant to meet the electricity demands of a growing economy.

Net fair value loss on financial instruments, excluding embedded derivatives

The net fair value loss on financial instruments, excluding embedded derivatives, for the group was R3.7 billion for the year (2010: R5.9 billion), and for the company was R3.8 billion for the year (2010: R6.1 billion). This loss consists primarily of the cost of rolling over forward exchange contracts and varies from period to period due to the timing of the placement of related procurement contracts.

It is Eskom's policy to hedge all foreign currency exposures above R50 000 as and when committed.

Loss on embedded derivatives

The net impact on the income statement of changes in the fair value of the embedded derivatives for the group and the company was a fair value loss for the year of R1.3 billion (2010: profit of R2.3 billion). The embedded derivative assets were Rnil (2010: R0.1 billion) and the embedded derivative liabilities amounted to R5.9 billion (2010: R4.7 billion).

The renegotiation of the commodity-linked revenue contract for the zinc smelter contract in Namibia has been finalised. The negotiation regarding the remaining commodity-linked aluminium smelter contracts in KwaZulu-Natal is expected to be concluded in the next financial year.

Net finance cost

The net finance cost, after the capitalisation of borrowing costs and including the unwinding of interest, was R2.9 billion (2010: R1.2 billion) for the group and R2.9 billion (2010: R1.3 billion) for the company.

Gross finance cost was R12.7 billion (2010: R11.8 billion) for the group and for the company. The borrowing costs capitalised for the group and company for the period amounted to R8.6 billion (2010: R8.2 billion) and the unwinding of interest for the group and company was R1.7 billion (2010: R1.6 billion).

Gross finance costs continue to increase as additional borrowings are raised to fund the capacity expansion programme. The finance cost includes the remeasurement of the government loan at a R2.5 billion cost (2010: R4.6 billion income).

Gross finance income was R2.4 billion (2010: R1.6 billion) for the group and for the company.

Finance and Group Capital continued

Taxation

The effective tax rate for the period was 27.9% (2010: 34.76%) for the group and 28.2% for the company (2010: 33.9%) which is in line with the current statutory tax rate of 28.0%.

Liquidity and capital resources

The group's cash and cash equivalents decreased from R15.5 billion to R12.1 billion at 31 March 2011 and the company's from R14.9 billion to R11.5 billion. However, if all liquid funds of R53.7 billion (2010: R25.7 billion) are taken into account, the group currently carries sufficient funds to meet eight months' operational cash flows, interest and debt repayments. The intent is to build this up over time to 12 months.

Cash flows from operating activities

The group's net cash inflow from operations for the year increased by 144% from R9.1 billion to R22.3 billion, while the company had a net cash inflow increase of 151% from R8.6 billion to R21.6 billion. This is primarily due to the increased operating profitability of the company in line with the increased tariff.

Cash flows used in investing activities

Cash flows used in investing activities for the year decreased by 3.2% from R47.5 billion to R46.0 billion for the group and for the company from R45.4 billion to R44.5 billion.

Group capital expenditure, excluding borrowing costs, included in this line item amounted to R44.3 billion, due to the progress of the capacity expansion programme. However, the expenditure in the Group Capital division was still R25.1 billion below budget mainly due to delays in the placing of contracts at Kusile (which, since October 2010, has been fully under way), contractual issues at Medupi and delays on Transmission projects due to difficulties in obtaining land and servitude rights.

Cash flows from financing activities

Net cash flows from financing activities for the group decreased by 42.7% from R35.5 billion to R20.3 billion, and for the company by 42.4% from R33.7 billion to R19.4 billion. This includes R20 billion received from government in terms of the last tranche of their R60 billion subordinated loan. From an accounting point of view, based on future cash flows, approximately 50% of the loan received has been accounted for as equity. Cash flows from financing activities have been reduced by investments made, as part of Eskom's liquidity management and strategy to optimise returns. Investments as at 31 March 2011 consist of R14 billion in South African government bonds and R33 billion in money market assets.

The debt:equity ratio for the group (including long-term provisions) stayed constant at 1.62 (2010: 1.62) and similarly for the company at 1.67 (2010: 1.69). The working capital ratio was 0.87 (2010: 0.91) for the group and 0.83 (2010: 0.86) for the company. Free funds from operations as a percentage of gross debt for the group was 9.56% (2010: 1.92%), and for the company was 9.39% (2010: 1.36%). The improvement in the free funds from operations as a percentage of gross debt is primarily due to the increased operating profitability of the company resulting from the increased tariff.

Capital expenditure (including interest capitalised)

The total capital programme, including capacity expansion, is firmly under way and, since the inception of the capacity expansion programme in 2005, Eskom has spent a total of R140.3 billion, with R40.3 billion in the current year. During the year 315MW^{RA} of new generation capacity, 443km^{RA} of new transmission lines and 5 940MVA^{RA} of new transformer capacity were added or installed.

Due to the resolution of Eskom's funding issues during the year, all of Kusile's remaining contracts are being placed. The first unit of Medupi is now expected to be commissioned by late 2012 and the first unit of Kusile during late 2014.

Capital expenditure by division (including interest capitalised)

Description	2011 Rm	2010 Rm	2009 Rm
Generation division	40 595	40 484	31 824
New capacity	32 318	31 343	27 015
Technical plan projects	7 059	5 485	4 515
Asset purchase and other	1 218	3 656	294
Transmission division	6 485	7 143	6 465
New strengthening projects	5 535	6 108	5 724
Land and rights	71	173	70
Capital spares	441	582	523
Asset purchase and other	438	280	72
Distribution division	8 474	7 079	6 446
New capacity	4 294	2 511	1 848
Refurbishment and strengthening	1 239	1 914	2 718
Electrification	1 324	1 324	861
Asset purchase and other	1 617	1 330	1 019
Other divisions	117	1 916	1 848
Subsidiaries	208	509	516
Elimination of inter-segment transactions	(422)	(128)	–
Total	55 457	57 003	47 099

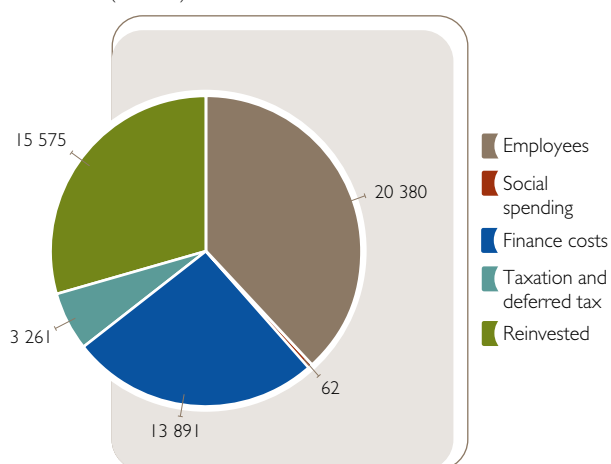
Refer to the Group Capital division on page 85 for more detail on the capacity expansion programme.

Finance and Group Capital continued

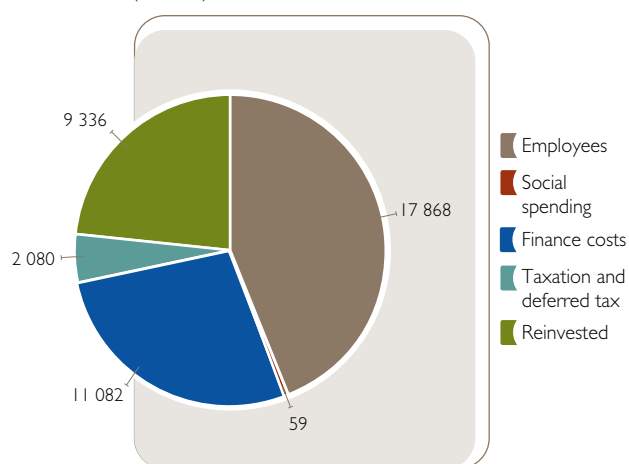
Group value-added statement

	2011 Rm	2010 Rm	2009 Rm
Value created			
Revenue	91 447	71 130	54 177
Other income	611	566	647
Less: primary energy and other operating expenses	(53 599)	(44 293)	(46 970)
Value added	38 459	27 403	7 854
Finance income	2 436	1 614	3 152
Wealth created	40 895	29 017	11 006
Value distributed	25 320	19 681	15 756
Benefits to employees	20 380	17 868	16 108
Social spending in communities	62	59	88
Finance costs to lenders	13 891	11 082	7 755
Finance costs and employee costs capitalised	(12 274)	(11 408)	(4 409)
Taxation to government (including deferred tax)	3 261	2 080	(3 786)
Value reinvested in the group to maintain and develop operations	15 575	9 336	(4 750)
Depreciation and amortisation	7 219	5 716	4 918
Transfer to reserves	8 356	3 620	(9 668)
Total value distributed and reinvested	40 895	29 017	11 006
Number of employees	41 778	39 222	37 857
Electricity sales (GWh)	224 446	218 591	214 850
Value created per employee			
Revenue per employee (Rm)	2.19	1.81	1.43
Value added per employee (Rm)	0.92	0.70	0.21
Value added per GWh (Rm)	0.17	0.13	0.04
Wealth created per employee (Rm)	0.98	0.74	0.29

Value added – Year ended 31 March 2011¹
(R million)



Value added – Year ended 31 March 2010¹
(R million)



1. The graphs above exclude the effect of capitalised finance costs and employee costs of R12 274 million (2010: R11 408 million).

Material issues

Environmental fiscal reform



Government introduced a 2c/kWh environmental levy, applied to electricity generated from non-renewable energy sources, effective from 1 July 2009. This is treated as an inherent variable cost to the production of electricity from non-renewable sources, similar to fuel costs. The environmental levy was introduced as a separate charge for all tariffs. This levy will be increased to 2.5c/kWh from 1 April 2011. There will be no increases in the tariff allowed by the National Energy Regulator of South Africa for MYPD 2 as a result of this, as it will replace moneys allocated in the MYPD 2 for road repairs.

The South African National Treasury issued a discussion paper in December 2010 for public comment entitled "Reducing Greenhouse Gas Emissions: The Carbon Tax Option". This builds on the previous draft policy paper issued by the Tax directorate entitled "A Framework for Considering Market-based Instruments to Support Environmental Fiscal Reform in South Africa" in April 2006. It is also to be read in conjunction with the draft Green Paper on a national climate change response strategy produced by the Department of Environmental Affairs in November 2011. Three carbon emissions tax options are presented for consideration:

- Direct tax on actual measured emissions
- Fossil fuel input tax – based on the carbon content of fuels
- Fossil fuel output tax.

The proposal for such a tax is being made in support of government's aspirations to address greenhouse gas emissions reductions in the country. The aspiration is to achieve a peak in national greenhouse gas emissions between 2020 and 2025, followed by a plateau in emissions and ultimately a decline in absolute emissions. This is conditional to international financial support, technology transfer and a global agreement on a climate change regime at the international negotiations. The most important elements to achieve a reduction in national greenhouse gas emissions are financing, monitoring, reporting and long-term certainty, particularly when energy infrastructure is under consideration. Planning and construction lead times for the low carbon emitting, base-load

options required to achieve absolute emissions reductions may be as long as 10 years and are highly capital intensive. While a carbon tax will penalise carbon emissions it may not bring about the technology choice that is required to address South Africa's emissions. The greatest concern is that the use of domestic regulatory or tax instruments places the financial burden on domestic consumers. A robust macroeconomic study is important in determining the effect of such a tax on the economy. Eskom remains committed to addressing its greenhouse gas emissions and is keen for South Africa to investigate the feasibility of the full suite of carbon financing instruments in addition to seeking international financing for low carbon emitting projects.

Standardise and optimise with Back2Basics



The Back2Basics programme was initiated early in 2010 to drive efficiencies by applying standard business processes and using uniform systems across Eskom.

Back2Basics has designed standard work processes, efficient standard transaction processing and standard reporting for the finance, procurement and human resources processes. These processes have been documented in process and control manuals. This is a major step towards achieving an Eskom that follows one process.

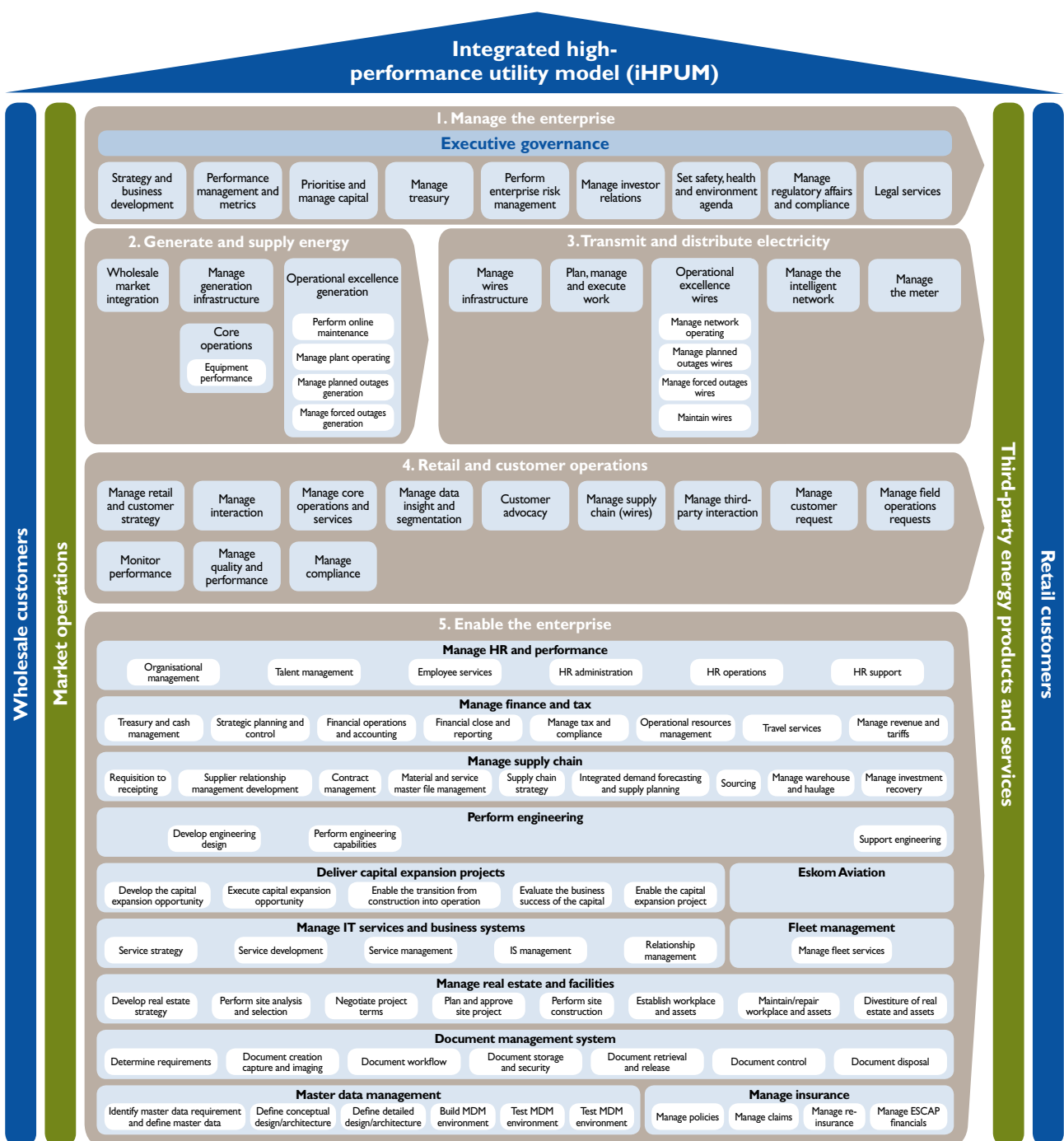
The Eskom strategic review programme initiated in 2010 extended the Back2Basics scope to include the engineering, projects, outage management, maintenance and operations processes. These are also being standardised, optimised and simplified to create standard work processes, efficient standard transaction processing, with standard controls, standard policies and procedures and standard reporting.

The Back2Basics programme also focuses on Eskom's ability to accurately measure business performance. To meet this need, an enterprise performance management unit was created to establish a standardised business reporting methodology that includes the standardisation and data integrity of key performance indicators used in business reporting. The unit will give Eskom access to analytical and intuitive dashboards and scorecards.

Finance and Group Capital division continued

The automation of processes is critical for efficiencies and data integrity. Eskom has standardised on SAP, Oracle/P6 (large capital projects), Intergraph (engineering), CC+B (customer and billing) and MAXIMO (distribution maintenance) as the key systems of choice. To facilitate an effective deployment of these key systems, Eskom has adopted the high-performance utility model as depicted below. This will enable Eskom to benchmark its capabilities and processes against best practice.

Change management and training are critical if the benefits of the programme are to be realised. The Back2Basics training will empower participants to understand where they fit into the overall Eskom business value chain, understand the end-to-end processes and give them the necessary systems training and support.



Treasury division



Caroline Henry Senior General Manager: Treasury division

Overview

Eskom has a funding plan in place to deliver the necessary financial resources required to undertake the current build programme up to 2017. The South African government, as shareholder, recognises Eskom's critical role in the economy and, to ensure Eskom's financial stability, has committed R430 billion of financial support to Eskom. This consists of:

- R350 billion in guarantees, including an additional guarantee of R174 billion provided in October 2010 (R106 billion of the guarantees have been committed)
- R60 billion subordinated shareholder loan received in full
- A proposed R20 billion equity injection.

The government-approved energy pricing policy aims to achieve cost-reflective tariffs that will reflect the full economic cost of supplying electricity to customers in terms of the current multi-year price determination (MYPD 2). The current determination has one further 25% increase for 2012/13. In order to obtain a cost-reflective tariff, Eskom requires an additional two increases of 25% in addition to those allowed in the MYPD 2 before moving to an inflation-related increase. While at this stage Eskom's numbers are premised on two 25% increases post MYPD 2, Eskom does review scenarios to ascertain the impact of a longer phase-in to a cost-reflective tariff.

Eskom has had discussions with government around the use of the guarantees based on Eskom's objective of achieving a standalone investment grade credit rating by 2014/15. Government and Eskom agree that the guarantees are to be utilised as a safety net, and that Eskom needs to define any further utilisation of them taking into account market dynamics.

Looking ahead, funds for the next 12 to 18 months will be sourced mainly through a combination of issuing international and domestic bonds, export credit financing, development financing institutions and the domestic money market.

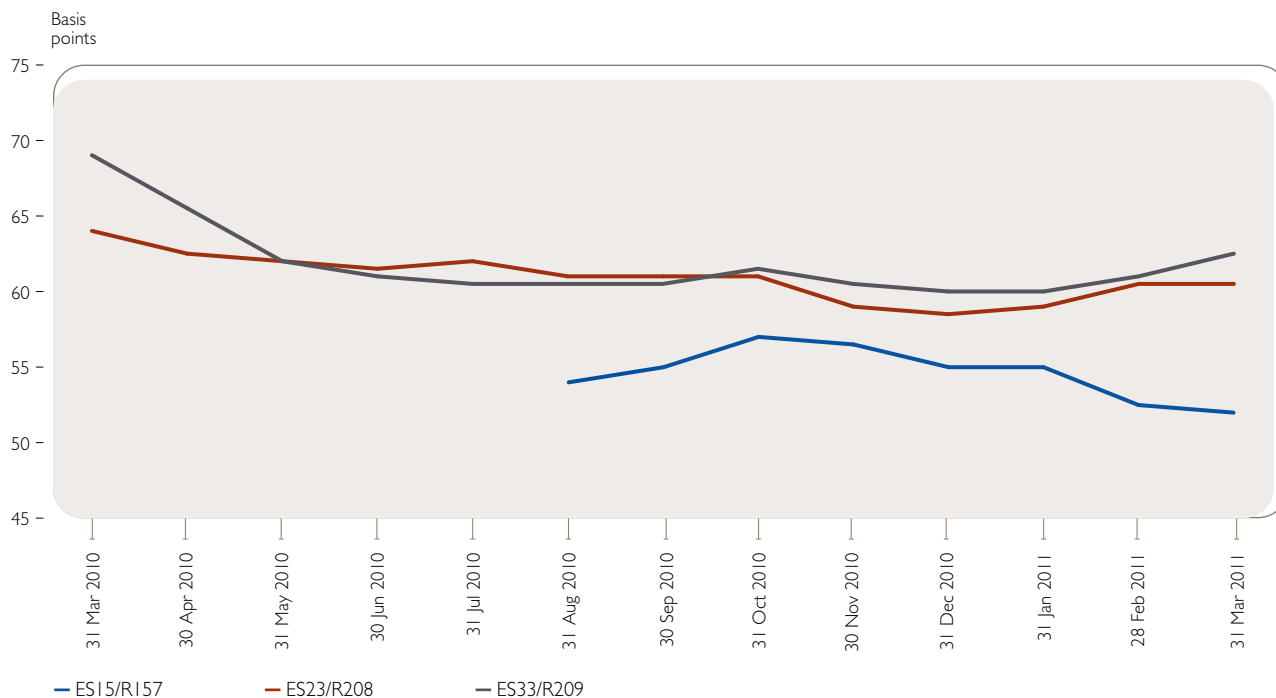
Finance and Group Capital continued

Treasury division continued

Benchmarking

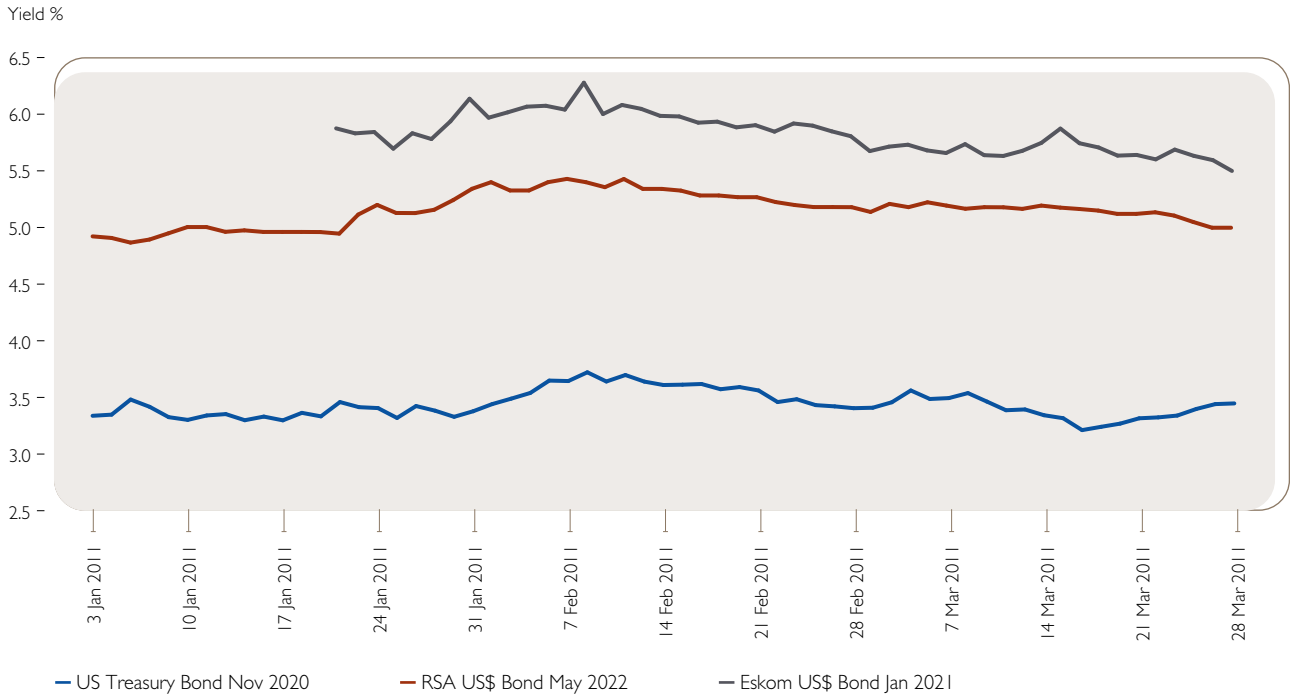
Eskom's first Treasury priority is that of liquidity, which needs to be balanced with the management of interest rate, currency, counterparty/ credit, and re-financing risks. Eskom benchmarks its Treasury activities, where possible, against external observable data. Funding is benchmarked to relevant peers at the time of financing, namely other utilities, relevant emerging markets and the Sovereign, taking into account the volume of funding required, capacity and tenor available in various markets, required covenants and profile of the borrowings.

Eskom bonds versus government benchmark bonds gap



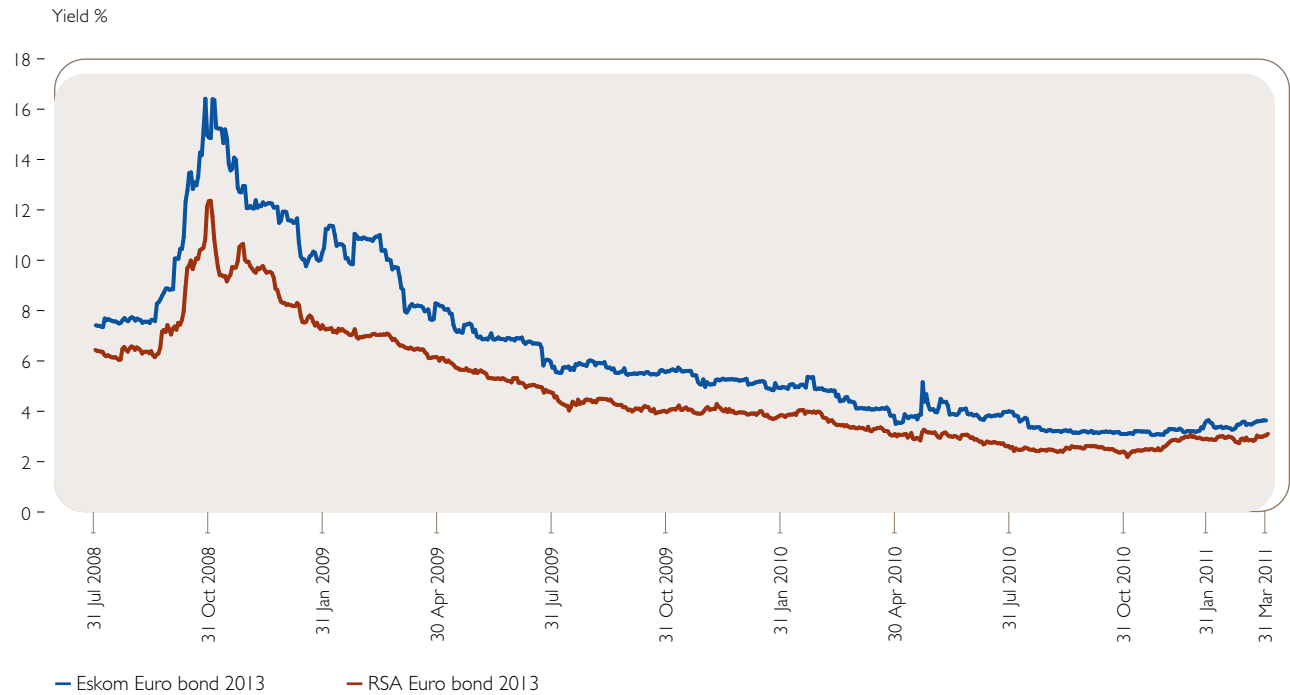
The gap between government and Eskom bonds is linked to the overall interest rate cycle, overall demand for scarce tenors and the need to enhance the attractiveness of certain issuance points on the curve.

US\$ bond gap



The spread between the US Treasury 10-year, Eskom US Bond and the RSA government US Bond.

Euro bond gap



The spread between the Eskom 2013 and South African government Eurobonds contracted over the credit crisis from 300 basis points to the current 27 basis points.

Finance and Group Capital continued

Treasury division continued

Material issues

Standalone credit rating



Eskom's ability to raise funds on a standalone basis beyond the tariff increase is limited by its credit rating as assigned by the various rating agencies.

The newly approved capital expenditure budget requires significant funding. Eskom has assumed that it will receive two years of additional 25% increases in the next MYPD period, which will enable it to achieve standalone investment grade credit metrics by 2015.

Concerns raised by the rating agencies on Eskom's balance sheet ability to finance the huge infrastructure investment without a cost-reflective tariff adjustment have been mitigated by the strong

support from the South African government as shareholder. The revised cash flow projections, the outcome of government's latest support package and the tariff increase from MYPD 3, will all play a major role in the ongoing decisions of the agencies.

Regular interactions with rating agencies have assisted in giving some comfort to them, with the result that Moodys announced on 2 December 2010 a change in outlook from negative to stable (same Baa2 rating). Unfortunately, due to a change in methodology for rating government-related entities (not Eskom-specific), Standard & Poor's lowered both Eskom's local currency rating and national scale ratings each by one notch to BBB+ and ZaAA respectively. The international foreign currency rating remains unchanged at BBB+. However, during January 2011, Standard & Poor's improved its ratings for both the Sovereign and Eskom from negative to stable.

Eskom's credit ratings and outlook

		2011	2010	2009
Standard & Poor's				
– Foreign currency	Rating	BBB+	BBB+	BBB+
	Outlook	Stable	Negative	CreditWatch negative
– Local currency	Rating	BBB+	A-	A-
	Outlook	Stable	Negative	CreditWatch developing
Moody's				
– Foreign currency	Rating	Baa2	Baa2	Baa2
	Outlook	Stable	Negative	Negative
– Local currency	Rating	Baa2	Baa2	Baa2
	Outlook	Stable	Negative	Negative
FitchRatings				
– National long term	Rating	AAA	AAA	AAA
	Outlook	Stable	Stable	Negative
– National short term	Rating	F1+	F1+	F1+
	Outlook	Stable	Stable	Stable

Understanding Eskom's funding

New capacity is funded from a combination of sources – retained earnings (reserves), new equity, borrowings, and regulated revenue and tariffs.

Equity

This is provided by the shareholder at a figure of R60 billion drawn down over three years, supported by R350 billion in government guarantees. The shareholder has also proposed a R20 billion equity injection into Eskom.

Borrowings

Eskom has a borrowing target of R40 billion per year over the forthcoming three-year period. Funding from various sources, namely local and international debt capital markets and development finance institutions such as the European Investment Bank, the African Development Bank and the World Bank, are included in the overall borrowing mix. Development finance institutions generally bring concessionary terms, and contract with Eskom on the strength of Eskom's shareholder in projects that support regional growth. Access to debt capital markets depends on an independent assessment of Eskom's credit rating (creditworthiness).

Regulated revenue

Regulated revenue assists in a move towards achieving sustainable tariffs, strengthens the organisation's capacity to borrow and supports an investment grade credit rating. While borrowings and other various forms of funding can be used to finance capital expenditure, ultimately tariffs must cover the cost of operational expenditure and the interest charge.

Financial sustainability



The latest projections indicate that Eskom has sufficient cash flows from cash on hand, investments, net operational cash flows and current secured (signed) facilities available to fund the business through to at least March 2013, excluding funds from new facilities under negotiation.

Funding requirements/plan with secured funding

(R million)



Finance and Group Capital continued

Treasury division continued

Funds sourced in terms of Eskom's R300 billion funding plan from 1 April 2010 to 31 March 2017

Source of funds R billion	Funding sourced	Currently secured	Draw-downs to date	Amount supported by government ¹
Bonds ^{2,3}	90.0	26.7	26.7	15.0 ⁴
Commercial paper ⁵	70.0	70.0	10.0	0.0
Export credit agency backed	32.9	32.9	7.5	0.0
World Bank loan	26.1	26.1	2.6	26.1
African Development Bank loan	21.0	21.0	3.9	21.0
Development Bank of Southern Africa loan	15.0	15.0	1.0	0.0
Shareholder				
– Loan	20.0	20.0	20.0	20.0
– Equity (proposed)	20.0	0.0	0.0	0.0
Other sources ⁶	5.0	0.0	0.0	0.0
Totals	300.0	211.7	71.7	82.1
Percentages		70.6	33.9	38.8

Notes

1. Amount of funding secured, supported by government.
2. Including \$1.75 billion forex bond.
3. Forex bond not covered by guarantee.
4. In addition, R46 billion of the domestic medium-term note programme bonds issued prior to 1 April 2010 were guaranteed.
5. The commercial paper programme is in place and dependent on market appetite. Eskom does not foresee a problem rolling the R10 billion per annum.
6. Clean technology fund related/export credit agencies.

Treasury has focused on export credit agencies, development financing institutions and local debt issues to fund the current year's requirements. These will continue to be part of the mix going forward. During January 2011, Eskom issued a US dollar bond and raised USD1.75 billion (R12 billion). In addition, Eskom has reached financial close on a number of the export credit agency-backed loans, with funds now flowing from these facilities.

Other initiatives currently being pursued are completing the Clean Technology Fund financing package, supported and co-financed with other development finance institutions (to finance the Sere wind

farm and the Uppington concentrating solar plant project). To this end, a mission consisting of interested parties (the African Development Bank, France's AFD, the European Investment Bank, the German government's investment bank KfW and the World Bank) took place during the second week of February 2011 to appraise the projects concerned. The response from the potential lenders was positive, and it is anticipated that financing associated with the wind project will be finalised by the end of June 2011, to support the acceleration of the wind project in support of the 17th Conference of the Parties of the United Nations Framework Convention on Climate Change (COP 17).

Group Capital division



Kobus Steyn Senior General Manager: Group Capital division

Highlights

- Full membership of Construction Industry Institute (CII)
- Construction at Medupi power station is progressing well
- Significant progress has been made in placing of contracts for the Kusile power station project
- High local content levels achieved in contracts awarded
- Positive economic impact on local communities through job creation and other spin-offs.

Challenges

- Repairing Duvha unit 4 that was severely damaged during testing in January 2011
- Containing costs
- Keeping up with the construction schedule
- Not achieving shareholder compact in terms of MW installed and transmission lines strung (see page 66).

Future priorities

- Safety
- Achieve shareholder's performance targets
- Recovery of Medupi boiler unit 6 critical path. (This is the first unit that will be commissioned.)
- Start with refurbishment of last unit at Kriel and second unit at Matla
- Finalisation of financing and project execution strategy for Sere wind project and Majuba rail project
- Placing of outstanding Medupi integration contracts
- Upgrade of last unit at Arnot
- Completion of civil plant work and handover to mechanical plant contractors at Kusile (ie Alstom and Hitachi)
- Obtaining servitudes for various Transmission projects
- Initiate renewables execution methodology and continue to pursue existing projects (eg biomass).

Finance and Group Capital continued

Group Capital division continued

Material issues

Ensuring electricity supply for the future



Group Capital continues to meet the requirements of the capacity expansion programme. Formal project assurance is used to track project schedules, costs and safety risks to meet the expected quality standards and deadlines.

The three major projects – the Medupi and Kusile coal-fired power stations and the Ingula pumped-storage scheme – are on track in terms of the current schedule and capital expenditure. Despite the global recession, Eskom has successfully managed to negotiate and secure most fundamental contracts for Medupi and Kusile.

Building a coal-fired power station is a mammoth task which takes approximately eight years (not including project development which typically takes between five and seven years to finalise). As such, keeping the construction costs fixed to a specific budget requires constant focus.

Camden, one of the return-to-service (RTS) stations, has been completed and all units fully commissioned. Grootvlei power station, which was expected to be complete, is slightly behind schedule (93% completed) due to technical difficulties. Komati, the third RTS station, is on track, being 83% complete.

Significant inroads are being made in building and refurbishing of transmission lines and substations to strengthen the transmission network.

Future of renewable projects



Eskom has a portfolio of wind projects and other renewable energy projects (including wind, and concentrating solar power) at various stages of development in line with national renewable objectives and Eskom's own renewable energy strategy. The CSP project will produce around 516GWh yearly. Further details on the CSP project are set out in Corporate Services on page 118.

Project Sere – a 100MW wind power project on the West Coast – is under way, with certain of the funding approved by the World Bank and other multilateral development banks and the remaining currently in negotiation. Project Sere's first units are expected to be turning in the second half of 2012, and is scheduled to be fully operational by October 2013.

The work undertaken by the South African government to determine the potential and options for the country to reduce its greenhouse gas emissions resulted in the production of long-term mitigation scenarios and ultimately the publishing of the integrated resource plan 2010. These were clear about the need for renewables, together with nuclear and clean coal, as options to reduce emissions from electricity generation. For renewables, the challenge is to scale up in the next few years, so that implementation at a larger scale is feasible and more affordable in future. The central problem is cost, and much depends on technology developments in South Africa and in other countries, and how these technologies can be practically implemented.

Benchmarking

Benchmarking power station costs

The most widely used method to compare capital costs of different power stations is the "overnight cost" method and is evaluated in terms of the USD cost per kilowatt (USD/kW) for installed capacity. The overnight cost excludes escalation in equipment, labour and commodity prices. The overnight cost methodology commonly excludes capitalised borrowing costs and includes the engineering, procurement and construction portion, or plant basic cost, as well as a combination of the following cost components:

- Owners' development costs
- Contingency and
- Transmission costs.

Further, overnight cost calculations depend on a number of factors such as site location, the year of comparison, the technology used and the station size.

Another method of comparing total capital and operating costs is the "levelised cost of electricity" method. This methodology calculates the present value cost in United States dollars per megawatt-hour of energy production. Financial factors such as interest rates, inflation, discount rate and taxation are taken into account and include the capital cost, as well as fuel and all fixed and variable operating and maintenance costs. Compared to the overnight cost method, levelised cost of electricity comparisons are significantly more difficult to compare on a like-to-like basis, as a greater number of cost components need to be evaluated to normalise costs being reported from different sources.

It is challenging to obtain consistent and accurate benchmarks for new power plant capital costs. This is mainly due to the following factors:

- The numbers are commercially sensitive
- The assumptions behind the numbers vary greatly (technology, plant design, base year, exchange rate, etc)
- The costs are constantly changing and have increased substantially over the past few years due to a rising demand for equipment and a movement in commodity prices

- The consideration of contextual issues such as localisation, supply chain, economic cycles/parameters and economies of scale.

The benchmarking information must be used with care as only high-level broad conclusions can be made, particularly if the underlying assumptions differ from the various information sources. The Eskom overnight and levelised cost of electricity (LCOE) numbers have been compared with the following available benchmarks:

Summary of benchmark information from EPRI, Lazard, and IEA

Study	ZAR/USD	Technology	Overnight	Cost	LCOE	Cost
	exchange		costs		(USD/MWh)	
	rate		(USD/kW)	components		components
EPRI (May 2010) Data for IRP2010	7.4	Pulverised coal with FGD	2 403 – 2 656	<ul style="list-style-type: none"> • Basic cost • Contingency 	80 – 85	<ul style="list-style-type: none"> • Capital cost • Operation cost • Fuel cost
		Pulverised coal without FGD	2 091 – 2 281		71 – 75	
Lazard (June 2009)	8.3*	Super-critical with and without carbon capture	2 800 – 5 925	<ul style="list-style-type: none"> • Basic cost • Contingency • ODC • IDC • Transmission 	78 – 144	<ul style="list-style-type: none"> • Capital cost • Operation cost • Fuel cost • Transmission
IEA (2010 Edition)	8.2	Super-critical from various countries	672 – 2 539	<ul style="list-style-type: none"> • Basic cost • Contingency • ODC 	29 – 100	<ul style="list-style-type: none"> • Capital cost • Operation cost • Fuel cost
		Pumped storage	2 703		73 – 149	

* The Lazard study has not indicated the ZAR/USD exchange and whether transmission costs were included. Assumed ZAR/USD exchange of 8.3 (Eskom value corresponding with 2009 base year) and inclusion of transmission costs.

In order to compare cost more accurately, an attempt has been made to adjust the Eskom costs to the same base year and exchange rate and to match the cost components listed above in the EPRI, Lazard and IEA benchmarks. The outcome is presented below. The comparison of overnight and levelised cost of electricity (LCOE) costs show that Eskom's plants are well within or below the international benchmark.

Eskom costs adjusted to similar cost components from EPRI, Lazard, and IEA

Study	Overnight cost (USD/kW)			LCOE (USD/kWh)		
	Medupi	Kusile	Ingula	Medupi	Kusile	Ingula
EPRI	2 210	2 399	1 641	56	79	110
Lazard	2 786	3 269	2 045	53	72	103
IEA	2 048	2 325	1 540	51	71	99

Finance and Group Capital continued

Group Capital division continued

While Medupi and Kusile are similar super-critical coal-fired power stations, the difference in their costs is due to Medupi costs not including flue-gas desulphurisation. The capital expenditure phasing is also different, resulting in Kusile attracting higher escalation and financing charges.

Based on the current economic and financial parameters applied by Eskom, the overnight cost (excluding borrowing costs but including owners, development costs, transmission and contingency) and LCOE calculations for new build projects are:

- Medupi (2.341 USD/kW and 54 USD/MWh);
- Kusile (2.514 USD/kW and 73 USD/MWh);
- Ingula (1.719 USD/kW and 110 USD/MWh).

Current performance

The Group Capital division focuses on Eskom's capital-intensive projects, such as new build and upgrades. Capital expenditure on

generation, transmission and distribution projects up until the 2017 financial year is expected to be between R450 billion and R500 billion (excluding borrowing costs).

The capacity expansion programme, which comprises R301 billion of the above expenditure, includes the two new coal-fired power stations, Medupi (4 764MW) and Kusile (4 800MW), the Ingula pumped-storage scheme in the Drakensberg, that will deliver 1 332MW of hydro-electricity during peak demand periods, as well as the expansion and strengthening of the transmission network.

In the past year Eskom added the following new capacity in the build programme: 315^{RA}MW generation capacity, 443^{RA}km of new power lines built and 5 940^{RA}MVA installed. To date, since 2005, a large amount of construction work has been completed, adding 5 222MW of generation capacity, 3 268km of transmission network, and 17 670MVA of substation capacity.

Capacity expansion programme by project (excluding capitalised interest)

<i>Project</i>	<i>Total approved project cost Rm</i>	<i>Total inception-to-date expenditure: 2005 – 2011 Rm</i>	<i>Total inception-to-date expenditure: 2005 – 2010 Rm</i>
Camden (return to service)	5 682	5 522	5 497
Grootvlei (return to service)	7 230	6 763	6 428
Komati (return to service)	11 120	9 026	7 465
Kriel	1 715	1 211	978
Arnot	1 415	1 332	1 165
Matla refurbishment	2 731	994	626
Majuba rail	4 785	206	200
Duvha	2 386	75	53
Underground coal gasification	1 006	643	363
Ingula	21 377	7 856	5 546
Sere	1 174	60	35
Ankerlig and Gourikwa (complete)	8 537	7 323	7 304
Medupi	98 900	41 910	28 741
Kusile	121 000	24 896	13 552
Transmission projects	28 852	15 008	12 365
Total	317 910	122 825	90 318

Capacity expansion project update

Project:	Medupi power station
Technology:	Coal, dry cooling, flue-gas desulphurisation (FGD)
Output:	4 764MW (6 x 794MW units)
Location:	Lephalale
Completion date:	First unit in 2012 and completion in 2015, commissioning of FGD plant planned for 2018

Progress

Site preparation activities started in May 2007

The project is well on track, given the new direction.

As of 31 March 2011, progress against the schedule for the procurement and commercial processes was as follows:

- 26 of the 38 contracts have been awarded
- Contract placement – 85% actual vs 97% planned
- Construction completion – 25% actual vs 44% planned
- Since obtaining funding from the World Bank, 16 packages have been placed. Both the recent Medupi World Bank transactions, namely the Medupi ash dams, dumps and miscellaneous buildings were submitted to the bank's operational procurement review committee (OPRC) for the "No objection" approval to continue. These two packages adhered to the strict rules and regulations of the bank and the bank subsequently issued formal "No Objection" (approvals) for both these bid submissions on 4 January 2011. This is a great financial benefit since both bids are approximately 50% lower than budget
- Unit 5: the turbine area air cooling suspended slab was poured, the second phase main steel work was installed and the boiler area handed over to Hitachi so that boiler construction could start
- Unit 6: good progress is being made on steel construction for the turbine hall. The feedwater tank is in place; the overhead crane has been installed, and the generator stator is adjacent to the turbine table in preparation for lifting and installation
- At the end of March 2011, the total contracted local content was R33 billion, (64.27% of the total contracted amount of R51 billion). Since inception the cumulative actual spend was R11.03 billion, with 33.61% of it being local content. The breakdown of local content to the empowerment companies was:
 - R7.36 billion went to B-BBEE companies (24.42% of the local content commitment)
 - R2.38 billion went to BWO companies (7.27% of the local content commitment)
 - R2.47 billion went to SMME companies (7.52% of the local content commitment).



Finance and Group Capital continued

Group Capital division continued

Capacity expansion project update continued

Project:	Kusile power station
Technology:	Coal, dry cooling, flue-gas desulphurisation
Output:	4 800MW (6 x 800MW units)
Location:	Emalaheni
Completion date:	2018

Progress

Construction entered into its third year in the first quarter of 2010 and a recreational centre and upgrades to electrical infrastructure were completed. Since the moratorium on the placement of contracts at Kusile was lifted, 42 of the 53 contracts were placed. Among these was the placing of the miscellaneous structures package and unit power transformers package.

- Contract placement – 80% actual vs 80% planned
- Construction completion – 13% actual vs 16% planned

Progress has been made on the access road to connect the site to the N4 highway (north of the plant). A main water supply pipeline for Kusile from Kendal power station is on schedule and expected to be completed in 2011. The unit 4 boiler lift shaft has been completed.

Approximately R16 billion of the budget will be spent locally in the Nkangala district on items such as accommodation, training and associated facilities, catering and services, laundry and supplies, fill material, and other smaller contracts for goods and services.

At the end of March 2011, the total contracted local content was R29 billion, which translated into 61.48% of the total contracted amount of R47 billion. Since inception, the cumulative actual spend was R8.45 billion (28.9% of the total local content committed). The breakdown of local content to the empowerment companies was:

- R7.22 billion went to B-BBEE companies (24.66% of the local content commitment)
- R2.60 billion went to black women-owned (BWO) companies (8.97% of the local content commitment)
- R2.59 billion is targeted to SMME companies (8.85% of the local content commitment).



Capacity expansion project update continued

Project: Grootvlei power station
Technology: Coal (return-to-service)
Output: 1 200MW (6 x 200MW units)
Location: Balfour
Completion date: 2012

Progress

- Unit 1 went into commercial operation on 31 March 2008
- Unit 2 went into commercial operation on 27 March 2009
- Unit 4 went into commercial operation on 21 October 2009
- Unit 3 went into commercial operation on 9 March 2010
- Unit 6 went into commercial operation on 31 March 2010
- Work is in progress on unit 5. This unit is expected to enter commercial operation in the first quarter of 2012 due to a scope change that included super heaters that were not part of the original scope. Construction completion – 93% actual vs 99% planned
- The project reached 1 009 days without a lost-time incident during the first week of December 2010
- The total contracted content amount of R24 million was locally procured.



Finance and Group Capital continued

Group Capital division continued

Capacity expansion project update continued

Project: Komati power station
Technology: Coal (return-to-service)
Output: 1 000MW (4 x 125MW and 5 x 100MW units)
Location: Middelburg
Completion date: 2012

Progress

- Unit 9 went into commercial operation on 5 January 2009
- Unit 8 went into commercial operation on 31 March 2009, adding an additional 125MW to the national grid
- Unit 7 went into commercial operation on 12 July 2010
- Unit 4 is expected to enter commercial operation in the first half of 2011
- Contract placement – 98% actual vs 98% planned
- Construction completion – 83% actual vs 90% planned
- Komati is expected to be completed in 2012
- Some 99.8% of the total contracted amount of R319 million was procured locally, amounting to R318 million.
- Some of the units have been temporarily de-rated. The expected total installed capacity is therefore 940MW and not 1 000MW in the interim.



Capacity expansion project update continued

Project:	Ingula pumped-storage scheme
Technology:	Pumped storage
Output:	1 332MW (4 x 333MW units)
Location:	Ladysmith
Completion date:	2014

Progress

With the major civil works at both dams complete, the focus has now shifted to rehabilitating disturbed works areas. Topsoil is being returned to disturbed areas and indigenous local grasses are being planted.

- Construction on the main underground works is progressing well, with the excavation of over 3.5km of tunnels and 300 metres of shafts complete. The top section of the massive turbine/generator cavern, some 26 metres wide and 184 metres long, has also been completed. This cavern is the largest of its kind in the world
- Some 62.2km of roads have been handed over
- Other current work includes excavation of the tailrace outfall structure and channel, which is about 90% complete
- Contract placement – 89% actual vs 89% planned
- Construction completion – 40% actual vs 40% planned
- Bramhoek Dam is 60% complete. Heavy rains have filled the bottom dam to the extent that the turbines can start operating when ready
- Ingula issued approved construction drawings for tunnels and trenches to the underground utility contractor
- At the end of March 2011, the total contracted local content was R3.68 billion (36.72% of the total contracted amount of R10 billion). The breakdown of local content to the empowerment companies was:
 - R1.8 billion went to B-BBEE companies (48.92% of the local content commitment)
 - R134 million went to BWO companies (3.66% of the local content commitment)
 - R224 million went to SMME (6.34% of the local content commitment).



Finance and Group Capital continued

Group Capital division continued

Capacity expansion project update continued

Project: Arnot capacity increase project (phase 2)
Technology: Coal
Output: 2 400MW (upgrade from 2 220MW to 2 400MW)
Location: Middelburg
Completion date: July 2011

Progress

- Unit 3 achieved sectional completion on 17 December 2008
- Unit 2 achieved sectional completion on 25 March 2009
- Unit 6 achieved sectional completion on 27 March 2009
- Unit 4 achieved sectional completion on 19 March 2010
- Unit 1 achieved sectional completion on 19 March 2010
- Unit 5 is expected to achieve sectional completion in the first half of 2011
- Contract placement – 100% actual
- Construction completion – 99%
- The total contracted local content was R4.6 million, which translated into 100% of the total contracted amount.
- Some of the units have been temporarily de-rated. The expected total installed capacity is therefore 2 352MW and not 2 400MW in the interim.

Project: Sere wind farm
Location: The project is situated near the town of Koekenaap on the West Coast, Western Cape Province
Technology: Utility scale wind turbines
Output: 100MW installed

Progress

The project is in the procurement stage and construction is planned to start in August/September 2011. This project goes for final board approval in July/August 2011 and is fully funded by the developmental financial institutions (IBRD, CTFm AfDB and AFD). The project has applied for CDM credits from the UN. As such it will contribute to a gradual reduction of emissions by Eskom. Sere also supports the government and Eskom's sustainable development objectives.

Completion: Full commercial operations are scheduled for October 2013, with the first units expected on line in the second half of 2012.



Transmission expansion projects

Line construction progress:

The completion dates for the transmission projects are:

- 765kV – December 2013
- Northern Grid – November 2016
- Central Grid – March 2015
- Cape Grid – August 2016.

By the end of the year the power delivery team will have strengthened the 400kV line in the Nelson Mandela Bay area (Eastern Cape) and the 275kV and 400kV lines in the Polokwane area in Limpopo. The network strengthening in Johannesburg North should be complete in the first quarter of 2011 and phase I and II of the Vaal strengthening by end-2012.

The 765kV Majuba-Umfolozzi line has been completed and energised, while the 765kV project from Zeus to Omega to strengthen the supply to the Western Cape region will be complete by mid-2012.

The Ingula and Medupi 400kV integration into the national grid is planned for the end of 2013. Other projects are:

- The environmental management plan (EMP) was approved for the 765kV Gamma-Kappa line on the Hydra-Omega scheme
- Eros: the second transformer on Central Grid projects that adds 500MVA was commissioned on 3 November 2010
- Northern Grid: Group Capital approved the additional time and cost requirements for the Duvha-Leseding and Lowveld transformer capacity expansion scheme
- Kimberley network strengthening: Asset specifications were signed for the following substations: Ferrum (5 October 2010), Mookodi and Mercury (6 December 2010)
- The division is constantly challenged by access problems, servitude acquisition and unclear user requirement specifications. Not being able to schedule outages is hampering the commencement of work.



Finance and Group Capital continued

Group Capital division continued

Environmental and safety performance

Key Group Capital division environmental and safety performance indicators

	Target	2011 ¹	2010	2009	
Employee fatalities	0	0	0	0	●
Contractor fatalities	0	2	2	3	●
Lost-time incident rate, including occupational diseases	0.20	0.12	0.04	0.26	●
Number of environmental legal contraventions (number)	0	8	15	24	●
Number of environmental legal contraventions reported in terms of Eskom's operational health dashboard (number) ²	0	1	0	3	●
Materials containing asbestos disposed of (tons) ³	n/a	76.1	73.6	279.4	
Materials containing polychlorinated biphenyls (PCBs) thermally destructed (tons)	n/a	0	1.2	1.4	

Highlights	Challenges
<ul style="list-style-type: none"> Continuous improvement in effective management and compliance with the conditions of environmental authorisations. A reduction in legal contraventions was noted. Lost-time incident rate better than target. 	<ul style="list-style-type: none"> Group capital recorded eight⁴ cases of non-compliance with environmental requirements (2010: 15). Eskom notes a legal contravention on the operational health dashboard (OHD) for Majuba-Umfolozi (765kV) due to construction without authorisation and recognises that its approaches to water, waste and biodiversity management need to improve.

Did you know?

- Kusile and Medupi will be the third and fourth largest coal-fired power plants in the world, respectively.

Medupi

- Medupi will require enough concrete to build four Green Point stadiums. Approximately 285 000m³ of structural concrete has already been poured at the Medupi project
- About 71 tons of steel was used to reinforce the foundation for the lift shaft
- The lift shaft itself required 575 tons of steel to build
- Parts and cement weighing as much as seven super tankers will be transported over land
- The total height of the lift shaft is 119.55m
- The lift shaft was completed on 4 August 2009, three days ahead of schedule, despite an eight-day strike stoppage.

Ingula

- The Ingula pumped-storage scheme consists of an upper and lower dam, both with approximately 22 million m³ water supply. The dams, 6.6km apart, are connected by underground waterways, through an underground powerhouse, which will house four 333MW pump turbines
- By the end of February 2011, about five million tons of rock had been removed from the underground works.

1. From 2011 performance figures relate to Group Capital Division only. Prior years included Enterprises division performance.

2. Under certain conditions, contraventions of environmental legislation are classified in terms of the Eskom operational health dashboard (OHD) index. These include instances where censure was received from authorities, non-reporting to authorities as may be legally required, non-reporting in Eskom, a repeat legal contravention, or when the contravention was not addressed adequately. Divisional executives can escalate any significant environmental legal contravention to the OHD.

3. Quantities of waste disposed of at registered waste sites.

4. This figure is not comparable to prior years, due to business structural changes.

Group Commercial

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Group Commercial



Dan Marokane Chief Commercial Officer

Overall mandate

Provide a single procurement entity that ensures effective and efficient procurement for Eskom (including Primary Energy), through supplier management and development, contract negotiations, as well as inventory management, warehousing and logistics.

Highlights	Challenges
<ul style="list-style-type: none"> • Completion of the preparatory work on the formation of the consolidated procurement and supply chain function • More than 51% local content (expenditure) in the whole capacity expansion programme since inception • Level 2 contributor level on B-BBEE • Renegotiated power transformer contracts will deliver a potential saving of R1.5 billion over the next four years. • Three-year contracts for the supply and installation of dissolved gas analysers resulted in a 17% reduction in the overall cost of the units • Reduced the cost base of insulated aerial bundle conductor by 28% (R215 million) over five years • Reduced the average cost base of earth wire by 36% (R90 million) over five years. <p>Medupi</p> <ul style="list-style-type: none"> • All major packages have been placed • Value of contracts placed to date: R51 billion • Contracted local content from inception of contract: R33 billion. <p>Kusile</p> <ul style="list-style-type: none"> • 43 of the 53 packages have been placed • Value of contracts placed to date: R47 billion • Contracted local content since inception of contract: R29 billion. <p>Ingula</p> <ul style="list-style-type: none"> • Finishing last package transaction • Value of contracts placed to date: R10 billion • Contracted local content since inception of contract: R4 billion. <p>Power delivery projects</p> <ul style="list-style-type: none"> • Contracts have been successfully completed to maintain momentum • Value of contracts placed to date: R7.8 billion • Contracted local content since inception of contract: R6.4 billion. 	<p>Medupi</p> <ul style="list-style-type: none"> • Alignment of procurement activities of two packages to the World Bank procurement rules. <p>Kusile</p> <ul style="list-style-type: none"> • Funding challenges delayed the placement of various packages during the year • The misalignment in milestone and completion dates caused by the delay in placement of contracts has to be managed. <p>Ingula</p> <ul style="list-style-type: none"> • Some contract strategies had to be revised to cater for dynamic market conditions, especially related to localisation. <p>Power line projects</p> <ul style="list-style-type: none"> • Limited availability and capability of local line construction suppliers • Land and rights issues affecting the awarding of contracts, as well as the receiving of uncontested environmental management plans • Alignment of procurement activities on the three Medupi line construction packages to the World Bank procurement requirements. <p>Return to service</p> <ul style="list-style-type: none"> • Delayed the placement of various packages during the year. <p>Renewables</p> <ul style="list-style-type: none"> • Alignment of procurement activities to the World Bank procurement rules to which all funders agreed to • Procurement requirements are dependent on a memorandum of understanding between various funding institutions, which is causing time delays.

Future priorities

- Finalise the staffing and organisational structures of Group Commercial
- Deliver the Group Commercial strategy
- Conclude the various packages for the capacity expansion programme
- Deliver sustainable savings across all commodities.

Overview

Group Commercial was established in 2010 to consolidate the divisional procurement and supply chain departments into a single procurement entity. Group Commercial is founded on a strong commercial risk and governance premise with a sound business enablement foundation. Group Commercial is comprised of procurement and supply chain activities covering the new build projects as well as strategic and tactical sourcing of other key commodities, together with the sourcing and delivery of primary energy. The consolidation of procurement and supply chain activities will ensure effective and efficient procurement for the organisation, through supplier management and development, contract negotiations, as well as inventory management, warehousing and logistics. Operational cost efficiencies as well as sustainable cost reduction across the organisation are some of the benefits that will result from a consolidated commercial value chain.

With the current focus on Eskom's capacity expansion programme, as well as the ongoing challenges of sourcing adequate coal supplies, smart procurement is more important than ever. In line with the Back2Basics programme, standardised, simplified and optimised procurement policies, processes and systems need to be consolidated into one common standard for the entire organisation.

Group Commercial must ensure that both local and international suppliers receive a clear and consistent message about how to do business with Eskom as a state-owned company.

With standardised procurement procedures, Eskom will have the capacity to take its buying approach to the next level, becoming leaner and more efficient, eliminating unnecessary processes while ensuring a single source of visibility.

Eskom's total procurement budget for the financial year under review was approximately R90 billion, of which 27% went towards meeting coal requirements. Eskom is committed to staying within the cost structure laid out by the National Energy Regulator of South Africa, and consolidation of procurement and supply chain is vital to ensuring this. The division will be focusing on two critical success areas while intensifying strategic sourcing principles to drive a rigorous cost savings programme over the next three years and beyond, as well as negotiating contracts that take advantage of bulk purchases and economies of scale.

A more streamlined and efficient procurement policy requires that the supplier database is cleaned up and consolidated. Suppliers' broad-based black economic empowerment spend and company profile are taken into account, to determine the degree to which they are contributing to the South African economy in line with government's new growth path. Eskom examines to what extent a supplier sources or manufactures equipment in South Africa, and to what extent do they use and train local labour. Eskom remains focused on the development of local suppliers.



Sourcing components and material for a project such as Medupi station is a massively intricate operation.

Material issues

National spend in new build



Eskom continues to support the electricity supply and value chain of the economy by driving affirmative procurement and industrialisation through the capacity expansion programme. The annual target is 50% local content in capacity expansion contracts, as set out in the shareholder compact. From 1 April 2010 to 31 March 2011 the local content committed spend in capacity expansion projects was R9.62 billion which is 79.69%^{RA} of the total value of contracts awarded in the period under review.

Industrialisation, skills development and job creation

Eskom has a pro-active approach, particularly in the capacity expansion and strategic sourcing areas, towards achieving government's local development objectives. Eskom also actively implements government programmes such as the competitive supplier development programme (CSDP) and the new growth path (NGP) in terms of job creation and supporting small business. Since the inception of the CSDP in June 2008, the total actual investment spend in plant by suppliers was R608 million (2010: R465 million) against a committed value, over the life of the respective contracts, of R1.18 billion (2010: R1.17 billion).

Improvements to the supplier development and localisation function have better aligned Eskom to deliver on government policy requirements. Local supplier development is one of the key performance areas.

Training

Since inception of the respective contracts a total of 6 970 (2010: 6 130) individuals have been targeted for skills development. Of these 2 514 (2010: 2 145) people are currently undergoing training. To date, 4 961 (2010: 3 054) people have completed their training at various training sites across the country, and during the fourth quarter, 157 individuals had completed their training.

Job creation

Since the inception of capacity expansion contracts to end of March 2011, some 21 477 jobs were created as a direct result of the build projects. The skilled labour employed was 40%, semi-skilled was 25% and non-skilled was 35%. A total of 11 519 people (54% of the total jobs created in new build projects) were employed from the local districts where the projects are taking place, ie Waterberg around Lephalale (5 996), Inkangala around Delmas (3 812) and Uthukela around Ladysmith (1 711).

The capacity expansion projects impact on the following local communities:

- Lephalale in the Waterberg District in Limpopo province (Medupi power station)
- Delmas and Ogies in Mpumalanga province (Kusile power station)
- Ladysmith in KwaZulu-Natal province (Ingula pumped storage scheme).

The local infrastructure being developed includes catering, laundry, transport, building companies, housing maintenance, hotels, entertainment, training facilities, security, schools/education, shops, medical care, banks and financial services, etc.

B-BBEE attributable spend performance



The figures presented below relate to Eskom the company only.

<i>Eskom company</i>	<i>Target</i>	<i>2011</i>	<i>2010</i>	
Measured procurement spend (Rbn)	n/a	79.9	72.6	
Attributable spend (Rbn)	n/a	41.9 ^{RA}	20.8 ^{LA1}	
Attributable spend (%)	50.0%	52.3 ^{RA}	28.6	●
Attributable spend on black women owned (BWO) businesses (Rbn)	n/a	3.4 ^{RA}	2.5	
BWO as % of attributable spend (%)	6.0%	4.3	12.1	●

LA – Reasonable assurance provided by the independent assurance provider (refer page 200).

RA – Reasonable assurance provided by the independent assurance provider (refer page 200).

1. Attributable spend for 2010 comprised the top 295 suppliers out of the 11 790 active vendors. In the current year the reported number encompasses the entire supplier population.

The attributable spend target is in line with the Codes of Good Practice that prescribe a minimum of 50% for the first five years since the inception and implementation of the codes.

The 52.36%^{RA} achieved indicates that Eskom has met its B-BBEE target for the year. Efforts have to be put in place to concentrate on BWO as there are not enough suppliers in this category.

The request for active suppliers to re-register with Eskom, as part of the clean-up of the supplier database, will update the supplier B-BBEE information and will enable Eskom to increase the number of B-BBEE suppliers it is doing business with.

Project sourcing

Project sourcing primarily optimises all expenditure in the capacity expansion programme by:

- Jointly defining the scope of each project with the Group Capital team
- Taking the requirements to the market
- Negotiating and closing the contracts
- Undertaking contract management.

Commodity sourcing

Commodity sourcing buys all commodities at a competitive unit price using economies of scale, coupled with appropriate quality and delivery criteria. Sustainable cost savings are balanced with security

of supply, as well as with supplier development and localisation in line with government's new growth path.

Supplier development and localisation

Eskom has a pro-active approach, particularly in the new build and strategic sourcing areas, towards achieving government's local development objectives. Eskom also actively implements government programmes, for example, the competitive supplier development programme and the new growth path in terms of job creation and supporting small business.

Improvements to the supplier development and localisation function have better aligned Eskom to deliver on government policy requirements.



Road repair project in Bethal.



Kendal power station near Emalahleni with its water reservoir in the foreground.

Group Commercial continued

Primary Energy division

Primary Energy mandate

Optimally identifies, develops, sources, procures and delivers the required amounts of primary energy (water, sorbent and coal), to power station specification, to the required locations, on time and at minimum cost over the full plant life cycle of Eskom's non-nuclear generating assets.

Highlights	Challenges
<ul style="list-style-type: none"> • Kept the coal cost below budget for the year to date • Maintained coal stock levels at 41.4 days by end March 2011 • Benefited from higher than expected dam levels, resulting in lower pumping costs • Implemented the Camden containerised rail solution • Had some successes in the roads repair programme: <ul style="list-style-type: none"> – Havenga Street in Ermelo was made operational in December 2010 and handed over in March 2011 at an approved cost of R47.7 million – The pothole repair programme has begun, with about 50% expenditure against the approved R106.5 million • Signed a number of medium-term coal supply agreements (2011 to 2019) to ensure continuity of supply • Signed the Komati water scheme augmentation project agreement with the Department of Water Affairs • Signed the Mokolo and Crocodile water augmentation project agreement with Exxaro • Improved rail performance for coal supplies to Majuba power station from 5.6Mt in 2010 to 6.9Mt in 2011 • Reduced the use of the expensive open-cycle gas-turbine stations. 	<ul style="list-style-type: none"> • Delays in spending on the road repair programme • Poor volume performance of some of the cost-plus mines (cost-plus is a contractual arrangement where Eskom pays all operating costs to mine the coal, plus an annuity return to the mining house.) • Slow uptake in volumes due to initial start-up problems in the rail solution technology • Having to purchase more expensive coal from the short/medium-term market due to the poor performance of mines • Pending approvals for integrated water use licences for some Eskom contracted coal mines • Ensuring that all legal statuses are maintained by coal suppliers • Reducing defunct mine liability • Road fatalities among both the public and coal transporters despite a number of safety initiatives • Various cost-plus mines and medium-term coal suppliers still require water use licences and new mining licences (conversion from old order mining rights) • Quantifying liabilities associated with water on the cost-plus and defunct mines • Regional mine water reclamation schemes to treat water from mines and brine ponds have not been implemented yet.
Future priorities	
<ul style="list-style-type: none"> • Roll out the containerised rail solution for other power stations (including Tutuka) • Conclude long-term coal negotiations with major mining houses and finalise and agree on optimisation initiatives for cost-plus mines' production • Implement a coal quality improvement strategy through the beneficiation of coal • Implement the long-term logistics strategy to reduce road haulage of coal and increase rail haulage • Roll out phase 1 of the road repair programme over the multi-year pricing determination (MYPD 2) period • Monitor and report on the roll out of phase 2 of the road repair programme funded by the increased environmental levy from 1 April 2011 • Finalise the mechanism to generate funding for road repairs other than from the environmental levy • Ensure that Eskom coal suppliers have obtained all the necessary mining, water and environmental authorisations • Address care and maintenance risks for the defunct Majuba Colliery and develop the plan for closure • Cost-plus mines to commence with detailed quantification of closure liabilities, with attention to liabilities associated with water management aspects • Build a container solution at Tutuka power station, and the Majuba railway line to the Majuba power station • ISO 14001 certification for Primary Energy subdivision to be rolled out together with ISO 9001 and ISO 18000 by March 2012 • Investigate and implement water conservation, water demand management and mine water treatment and re-use at power stations • Finalise and approve the water management policy • Address catchment and national water challenges through water stewardship and collective action. 	

Material issues

Coal quality and quantity



Quality

There are several initiatives to ensure that the right quality of coal reaches each power station, including enhanced quality audit and assurance procedures. Eskom has also revised the acceptable coal quality specifications for each power station based on the coal quality effect model. To meet the revised specifications, coal supplies are being evaluated to find cost-effective options for power stations, mining, beneficiation and blending. Dry destoning technologies are being evaluated and tested to provide more cost-effective ways to upgrade subspecification coals. Another focus area is online coal quality measurement for more pro-active coal quality supply management to the stations.

Quantity

The amount of coal procured from Eskom's tied collieries has been below committed levels, due to under-performance from the Arnot and Matla collieries. Stockpiles at all the power stations have, however, been kept at acceptable levels and total system stock is within the expected range.

Long-term coal supply strategy



Eskom has continued implementing its long-term coal supply strategy to meet the requirements of current and future power stations. The key elements of this strategy are:

- To develop an optimal portfolio of long-, medium- and short-term coal supply agreements
- To invest in low-cost, flexible coal transport infrastructure
- To improve the consistency and quality of coal supplied to the power stations
- To intensively engage with all major stakeholders.

In the past year, Eskom has made major progress in several areas:

- Instituted improved quality management procedures and policies at power stations and mines
- Implemented an innovative, containerised rail solution for Camden power station
- Increased rail transportation on the Transnet general freight business line to Majuba
- Evaluated several initiatives to improve coal quality.

Future focus areas include:

- Major emphasis on investigating, designing and implementing low-cost, flexible, coal transport solutions to reduce the number of coal trucks on the roads
- Increased efforts to conclude long-term coal supply agreements
- Implementation of solutions to improve the quality of coal delivered to the power stations.

Rail solution for coal at Camden power station

Camden power station is situated on the coal line south of Ermelo, but needs to truck in coal since the previous tied colliery supply is no longer available. The power station requires up to 4.5Mt per year. Coal trucks impact severely on roads and road users, and reducing this impact was an urgent priority.

The obvious short-term solution was to replace road haulage with rail haulage.

This is a first for Eskom. Trains haul the coal to a handling facility 126km from the power station. The coal is transported in modified rail containers that are offloaded by cranes onto trucks, which then travel the short distance of 5km to the coal stockpile next to the station.

Key features include:

- Innovative short-term solutions in train design and materials handling – coal in containers
- Combining train design and bulk offloading facilities – progressing from containers to 50-wagon and 100-wagon trains
- Detailed design of short-term offloading layouts – track and reach stacker operating slab
- The next phase will involve extensions to the present layout to include a tipliner yard designed for conventional 50 gondola-type wagons. An arrivals and departure yard for 100 wagons is envisaged in the long term, which would handle up to 3.5Mt of coal per year.

Eskom's innovative rail solution has removed about 190 trucks from the roads around Ermelo, increasing road safety significantly, and dramatically reducing road damage.



Trains haul the coal to a handling facility 126km from Camden power station.



Truck then hauls the coal for a short distance of 5km to the coal stockpile next to the Camden power station.



The coal is transported in modified rail containers that are offloaded by cranes onto trucks.

Group Commercial continued

Primary Energy division continued

Safety of coal transport



About 30.5Mt of coal was transported by road this year, primarily in Mpumalanga province. The high number of road accidents and fatalities called for a public safety awareness initiative, which was undertaken in partnership with the local departments of Public Works, Roads and Transport. Stakeholders were invited to a workshop to discuss how to achieve the target of "zero harm for all", including the Bethal community, truck owners, truck drivers, traffic departments, the South African Police Service, the Department of Health, Mercedes Benz, Dunlop and Rotran (a subsidiary of Eskom Enterprises).

Eskom has also built two new junior traffic training centres in two schools in Bethal to educate children on road safety in areas where coal trucks travel. Six other coal-haul towns have been identified for such training centres: Ermelo, Hendrina, Morgenzon, Perdekop, Charl Cilliers and Kinross. Construction of the 10 new centres will be completed in the 2012 financial year.

Area	Name of school
Ermelo	Ark Christian School
	Camdeni Primary School
Hendrina	Mphophete Primary School
	Bosman Primary School
Morgenzon	Morgenzon Landbou Akademie
	Sizakhele Primary School
Perdekop	Vukuzenzele Combined School
Kinross	Sosolia Primary School
Amersfoort	Amersfoort Combined School
Charl Cilliers	Van Standersdam Farm School

In March 2010, Eskom joined the Trans-African Concessions N4 road safety project in Mpumalanga. The focus is to prevent accidents by increasing the visibility of all emergency services and to reduce the reaction time to emergency calls by having a complete emergency team stationed at one place.

Road repairs



Eskom does not have a legal obligation to repair the roads used to transport coal to the power stations. But it is imperative that these roads are repaired and maintained so that they are safe for all users and enable the adequate supply of coal.

In 2009, government¹ and Eskom agreed that the road authorities² will be responsible for road maintenance. However, in its MYPD 2 adjudication last year, the National Energy Regulator of South Africa granted Eskom an amount of R950 million for road repairs in 2011 (phase 1) and the charging of a shadow toll to Eskom for implementation of phase 2 by the road authorities over the remaining two years of MYPD 2, amounting to R9 billion.

Initially the funding mechanism was proposed to be an additional toll from April 2011 paid by Eskom and allowed by NERSA. After discussions between National Treasury, Eskom and the National Energy Regulator of South Africa, it was proposed that this be changed to generating revenue for road repairs by increasing the environmental levy charged to Eskom from 2c to 2.5c/kWh, which approximates the funds allocated by NERSA to Eskom in the remaining years of MYPD 2. This will not result in additional electricity prices for consumers other than those already determined. It is proposed that National Treasury administers the allocations to the road authorities.

Of the R950 million allocated to Eskom for road repairs for 2010/11, Eskom has committed R205 million in 2011, of which over R110 million has been spent. Eskom has planned for the remaining R745 million to be spent within the MYPD 2 period.

The repairs to Havenga Street in Ermelo have been completed (R47.7 million). The road was officially handed over to the local municipality in March 2011.



The number of local trucks on the roads impact road conditions.

1. Department of Transport, Department of Public Enterprises and National Treasury.
2. South African National Roads Agency, MPWDRT and GDRT.

R106 million has been allocated to repair most of the 120 000m² of existing potholes. Potholes are dynamic and can reappear immediately after repair depending on external conditions.

The focus will now be on the remainder of the coal haul roads. The rehabilitation will be executed by the road authorities with funding through Eskom from the unspent funds of the R950 million allocation.

Long-term water strategy



Water is a scarce resource in South Africa, and it is at the forefront of Eskom's strategic thinking. Concerns include growing water scarcity and the conflicting demands for the right to use water; the lack of access to water to meet basic human needs, depleted environmental flows, growing pollution and the implications of climate change on rainfall patterns.

Eskom, as a strategic water user, must play a leading role in the management of water resources. Water is scarce and deteriorating in key catchments, and important stakeholders – including consumers and investors – have heightened expectations of Eskom. Eskom has responded with an overall water management strategy, which includes a demand management strategy to reduce fresh water intake at power stations and to re-use effluent water.

Key elements of Eskom's water strategy:

- Meet the water requirements for new power stations
- Meet the water requirements for existing power stations
- Develop long-term water plans to ensure security of water supply
- Develop and implement a water conservation and water demand management strategy
- Meet the water quality objectives of the various catchments
- Efficiently manage water cost increases into the future
- Actively influence policy, strategy, planning, legislative and regulatory issues related to water
- Engage stakeholders on water challenges and solutions.

Current performance

Performance – coal purchased and burnt

	Target 2011	Actual 2011	Actual 2010	Actual 2009	
Coal burnt (Mt)	127.38	124.68	122.70	121.16	●
Coal purchased (Mt)	127.86	126.23	121.82	132.66	●
Coal stock days	42	41 ^{RA}	37 ^{RA}	41 ^{LA}	●

RA – Reasonable assurance provided by the independent assurance provider (refer page 200).
LA – Limited assurance provided by the independent assurance provider (refer page 200).

Eskom has engaged with the Department of Water Affairs' national water resources planning directorate to ensure that water resources and infrastructure planning needs are factored into the national water resources strategy.

Key water supply infrastructure projects to deliver water to Eskom facilities:

- Vaal River eastern subsystem augmentation project: The project was declared operational by the Department of Water Affairs in June 2009. On Eskom's request, the Department of Water Affairs is investigating potential infrastructure bottlenecks in the Vaal River water supply systems. The department is also planning to mitigate the risk of a water deficit in the Vaal River system up to 2021 by curbing illegal water abstractions and use and enforcing both water conservation and water demand management, as well as mine water treatment and re-use
- Mokolo and Crocodile water augmentation project. Phase 1 is the new water infrastructure to supply Medupi power station. This project will provide sufficient capacity for all Medupi's water requirements and the associated developments, but excludes water for the planned flue gas desulphurisation process. In the interim, there is adequate water from the surplus from Matimba power station's water allocation.

The development of Eskom's business case for phase 2 of the project is under way. Eskom will continue to lobby government and the National Energy Regulator of South Africa to fund and build phase 2 of the Mokolo and Crocodile water augmentation project on behalf of Eskom and other water users.

- Komati water scheme augmentation project: Kusile power station and the return-to-service stations will access water from this project. The Trans-Caledon Tunnel Authority has obtained long-term funding for the project, environmental authorisation has been granted, and water delivery is planned by the end of December 2012, ahead of the commissioning of the first units of Kusile power station
- Pilot concentrating solar plant: Negotiations with the Upington municipality around the water supply for the pilot concentrating solar plant are in progress.

Group Commercial continued

Primary Energy division continued

Key Primary Energy environmental and safety performance indicators

	Target	2011	2010	2009	
Environmental legal contraventions – number	0	0	1	1	●
Environmental legal contraventions reported in terms of Eskom's operational health dashboard ¹ – number	0	0	0	0	●
Lost-time incident rate	0.20	0.88 ²	0.00	0.00	

Environmental performance highlights

- Incorporated specific environmental criteria into coal contracting protocols to evaluate the various coal suppliers' risk profile before contracting, and adopted the environmental procedure for contracting purposes as a formally constituted internal control procedure
- Addressed most of the care and maintenance risks associated with some of the defunct mines and scheduled some longer-term remedial measures for completion in the new financial year
- Developed closure plans for some defunct mines
- Reviewed the environmental liability assessments of cost-plus mine operations and defunct mines
- Received a positive environmental authorisation for an environmental impact assessment for the railway line to deliver coal to Camden power station, as part of the road-to-rail migration strategy
- Conducted water readiness assessments for 19 cost-plus and medium-term mines, relating specifically to their preparedness for heavy rainfalls
- Implemented environmental and water strategies and plans
- Completed water and waste water management reviews at all coal-fired power stations
- Received approval for the water accounting framework – coal-fired power stations are expected to start reporting on it from April 2011.

Further environmental objectives

- Waste discharge charge system: Eskom has provided inputs into the formation of the waste discharge charge system (WDCS). Eskom is still awaiting finalisation and implementation of the system by government
- Critical water use licences: In order to meet legal requirements regarding water usage, it is critical for Eskom to obtain water licences for both the power stations during construction phase

and the operation of new and existing power stations. Eskom has successfully obtained the necessary water licences for the Kusile power plant and is working towards obtaining the water licences for the Medupi and Ingula projects which are still under review by Department of Water Affairs

- Environmental liabilities of cost-plus mines: The assessments of environmental liabilities of cost-plus mine operations have been reviewed. However, more detailed understanding of all the liabilities including water management is sought. This will assist in carrying out full environmental and water liability reviews of cost-plus mines and the tracking of their environmental expenditure against the environmental management plans
- Water readiness assessment of mines: In order to ensure continuity of coal supply to the power stations, Eskom initiated an assessment of the readiness of mines that supply Eskom power stations with coal, in preparation for the rainy season. Integrated solutions have been found, for example, adjustment of environmental rehabilitation plans and infrastructure to prevent rain impacting on coal supply. This will be conducted annually in future
- Closure plans for defunct mines: Eskom has initiated studies to assess the risks associated with the defunct mines, which are currently managed through care and maintenance programmes. Closure plans for some of the mines have been developed and these will be implemented in a phased manner.

The year ahead will see Group Commercial making strides toward achieving its mandate, in particular ensuring the achievement of the single procurement entity vision. Work will continue in standardising and optimising our processes in line with the Back2Basics programme. Engagements with the supply environment are expected to move towards a common platform of systems and processes. Value delivery will continue to drive efforts going forward as the division migrates from a mainly transactional focus to a strategic focus.

1. Under certain conditions, contraventions of environmental legislation are classified in terms of the Eskom operational health dashboard (OHD) index. These include instances where censure was received from authorities, non-reporting to authorities as may be legally required, non-reporting in Eskom, a repeat legal contravention, or when the contravention was not addressed adequately. Divisional executives can escalate any significant environmental legal contravention to the OHD.

2. Lost-time increased from 0 in 2010 to 2 in 2011, although none of these incidents resulted in an employee fatality.

Corporate Services division

	GRI Reference
<i>Mandate</i> 108	
<i>Benchmarking</i> 109	
<i>Material issues</i> 109	
<i>Climate change</i> 109	EU5, EN18
<i>Internal energy efficiency</i> 110	EN5, EN7, EN18
<i>Managing Eskom's environmental impact</i> 112	4.12, 4.13, EN1, EN26, EN22, EN23, EN28, EN30, SO8, PR9,
<i>Biodiversity</i> 114	EN11, EN13, EN14
<i>Safety</i> 114	EU16, EU18, EU25, LA7, PR1
<i>Research and demonstration</i> 117	EU8
<i>Anti-fraud and anti-corruption programmes</i> 119	
<i>Information management</i> 120	
<i>Quality</i> 120	
<i>Eskom Development Foundation</i> 121	EC8, LA8

Corporate Services division continued



Dr Steve Lennon Divisional Executive: Corporate Services

Mandate

Provide long-term, sustainable business performance and growing stakeholder confidence through functional leadership and strategic guidance to Eskom in the fields of risk, sustainability (safety, health, environment, climate change and quality), and operational execution in the areas of innovation, corporate social investment, information management and research.

Although operational units are responsible for the execution of risk, safety, health, environmental and quality policies and procedures, the overall group performance is monitored and reported on by Corporate Services.

<i>Highlights</i>	<i>Future priorities</i>
<ul style="list-style-type: none"> • Co-fired gas from the underground coal-gasification (UCG) pilot plant into the Majuba power station • Implemented phase 2 of the utility load manager (ULM) project • Contributed to the Copenhagen and Cancun climate change negotiations (COP 15/16) • Authorised an Eskom combined safety, health, environmental and quality management policy • Made grants of R5 million to further education and training college programmes • Signed an Emissions Credit Purchase Agreement with BNP Paribas in 2010 – a first for Eskom • Became the South African Quality Institute's first platinum member • Successfully managed the risk and security aspects around the 2010 FIFA World Cup™ leading to a very positive reputation for Eskom and the country • Ranked third in the Ernst & Young: Excellence in Sustainability Reporting Awards and a category winner for best sustainable reporting in the Chartered Secretaries' Annual Report Awards for the 2010 integrated report • Provided prepaid metering systems training for the Power Institute for East and Southern Africa (PIESA) • Entered into a strategic water research partnership with the Water Research Commission (WRC). 	<ul style="list-style-type: none"> • Make arrangements for COP 17 in Durban: logistics, co-ordination of local and international speakers, support to Durban, participation in the South African delegation and support to government
<i>Challenges</i>	
<ul style="list-style-type: none"> • The slow implementation of the security improvement plan across the business • The number of employee and contractor fatalities • Compliance with environmental regulations and air quality targets. Care and maintenance and closure plans for defunct coal mines and environmental liabilities on cost-plus mines. 	

Benchmarking

Eskom's sustainability performance has been benchmarked against that of a selected number of other electricity utilities as set out in the table below. In some cases, their technology mix is not completely aligned with Eskom's. All information was sourced from the utilities' annual reports.

	Eskom ¹ 2011	Utility 1 in Europe	Utility 2 in Europe ²	Utility 3 in Europe	Utility in China	Utility 1 in USA	Utility 2 in USA	Utility in Latin America	Utility in the United Kingdom
Utility and country									
Total electricity produced (TWh)	237	225	288	159	161	187	195	185	32
Electricity generation mix:									
Coal-fired power stations (%)	92.8	56.0	27.6	44.8	81.0	57.0	66.0	0.4	35.6
Renewables (%)	0.8	4.0	32.3 ³	23.3	0.2	4.0	6.0	92.9 ⁴	15.5
Pumped storage and other (%)	1.2	1.0	0.0	0.0	1.2	0.0	0.0	0.3	1.2
Gas (%)	0.1	19.0	15.3	5.7	17.6	16.0	22.0	0.0	47.7
Nuclear (%)	5.1	20.0	11.9	26.2	0.0	23.0	6.0	6.4	0.0
Environmental performance									
Water usage [L/kWh SO]	1.35	1.73	0.22	–	–	–	–	–	0.09
CO ₂ [kg/kWh SO]	0.99	0.73	0.74	0.43	0.83	0.65	0.66	0.00	0.49
Particulate emissions [g/kWh SO]	0.33	0.02	0.07	0.00	0.04	0.00	0.00	0.00	–
SO ₂ emissions [g/kWh SO]	7.75	0.29	1.12	0.36	0.27	2.54	2.34	0.00	0.32
NO _x [g/kWh]	4.18	0.58	1.38	0.31	0.27	0.50	0.62	0.00	0.59
Social performance:									
Employee work-related fatalities	6	2 ⁵	3	2	0	0	0	0	0
Contractor fatalities	18	0	17	1	0	0	3	0	0
Employee and contractor fatalities	24	2	20	3	0	0	3	0	0

Material issues

Climate change



The United Nations Climate Change Conference in Cancun, Mexico ended with the adoption of the Cancun Agreement in which countries agreed that they need to work to stay below a 2°C temperature rise by lowering emissions. The agreement also adopted enhanced financial and technological support as well as capacity building for developing countries, both in terms of mitigation and adaptation to climate change.

 Details of the Cancun Agreement are set out in the internet version of the report at www.eskom.co.za/annreport11/002.html.

South Africa continued to play an active role in the negotiations. Key national positions were: support for the multilateral process, the continuation of the Kyoto Protocol and advocating a legally binding outcome for the climate negotiations at international level that would bind developed countries to economy-wide, quantified emission reduction commitments.

Currently there is no CO₂ allocation framework in South Africa. However, Eskom has been active in the international and national climate change policy development process. As such Eskom has aligned its medium- to long-term strategy and plans with South Africa's national climate change response policy development process. As part of the South African delegation to the international climate change talks,

1. Eskom's environmental performance figures are calculated using total electricity generated less that used for pumped storage schemes and all power stations excluding Komati power station.

2. Approximately 13% of electricity generated from other sources other than those listed in table.

3. Includes pumped-storage facilities.

4. Hydro-electric.

5. Includes both employee and contractor fatalities.

Corporate Services division continued

Eskom plays an advisory role to ensure the appropriate development of the future climate change regime taking into consideration growth, security of energy supply and the energy needs of South Africa, the Southern Africa region and Africa as a whole.

Adaptation strategy

In the last year Eskom also started developing its adaptation strategy to prepare for the impacts of climate change and the effects on infrastructure and people. The aim of the strategy is to make recommendations to increase the organisation's capacity to adapt and increase resilience to the negative impacts of climate change.

Eskom signed its first Emission Credits Purchase Agreement (ECPA) with European-based bank, BNP Paribas in September 2010. This is the outcome of an open enquiry for bids to develop the clean development mechanism (CDM) for Eskom's compact fluorescent light (CFL) programme. This was the first time that Eskom used the global carbon market to achieve its sustainability objectives, and this will form the basis for similar future agreements. The carbon assets that will be created from this project are certified emissions reductions and voluntary emissions reductions that will be traded with BNPP.

South Africa's responses to climate change

South Africa will host the next round of climate change negotiations in Durban in December 2011. South Africa has published the Green Paper on National Climate Change Response as well as a discussion paper on reducing greenhouse gas emissions through a carbon tax for public comment in 2011. The green paper encompasses South Africa's aspirations for sustainable development – prioritising poverty

alleviation albeit within the context of sustainable development, with benefits to the climate. The country is also very vulnerable to the adverse effects of climate change and the paper focuses on the adaptation measures and strategies required by various sectors.

Government's Integrated Resource Plan (IRP) was published by the Department of Energy in 2010. The recommended "revised balanced plan" is geared towards a low carbon future and aligned with South Africa's long-term mitigation scenarios. It allows greenhouse gas emissions to peak, plateau and decline in line with government's aspirations.

During the last year Eskom engaged in a review of its climate change activities. Going forward, Eskom is completely committed to reducing its carbon footprint and helping South Africa achieve its aspirations by moving towards a cleaner energy mix. The plan is to increase the share of nuclear and renewables (through allocations from the IRP), continue investigating clean coal technologies and accelerate efforts in energy efficiency and biomass co-firing.

The aim is to reduce Eskom's total CO₂ emissions from a maximum in 2022 to a reduction in relative and absolute terms by 2030.

Internal energy efficiency



Eskom's internal energy efficiency campaign entails implementing energy savings projects within company facilities and educating employees on how to save energy.

Energy saved Measured and verified savings (non-essential consumption):

	Target	2011	2010	
Annualised savings (GWh)	Annual target of 24	26.2 ^{RA1} (annualised)	–	●
Projects started in the current year (GWh)		2.9 ^{RA2}	–	
Savings for the financial year even if they were implemented historically (GWh)		12.7 ^{RA2}	9.6 ^{LA2}	
All projects implemented from inception to date (GWh) ³	n/a	60.6	46.7 ^{LA}	
Measured and verified energy savings from inception to date (including employee roll-out programmes) (GWh)	1 000GWh (1 billion kWh) by end 2012/2013	109.5 ³	75.3 ³	

RA – Reasonable assurance provided by the independent assurance provider (refer page 200).

LA – Limited assurance provided by the independent assurance provider (refer page 200).

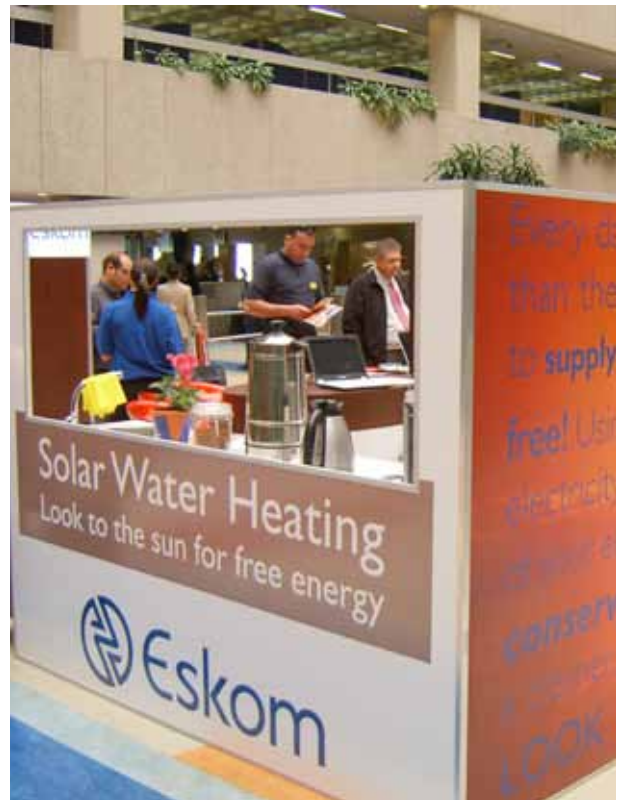
1. Projects started in 2011 in terms of the shareholder compact target.

2. Figure was reported in 2010 in the absence of an annual target and will not be reported in future years due to the subsequent development of annual targets.

3. Energy savings for all projects – measured and verified savings for the financial year even if they were implemented historically.

Educating employees on how to save energy

Employee programmes focused on hot water management such as solar water heaters, heat pumps, geyser blankets, reducing conventional geyser temperatures to 60°C, and using low-flow showerheads. Engagement methods included industrial theatre, informative presentations and interactive competitions.




Initiatives during the year

- Committed to internal energy efficiency through the shareholder compact
- Achieved annual energy savings 26.2GWh^{RA} (target of 24.0GWh) for building-related energy efficiency improvements by implementing various building projects – mainly lighting improvements
- Started a pilot project at one of the power stations to improve net thermal efficiency.

A key challenge is the installation of metering at all key facilities which has delayed the development of the Eskom baseline, as metered data is required to improve the credibility of an overall Eskom baseline and verified savings against the 15% national energy efficiency strategy target.

Eskom will now focus on

- Completion of the Eskom energy baseline
- Identification of additional opportunities for energy savings and the implementation of associated projects
- Monitoring and managing key sites' consumption through the building monitoring system
- Continued communication, education and awareness on internal energy efficiency.

 Details of Eskom's adherence to the World Business Council for Sustainable Development Buildings Manifesto are set out in the internet version at www.eskom.co.za/annreport11/003.html

Corporate Services division continued

Managing Eskom's environmental impact



Environmental performance is fundamental to Eskom's business. The impact of operations on the natural environment and human health must be minimised, while mitigating potential short- and long-term legal and financial liabilities. Therefore, Eskom continues to operate as a responsible corporate citizen in South Africa – the goal being to be recognised as a world-class utility in terms of environmental management practices and environmental duty of care.

Eskom's strategic environmental objectives

- Avoiding harm to the natural environment – minimising financial and legal liabilities
- Reducing Eskom's carbon footprint through efficient production and change of energy mix
- Reducing particulate and gaseous emissions to minimise the impact on human health and comply with regulated emission standards
- Reducing fresh water usage through effective water management processes and the use of mine water
- Improving waste management through reduction, reuse and recycling
- Achieving legal compliance with environmental legislation as a minimum requirement in all activities
- Minimising the impact of activities on land and biodiversity and enhancing responsible land management practices.

Eskom's environmental commitment is demonstrated through the safety, health, environmental and quality policy, and its international and national participation and representation on environmental forums. Eskom is also a signatory to business and environmental initiatives such as the United Nations Global Compact.

Eskom has signed up with the Global Compact LEAD, and Eskom's Chairman attended its launch in Davos this year. Eskom is one of 54 companies to make this historical commitment to adopt an ambitious sustainability roadmap and demonstrate leadership in tackling global challenges as a signatory to LEAD.



Eskom's involvement in the United Nations Global Compact is detailed in the Internet version at www.eskom.co.za/annreport11/004.html.

Initiatives during the year

- Hosted a dialogue session with some environmental NGOs
- Developed a position and standard on biodiversity
- Had parts of its business certified to ISO 14001, and put programmes in place for Generation, Primary Energy, Nuclear, Group Capital and Distribution to achieve ISO 14001 by 2014
- Implemented a water accounting framework to support water conservation and water demand management at the coal-fired power stations
- Put agreements in place for joint initiatives to improve water management practices with coal-mining houses, Department of Water Affairs, CSIR and the Water Research Commission
- Implemented water conservation and water demand management programmes
- Continued strategic partnerships with Endangered Wildlife Trust (EWT), BirdLife South Africa, Middelpunt Wetland Trust, Wildlife and Environmental Society of South Africa (WESSA)
- Initiated the processes to declare a portion of the Eskom-owned property surrounding Ingula pumped-storage scheme as a nature reserve and to apply for the extensive wetlands downstream of the upper reservoir to be declared a Ramsar Site (The Convention on Wetlands of International Importance, called the Ramsar Convention).

Activities that have significant environmental impacts

- The construction of power stations and transmission and distribution power lines – impact on land use and ecosystems
- The generation of electricity at our coal-fired power stations – use of resources (coal and water), land transformation, gaseous and particulate emissions and waste generation (such as ash)
- The generation of electricity at Eskom's nuclear power station – land transformation, radiation and radioactive waste.



Bird diverters were strung on a high-voltage line in the Karoo to prevent bird fatalities.

Consolidated Eskom environmental performance in terms of non-compliance with environmental legislation, waste disposal and environmental expenditure¹

	Target	2011	2010	2009	
Number of environmental legal contraventions	0	64 ^{RA}	55 ^{RA}	114 ^{RA}	●
Number of environmental legal contraventions reported in terms of Eskom's operational health dashboard ²	0	4	0	12	●
Materials containing asbestos disposed of (tons) ³	n/a	611.5 ^{RA}	321.1 ^{RA}	3 590.8 ^{LA}	
Materials containing polychlorinated biphenyls (PCBs) thermally destroyed (tons)	n/a	422.9 ^{RA}	19.1 ^{RA}	505.6 ^{LA}	
Environmental expenditure – (Capex) (Rbn)	n/a	0.3	0.6	1.1	
Environmental expenditure – (Opex) (Rbn)	n/a	1.1	0.9	1.0	

RA – Reasonable assurance provided by the independent assurance provider (refer page 200).

LA – Limited assurance provided by the independent assurance provider (refer page 200).

Environmental expenditure: Expenditure related to environmental control and protection covered air quality, water management, land rehabilitation, undertaking environmental impact assessments, waste management and eradication of alien vegetation.

Environmental legal contraventions: The number of occasions on which Eskom has failed to fully comply with environmental legislative requirements this financial year was 64 (2010: 55). These related to oil and diesel spills, unauthorised releases of water from power stations, particulate emissions and cutting of protected trees without a permit. Other contraventions related to non-compliance with conditions of authorisations.

Four significant legal contraventions were reported during the year. Two were repeat events where a protected tree was cut

down without the required permit, and an activity was started before receiving the environmental authorisation, resulting in an administrative fine of R390 000 (2010: R1 000). The last was a repeat of an unauthorised release of water.

During the year certain project sites were inspected by the Department of Environmental Affairs compliance unit. The outcomes of these were responded to resulting in continual improvement in controls and practices and legal compliance.

Environmental performance continues to be managed as an integral part of Eskom's governance structures – at board and Exco levels. Environmental managers are accountable for the effective implementation of environmental management systems, in line with the ISO 14001 standard.



Hamilton Primary School learns about wetlands at the Ingula pumped-storage scheme.

1. Additional environmental performance is shown in the divisional sections of the report.

2. Under certain conditions, contraventions of environmental legislation are classified in terms of the Eskom operational health dashboard (OHD) index. These include instances where censure was received from authorities, non-reporting to authorities as may be legally required, non-reporting in Eskom, a repeat legal contravention, or when the contravention was not addressed adequately. Divisional executives can escalate any significant environmental legal contravention to the OHD.

3. Quantities of waste disposed of at registered waste sites.

Corporate Services division continued

Looking forward

The following key milestones are in place to achieve continual improvement in Eskom's environmental management practices and performance:

Financial year	Key milestones
2011/12	<ul style="list-style-type: none"> • Roll out process control manuals for reporting of environmental performance • Mutually effective NGO stakeholder forums • Identification of potential air quality off-sets • Waste management plans in place • Implementation of avian species-specific action plan to reduce fatalities of specific bird species.
2012/13	<ul style="list-style-type: none"> • Usage of SAP environmental, health and safety system to manage, report and track all environment-related incidents • Fabric filter plant retrofits of the first units at Tutuka and Matla power stations • Reduction of environmental contraventions by 50% against 2011 performance.
2013/14	<ul style="list-style-type: none"> • All operational business units ISO 14001 certified • First unit at Hendrina power station retrofitted with NO_x reduction technology • Reduction of particulate emissions to 0.28 kg/MWh sent out • Reduction in water used to 1.30 L/kWh sent out.
2014/15	<ul style="list-style-type: none"> • Reduction of environmental contraventions by 70% against 2011 performance • Continuous particulate and gaseous emissions monitors installed on combined stacks or units of coal-fired power stations • Start of the Medupi flue-gas desulphurisation (FGD) plant retrofit project.
2015/16	<ul style="list-style-type: none"> • Reduction of particulate emissions to 0.23 kg/MWh sent out • Reduction of water used to 1.21 L/kWh (sent out).
2016/17	<ul style="list-style-type: none"> • Complete the Grootvlei power station fabric filter plant retrofit.

Biodiversity



2010 was the United Nation's International Year of Biodiversity. Globally, there was an increased level of awareness of the importance of biodiversity and the relevant ecosystem services that Eskom relies on. Some of Eskom's operations are located in close proximity to areas of high biodiversity value, namely Majuba, Ingula (currently under construction, ±8 000ha of construction area), Koeberg (±3 000ha) and Palmiet (±250ha within the larger Kogelberg biosphere). Eskom participated in the World Business Council for Sustainable Development (WBCSD) ecosystems focus area, which has a corporate guide for ecosystem valuations. The intention is to do a more robust valuation study using the guide developed by the WBCSD.

During this year the Eskom land and biodiversity task team (represented by all the operating units in Eskom) revised various biodiversity-related procedures, and drafted a biodiversity policy and standard within the framework of the ISO 14001 environmental management system. Funding was made available to BirdLife South Africa for the revision of the *Eskom Red Data Book of Birds of South Africa, Lesotho and Swaziland*.

Details of the work done by the Eskom-Endangered Wildlife Trust (EWT) strategic partnership can be found at www.eskom.co.za/annreport11/005.html

Safety



Eskom leadership has added the value of "zero harm" into the existing set of values. This value builds a strong foundation for health and safety, and Eskom has embraced the need to improve the working environment, create healthier, safer, stable workplaces, share responsibility and provide strong leadership.

Ongoing initiatives in pursuit of zero harm

- Elimination of fatalities
- Peer reviews of risk control interventions conducted at selected sites
- Sharing learning
- Work stoppages to discuss risks and share lessons
- Robust action management on repeat incidents.

Despite the poor safety performance overall, there have been some positive safety achievements. A number of business units achieved an injury-free period during the 2010 FIFA World Cup™, proving that it is possible to achieve zero harm. The Distribution division celebrated 340 days without an employee fatality.

A safety improvement programme has led to enhanced operational discipline among employees and visible, felt leadership on safety. As part of Eskom's goal of zero harm, a behaviour observations programme is being implemented to change the safety culture from

being reactive (by measuring and investigating accidents) to being pro-active (by observing and addressing unsafe acts and conditions through management visibility in the workplace).

Critical behaviours or actions that have a very high probability of causing incidents and severe injuries or fatalities have been identified, and non-negotiable cardinal rules were implemented in 2008. If these rules are broken, there is a disciplinary process. Incidents involving these high-risk activities have substantially reduced. The wearing of safety belts was monitored and showed significant improvement.

Group safety performance	Unit of measure	Target 2011	Actual 2011	Actual 2010	Actual 2009	
Employee safety						
Total fatalities	number	0	6 ^{RA}	2 ^{RA}	6 ^{RA}	●
Electrical contact fatalities	number	0	2	0	4	●
Vehicle accident fatalities	number	0	0	2	0	●
Other fatalities	number	0	4	0	2	●
Lost-time incident rate, including occupational diseases	index	0.31	0.47 ^{RA}	0.54 ^{RA}	0.50 ^{RA}	●
Contractor safety						
Total contractor fatalities	number	0	18 ^{RA}	15 ¹	21 ^{RA}	●
Electrical contact fatalities	number	0	1	1	1	●
Other fatalities	number	0	17	14	20	●
Public safety						
Total public fatalities ²	number	0	43	41	28	●
Electrical contact fatalities	number	0	22	27	22	●
Fatalities from other causes	number	0	21	14	6	●

RA – Reasonable assurance provided by the independent assurance provider (refer page 200).

- 14 fatalities were reported in the previous financial year. In October 2010 Eskom was notified that a contracting company (Jaws Electrical cc) failed to notify Eskom of a contractor fatality that occurred while performing work for Eskom. Upon further investigation it was learnt that one contractor passed away as a result of injuries sustained after he was struck by a pole in February 2010. Eskom initiated an investigation into the conduct of the contracting company and subsequently suspended their contract.
- Sustainability index public fatalities: An incident resulting in the electrocution of a member of the public by coming into contact with Eskom apparatus, but excluding electrocution resulting from any criminal activity. Minors being electrocuted as a result of criminal activity will be regarded as an SI incident. Any other work-related fatality where an Eskom employee or contractor might be responsible for the death of a member of the public, excluding an incident where a member of the public was at fault.

Corporate Services division continued

- Sadly six^{RA} employees passed away this financial year in comparison to the two^{RA} in 2010. Two of the fatalities were due to an electrical contact incident, two were struck by moving vehicles, one passed away due to a fall from height and, lastly, an employee was responding to a call-out when his vehicle was washed off a low-water bridge into the mainstream of the river and he drowned.
- Most unfortunately 18^{RA} contractor employees lost their lives this financial year compared to 15 in 2010. Ten of the fatalities were due to vehicle accidents, four to gunshots, one to an electrical contact incident, one was struck by a moving vehicle, one was struck by a pole, and one passed away as a result of burns.
- Tragically 43 members of the public died in 2011 (as compared to 41 last year). Vehicle accidents and electrical contacts remain the major causes of death.

Group lost-time incident rate (LTIR)

The safety of Eskom's people remains fundamental. This is measured by the progressive LTIR, a proportional representation of the occurrence of lost-time injuries over 12 months. The actual lost-time incident rate (LTIR) performance was 0.47^{RA} per 200 000 manhours worked against a target of 0.31 for 2011 (0.54^{RA} reported in 2010 and 0.50^{RA} in 2009). Although the LTIR performance has improved compared to prior years, the target was not met.

In risk-specific terms, the leading causes of injuries were motor vehicle accidents, being caught and struck by objects and falls.

Safety interventions in high-risk areas

Vehicle incidents, electrical contacts and slip, trip and fall incidents are the high-risk areas for employees and contractors. Various initiatives were implemented to address these issues.

Communications to staff highlighted electrical safety, vehicle and driver safety as well as the risk of slips, trips and falls. Work stoppages were held where management discussed the risks and lessons learnt.

Eskom has installed a new vehicle monitoring device (in all company vehicles). Records can be sent to managers or supervisors by the manager's electronic medium of choice. The system highlights historical replays, driver errors and driver scoring and will be used to change employees' driving behaviour.

Driver evaluation and advanced driver training are offered to employees. Eskom is using a benchmarking strategy to see what other big corporations are doing to curb vehicle safety incidents.

Contractor management

The health and safety of Eskom contractors and the public has received much attention. Eskom is working with suppliers, customers and contractors to integrate safety, health and environmental issues into their operations. Contractors working under Eskom's supervision or on company premises are expected to comply with Eskom's safety, health, environmental and quality policy, and a zero tolerance approach to safety management is applied. Eskom engages with contractors in contractor forums to ensure that the standard of safety management at sites is in line with best practice.

Wide-ranging policies, procedures and standards were implemented to provide guidance on Eskom's expectations from contractors. Contractors are expected to adhere to Eskom policies and procedures in addition to their own safety systems and programmes. Minimum mandatory generic safety, health, environmental and quality (SHEQ) requirements must be met in the procurement and supply chain management processes for all contractors. Eskom has compiled a standard that defines the SHEQ responsibilities of the Group Commercial division, line management and SHE functionaries, as well as the minimum mandatory generic safety, health and environmental requirements to be met during the commercial processes for all vendors.

Eskom's chief executive hosted a SHEQ leadership forum on 13 October 2010. The forum reflected the SHEQ challenges facing both Eskom and its suppliers and contractors. Fundamental safety, health, environmental and quality constraints were addressed. Several contractors were acknowledged for their outstanding SHEQ performance and contribution to Eskom.

Public safety

Various initiatives were implemented, such as the Eskom electricity safety week from 16 to 22 August 2010. The highlight of the campaign was the outside broadcast with SABC2 showing the dangers of illegal and unsafe connections. During this campaign schools participated in the public safety school competition where learners were given educational material on electricity safety.

RA – Reasonable Assurance provided by the independent assurance provider (refer page 200).

Research and demonstration



Eskom continues to invest strongly in the research and demonstration of new technologies and solutions. The research is focused on the divisions' needs and the strategic challenges faced by the organisation. Research outputs are in line with the strategic and operational needs of Eskom. Research underpins the technology vision and direction of Eskom and ensures the sustainability of the business through balanced financial, social and environmental decision making while at the same time building and sustaining Eskom's skills and core competencies.

Eskom's investment in research enables the organisation to fully understand emerging technologies and their applicability, so that appropriate management risk and investment decisions can be made. The research process allows Eskom to make the optimum choice of technologies and accelerates their implementation. The most powerful return on this investment in research is optimised asset management, improved performance and a skilled workforce that is equipped to evolve and adapt to the best that technology has to offer.

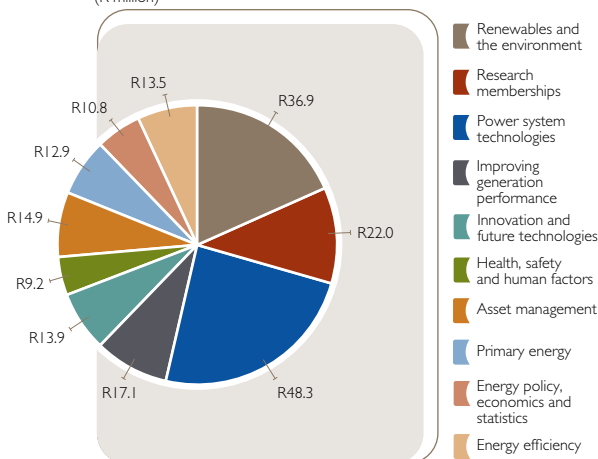
Research expenditure

Actual research expenditure of R199.5 million was 2% higher than last year in line with budgetary allocations and some growth in the size of the research programme. The increased funding for research was motivated throughout the year as other sources of funding became available. Around R93.6 million (46%) of the total spend was on direct costs related to staff, and the remainder was on general expenses, suppliers and contracted services.

Research and demonstration

The 18-project programme is shown below:

(R million)



Expenditure per research focus area.

The largest portion of research money is invested in renewable energy research and reducing Eskom's impact on the environment as well as in power systems technologies and solutions to improve the availability and reliability of the Transmission and Distribution grids and intelligent networks. The Generation side of the business also receives significant focus with research into primary energy solutions and alternatives. A six-year budget has been approved that translates into a 20.5% year-on-year growth, culminating in an estimated 0.2% of revenue by 2017 – a significant show of confidence in the need for research in Eskom and a commitment to its future.

The bulk of the capital investment continues to be in concentrating solar power and underground coal-gasification solutions – two projects in particular. The purpose of the demonstration programme is to feed Eskom's infrastructure expansion programme with researched solutions that improve power quality, reduce cost, increase environmental performance and support the Eskom business model. It also drives and challenges capital expansion technology choices based on the knowledge gained through demonstration, namely to ensure that key technologies that can fundamentally change Eskom's current technology path and improve performance are well understood and part of the Eskom technology plan.

Structural changes

The research and demonstration programme is under constant review and is changed to align with the changing needs of the organisation. Every annual review begins with an examination of the current portfolio in discussion with internal and external stakeholders. The latest review indicates a need to focus the Eskom researchers into fewer "centres of excellence" that will build specific capacity in a chosen discipline and become a world-class centre for research and development in that field. This approach will be rolled out in 2012.

Demonstration and pilot projects

A demonstration project is a production scale asset that Eskom constructs to allow it to assess technologies for their business and technical risks and their implementation impacts before they are rolled out commercially. Eskom's pilot and demonstration programme feeds its infrastructure expansion programme with researched technological solutions and expands its capital expansion technology choices.

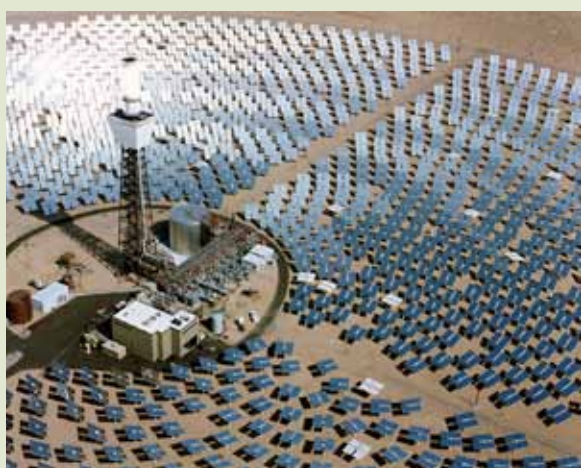
Eskom invested R306.9 million in the demonstration programme in 2011. The bulk of Eskom's investment is in concentrating solar power and underground coal-gasification solutions.

Corporate Services division continued

Major demonstration and pilot project expenditure

<i>Project name</i>	<i>Actual expenditure R million</i>
Plant monitor	13.13
Underground coal gasification	248.46
Utility Load Manager	27.70
Concentrating solar power (CSP)	13.61
765kV double-circuit tower development	2.81
Friction stir taper-stud welding platform	1.22
Total	306.93

Concentrating solar power – CSP



Concentrating solar plant to be built near Upington in the Northern Cape.

Concentrating solar power systems use lenses or mirrors and tracking systems to focus a large area of sunlight into a small beam. The concentrated heat is then used as a heat source for a conventional power plant.

Eskom's concentrating solar power (CSP) project has made significant progress since the awarding of the World Bank loan in April 2010. The required land is now owned by Eskom, water for

construction and operations has been secured, and the planning around grid integration has progressed well.

Given the pace of technological developments in CSP and the time taken to finalise funding, Eskom and the World Bank decided that an independent technology assessment was required before concluding the plant specifications. The assessment, conducted by an independent German consultancy, was completed in December 2010. The consultant confirmed Eskom's internal findings that the central receiver (CR) is the preferred technology choice and is suitable for utility scale application. Eskom finalised the plant specifications as follows:

- 100MW central receiver demonstration plant with molten salt as a heat transfer fluid
- Capacity factor greater than 60%
- Two tank storage systems, with molten salt, designed for optimised, levelised energy costs
- The plant will be dry cooled or hybrid cooled – designed to optimise water usage
- All auxiliary power will be sourced from the national grid and backup will be sourced from diesel generators
- Life of plant will be a minimum of 25 years.

Eskom will appoint an owner's engineer in the first half of 2011 for the development and execution of the project. The plant is expected to be commissioned in the first half of 2016.

Utility load manager – ULM

A utility load manager is a system that can control and limit the load available to a home or business when Eskom experiences network and system supply constraints. The system gives households a choice about which appliances to use when, and encourages energy efficiency. Eskom's system has been designed to ensure quick roll out, with minimal impacts on the network design and for use on all existing reticulation network designs. The pilot project has been hugely successful and is ready to be implemented nationally.

Underground coal gasification – UCG



The underground coal-gasification flarestack with Majuba power station in the background (blue flame typical for UCG gas).

Underground coal-gasification (UCG) is a clean-coal technology that allows coal to be gasified on site within the coal seam to produce UCG gas that can be used directly as a fuel for power generation. Eskom is demonstrating the co-firing of UCG gas with coal in an existing power station and the use of UCG gas as a fuel for an open-cycle gas-turbine demonstration plant.

On 28 October 2010 at 13:22 Eskom's UCG demonstration plant started delivering gas to Unit 4 at Majuba power station near Volksrust. The gas is being co-fired with coal, and contributes 3MW to the unit's current electricity production of approximately 650MW. This is an historic occasion, as it marks the first production of commercial electricity from UCG gas outside the former Soviet Union.

Eskom highlighted the potential of UCG in a conceptual study in 2002; and this led to a site selection and pre-feasibility study in 2003; a site characterisation study in 2005; the successful commissioning of a pilot plant in the Majuba coalfield in January 2007; and the successful testing of the equipment for co-firing of UCG gas in one of the Majuba power station boilers in October 2010.

 Further details of the UCG project are set out in www.eskom.co.za/annreport11/006.html

Innovation circuit

To support one of Eskom's core values of innovation, the division formed the Innovation Circuit (IC).

The IC encourages and nurtures a culture of innovation within Eskom. It conducts "fun shops" where employees are interactively made aware of the advantages of innovation as a company value. The IC website welcomes employees' ideas, and more than 6 000 employees have registered on the website and submitted nearly 2 000 ideas.

In 2011, the open innovation pilot project was launched, which aims to prove the value of sharing needs with outside parties to accelerate the discovery and implementation of innovative solutions. Eskom will collaborate with energy stakeholders and members of the public.

Some 2011 successes

- Several business process ideas were integrated into the Back2Basics project
- A manageable and cost-saving print environment was established
- An ongoing recycling project was established.

Key ongoing innovation research projects

- Safer operating conditions near power lines and low-hanging conductors
- Alternative energy sources
- Innovative ways to conduct line inspections
- Energy efficiency initiatives, including heat recovery, geyser control, and energy-saving incentives.

Anti-fraud and anti-corruption programmes



The Forensic and Anti-Corruption department assists Eskom with good corporate governance and prevents, mitigates, detects and responds to fraud, corruption and other forms of economic crime or dishonesty. This is in support of Eskom's commitment as a signatory to the United Nations global compact.

The South African National Anti-Corruption Campaign

Eskom is strengthening its commitment to the national anti-corruption campaign. Eskom has entered into a three-year partnership with the Special Investigation Unit (SIU). The partnership will help Eskom to remain ethical, with appropriate fraud detection and prevention measures in place.

Corporate Services division continued

Information management



2011 has been a year of transformation for IT in Eskom. Major changes in the structure and management of Eskom's IT have contributed to aligning IT resources with Eskom's new business priorities, while maximising the value Eskom derives from IT.

These changes have already had a significant business impact on Eskom. There is greater flexibility and Eskom is able to standardise, simplify and optimise business processes across the organisation through the Back2Basics programme. Integrated business reporting is already enabling executives to make informed decisions based on improved information accuracy, timeliness and availability. The Microsoft platform currently being implemented will enable Eskom to more easily adopt and integrate new and emerging technologies in line with more demanding business requirements. Duplicate processes have been eliminated and consolidated, saving costs.

Increased threats to IT security emerged internationally in 2011. Information security governance has been extended to include Eskom's operational power station systems.

Quality



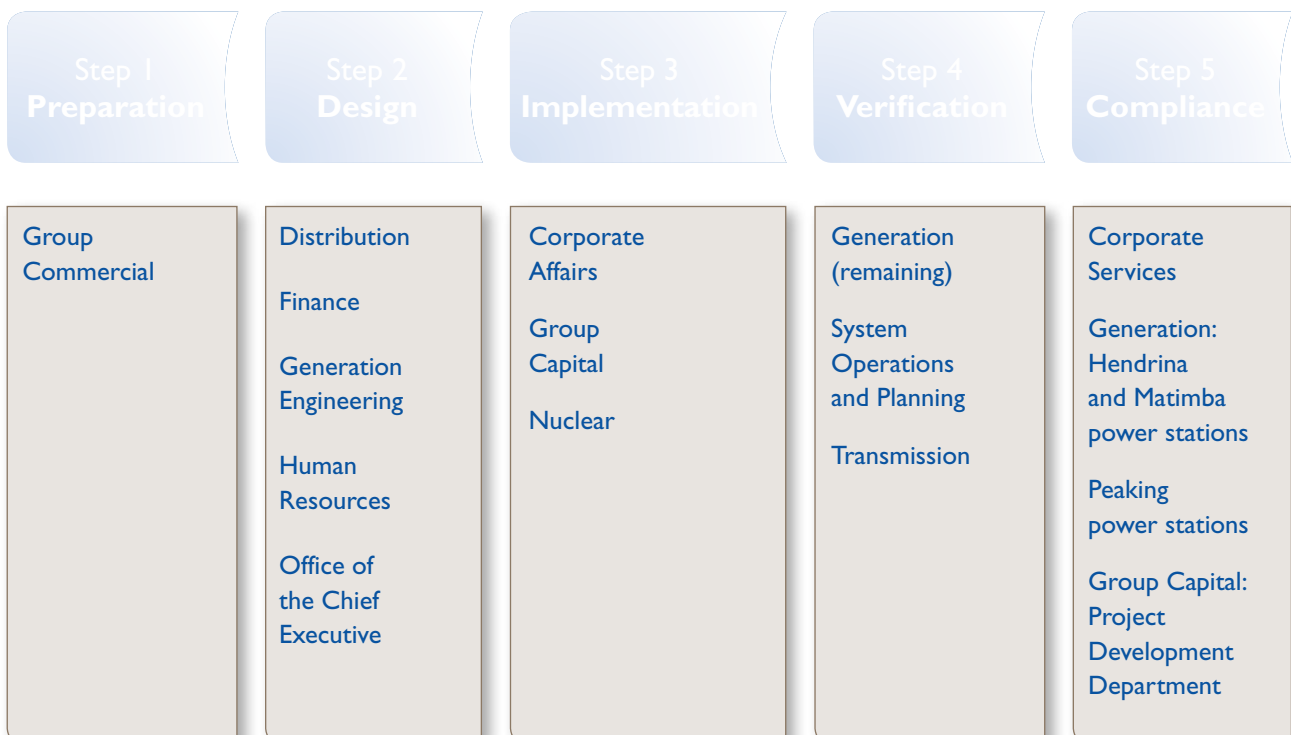
Eskom has embarked on a quality improvement programme to integrate quality into all activities based on the quality management strategy. The overall quality improvement initiative is in the developmental phase.

As part of its quality management strategy, Eskom adopted the ISO 9001:2008 standard as the framework for business management. To date, the following Eskom divisions and business units have received ISO 9001 certification:

- Corporate Services division
- Two coal-fired power stations (Hendrina and Matimba) and all peaking power stations in the Generation division
- Project development department in the Group Capital division.

The rest of the divisions are developing and implementing ISO 9001-compliant quality management systems. All the divisions and operating units are expected to be ISO 9001 compliant by 31 March 2013.

Eskom's quality improvement programme towards ISO 9001:2008 certification



Eskom Development Foundation



Haylene Liberty Chief Executive Officer: Eskom Development Foundation

Mandate

Eskom Development Foundation (Foundation), is a section 21 company (an organisation not for gain, registration number 1998/025196/08). The Foundation has been co-ordinating and executing Eskom's corporate social investment since January 1999. It receives funding from Eskom to make grants and donations.

<i>Highlights</i>	<i>Future priorities</i>
<ul style="list-style-type: none">• Through the Eskom Development Foundation, Eskom has impacted 254 beneficiary organisations with some 303 983 beneficiaries for the year• Total grant making amounted to R62.3 million• In the "Top caring companies spontaneous awareness: 2010" survey Eskom was rated:<ul style="list-style-type: none">– among the top 10 since 2000, and in seventh position in 2010,– second top caring company in the manufacturing/ electricity sectors and joint third with Vodacom by rural blacks and sixth by urban blacks; and– ranked first among public enterprises in this survey.	<ul style="list-style-type: none">• Adopt a holistic development approach to programmes in communities where Eskom implements its capacity expansion projects, focusing primarily on capacity building, skills development and job creation• Continue with flagship and national programmes that have a strategic impact; viz:<ul style="list-style-type: none">– Eskom business investment competition, including the Simama Ranta school enterprise competition– Business Opportunities Expo– Eskom energy and sustainability programme– Enterprise development programme– Support to selected FET colleges

Corporate Services division continued

Eskom Development Foundation continued

Overview

The Foundation operates in the nine provinces of South Africa. Economic and social development managers and advisers employed by Eskom are based in each province to represent the Foundation.

In addition, and in consultation with the stakeholder forums of the Eskom new build sites, integrated social and economic development programmes are initiated, based on identified needs that are within the operating mandate of the Foundation.

Target groups

Grants and donations are considered for community-based organisations, development agencies and organisations involved in philanthropic work for the development and benefit of the disadvantaged, as well as small and medium enterprises. The primary target groups for grants and donations are women, youth and children, as well as people with disabilities.

The Foundation revised its strategy to focus on development in communities around Eskom capacity expansion sites. Planning has been completed to implement projects in the communities around Lephalale (Medupi site). Communities around Kusile site include eMalahleni, Delmas, Ogies and Phola, as well as communities around Camden (Ermelo), Komati (Middelburg) and Grootvlei (Balfour), as well as Ingula pumped storage scheme (Ladysmith/Harrismith) and Eskom's return-to-service (RTS) sites.

Programmes

The Foundation has a number of flagship programmes. It also supports a number of national CSI programmes that are deemed important for the socioeconomic development of the South African landscape.

Donations to philanthropic and welfare causes executed by registered non-profit organisations are also considered. The donation of assets is also facilitated and accounted for on behalf of Eskom and its subsidiaries.

Flagship programme

These programmes are initiated by the Foundation and include:

- Business investment competition
- Business opportunities expo
- Energy and sustainability
- Contractor academy
- Small- and medium-enterprise development.

National programme

National programmes are funded as they are deemed of strategic importance to Eskom:

- Energy and sustainability
- Further education and training colleges.

Development grants

Development grants are considered for the capacity building of registered and operating projects in the economic and social sectors that meet the grant-making criteria of the Foundation; particularly those in communities around Eskom's new build sites.

Support to economic projects will continue in the form of marketing and financial assistance to small enterprises through the Eskom business opportunities expo and the Eskom business investment competition and business skills capacity building and mentoring through business incubators, contractor academies and other training initiatives.

Support to social projects will include support to philanthropic/welfare organisations, support to early childhood development (ECD) centres, capacity building for primary schools and further education and training colleges (FETs).

Donations

Donations are considered to registered, philanthropic or welfare organisations or donations to causes that are strategically important to Eskom, a region or to South Africa are considered.

- Philanthropic donations
- Strategic donations
- Divisional donations.

Sustainability

Sustainability is a vital element of Eskom's CSI interventions. It is considered both in developing the Foundation's strategy and at a project level.

In terms of the Foundation's strategy:

- Support is provided in terms of education, from the early childhood development phase onwards. It is a long-term strategy to ultimately contribute to an improved pipeline of grade 12 learners with good results in mathematics, physical science and language to study in engineering and technical disciplines to meet the human resources needs of Eskom and South Africa.
- Support provided to further education and training colleges contributes not only to improving the employability of the youth, but also to creating a future pipeline from which to draw technical skills, for Eskom and other industries.

- Support provided to small business through skills development and marketing support assists these businesses in growing and providing further employment opportunities; and creates an ever increasing pool of SMME and BWO suppliers from whom Eskom and other large corporate players can procure goods and services.

Distribution of CSI grants and donations

During the year the Foundation approved a total of 30 grants for R46.6 million towards economic and social development projects, national programmes, flagship projects, infrastructure and food security projects as part of the rural development programme; as well as 224 donations for R15.7^{RA} million were approved for philanthropic and welfare organisations. This brings the total grant making to 254 beneficiary organisations to R62.3^{RA} million (2010: R58.7^{RA} million).

Beneficiaries

A total of 303 983 project beneficiaries are involved with the organisations that received grants and donations (2010: 590 440/ 2009: 239 617). There is a decrease in the number of beneficiaries due to implementation of a focused CSI strategy (flagship and national programmes and emphasis on communities around Eskom's new build sites), resulting in fewer, but more high-impact projects.

Donation of assets

Assets that had been written off in the assets registers of the various divisions of Eskom were donated to the Foundation. These assets were in turn donated to schools and welfare organisations. The estimated market value of these assets was R72 650 in the current financial period (2010: R30 000).

Summary of corporate social investment	2011		2010		2009	
	No of projects	Rm	No of projects	Rm	No of projects	Rm
Grants for flagship and national programmes and economic and social sector projects	26	39.8 ^{RA}	43	47.4 ^{RA}	43	47.8
Donations to registered, non-profit philanthropic organisations	224	15.7 ^{RA}	153	8.4 ^{RA}	109	4.7
Rural development ¹	4	6.8 ^{RA}	7	2.9 ^{RA}	50	27.0
Total donations and grants	254	62.3^{RA}	203	58.7^{RA}	202	79.5^{RA}

RA – Reasonable assurance provided by the independent assurance provider (refer page 200).

1. Rural development department was incorporated in the Eskom Development Foundation in June 2010.

Further details of the corporate social investment programmes can be found at www.eskom.co.za/annreport11/csi/01.html



Eskom's Western Region i-Volunteer team and Good Hope FM ran a toy-toy campaign for underprivileged children, bringing smiles to many children.

Corporate Services division continued

Eskom Development Foundation continued

Case study

Yellow Woods primary school is on a farm at Witteklip, about 10km from Port Elizabeth, which falls in the Nelson Mandela metro municipality. The school was established in 1960 and has eight educators and 203 learners, of whom 87 are girls. Some of the learners come from surrounding farms. Many parents are unemployed, and those who are employed survive on low incomes and cannot pay school fees.

The school has a reception year class, Grade R, and offers schooling up to Grade 9. It offers: isiXhosa, English, mathematics, natural science, economic and management science, life orientation, social science and technology, as well as arts and culture.

There is no electricity, and teaching and learning are compromised.

The Foundation funded wind turbines and palisade fencing at the school. Educators and learners are delighted that "our school also has electricity".



Yellow Woods farm school with the newly erected wind turbines at the far end.

Human Resources division

GRI Reference

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Human Resources division



Bhabhalazi Bulunga Divisional Executive: Human Resources

Mandate

Partner and empower line divisions to recruit, develop, and retain a skilled, committed, engaged and accountable staff base across Eskom.

Eskom is also committed to building skills, not only internally but also in the communities in which it operates. This supports Eskom's aspiration to grow the South African economy and improve the quality of life of people in South Africa and in the southern African region.

<i>Progress this year</i>	<i>Future priorities</i>
<ul style="list-style-type: none">• Eskom leadership development framework in place• Performed an intensive assessment of Eskom's top 60 leaders• Developed preliminary workforce demand and supply forecast• Started rolling out a competence model pilot project• Rebuilt the Eskom Academy of Learning and Leadership Development Centre• Rated by young engineering professionals as the employer of choice in engineering and technology out of 60 companies in South Africa• Sustained the skills base and tripled the skills pipeline over the last five years, meeting the shareholder expectation of 4 950 learners in the pipeline.	<ul style="list-style-type: none">• Revise the performance and reward process• "Re-launch" the middle-management engagement process• Put signature leadership development programmes in place• Implement a transformation intervention plan• Put a workforce supply/demand model and process in place• Roll out a sourcing, development and deployment plan• Implement an employee relations and engagement model• Put core competence models and associated curricula in place• Put individual talent profiles in place for top 60 managers and leaders, with related development plans• Conduct an intensive assessment of the top 400 leaders in the organisation• Finalise long-term housing strategy• Embed competence models in all key human resources processes• Develop supervisory skills.

Overview

The mandate of Human Resources within Eskom remains entrenched in Eskom's role within the context of South Africa.

Universal human resources principles that reflect the common needs of all South Africans

- Improve the quality of life of all citizens of South Africa
- Maximise the potential of each employee in Eskom
- Become the embodiment of a united and democratic South Africa
- Enhance South Africa's participation in the global economy.

What Eskom's Human Resources division provides

- Strategy, direction, policies and assurance on people-related issues
- Business partnering in the delivery of the organisational objectives
- A cost-effective transactional service for economies of scale and skills
- Culture change through effective change management and supporting programmes
- A holistic training and development function and delivery centre.

Benchmarking

Training and development costs as a percentage of the wage bill:

Eskom's R998 million (2010: R758 million) investment in training and development is 5.7% of the wage bill. This puts Eskom well within the 75th percentile of United States utility companies (3.3%), and United Kingdom/European utility companies (3.5%) (PWC, 2008).

Training hours per annum per full-time equivalent (FTE):

Eskom's training hours per FTE is 62. This puts Eskom above the 75th percentile of US utility companies (37 hours) and between the 25th percentile and 50th percentile of UK/European utility companies (53 – 75 hours) (PWC, 2008).

Learner pipeline

Eskom's learner pipeline consists of 5 283^{RA} learners, which is above the target agreed in the shareholder compact. There are 4 240^{RA} engineering/technical learners, which is also above the target.

Employer of choice:

Young engineering professionals rated Eskom the employer of choice in engineering and technology out of 60 companies in South Africa (Ideal Employer Ranking, Magnet Survey, 2010).

Overall staff turnover:

Eskom's overall staff turnover is 3.6% per year. This places Eskom favourably below the 25th percentile of South African companies (9.5%). This is still extremely low for Eskom, as the turnover in the last two decades for Eskom has been an average of 6.2%.

Turnover due to retirement:

Eskom's turnover due to retirement is 0.84%. This places Eskom midway between the 50th percentile and 75th percentile of South African companies (0.6 – 1.2%). 27% of Eskom's staff are older than 50 years and could be considered a retirement risk within the next decade.

Disability:

According to the report on employment equity for disability in the South African Public Service, the benchmark for disability is 2%. The Employment Equity Commission's 2009 report found that people with disabilities (PWD) accounted for nearly 0.7% of the total number of employees reported by all employers. Eskom's disability target is 3% of the workforce. Eskom prides itself in achieving levels that are above the national norm. (See table on page 130)

Age profile:

The Eskom age profile is:

– 18 to 20 years:	0.07%
– 20 to 29 years:	22.62%
– 30 to 39 years:	30.48%
– 40 to 49 years:	19.86%
– 50 to 59 years:	22.94%
– 60 and over 60 years:	4.03%

The ideal ratio of young professionals to older professionals is 2:1. Eskom's is currently 2:3, reflecting a disproportionately high number of people in the higher age categories (SAICE, 2008).



Modern office set-up at Eskom's head office.

RA – Reasonable assurance provided by the independent assurance provider (refer page 200).

Human Resources division continued

Material issues

Employee value proposition



An employee value proposition that attracts, retains and engages target employees will be defined and implemented next year. Segmentation of the workforce will assist in addressing the diverse needs and preferences of the workforce population. The employee value proposition will be measured against the desired employer attributes of Eskom's current and future talent mix.

Skills



Eskom has been fortunate to maintain a low 3.6% staff turnover (3.5% in 2010), mainly due to the restricted job market resulting from the economic climate both locally and internationally. However, Eskom continues to face a number of skills-related challenges:

- Repositioning the Eskom Academy of Learning as a professional centre of excellence that manages all learning in Eskom
- Meeting the stretched learner pipeline target in the shareholder compact.

Eskom has sustained its skills base and even tripled the learner pipeline over the last five years (2007 – 2011).

The next planning cycle will be marked by reinforcement of the government's new growth path. In line with this, Eskom endeavours to be a developmental state-owned entity that can meaningfully contribute to skills development and job creation in South Africa. The higher levels of growth and development will put additional pressure on Eskom to maintain and improve its "Employer of Choice" niche in the marketplace through high potential (HiPo) talent management strategies and skills development opportunities for all employees. The roll-out of standardised, simplified policies, processes and systems (B2B programme) will position Human Resources well to play a leading role in the future high-performance utility model.

A talent management business process and procedure has been developed to ensure robust talent contingency planning and the creation of career development opportunities.

The identification and categorisation of skills as core, critical or scarce was aligned with the new legislative requirements in the organising framework for occupations.

A scientific workforce planning process and tool to enable demand and supply management is being implemented to enhance Eskom's ability to identify and plan for medium- and long-term business capacity requirements. Eskom has identified core competencies and translated them into a workforce plan and a medium-term skills plan aligned with government's Integrated Resource Plan. Eskom has also contributed to the energy sector skills plan.

The recruitment process has been optimised to enable the sourcing of the learner pipeline, and to address capacity gaps in the core and critical segments of the workforce skills plan. Internal talent pipelines

will be strengthened by recruiting for potential at entry level, enabling and encouraging career progression at least to supervisory level. The Eskom Academy of Learning in partnership with tertiary institutions will be key enablers for skills development. An Eskom Power Plant Engineering Institute (in partnership with a South African university) and a faculty of customer service within the Eskom Academy of Learning will be established to boost skills in these critical areas.

Finally, a planned rotational deployment strategy with other state-owned enterprises, utilities, original equipment manufacturers and business partners will strengthen workforce flexibility, build strategic competencies and provide career development opportunities for the talent in Eskom.

The recruitment section on the Eskom website (www.eskom.co.za – "A career at Eskom") has been streamlined to make it easy for job seekers to find meaningful work opportunities in the organisation.

Additional core, critical and scarce skills must be developed or recruited annually over the next five years to replace losses and cater for Eskom's new build programme. The Eskom learner pipeline has been increased to 5 283^{RA} (2010: 5 255^{RA}) learners with three to four-year learning/bursary contracts to accommodate the new skills requirements and offset normal attrition. This is reflected in the table below:

Cumulative projected additional core, critical and scarce skills requirements

	2011	2012	2013	2014	2015
Skills required	2 054	2 465	2 958	3 300	3 500

Training interventions



The Eskom Academy of Learning has been repositioned as a professional centre of excellence, tasked with delivering learning in Eskom. A chief learning officer reports to the Human Resources divisional executive.

The objective of the Academy is to co-ordinate and integrate all learning throughout Eskom, focusing on business needs. It will cater for learning design and development, learning delivery, learning administration, as well as learning operations, supported by a quality management process. The Academy faculties are engineering, artisan, services, project management, leadership and finance.

The key focus will be on engineers, technologists, technicians and artisans for the future. There are 5 283^{RA} (2010: 5 255^{RA}) learners in the pipeline, of which 4 240^{RA} (2010: 3 780^{RA}) are studying in the engineering and technical fields. Once they have completed their training, they will be absorbed into the business as engineers or graduates-in-training. Over and above the business learner pipeline requirements, Eskom provides 550^{RA} bursaries (2010: 236^{RA}) for employee dependants, to contribute to the socioeconomic development of South Africa.

RA – Reasonable assurance provided by the independent assurance provider (refer page 200).

Focus on leadership



Eskom developed a leadership framework aligned with Eskom's strategic imperatives. As a first step in a systematic leadership development process the top 60 senior executives went through a comprehensive leadership capability and competence assessment as input to an executive talent conversation. An executive development centre will facilitate development solutions for this leadership community.

Some 3 700 (2010: 120) managers and professionals were trained in the theory and application of Situational Leadership II and a further 90 supervisors completed a new customised developed programme. More than 1 200 (2010: 810) managers were assessed using the Eskom Leadership Effectiveness Assessment instrument and the compilation of individual development plans was facilitated.

Transformation



Eskom has had a transformation agenda since the 1980s, before the Employment Equity Act came into being, and has achieved various transformational goals.

Eskom's diversity and inclusion philosophy

- Diversity and inclusion are strategic business imperatives, essential to making Eskom great

- Transformation is leadership driven and is lived through organisational values
- Eskom embraces, values and leverages off the diversity of its employees and their experiences, backgrounds and expertise
- Transformation is not a programme, but who Eskom is
- Diversity and inclusion underpin all human resources policies and practices, and all dealings with customers, suppliers and stakeholders.

Eskom has implemented a robust and ambitious employment equity plan (EE plan), supported by a long-term target-setting strategy (Equity 2020) to drive the transformational agenda for the next three financial years until 2012/13. The EE plan seeks to create, through various interventions, a workplace and workforce profile that is diverse and inclusive; and to ensure that diversity becomes the "Eskom way".

Eskom's current review of its business strategy will create opportunities to address equitable representation at top and senior management levels.

Human resource operational measurements

The table below reflects Eskom's performance against internal transformation guidelines, reflecting employee movements and the achievement of targets set for gender and race, as reported to the Department of Labour:

Eskom company employee profile – Top four occupational levels – (Task grades 9 and above) (%)

Occupational level	Actual/Target	Male				Female				Foreign nationals	
		A	C	I	W	A	C	I	W	Male	Female
EAP		39.20	6.10	1.90	6.70	34.20	5.20	1.10	5.50	0.00	0.00
Top management (FAA, FBB)	Mar 2009 Actual	26.32	5.26	21.05	26.32	10.53	5.26	5.26	0.00	0.00	0.00
	Mar 2010 Actual	23.81	4.76	19.05	28.57	9.52	4.76	4.76	4.76	0.00	0.00
	Mar 2011 Target	23.81	4.76	19.05	28.57	9.52	4.76	4.76	4.76	0.00	0.00
	Mar 2011 Actual	28.57	4.76	14.29	33.33	4.76	4.76	4.76	4.76	0.00	0.00
Senior management (EEE, SSE)	Mar 2009 Actual	18.57	3.10	10.00	42.38	9.05	2.38	3.81	5.48	4.52	0.71
	Mar 2010 Actual	17.80	3.04	10.07	42.62	9.37	2.81	4.22	5.15	4.22	0.70
	Mar 2011 Target	19.73	3.40	9.30	39.23	11.56	2.95	3.85	5.22	4.08	0.68
	Mar 2011 Actual	20.62	3.84	10.55	38.85	10.31	2.88	4.32	6.00	2.16	0.48
Professional, specialists and mid-management (MIP14 – MIP18)	Mar 2009 Actual	26.33	5.21	7.78	28.06	17.87	2.03	2.92	6.93	2.22	0.66
	Mar 2010 Actual	26.70	5.22	7.49	26.85	18.61	2.04	2.87	6.73	2.69	0.80
	Mar 2010 Actual	27.78	5.28	6.97	24.96	19.98	2.32	2.71	6.60	2.61	0.77
	Mar 2011 Actual	26.80	5.14	7.38	26.11	19.73	2.09	2.91	6.83	2.40	0.62
Skilled technical, academic qualified workers, junior management, supervisors (T09 – T13)	Mar 2009 Actual	32.45	5.30	2.31	21.91	24.83	2.90	1.69	7.49	0.78	0.33
	Mar 2010 Actual	33.85	5.12	2.41	20.81	25.16	2.80	1.71	7.01	0.78	0.36
	Mar 2011 Target	34.32	5.21	2.36	19.51	25.96	3.02	1.65	6.86	0.75	0.35
	Mar 2011 Actual	34.62	5.16	2.46	19.46	26.05	2.96	1.67	6.72	0.64	0.26

A – African C – Coloured I – Indian W – White
EAP – economically active population

Human Resources division continued

Eskom company disability profile: – all occupational levels

unit of measure %

	Total
Mar 2010 Actual	2.54
Mar 2011 Target	3.00
Mar 2011 Actual	2.53

The Eskom target for disability is 3% of the total workforce. This is above the 2% target set by the government. Currently 1 002^{RA} employees have been identified as people with disabilities. Eskom will continue to strive for a fair representation of people with disabilities.

Eskom group employee profile – Top four occupational levels – (Task grades 9 and above)¹ (%)

Occupational level	Actual/Target	Male				Female				Foreign nationals	
		A	C	I	W	A	C	I	W	Male	Female
Top management	Mar 2009 Actual	21.74	4.35	17.39	39.13	8.70	4.35	4.35	0.00	0.00	0.00
	Mar 2010 Actual	20.83	4.17	16.67	37.50	8.33	4.17	4.17	4.17	0.00	0.00
	Mar 2011 Actual	28.57	4.76	14.29	33.33	4.76	4.76	4.76	4.76	0.00	0.00
Senior management	Mar 2009 Actual	18.65	3.03	9.79	42.89	9.09	2.33	3.73	5.36	4.43	0.70
	Mar 2010 Actual	18.10	2.94	9.95	42.53	9.50	2.71	4.30	5.20	4.07	0.68
	Mar 2011 Actual	20.83	3.70	10.42	38.98	10.42	2.78	4.40	6.02	2.08	0.46
Professional	Mar 2009 Actual	26.31	5.15	7.71	28.59	17.58	1.94	2.88	6.95	2.25	0.63
	Mar 2010 Actual	26.67	5.17	7.41	27.38	18.25	1.95	2.85	6.73	2.82	0.77
	Mar 2011 Actual	26.72	5.05	7.28	26.85	19.28	1.99	2.88	6.80	2.54	0.61
Skilled	Mar 2009 Actual	32.60	5.15	2.36	23.32	23.65	2.77	1.69	7.36	0.79	0.31
	Mar 2010 Actual	34.14	5.00	2.46	21.86	24.05	2.68	1.66	6.88	0.93	0.35
	Mar 2011 Actual	34.28	5.03	2.52	20.72	25.08	2.86	1.66	6.74	0.82	0.28

A – African C – Coloured I – Indian W – White

1. No specific targets for the group – aligned to company targets.

Eskom group* disability profile: – all occupational levels

unit of measure %

	Total
Mar 2010 Actual	2.29
Mar 2011 Actual	2.36

* This is the total for Eskom, Rotek, Roshcon and Rotran. Currently 1 012^{RA} Group employees have been identified as people with disabilities.



Unit operators run power station control rooms 24 hours a day.

The highlight of the transformation process has been the implementation of the three-year employment equity plan.

As part of its transformation agenda, Eskom will continue with the affirmative action drive, the promotion of women and the focus on employment equity for people with disabilities, not because it is required of the company by statute, but because it is the right thing to do. It is also a business imperative.

Health and wellness



Eskom's integrated health and wellness programme promotes a safe and healthy working environment that will ensure its employees are healthy, productive, resilient and engaged throughout their time at Eskom.

Eskom's occupational health and wellness services

- Medical surveillance
- Employee assistance programme, including work life, biokinetics, sports and recreation
- Comprehensive chronic disease programme, including tuberculosis and HIV/Aids management.

Strategic initiatives ensure that employees are aware of their health status, are empowered to make correct health seeking choices to ensure they maintain good health and wellbeing.

Employee relations



Eskom's employee engagement model builds employee participation and connects employees and executives in conversations around strategy, performance and people. Eskom has also built more productive and sustainable relationships with organised labour through a partnering model to guide these interactions.

About 30 520 man-hours were lost due to industrial action at Eskom in the last year. Eskom maintains direct lines of communication with managers and professionals and consults in the bargaining unit with recognised trade unions. A one-year salary and conditions of service agreement was concluded with trade unions during the last year.

Central to the negotiations was a review of the housing benefits: Eskom needs to optimise the use of the housing benefit by employees and ensure that housing is available in the areas that Eskom operates in, in line with government's guidelines for sustainable human settlements.

Staffing for expansion phase



Eskom, as a state-owned enterprise, has been directed by its shareholder to contribute meaningfully to South Africa's New Growth Path. In addition to the 5 283^{RA} learners in the pipeline, Eskom has further committed to partner with its supplier network to train an additional 5 000 learners (2 500 matriculants in trades training and 2 500 unemployed graduates for experiential internships).

To achieve ongoing efficiencies, Eskom is developing a strategy to contain employee numbers by reallocating staff from the existing business to the new build projects and other new focus areas. Shifting the balance from the existing to the new business is only possible if adequate skills levels can be redeployed in critical areas (such as maintenance and delivery on the new build programme). These efficiencies will oblige Eskom to manage increases in overtime and to monitor ongoing adherence to safety requirements.

Current performance

Human Resources Sustainability Index (HRSI)

An important role is to measure and monitor critical factors relating to the sustainability of Eskom's human resources. A Human Resources Sustainability Index (HRSI) measures key aspects of human resources sustainability. The HRSI is also contracted into leadership and operating unit performance compacts.

The main areas of measurement are: employee satisfaction, employee competence, and employee health and wellness. The measurements and criteria are reviewed annually to make sure they stay applicable.

The HRSI score for the past year was 88.3% (2010: 92.1%) against a target of 80%. Although the score is lower than the previous year, it still indicates that Eskom's human resources performance was well maintained and that the human resources interventions are relevant and meet the needs of employees and the organisation.

Every effort is being made to ensure that Eskom obtains and retains the right people for the right job at the right time, to ensure a reliable electricity supply for generations to come.

Eskom's human resource development strategy has demonstrated remarkable resilience over the past year in an environment characterised by constraints, such as the impact of the global economic downturn and international demand for scarce skills.

In line with skills development legislation, Eskom has submitted a workplace skills plan and an annual training report for the period 2010/11.

Human Resources division continued

Eskom staff profile

<i>Company</i>	<i>Actual 2011</i>	<i>Actual 2010</i>	<i>Actual 2009</i>
Employees at start of period	36 547	35 196	32 954
Added: Recruitment	3 884	2 581	4 261
Lost: Resignations	(582)	(541)	(1 312)
Deaths	(248)	(260)	(276)
Dismissals	(118)	(110)	(98)
Absconded	(18)	(12)	(11)
Retirements	(384)	(300)	(337)
Voluntary packages	(4)	(5)	(7)
Other	(43)	(2)	22
Total employees at end of period	39 034	36 547	35 196
Employee turnover rate (%)	3.6	3.5	6.0

Eskom staff age distribution

<i>Company</i>	<i>Actual 2011</i> %	<i>Actual 2010</i> %	<i>Actual 2009</i> %
Age at the end of the year			
18 – 20 years	0.07	0.05	0.04
20 – 29	22.62	21.86	21.62
30 – 39	30.48	28.75	27.25
40 – 49	19.86	22.04	24.59
50 – 59	22.94	23.54	23.20
Over 60	4.03	3.76	3.30

Staff complement per division

<i>Division</i>	<i>2011</i>	<i>2010</i>	<i>2009</i>
Corporate division ¹	2 986	2 389	2 461
Distribution	18 879	17 384	16 716 ²
DSM	71	57	
Enterprise ³	n/a	n/a	3 097
Generation	9 853	9 537	10 833 ¹
Generation Nuclear	1 687	1 611	
Generation Primary Energy ⁴	186	164	
Group Capital	3 076	3 152	n/a
System Operations	295	285	270
Transmission (including Key Sales and Customer Service)	1 922	1 889	1 819
Treasury	79	79	
Total	39 034	36 547	35 196

1. Corporate division includes Finance, Human Resources, Corporate Services, Office of the Chief Executive and Eskom Development Foundation.

2. 2009 Demand-side Management numbers incorporated with Distribution.

3. Enterprises division restructured as Group Capital in 2010.

4. 2009 Primary Energy numbers incorporated with Generation.

Training

Training and development has always been a major focus in Eskom – to the extent that outside organisations make use of Eskom’s training facilities. Eskom has 26 training facilities of which 18 are primarily for artisan training. There are approximately 480 (2010: 530) training practitioners and 24 (2010: 28) technical instructors.

Eskom presented 6 118 courses throughout the year and achieved 297 889 (2010: 150 000) learner days.

These facilities, staff and programmes support the development of new and existing employees, in accordance with individual development plans, to ensure optimal performance in the work environment.

Total training investment per year (R millions)

	Total
2009 Actual	823
2010 Actual	758
2011 Actual	998

Corporate Affairs division

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Corporate Affairs division



Chose Choenu Divisional Executive: Corporate Affairs

Mandate

Stem the flow of negative media coverage in the short term and recover and turn around Eskom's image and reputation in the long term, while gearing Eskom's corporate communication machinery.

The Corporate Affairs division was formed in 2010, with the explicit task of focusing on the turnaround of Eskom's reputation that deteriorated significantly after the load-shedding incidents in 2008. The Corporate Affairs division is therefore being geared to address this mandate through effective communications, stakeholder engagement, advertising, public relations and marketing, internal communication and media relations activities.

Highlights	Challenges
<ul style="list-style-type: none"> • Moved Eskom's reputation from a negative RepTrak score of 40.5 in 2008 to a positive score of 54.44 • Managed reputational risks through its communication and emergency readiness for the 2010 FIFA World Cup™ • Created public awareness and achieved substantial megawatt savings through marketing campaigns that promoted demand-side management products such as solar water heaters and compact fluorescent lamps • Launched Operation Khanyisa – a national social marketing campaign partnering with several business organisations to change behaviour and encourage the reporting of illegal connections • Promoted public safety and the dangers of electricity and held 645 engagements in five regions • Initiated the "Nine City Tour" leadership dialogue with Eskom's chairman and chief executive, to strengthen stakeholder relationships • Encouraged two-way dialogue between leadership and employees through regular employee engagements, and introduced an internal chief executive blog • Highlighted energy efficiency and promoted science, innovation and technology through its flagship sponsorships, Eskom's Expo for Young Scientists, and the eta Awards • Launched the 49M national campaign in March 2011 • Seen small, yet significant improvements in media coverage as Eskom's strategy includes quarterly media "State of the System Addresses" and the annual and interim results announcements with key stakeholders. 	<ul style="list-style-type: none"> • Continued negative media coverage, despite a small yet significant improvement in media coverage • Changing the stakeholder experience by building stronger relationships and having a deeper understanding of customers' and stakeholders' needs • Evoking a cultural and paradigm shift among employees in terms of the role they all play as guardians of Eskom's reputation • Developing, driving and maintaining the ideal brand strategy and image to rebuild trust • Maximising corporate social investment initiatives • Sustaining behaviour and attitude change towards energy efficiency

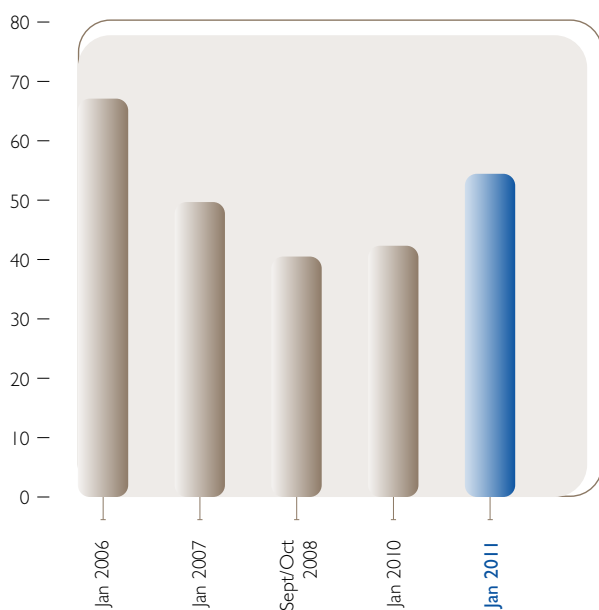
Corporate Affairs division continued

Future priorities

- Strengthen media relations and stakeholder engagement
- Refine emergency communication protocols
- Prepare for the hosting of the 17th United Nations Framework Convention on Climate Change (COP 17)
- Continue the momentum of the 49M campaign
- Improve reporting to senior managers: daily media assessments, weekly trigger documents and parliamentary reports
- Fully implement the nerve centre
- Finalise brand concept by year end
- Implement a CSI strategy in 2012
- Launch an electricity summit
- Launch a new customer magazine.

Benchmarking

RepTrak™ Pulse scores Eskom 2006 – 2011



RepTrak™ is a proprietary tool that was developed by the Reputation Institute to measure corporate reputations. It is grounded on the theory that reputations are emotional attitudes stakeholders have towards companies, and can be measured by assessing their degree of admiration, trust, “good feeling” and “overall esteem” for companies. The RepTrak™ model not only measures the health of a company’s reputation across stakeholders, countries and industries, but also examines which of seven key driver dimensions most influences the company’s reputation – as well as the level of support stakeholders provide companies.

Material issues

Regaining confidence



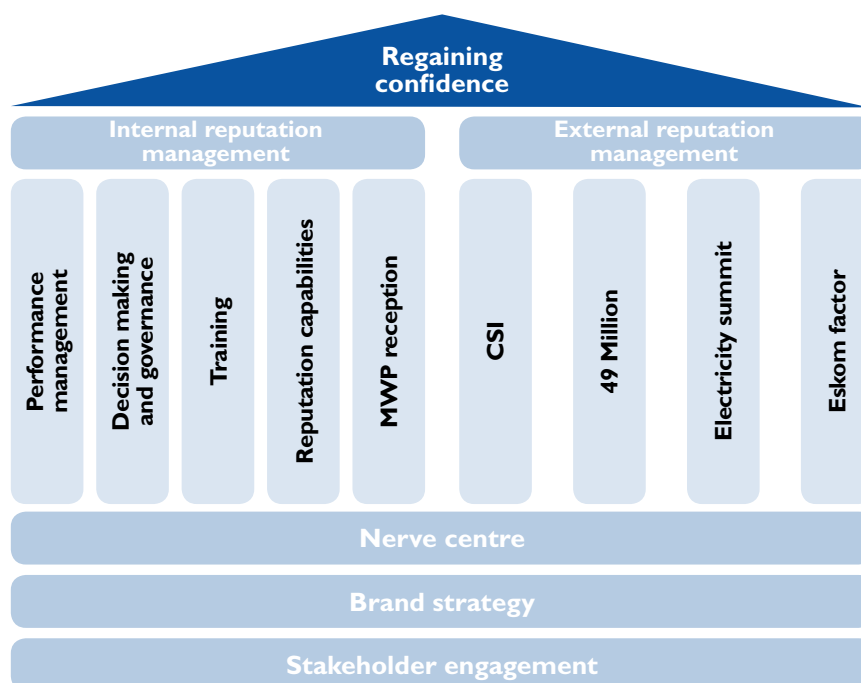
Corporate Affairs is geared for moving Eskom’s reputation from a 42.3 Reptrak score in 2010 to 60 in 2016, with the intention of restoring stakeholders’ trust and confidence and regaining Eskom’s position as one of the most reputable power companies globally by 2020.

This includes additional objectives:

- Manage stakeholder relations by forging stronger relationships with stakeholders through open dialogue and by understanding stakeholders by mapping their issues in a stakeholder matrix.
- Manage internal reputation and evoke a shift among Eskom employees about the role they play as guardians of Eskom’s reputation.
- Manage external reputation by positively profiling Eskom through various initiatives and consistent messaging, such as mobilising South Africa around the common goal of saving electricity for the future.
- Manage reputation risk by providing early warnings and co-ordinating pro-active responses.
- Develop the ideal brand strategy for Eskom to rebuild brand equity and trust and to ensure continued brand health.
- Turn Eskom’s reputation around by gearing up Corporate Affairs with the right skills and resources and by enhancing internal media and channels.

In regaining and rebuilding Eskom’s reputation, excellence in the way the company communicates is crucial. The approach is to ensure a pro-active, sustained, honest and transparent communication with internal and external stakeholders, using the best available channels. The integration of projects from a messaging, internal, media, branding and stakeholder perspective is integral to the success of the communication approach.

The plan to regain confidence centres around five distinctive building blocks:



Current performance

Stakeholder engagement

Reputation is derived from stakeholder perceptions. The key ambition of Eskom's stakeholder engagement initiative is to gain a deeper understanding of stakeholders and their issues and agendas.

In 2010, Corporate Affairs developed a stakeholder matrix and engagement plan. The matrix segments, groups, prioritises and assigns responsibilities to executives in terms of specific stakeholders and shapes the stakeholder engagement plan.

Broad groupings of stakeholders

- Authorisers – government (national, provincial and local spheres), parliamentary portfolio and select committees
- Enforcers – regulators
- Influencers – investors, suppliers, customers, lending institutions and, industry experts, academics, analysts (economic/business, environmental, political and social), organised labour, business organised interest group (broad and niche)
- Partners – internal stakeholders (board of directors, executive committee, management and employees), media.

Stakeholder engagements in 2010

- Nine province and nine city tours
- Interim results stakeholder engagements
- Investor roadshows
- Questionnaires to recipients of the 2010 annual report.

The primary objective in all these engagements was to share Eskom's corporate strategy and to listen to stakeholders' concerns and expectations.

Brand strategy

A strong and resilient brand is central to public confidence in Eskom. Corporate Affairs aims to take the Eskom brand into the top five on local and global brand league tables by 2020.

Nerve centre

This year Eskom established a pilot nerve centre. The nerve centre is an intelligence gathering and early warning unit for the day-to-day management of reputational risk. The purpose is to improve customers' experience of electricity supply and pro-actively communicate on issues important to stakeholders. Critical issues are fed into the emergency protocols process.

Internal reputation management

Introduced at the beginning of 2010, the Guardian concept is used as a thread through all internal campaigns and programmes. The concept is focused on empowering employees to be ambassadors of Eskom by instilling pride and passion in the Eskom brand. Guardian interventions help employees at all levels to work as teams, dedicated to safeguarding the assets that are vital to South Africa's electricity supply. Monthly interventions under the banner *Guardians Fly the Flag* aim to keep the spirit of the 2010 FIFA World Cup™ alive. Once a month, Eskom offices nationwide encourage employees to wear

Corporate Affairs division continued

their favourite sport shirts or outfits. Guardian Fly the Flag activations for Heritage Day, cancer awareness and HIV counselling and testing have been very successful.

The chairman and chief executive had extensive employee engagements across the country in this past year, focusing on the financial results and Eskom's new strategic direction.

The leadership network series is a monthly conversation platform for Eskom board members to engage with thought leaders on business trends and leadership topics. These sessions have been successfully subscribed to and have added value to the business.

A chief executive blog was launched last year as part of the new chief executive's 100-day plan. The blog gives employees an opportunity to engage more easily with the chief executive, regardless of their location or position in Eskom. The initial response was overwhelming with a few thousand postings per day. This has toned down since, and the blog has turned from many negative comments to more positive postings.

Corporate Affairs has developed a communication coaching programme to improve how senior management engages with employees, stakeholders and the media and how they lead in times of crisis.

Media relations

Detailed daily, weekly and monthly analysis of the media indicates a small yet significant change in Eskom's reputation. Eskom has increased its share of voice through regular "state of the system" briefings and the announcement of annual and interim business results. The media and the public will have better access to Eskom following the appointment of additional spokespersons conversant in the official South African languages.

External reputation management

The key milestone is to position Eskom positively in the public domain, to rebuild trust and confidence.

There are four elements to this building block of the plan for regaining confidence:

- The corporate campaign
- Reviewing the corporate social investment strategy

- Developing the Eskom Factor – a report that details Eskom's social, economic and environmental footprint in South Africa
- Rolling out an electricity summit.

The corporate campaign consists of two strategies: active leadership and active partnerships. Active leadership demonstrates Eskom's leadership in meeting the electricity challenges in the country – this campaign is called "Eskom at work" and tells the public what Eskom is doing to maintain a stable electricity network. Active partnerships are aimed at creating partnerships with all South Africans to become more energy efficient – this is the 49M campaign.



The Deputy President and the Ministers of Energy and Public Enterprises launched the 49M campaign on 18 March 2011.

Major campaigns run in 2010/11

49M campaign

49M is an internal and external Eskom campaign, supported by government, to encourage the more than 49 million South Africans to embrace energy saving as a national culture for a sustainable future.

Corporate South Africa, retailers, communities, celebrities and ordinary South Africans are being asked to “remember their power” to influence others by switching off appliances when they are not in use.



Eskom Development Foundation

Objectives:

- Create public awareness of the Foundation's contribution to capacity building in small, medium and micro enterprises
- Create public awareness of the Foundation's contribution to growing the skills of young people in further education and training colleges in scarce technical skills
- Communicate Eskom's contribution to integrated environmental learning in schools
- Communicate Eskom's contribution to sound systemic education development in schools around Eskom new build sites.

Activities:

- Business investment competition (including Simama Ranta enterprise education schools competition)
- Business Opportunities Expo
- Enterprise development programme
- Further education and training college programme
- Energy and sustainability programme for schools
- Whole-school development programme (early childhood development, primary school development, nutrition)
- Women's Day event.



The Business Opportunities Franchise Expo is sponsored by the Eskom Development Foundation every year.

Demand-side management campaign

Objectives:

- Make all sectors of South Africa concerned about their electricity consumption and motivate them to take steps to reduce it
- Aid in building a culture of energy efficiency
- Accelerate the hardwiring of energy efficient technologies into the relevant processes.



Corporate Affairs division continued

Activities:

- In the residential market the immediate focus was on the Power Alert 2010 campaign, the promotion of solar water heating and the reinforcement of the benefits of energy efficient lighting
- In the commercial and industrial sectors: lighting; heating, ventilation and air conditioning; hot water solutions (solar water heating, heat pumps, energy and water saving shower heads); process optimisation (international process benchmarking and optimisation) and compressed air technologies.



The demand-side management exhibition stand travels across the country to educate consumers about energy efficiency.

Public safety

Objectives:

- Reduce public fatalities and injuries by 20%
- Raise awareness and educate members of the public on the dangers of misusing electricity.

Activities:

- 645 events held in five regions over 43 days: three community shows per day in five regions, totalling 15 events per day
- Electricity Safety Week: 129 community events and 45 women's groups visited
- Programme reached nearly 800 000 people
- School visits to Cape Town, Lenyenye, KwaZulu-Natal, Bloemfontein and Makhado.

Energy losses programme

Objectives:

To influence the voluntary behaviour of South African consumers to be legal electricity users by:

- Reducing the number of illegal electricity consumers
- Mobilising South Africans to report and prevent illegal connections
- Building partnerships to deal with illegal electricity consumption.

Activities:

- Operation Khanyisa was launched on 26 October 2010 in Johannesburg
- Five pilot sites were launched, attended by print and broadcast community media
- The reporting of illegal connections has increased tremendously and media coverage, billboards and face-to-face interactions have raised the awareness.





In its 30th year, the Eskom Expo for Young Scientists showcased science projects selected from more than 50 000 learners across South Africa. 762 finalists, with 536 projects, from 26 regions were joined by learners from Reunion and Thailand.

The Best Female Project prize went to grade 12 learners Kulani Mayimele and Reitumetse Makhetha of Welkom High School. The prize as the overall winners of the four Eskom categories secures them a trip to an international science fair. They developed a system of healthcare technologies, with the main focus on computer programmes to help clinics manage congestion. The learners created an electronic dispensary and medical library, which will provide relevant information to patients.

The Best Rural High School was Mahushhe Senior Secondary in Mpumalanga province Ehlanzeni and the Best Rural Primary School was Kabega Park Primary in Port Elizabeth. Each school received mobile science kits valued at R25 000.

Sponsorships

eta Awards

In their 21st year, the eta Awards, sponsored by Eskom and endorsed by the Department of Energy, recognise individuals and companies in nine categories who are using energy efficiently, from commercial and industrial applications for mines and factories, through to power-saving ideas for lower-income areas and homeowners.



Jana Jordaan was the winner of the Young Innovator of the Year award at the 2010 eta Awards from Eskom Board member Daniel Dube and Eskom chief executive Brian Dames.

Eskom Expo for Young Scientists

The Eskom Expo for Young Scientists, a non-profit organisation and the biggest science fair competition in South Africa, fosters a love for science, innovation and technology among the youth. The competition provides opportunities for young people to become original and innovative designers of scientific projects, creates a platform for growth, and serves as a catchment for future scientists, researchers and engineers.



Eskom
Generation

Gourikwa
Power Station



Generation Business

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GRI Reference

EU6

EN18

EN13

EU30, EN20,
EN16, EN17



Generation Business



Thava Govender Acting Chief Officer and Divisional Executive: Generation division

Mandate

Efficiently operates the existing generating capacity, and ensures world-class engineering solutions.

Highlights

- Avoided load shedding in the past year
- Powered the 2010 FIFA World Cup™ over the winter period – the coldest winter in the last 20 years
- Kept water use within target across the fleet of power stations
- Installed gaseous emission monitoring systems measuring SO₂, NO_x and CO₂ on one unit/stack of each coal-fired power station
- The water use performance stabilised. Water used as part of the process to generate electricity increased slightly from 1.34^{RA} to 1.35^{RA} litres/kWh sent out (see details of actions taken on page 154).

Future priorities

- 2% reduction in unplanned capability loss factor of the power stations over three years
- Zero harm to people, plant and environment remains a key focus area which will be addressed through the continuation of programmes to enhance safety and environmental performance
- Implementation of energy efficiency programmes across the Eskom fleet.

Challenges

- The return to service of Duvha unit 4 turbine and generator which was extensively damaged in an incident in February 2011. Estimated recovery period is 12 to 18 months
- Security of supply as Generation balances the need for planned maintenance on ageing plant with the demand of a growing economy
- Particulate emissions performance is still a challenge even though it decreased from 0.39 to 0.33kg/MW sent out compared to the previous year
- Coal-related energy losses have increased substantially since 2008, contributing to the lower availability of some coal-fired plant to meet demand
- Improved performance of Koeberg nuclear power station as measured by the INPO index curtailed by two significant forced outages immediately following a refuelling outage.

Financial results – Generation Business

<i>R millions</i>	2011	2010
Total revenue	63 549	49 732
Profit for the year	3 870	192
Total assets	177 680	131 039
Capital expenditure including capitalised interest	40 595	40 484

Overview

The Generation Business portfolio was established in 2008. It is a diverse portfolio encompassing the operations and engineering of the existing power stations, the supply of primary energy (coal, liquid fuels and nuclear fuels), the supply of water; the project development, project management, construction and commissioning associated with the return-to-service (Camden, Grootvlei and Komati) and new power stations which are being commissioned.

The Generation Business portfolio has since been unbundled. Its divisions have been re-aligned to give effect to the new Eskom strategy and operating model, subject to shareholder approval.

Eskom aims to ensure no supply interruptions due to plant unavailability in support of national government's social and economic imperatives.

Eskom's supply objectives

- Aspire to an energy availability factor of 90% (which will put Eskom's generating capability among the capabilities of the top five power generating utilities in the world)¹
- Enhance the generating fleet's availability of supply by reducing forced outages by 2% in three years
- Conduct all planned maintenance by finding innovative ways to create the required outage space, aided by demand-side reductions and non-Eskom generation capacity coming on line.

Energy availability turnaround programme

A turnaround programme focusing on the key levers that will impact on the energy availability factor will be implemented and rolled out across the fleet, with transparent target setting and Eskom-wide accountability that links directly to Eskom's energy availability factor aspiration. The programme will include but not be limited to the initiatives described below. The 84.2% energy availability factor aspiration for 2012 is consistent with the plan's assumptions about balancing supply and demand.

- Improve plant operations, which will result in reducing variability and duration of start-up times (by proper recommissioning, for

example); run units at contracted load (by improving adherence to guidelines and instructions); reducing losses due to trips by eliminating human error; and optimising auxiliary power usage.

- Accelerate optimisation of control and instrumentation refurbished units; improve co-ordination and co-operation between the station, the Group Capital division and other contractors.
- Improve preventive maintenance to reduce the number of planned maintenance activities, reduce the duration of planned short outages and facilitate better planning of opportunity work.
- Optimise and improve the execution of big planned outages to reduce their duration.

Power station performance

Overall Generation performance deteriorated in 2011 compared to the previous year. The main contributing factors to the deteriorating performance were the performance of the return-to-service stations (stations that were mothballed, refurbished and re-commissioned), the effects of poor coal quality on critical plant components, an ageing plant that requires substantially more maintenance in a capacity constrained environment and major energy loss events that occurred at the Duvha, Kriel and Camden power stations. Like in previous years, boiler tube failures were the single biggest contributor to the total unplanned energy losses in the Generation division.

Koeberg's performance was negatively impacted due to two consecutive forced outages following refuelling outage 118. The first was due to a design tolerance error which emerged during re-commissioning, following a turbine retrofit. The second, three weeks later, was due to failure of a newly reloaded nuclear fuel assembly.

Incident at Duvha power station

On 9 February 2011, the 600MW unit 4 at Duvha power station was taken off load for a statutory turbine test. The protection on the unit failed, causing severe mechanical damage and starting a fire, which was rapidly brought under control by the power station's fire team.



The damage to the 600MW unit 4 at Duvha power station is being assessed and the clear-up operation is in progress.

¹. In terms of the McKinsey database – Power Gauge.

Generation Business continued

Extensive mechanical damage was caused to the turbo generator. More specifically the damage was contained to the high-pressure turbine, intermediate pressure turbine, the two low-pressure turbines as well as the generator and exciter. There has also been some damage to civil and building structures due to flying debris.

The repair process will take approximately 12 to 18 months. An independent investigation is underway to determine the root cause of the incident after which stripping will commence in order to repair and return the unit to service.

Environmental performance

The Generation division has not met its relative emissions target for 2011 but relative emissions improved from 0.39^{RA}kg/MWh sent out in 2010 to 0.33^{RA}kg/MWh sent out. Plant failures, specifically dust handling plant, and sulphur trioxide plant have contributed significantly to emissions. Several scheduled maintenance opportunities had to be postponed or cancelled because of the prevailing network constraints. A comprehensive air quality strategy to reduce emissions was approved by Eskom's board this year. Refurbishment is underway at Matla and Kriel and fabric filter plant retrofits are in an advanced planning stage.

Generation Business has managed to meet its relative water consumption targets due to sustained focus on areas for improvement. Legal contraventions have increased due in part to the inclusion of all ground water contaminations as legal contraventions in the division's register.

Establishment of the Power Plant Engineering Institute

A Power Plant Engineering Institute will build power plant engineering capabilities and is a response to meeting South Africa's future energy needs, and the needs of the Southern African region. The institute will build capacity in universities, creating and sustaining a flow of qualified engineers in areas relevant to the power industry. Eskom's pro-active role in building new capacity will also bring with it the opportunity to grow a new power plant service industry, which will need these engineering skills at all levels. Preparation work on establishing the institute is advanced, and the first programme will start in 2012. Eskom plans to roll out similar initiatives for its Transmission and Distribution divisions.

Stakeholder engagements

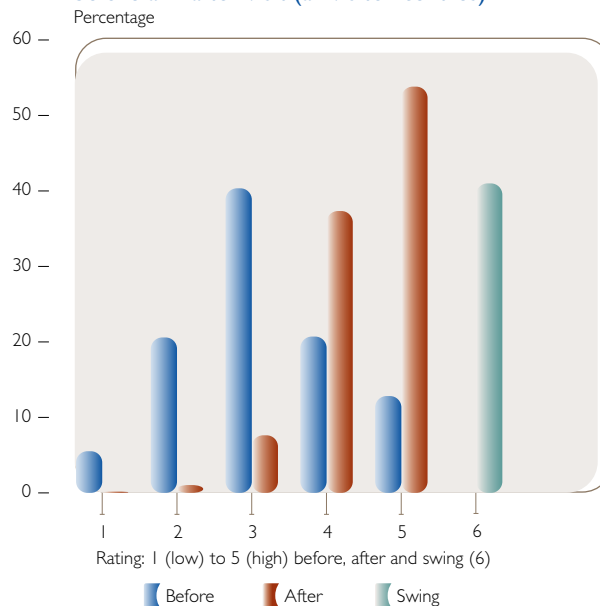
Generation Business has continued to build and maintain sustainable relationships with a range of stakeholder groups at power stations and visitor's centres. Participation in the Mpumalanga Eskom forum

has strengthened relationships at provincial and local governmental levels and has given Eskom an opportunity to discuss issues of mutual interest.

A memorandum of understanding was signed with the Department of Water Affairs, and quarterly meetings are held to discuss common issues such as efficient water use at the power stations.

Generation division's visitors' centres host different stakeholder groups daily. More than 33 000 people visited the centres at Drakensberg, Koeberg, Palmiet, Ingula, Ankerlig and Lethabo power stations during 2011. More than 150 000 visitors have been exposed to the Eskom story since 2007. Statistics evaluating visitors' perceptions showed a 42% swing towards a more positive view of Eskom after a visit.

Perception of Eskom before and after visit (all visitor centres)



Future focus

Five strategic shifts have been targeted in the Generation Business in the next three years:

1. Pursue an energy availability factor (EAF) of 90%.
2. Energy efficiency – reduce power plant consumption.
3. Reduce carbon footprint – investigate co-firing coal-fired power stations with biomass, thereby reducing coal usage by 10%.
4. Operational excellence – Back2Basics in the policies, processes and systems that govern the operation and maintenance of power plants.
5. Financial excellence – 10% reduction in operating costs.

Generation Coal and Peaking division

Mandate

Optimally operate and maintain Eskom's local non-nuclear electricity generating assets over their full plant lifecycle.

The Generation Coal and Peaking division operates 26 power stations:

- 13 coal-fired power stations
- 4 gas/liquid fuel turbine stations
- 6 hydro-electric stations
- 2 pumped-storage stations
- 1 wind energy station.

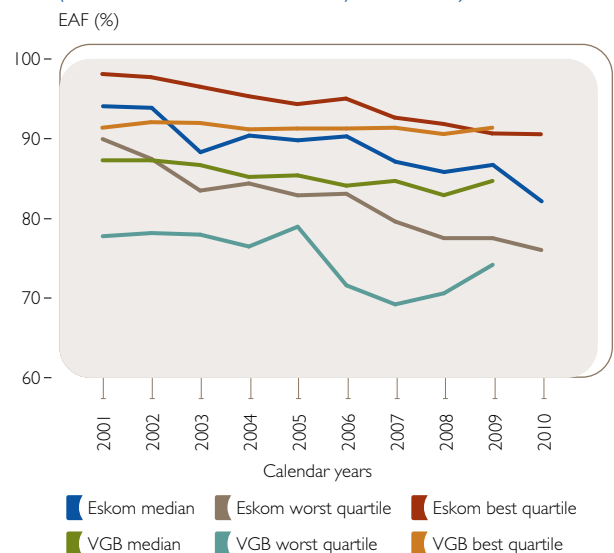
Highlights	Future priorities
<ul style="list-style-type: none"> • Water utilisation across the fleet of power stations is within target • The integrated Generation control centre (IGCC) was successfully commissioned to centrally monitor the production output of all power stations • Lost-time injuries improved by 28% compared to previous year • Matimba, Hendrina and Generation environmental head office have successfully completed their respective phase 2 ISO 14001:2004 audits • The first annual environmental practitioner awards were held • Gaseous emission monitoring systems measuring SO₂, NO_x and CO₂ were installed on one unit/stack of each coal-fired power station. 	<ul style="list-style-type: none"> • Increased operational efficiency in Generation and the implementation of the operational excellence programme for management and operation of existing power stations • ISO 9001 (quality) certification for all Generation business units. Compliance with and, where appropriate, certification to ISO 14001 (environmental management standards) • Improve particulate emissions performance.
Challenges	
<ul style="list-style-type: none"> • Particulate emissions performance is still a challenge even though relative emissions decreased from 0.39kg/MWh sent out to 0.33kg/MWh sent out compared to the previous year • Increased number of trips at power stations • Turnover of environmental practitioners at power stations • ISO certification not achieved for all stations • Unauthorised water releases. 	

Benchmarking

Generation has benchmarked its coal plant performance over many years against some of its major European counterparts. Eskom's plant profile and performance aligns closely with that of VGB (Association of Large Boiler Operators). The energy availability of Eskom's coal-fired units is benchmarked against those of VGB's members. VGB is a European-based technical association for the electricity and heat generation industries, with 478 member organisations from 34 countries, representing a collective capacity of 520GW.

The energy availability performance of Eskom's coal-fired generating units in comparison to VGB member performance (excluding Eskom) compares as follows:

Benchmarking EAF All Coal Sizes
2001-2009 120 VGB units (Excl. Eskom)
(benchmark data available only until 2009)



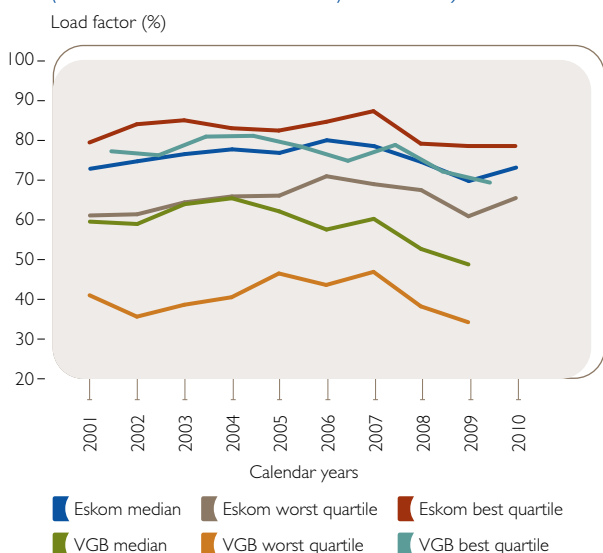
Generation Business continued

Generation Coal and Peaking division continued

The historical performance gap between Eskom and VGB is reducing to the extent that in 2009 the VGB best quartile surpassed Eskom's performance and the same was predicted in 2011 for the median and probably the worst quartile. Eskom's declining performance trend is due to increased operating pressure on the electricity production infrastructure and other operating factors outlined in the performance overview on page 145.

Eskom's coal-fired units have generally operated at higher load factors than VGB's members. This means they are working harder. The higher load factor indicates higher energy produced, compared to lower plant availability.

**Benchmarking load factor All Coal Sizes
2001-2009 120 VGB units (Excl. Eskom)**
(benchmark data available only until 2009)



Case study

Reopening of Camden power station

On 23 October 2010, President Jacob Zuma officially reopened Camden power station. It was mothballed in 1990, and is the first power station in the world to be brought back on line after such a long period of inactivity.

Camden power station is near Ermelo in Mpumalanga province. The first unit was commissioned in April 1967. Camden was the starting point of the national electricity grid that interconnects the whole of South Africa today. In 1988, half the station was mothballed, and the rest in 1990 as there was surplus electricity in South Africa at the time.

In response to the steady increase in demand for electricity, in 2003 Eskom's board of directors decided to return three power stations to service – Camden, Grootvlei and Komati. Camden's return to service started in 2005 and, at 21:46 on 19 April 2009, the power station had all eight units on load for the first time in 20 years.

Camden has added 1 430MW net generating capacity to the national electricity grid. Nearly 3 000 people were employed at the peak of the project, and no fatalities or major incidents were recorded throughout the return-to-service programme. The station is now equipped with fabric filter plants on all eight units, which remove almost all the dust particles in the emitted gases.

Returning Camden to service was the fastest way of adding new capacity to the grid and at less cost than building a new power station. It paves the way for the final return to service of Grootvlei and Komati power stations.

A feature of Eskom's return-to-service projects has been their impact on the local economies near the power stations. "We have ensured that local opportunities are shared by contracting specific percentages for empowerment groups; and that local workers, in particular around project sites such as this one, are trained to become employable mobile labour," said Mpho Makwana, Eskom's chairman.

The opening of Camden is a testament to the turnaround of the electricity sector in South Africa. Eskom celebrates its ingenuity in resuscitating such old technology, while building the latest power station that technological advancements can offer:



President Jacob Zuma is welcomed to Camden by Mpho Makwana, Eskom chairman.

Material issues

Boiler tube failure recovery



The boiler tube failure recovery programme was established almost three years ago. There was a 25% reduction in boiler tube failures and associated load losses in the first year, and further marginal improvements year on year. In 2011 however, the number of failures was high compared to 2010. One of the challenges is reduced maintenance due to running the power station units for extended periods to meet demand.

The boiler tube failure recovery programme is formally assessed regularly, both internally and externally. Comprehensive action plans are developed and implementation progress is monitored continuously.

Integrated generation control centre established



The integrated generation control centre was officially opened on 16 August 2010. It started, in February 2008, as a “war room” following the load-shedding incidents in that year. The main aim of the centre is to monitor plant performance and plant risks centrally,

including intensified monitoring, tracking and analysing of data and trends for pre-emptive decision making to balance supply and demand.

Over the past three years, Generation has navigated a number of challenges to achieve zero load shedding and a successful 2010 FIFA World Cup™.

Atmospheric emissions

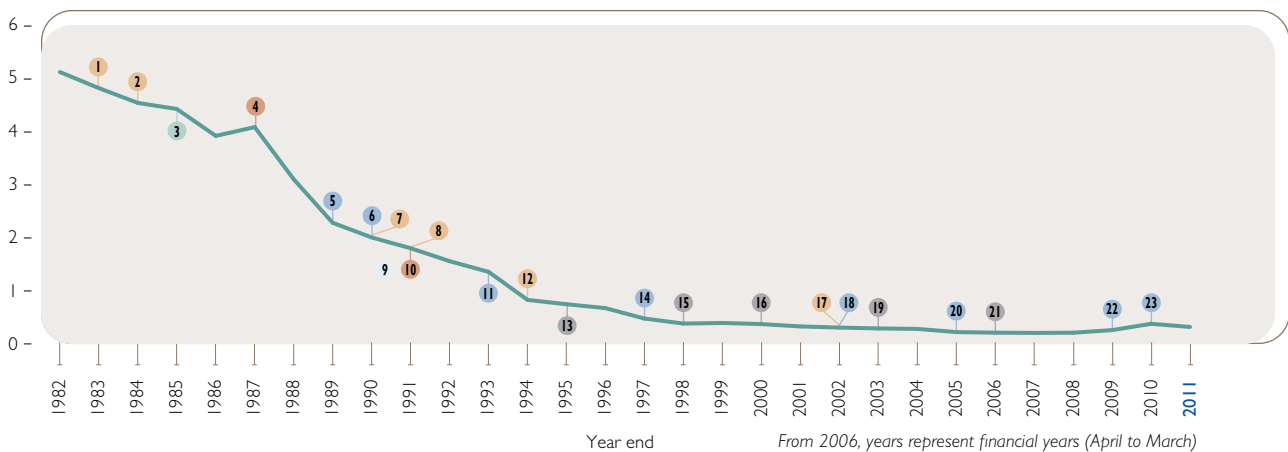


Reducing particulate emissions from coal-fired power station stacks has been a focus in Eskom since the early 1980s. Eskom has achieved significant reductions in the last 30 years through various particulate abatement technologies, such as electrostatic precipitators. Their efficiency has been further enhanced through sulphur trioxide flue-gas conditioning, skew-flow technology and modern control systems. Some power stations have been retrofitted with pulse fabric filter equipment.

Relative emissions have been increasing since 2007/8, but the trend reversed in 2010/11 again, with a slight improvement in emissions' performance.

Relative emissions roadmap

kg/MW hour sent out



- 1 Matla in
- 2 Duvha in
- 3 Completion of five-year enhancement investigation
- 4 Start decommissioning Simunye
- 5 Kriel SO₃ in
- 6 Hendrina SO₃ in
- 7 Tutuka and Lethabo in
- 8 Matimba in
- 9 Colenso, Klip, Umgeni, Hexriver, Vaal, Vierfontein, Westbank and Wilge out
- 10 Camden, Grootvlei, Komati, Ingagane, Salt River out
- 11 Matla SO₃ in
- 12 Kendal in
- 13 Duvha UI-3 bagged
- 14 Kendal SO₃ in
- 15 Hendrina 6-10 bagged
- 16 Arnot 4-6 bagged
- 17 Majuba in
- 18 Duvha 4-6 SO₃ in
- 19 Hendrina 1-5
- 20 Lethabo SO₃ in
- 21 Arnot 1, 2 and 3 units bagged
- 22 Matimba SO₃ in
- 23 Kriel, Matla SO₃ plant refurb

Generation Business continued

Generation Coal and Peaking division continued

Ambient air quality monitoring

Eskom has monitored ambient air quality regionally since the late 1970s. An extensive monitoring network provides key information for future strategic planning processes, compliance with standards and research activities.

Eskom currently operates 14 air quality monitoring stations. Most monitor sulphur dioxide, nitrogen oxide, fine particulate matter and meteorological parameters such as wind direction, wind speed and temperature. Five stations also monitor ozone. Although sites are influenced by many factors, most stations are strategically located to specifically monitor ground level pollutants from power station emissions. The stations are close to power stations, in residential areas and in remote areas to measure regional air quality, depending on the specific objectives of each station. When a new power station is built (Ankerlig, Gourikwa, Medupi, Kusile) or a mothballed power station returned to service (Camden, Grootvlei, Komati), an air quality monitoring station is set up before commissioning the power station so that baseline air quality in the area can be assessed and the impact of the power station on air quality measured. When possible, air quality monitoring stations are sited in populated areas to best assess the impact of emissions on people's health.

 See internet report for results
www.eskom.co.za/annreport11/007.html

Water



Water is a scarce resource in South Africa, and it is critical to Eskom's business. Eskom uses about 2% of South Africa's national freshwater resources, which is abstracted largely from government water schemes (dams).

For details on Eskom's long-term water strategy see Primary Energy division on page 105.

Ground water



Ground water contributes about 15% of the entire volume of water consumed in South Africa. Although Eskom does not utilise ground water, as a strategic water user and environmental management leader Eskom has to play a leading role in the protection of this valuable resource associated with its activities and therefore continues to implement and improve water and waste management measures to ensure that contamination of groundwater around the power stations is avoided.

Eskom studies in 2011 have provided clarity on groundwater users and usage in the vicinity of power stations. Hydro-census reports will allow Eskom to assess the importance of ground water in an area and classify aquifers from a user perspective. All the power stations have good waste management procedures, significantly reducing ground water contamination and the pollution of aquifers.

Environmental impact assessments



Environmental impact assessments play a critical role in informing decision making on Eskom's new build programme and modifications to existing plant, such as waste disposal sites and the extension of ash dams. Environmental authorisations are issued by the Department of Environmental Affairs.

Environmental impact assessments are ongoing for a nuclear power station. In 2011, Generation received several environmental authorisations on other environmental impact assessments, including a brine management project, a landfill site, a general waste disposal site, the closure of a waste disposal site, and infrastructure associated with capacity expansion projects, such as the Kusile rail project, the Medupi landfill site and the cemetery at Ingula.

Environmental management systems



Good progress was made towards achieving ISO 14001 certification in Generation division. Contractual issues resulted in not all stations being able to complete their phase 2 audits and achieve certification.

Partnering with non-government organisations



The Ingula partnership between Eskom, BirdLife South Africa and the Middelpunt Wetland Trust was formed at the time of the original Braamhoek (now Ingula) pumped-storage scheme environmental assessment process. The aim was to provide a forum for discussion and management decision-taking on conservation, social and environmental protection during construction and operation. The Ingula partnership has a steering committee that provides oversight, strategic direction and guidance. The steering committee is made up of Eskom senior management, a BirdLife South Africa trustee and a trustee from the Middelpunt Wetlands Trust.

The partnership also initiated the Ingula advisory conservation committee, which consists of Eskom, Birdlife South Africa and Middelpunt Wetlands Trust staff working on the project, and representatives from various local and provincial departments as well as NGOs, the national Department of Agriculture, the KwaZulu-Natal and Free State environmental departments and the Ekangala Grassland Trust. This committee is very involved with day-to-day operations on site, and feeds back into the partnership steering committee.

The record of decision led to the purchase of a number of farms that will make up a nature reserve around the two storage dams. The “Ingula reserve Bedford wetland conservancy” consists of

8 500 hectares of former agricultural land, scarps, rocky outcrops and wetlands. The pumped storage scheme involves the building of two dams – separated by about 450m of altitude, and the top dam will be built close to several excellent high altitude wetlands.

Significant achievements this year

- Ongoing successful alien vegetation eradication programme
- Erosion rehabilitation plan
- Baseline studies on the geohydrology, peat and inter-basin transfer of fish on site gaps
- Invertebrate study and veld conditioning study
- The project also achieved ISO 14001 certification.

Current performance

Generation plant performance

Measure	Description	Target 2011	Actual 2011	Actual 2010	Actual 2009	
Unit capability factor (UCF) (%)	UCF measures the plant availability and provides an indication of how well the plant is operated and maintained.	87.50	85.87^{RA}	85.86	86.07	●
Energy availability factor (EAF) (%)	EAF measures plant availability (UCF above), plus energy losses not under the control of plant management (external) and internal non-engineering constraints.	86.50	84.59^{RA}	85.21	85.32	●
Unplanned automatic grid separations (UAGS/7 000 hours) (number)	UAGS measures the reliability of service provided to the electrical grid and the number of supply interruptions per operating period (7 000 hours on average).	2.80	3.62	2.80	2.93	●
Unplanned capability loss factor (UCLF) (%)	UCLF measures the lost energy due to unplanned production interruptions resulting from equipment failures and other plant conditions.	4.50	6.14^{RA1}	5.10 ^{RA}	4.38 ^{RA}	●
Planned capability loss factor (PCLF) (%)	PCLF – planned energy loss is energy that was not produced during the period because of planned shutdowns or load reductions due to causes under plant management control.	8.00	7.98	9.04	9.54	●
Generation load factor (GLF) (%)	GLF generation load factor (net) indicates the extent to which the generation fleet was loaded on average over the year to produce the energy demanded from the power stations.	66.90	66.39	66.20	67.02	●

1. Grootvlei unit 4's normal 12-month performance confirmation period was extended to 21 months due to technical constraints and hence was excluded from the above performance report.

RA – Reasonable Assurance provided by the independent assurance provider (refer page 200).

Generation Business continued

Generation Coal and Peaking division continued

While some power stations have achieved world-class technical performance, the older and return-to-service (RTS) stations are not performing well and resulted in Eskom not meeting all its year-end targets.

Although the generation load factor shows a slight negative trend over the past few years, the maximum demand, together with the greater need for maintenance, has put the available supply capacity under pressure.

The poor performing power stations are in their mid-life and require more maintenance, and with low reserve margin, less time is available to do essential maintenance on these power stations. The quality of coal has deteriorated over the past few years and has significantly affected the performance of Duvha, Matla, Tutuka and Arnot. This situation directly contributed to the high particulate emissions. Duvha, however, has experienced improvements in the last quarter due to higher quality of coal.

The generation recovery process started in 2008/09 resulted in improved availability and reliability of those plant areas that were given priority then. However subsequently, other plant areas like coal handling, milling plant, air heaters and fuel gas cleaning plant (affecting particulate emissions) have shown a significant deterioration in performance mainly due to wet and poor coal qualities.

In January 2011 Eskom experienced a serious incident at the Duvha power station that resulted in extensive damage to the 600MW unit 4 turbine and generator. The cause of the incident is currently being investigated and it is estimated that the repair process will take between 12 to 18 months.

Koeberg's overall plant performance, as measured by the INPO index, improved through 2010, but has declined during the closing months due to two consecutive forced outages following refuelling, including the replacement of a defective fuel rod in unit 1.

Despite these challenges, Generation has managed to avoid load shedding since April 2008.

As reported in the previous year, the low reserve margin in the South African electricity supply system has, since 2006, resulted in shorter windows of opportunity to perform essential maintenance on generating units, and to schedule major refurbishments required by the older power stations.

Eskom's total installed capacity from liquid fuel-fired stations (open-cycle gas turbine stations) is 2 426MW. These plants ensure supply to the Western Cape province when Koeberg nuclear power station is not operational, when there is a general shortage of generating plant to meet demand or when there are problems with the transmission lines to the Western Cape.

Because of the high cost of generation from the liquid fuel-fired stations, Eskom restricts their use to peak hours, during emergencies or in periods of transmission constraints to the Western Cape. In 2011, Eskom contained their usage and they produced only 200GWh.

There are specific challenges around fuel procurement and storage. Procurement is affected by the uncertainty about the timing and extent of fuel usage, because these are back-up plants. Storage is affected by suppliers' requirement of long lead times for orders of liquid fuel. Maintaining a stock of fuel is one way of overcoming this challenge. But this comes at a cost to working capital, and Eskom regularly reviews the stock levels required.

The biggest drivers of the cost of fuel are the price of oil and the exchange rate, which resulted in significant price fluctuations. Overall, the average fuel price for 2011 increased by 12.5% compared to 2010.

Consumption increased from the very low usage in 2010 because of an overall increase in demand for electricity and the decreased availability of the baseload power stations (including nuclear).

<i>Liquid fuel usage</i>	2011	2010	2009
Diesel and kerosene (million litres)	63.6 ^{RA}	16.1 ^{RA}	28.9 ^{LA}

RA – Reasonable assurance provided by the independent assurance provider (refer page 200).

LA – Limited assurance provided by the independent assurance provider (refer page 200).

<i>Environmental and safety performance indicators</i>	<i>Target</i>	<i>2011</i>	<i>2010</i>	<i>2009</i>	
Water used at power stations (ML) ¹	n/a	327 252	316 202	323 190	
Specific water consumption (L/kWh sent out) ²	≤1.35	1.35 ^{RA}	1.34 ^{RA}	1.35 ^{RA}	●
Nitrous oxide (N ₂ O) (t) ³	n/a	2 906	2 825	2 801	
Carbon dioxide (CO ₂) (Mt) ³	n/a	230.3 ^{RA}	224.7 ^{RA}	221.7 ^{RA}	
Sulphur dioxide (SO ₂) (kt) ³	n/a	1 810 ^{RA}	1 856 ^{RA}	1 874 ^{RA}	
Nitrogen oxide (NO _x) as NO ₂ (kt) ³	n/a	977 ^{RA}	959 ^{RA}	957 ^{LA}	
Relative particulate emissions (kg/MWh sent out) ⁴	<0.26	0.33 ^{RA}	0.39 ^{RA}	0.27 ^{RA}	●
Particulate emissions (kt)	n/a	75.84 ^{RA}	88.27 ^{RA}	55.64 ^{RA}	
Ash produced (Mt)	n/a	36.22 ^{RA}	36.01 ^{RA}	36.66 ^{LA}	
Ash sold (Mt)	n/a	2.0 ^{RA}	2.0 ^{RA}	2.1	
Ash recycled	n/a	5.5% ^{RA}	5.6% ^{RA}	5.7%	
Ash disposed of on Eskom ash dumps and dams (Mt)	n/a	34.16 ^{RA}	33.89 ^{RA}	34.56	
Number of environmental legal contraventions (number) ⁵	n/a	41	33	64	
Number of environmental legal contraventions reported in terms of Eskom's operational health dashboard (number) ⁵	0	1	0	7	●
Materials containing asbestos disposed of (tons) ⁶	n/a	232.4	209.8	2 879.7	
Material containing polychlorinated biphenyls (PCBs) thermally destructed (tons)	n/a	3.1	0.9	0	
Lost-time incident rate (index) ⁷	0.20	0.36	0.50	0.34	●

RA – Reasonable assurance provided by the independent assurance provider (refer page 200).

LA – Limited assurance provided by the independent assurance provider (refer page 200).

1. Includes water used at Koeberg, Camden, Komati and Grootvlei power stations.

2. Volume of water consumed per unit of generated power from coal-fired power stations sent out, excluding Komati and Grootvlei power stations (these are not in full commercial operation).

3. Calculated figures based on coal characteristics and the power station design parameters. SO₂, CO₂ and NO_x emissions are based on coal analysis and using coal burnt tonnages. For 2010 and 2011, this includes Camden, Grootvlei and Komati and the gas-turbine power stations as well as oil consumed during power station start-ups and for the underground coal gasification pilot (flaring).

4. The overall particulate emission performance figure is based on individual coal-fired power station performance. For certain power stations, emission figures are based on best estimates. Excludes Grootvlei and Komati coal-fired power stations as these are not yet in full commercial operation.

5. Under certain conditions, contraventions of environmental legislation are classified in terms of the Eskom OHD index. These include instances where censure was received from authorities, non-reporting to authorities as may be legally required, non-reporting in Eskom, a repeat legal contravention, or when the contravention was not addressed adequately. Divisional executives can escalate any significant environmental legal contravention to the OHD.

6. Quantities of waste disposed of at registered waste sites.

7. Lost-time injuries improved from the previous year. Although none of the 46 incidents resulted in an employee fatality, sadly there were three contractor fatalities in the past three years.

Generation Business continued

Generation Coal and Peaking division continued

Atmospheric emissions

The relative particulate emissions improved this year to 0.33^{RA}kg/MWh sent out (0.39^{RA}kg/MWh sent out). The performance does not meet Generation Division's target but is progress resulting from initiatives put in place to improve performance.

This was primarily due to lower emissions at Kriel and Matla power stations. In 2010 both of these stations operated without the sulphur trioxide plant which was out for refurbishment for several months. This resulted in very high emissions for that period which impacted on the overall Generation performance. In addition to this refurbishment there has been a focus on the dust-handling plants at Kriel and unit 2 at Matla. Several stations replaced bags and Matimba power station installed a sulphur trioxide plant and continued to perform well in 2011.

Despite all efforts to improve the performance of pollution abatement equipment, poor coal quality, specifically at Matla and Duvha, continues to limit progress. The postponement of outages and reduced opportunity for maintenance adds to the challenge.

Minimum emission standards were published in terms of the National Environmental Management: Air Quality Act (Act No 39 of 2004) on 1 April 2010. These limits are for sulphur dioxide and nitrogen oxide and particulate emissions from power stations. The standards are effective immediately for new plant, and for existing plant in 2015. More stringent limits apply from 2020.

Eskom's air quality strategy details how emissions from power stations will be reduced to ensure compliance with the minimum emission standards, and planning has started for retrofits of abatement technology at some stations. Kusile power station is being constructed with flue-gas desulphurisation which will reduce the SO₂ emissions by approximately 90%.

Water

The specific water consumption of 1.35^{RA} L/kWh sent out (2010: 1.34^{RA} L/kWh sent out) (excluding the Grootvlei and Komati return-to-service power stations) was equal to the target of 1.35 L/kWh sent out.

The positive performance was the result of:

- Above normal rainfall which resulted in improved recovery of dirty water
- A power station dispatching programme that favoured water-efficient stations
- Maintenance and repair of water leaks
- Improved recovery as a result of reuse and recycling.

Water management and sewerage plant reviews were conducted at all coal-fired power stations to assess the status and effectiveness of water management practices, and to promote water conservation and water demand management. The reviews revealed various opportunities to reduce water consumption.

Waste

Generation disposed of 3.1 tons of PCB-contaminated material (2010:0.9) and 232.44 tons of asbestos (2010: 209.87 tons).

Ash

Of the approximately 36.2^{RA} million tons (2010: 36.01^{RA}) of ash produced at the coal-fired power stations 5.5%^{RA} (2010: 5.6%^{RA}) was re-used.

Some of the ash from Lethabo, Majuba, Matla, Kriel and Kendal is used for the production of cement and bricks. The remaining ash is safely disposed of and managed at ash dams and dumps next to the power stations. These ash disposal sites are continually rehabilitated to ensure the mitigation of fugitive dust.

RA – Reasonable Assurance provided by the independent assurance provider (refer page 200).

Generation Nuclear division



Clive le Roux Senior General Manager: Nuclear division

Mandate

Performs activities relating to the optimal operation and maintenance of Eskom's nuclear generation assets over their full plant lifecycle.

<i>Highlights</i>	<i>Future priorities</i>
<ul style="list-style-type: none"> • Successfully upgraded many control systems at Koeberg • Replaced the turbine centreline on unit 1 resulting in a slight increase in efficiency • Successfully completed ISO 14001 certification audit • Issued the environmental impact assessment for public review for the Nuclear-1 project • Acknowledgement in the policy adjusted IRP of 25 March 2011 of nuclear as a CO₂ mitigation strategy. 	<ul style="list-style-type: none"> • Reviewing the lessons learned from the Fukushima incident, and incorporating where applicable to Koeberg.
<i>Challenges</i>	
<ul style="list-style-type: none"> • Improved performance of Koeberg nuclear power station as measured by the INPO index curtailed by two significant forced outages immediately following a refuelling outage • Relatively high volume of low-level radiological waste due to major projects and dose reduction initiatives at Koeberg power station. 	

Generation Business continued

Generation Nuclear division continued

Overview

The Nuclear division provides nuclear energy from one nuclear plant in accordance with world-class nuclear safety and technical performance requirements.

The focus on reducing worker collective radiation exposure continues after the successes achieved in 2010. The internal contamination incident during outage 118 resulted in a policy change where no work will be conducted if the risk of internal contamination exists. No regulatory limits were exceeded as a result of this incident.

Nuclear undertook nuclear awareness activities through various media, community forum initiatives and communication strategies. The division also provided support to the government on the future nuclear programme.

Benchmarking

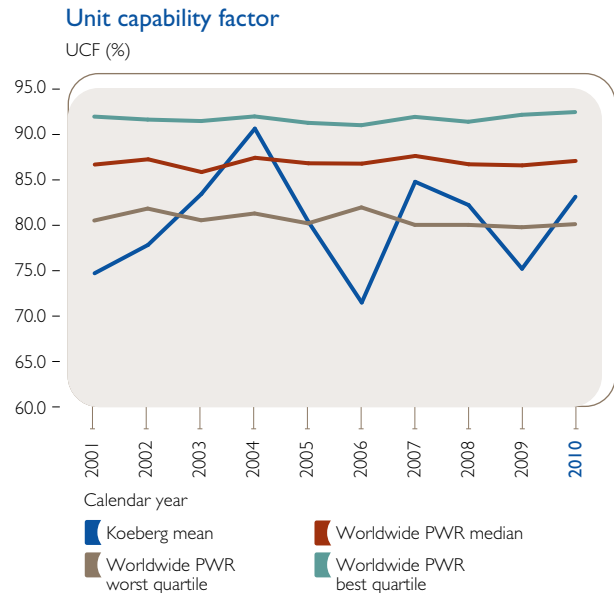
Eskom actively participates in the international nuclear domain through its affiliation to the World Association of Nuclear Operators (WANO), the Institute of Nuclear Power Operations (INPO) and the International Atomic Energy Agency (IAEA). This participation facilitates benchmarking of performance, periodic safety reviews, definition of standards, dissemination of best practices and training of industry personnel. Eskom remains a member of the European Mutual Association for Nuclear Insurance and uses this membership to reduce the cost of insurance for the business and to network with other nuclear utilities on common risk and insurance issues.

The World Association of Nuclear Operators currently uses 13 performance indicators (this international benchmark is in calendar years).



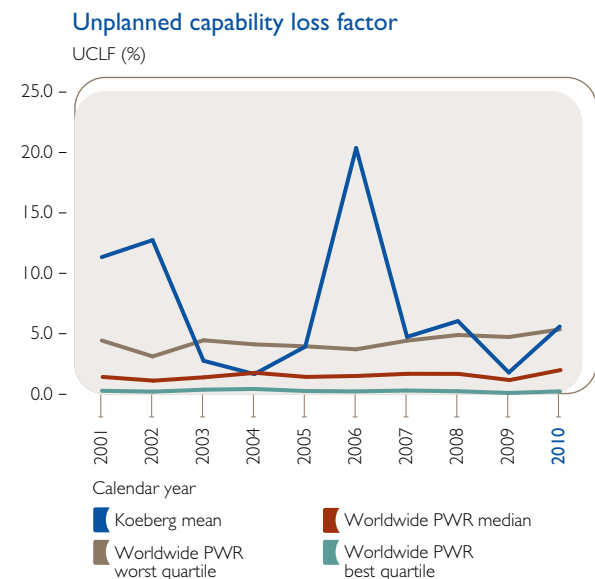
A group of school children learn more about nuclear energy at the Koeberg visitor centre.

Koeberg 12-month unit capability factor (UCF) vs. the median, best quartile and worst quartile for the 265 pressurised water reactor (PWR) units worldwide.



The unit capability factor has shown a significant improvement mostly due to a reduction in planned capability loss factor (PCLF) vs. the previous year (where following refuelling outage 117, unit 1 started up with an intermittent rotor earth fault, requiring an additional planned outage).

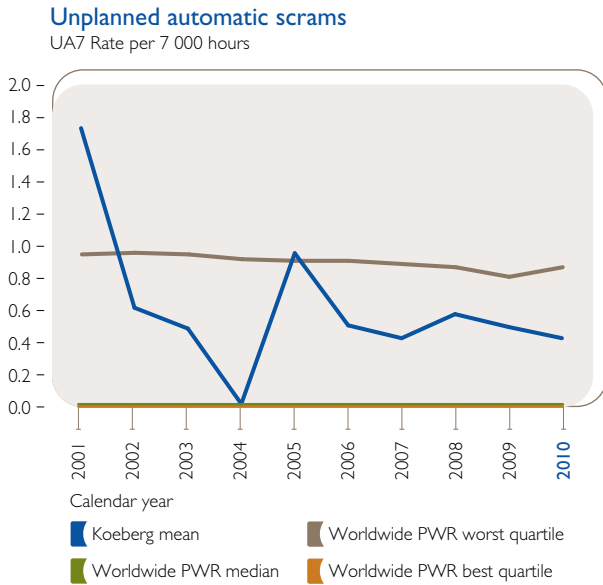
Koeberg 12-month unplanned capability loss factor (UCLF) vs. the median, best quartile and worst quartile for the 265 pressurised water reactor (PWR) units worldwide.



The deterioration through 2010, from close to median to worst quartile is due to two consecutive forced outages following refuelling outage

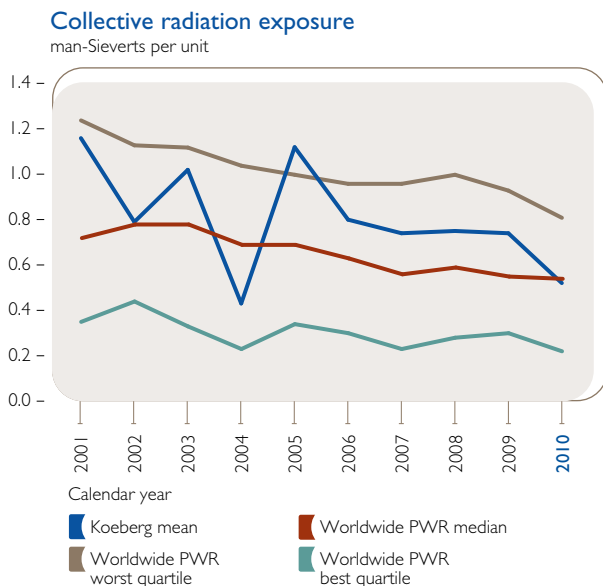
I 18. The first was due to commissioning problems following a turbine retrofit, the second, due to failure of a newly reloaded fuel assembly.

Koeberg 12-month unplanned automatic scrams per 7 000 hours (UA7) vs. the median, best quartile and worst quartile for the 265 pressurised water reactor (PWR) units worldwide.



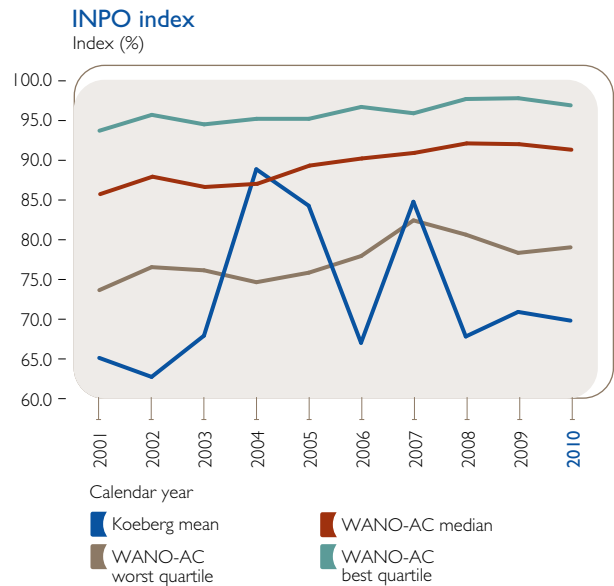
The benchmark median and best quartiles are both zero for the period under review. Koeberg's performance for the last five years has been one scram per year; the last in April 2010 due to an external event (loss of the 400kV grid).

Koeberg 12-month collective radiation exposure (CRE) vs. the median, best quartile and worst quartile for the 265 pressurised water reactor (PWR) units worldwide.



Koeberg made a step-change improvement in CRE compared to previous years.

Koeberg INPO index vs. the median, best quartile and worst quartile for the 128 units that are members of WANO Atlanta Centre. This sample includes various reactor types.



The Institute of Nuclear Power Operations index is published for the World Association of Nuclear Operators Atlanta Centre only, and uses 10 World Association of Nuclear Operators performance indicators to measure the overall performance of a nuclear unit. A 100% score is when the United States industry targets for all 10 indicators are achieved. The scoring shown is performance against the United States nuclear industry's 2010 goals. Koeberg's performance versus the previous year has not shown any improvement mainly due to the two forced shutdowns following refuelling outage I 18 (see UCLF comments), and the impact of the leaking fuel assembly.

Generation Business continued

Generation Nuclear division continued

Material issues

Future nuclear programme



Activities in the project definition phase for a potential nuclear programme:

- Feasibility study
- Environmental impact assessments
- Investigation of site suitability
- Seismic hazard analysis
- Purchase of land
- Site safety report
- Identification of transmission line routes
- Geotechnical and other required studies.

These activities support the application to the National Nuclear Regulator for a nuclear installation licence. The draft Nuclear-1 environmental impact report has been revised and reissued, taking into account public comments. Three sites – Duynefontein, Bantamsklip and Thyspunt – were considered in the environmental impact assessment. Thyspunt is now the recommended site.

On 17 March 2011, Cabinet approved the integrated resource plan for electricity 2010 (IRP2010) for promulgation by the Department of Energy. The plan includes a significant nuclear component (23% of new build).

Pebble bed modular reactor (PBMR) update



Following government's decision to stop funding the PBMR Company (Pty) Limited, the pebble bed modular reactor project has been placed in care and maintenance. The current priority is to capture and store intellectual property. Most of the client office staff have been redeployed in the Nuclear division.

Nuclear fuel



Nuclear fuel is procured and delivered to Koeberg nuclear power station in accordance with government-authorised contracts for the supply of enriched uranium and nuclear fuel fabrication services for the nuclear fuel assemblies. A second fuel fabrication vendor was contracted during 2010 for flexibility and competition in the fuel market. These contracts are sufficient to provide the fuel needed for Koeberg for the next eight years.

Nuclear waste management



The low- and intermediate-level radioactive waste from Koeberg is sealed in steel drums and concrete containers and disposed of at Vaalputs, a near-surface disposal site for radioactive waste, licensed by the National Nuclear Regulator:

The National Radioactive Waste Disposal Institute, under the governance of the Department of Energy, is responsible for appointing the operator of Vaalputs. Due to this regulatory change, the Nuclear Energy Corporation of South Africa's mandate to operate Vaalputs lapsed, and the transport of waste to Vaalputs was temporarily suspended.

The institute is not fully functional, so the Department of Energy has extended the Nuclear Energy Corporation of South Africa's mandate to accept radioactive waste at Vaalputs. Shipments of low-level radioactive waste from Koeberg resumed in March 2011.

A further role of the institute is to formulate the national strategy for managing used nuclear fuel. Used fuel from Koeberg is stored at the power station in specially designed fuel pools or used fuel storage casks in accordance with specified regulatory requirements. Strategic approval has been received from the Department of Energy Minister to move and store used nuclear fuel on site in dry casks.

Nuclear safety



The significant damage to four nuclear units at the Fukushima Daiichi nuclear power plant in Japan as a result of the March 2011 earthquake and tsunami has prompted varied international reactions. For Koeberg, Eskom will follow the guideline developed by the Institute of Nuclear Power Operations and WANO to validate operating nuclear plant designs to withstand earthquakes and tsunamis. The original Koeberg design took earthquakes and tsunamis into account, and numerous modifications have improved Koeberg's capability to deal with a severe accident.

- Koeberg is designed for a Richter 7.0 earthquake occurring 8km from Koeberg leading to a 0.3g horizontal ground acceleration.
- The whole nuclear island rests on a rigid 3m thick aseismic raft -157m long and 9m wide. It is supported by a system of 1 829 aseismic bearings. Koeberg is designed for a tsunami event with a run-up of 4m following a magnitude 7.8 seismic upheaval at the South Sandwich Islands. This can lead to an overall water level of +7m above sea level. Koeberg is constructed at a terrace level of +8m above sea level.

- The site has five emergency diesel generators, two dedicated to each unit and the fifth being a “swing diesel generator” available to either unit. They are situated at 8m above sea level.
- A suite of three inland gas turbines at Acacia power station provides a 132kV backup electrical supply to Koeberg.
- A recent modification to the plant was the installation of two station black-out diesel generators, which will ensure the integrity of the primary system and supply battery chargers in the event of a loss of all off-site and on-site power sources.
- Koeberg is equipped with a steam-driven emergency feed-water pump, which will provide cooling water when power has been lost.
- The plant is fitted with hydrogen recombiners. These remove hydrogen from the containment to avert an explosion. These recombiners need no electrical supply.
- Koeberg is equipped with external piping connections to the spent fuel pools and containment buildings to facilitate the addition of cooling water.

Current performance

<i>Nuclear plant performance</i>	<i>Target 2011</i>	<i>Actual 2011</i>	<i>Actual 2010</i>	<i>Actual 2009</i>	
UCLF (%)	3.00	7.89	2.12	5.70	●
EAF (%)	82.80	77.27	82.00	83.30	●
UCF (%)	84.70	79.03	83.20	83.40	●
PCLF (%)	12.30	13.08	14.68	10.90	●
UAGS/7000h (number)	1.01	0.00	1.42	0.47	●
INPO Index	87.0	76.6	76.1	68.2	●



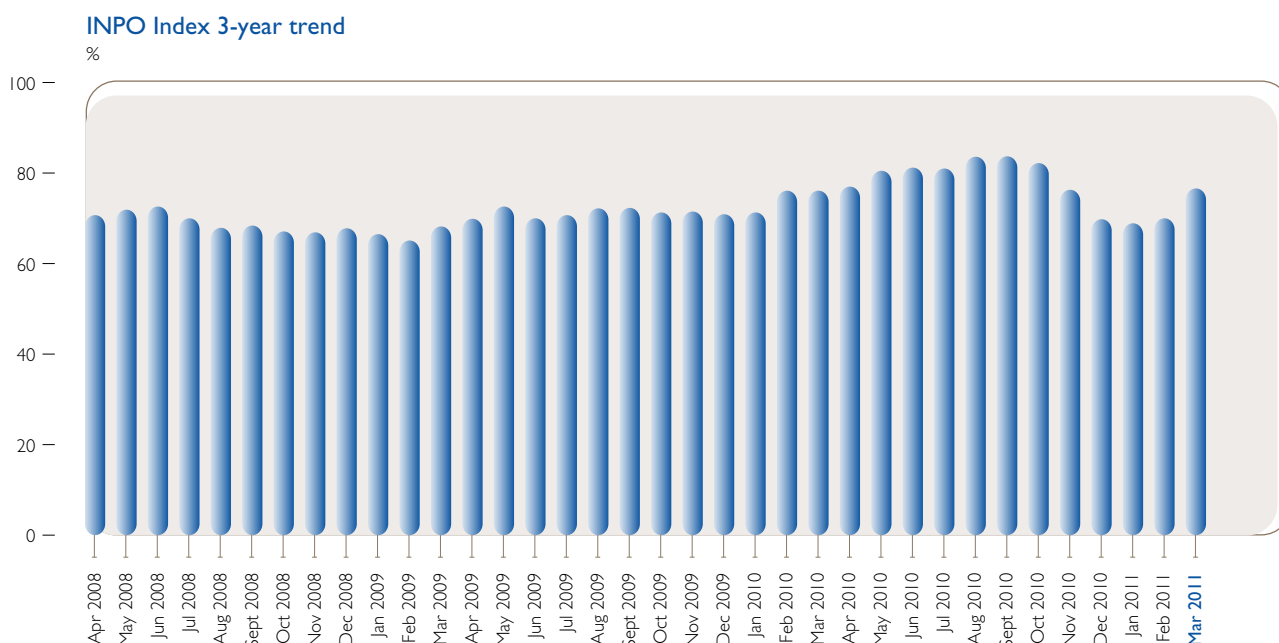
Koeberg nuclear power station near Cape Town

Generation Business continued

Generation Nuclear division continued

Plant performance and nuclear safety

Koeberg's overall plant performance as measured by the Institute of Nuclear Power Operations Index improved to September 2010, but declined in the closing months due to two consecutive forced outages following refuelling outage 118. The first, lasting 20 days, was due to commissioning problems following a turbine retrofit. The second, three weeks later, and lasting 30 days, was due to the failure of a newly reloaded fuel assembly.



Koeberg's design and technical practice are aligned to the Electricité de France CPI reference plant. Management processes and training philosophy are aligned to the United States nuclear industry.

Industrial and radiological safety performance

		Target	2011	2010	2009	
Nuclear division fatalities	number	0	0	0	0	●
Contractor fatalities (commuting)	number	0	0	1	0	●
Lost-time injuries (including contractors)	number	n/a	8	10	10	
Lost-time incident rate	index	0.20	0.13	0.32	n/a	●
Refuelling outages	number	n/a	1.5 ¹	1	1	
Worker collective radiation exposure (both units)	mSv	1 165	1 389.97	717.83	937.61	●

1. Refuelling outage 218 started in March 2011 with completion in May 2011. The recording of the outage is split between the 2011 and 2012 financial years.

<i>Key Nuclear division environmental performance indicators</i>	<i>Target/limit</i>	<i>2011</i>	<i>2010</i>	<i>2009</i>	
Number of environmental legal contraventions (number)	0	0	0	0	●
Specific water consumption by station (L/kWh)	0.055	0.063	0.038	0.043	●
Potable water consumption (ML)	n/a	766.8	492.6	589.3	
Low-level radioactive waste generated (net) (m ³)	n/a	165.3 ^{RA}	137.8	140.8	
Intermediate-level radioactive waste generated (net) (m ³)	n/a	39.4 ^{RA}	47.1	23.9	
Low-level radioactive waste transported to Vaalputs (m ³)	n/a	81.0 ^{RA}	216.0 ^{RA}	189.0 ^{RA}	
Intermediate-level radioactive waste transported to Vaalputs (m ³)	n/a	0 ^{RA}	266.0 ^{RA}	473.6 ^{RA}	
Calculated public effective radiation release (mSv)	<0,25	0.0043	0.0040	0.0045	●

RA – Reasonable assurance provided by the independent assurance provider (refer page 200).



Pioneer Senior School visited the Koeberg visitor centre to learn more about nuclear energy.

Generation Business continued

Generation Engineering division



Matshela Koko Senior General Manager: Generation Engineering

Mandate

Provides assurance of engineering integrity and integration across the line divisions by applying engineering governance standards, supported by an engineering framework that drives Eskom's asset intensive business.

<i>Highlights</i>	<i>Future priorities</i>
<ul style="list-style-type: none"> • With the introduction of the breaker and a half configuration at new 765kV substations, new protection philosophies and schemes were developed for feeder; transformer; reactor; buszone and AC & DC systems. The concurrent implementation of the new IEC 61850 communication protocol for control of IED's (intelligent electronic devices) positions Eskom as one of the leading utilities technologically with realised benefits in reducing the substation footprint area and the number of protection panels required per bay • Published innovative "tower cards" to assist with the negotiation of servitudes with land owners. The division is designing a new AC board standard for the 765kV control rooms that will be large enough to accommodate all cable requirements • Successfully implemented the quadrant fall arrest plan, to improve safety of workers during construction. 	<ul style="list-style-type: none"> • Fully implement an integrated engineering governance structure and framework • Encourage the implementation of more innovative designs and philosophies • Recruit sufficient engineering staff to continue with a stronger engineering presence on all construction sites • Assist with efficiency in expediting the build programme • Influence international technology direction and standard setting.
<i>Challenges</i>	
<ul style="list-style-type: none"> • The launch of the Engineering Institute • Implementation and execution of the operational excellence governance principles at sites • Attainment of energy efficiency and biomass co-firing targets • Integrating common processes across the asset and outage management electricity production and delivery value chain • A rotor pole incident occurred at Palmiet on 5 February 2011, causing a forced outage of nine days on the unit • Three lost-time injuries were experienced over the course of the financial year. 	

Material issues

Operational excellence



Over the past year significant work was done to redefine and redesign Eskom's engineering governance structure, develop the engineering framework and processes across the whole plant life cycle.

Generation Engineering together with the engineering departments from Transmission and Distribution have analysed the gap between Eskom's current performance and its aspiration to rank among the top five utilities worldwide. An operational excellence programme has been formulated to review and fix Eskom's technical operations' transformation programme, including fixing the context within which all engineering work happens in Eskom – from processes and standards through to the framework, tools and governance structures. This is aligned to the Back2Basics programme whereby policies, procedures and systems will be standardised, simplified and optimised across Eskom.

In October 2010 Eskom approved a set of aspirations for the next six years for the Primary Energy, Generation, Transmission and Distribution divisions.

Key operational performance indicators:

- Energy availability factor of 90%
- Total system minutes of 3.4 and one major incident per year
- Supply availability interruption duration index of 39 hours (5.1 hours for top 500 customers) and supply availability interruption frequency index of 18 disruptions (2.2 for top 500 customers).

Additional key performance indicators (KPIs), such as cost and investments, robustness and efficiency, safety and environmental performance, will also be closely monitored through the operational excellence programme.

Engineering tools



The Generation engineering design infrastructure project was launched in late 2008 and builds on previous investments in technology to optimise configurations and alignments for Eskom's capacity expansion needs.

The project is partnering with the Kusile project team to create an Eskom coal technology reference plant in collaboration with an implementation partner. In the process, fully intelligent piping and instrumentation diagrams will be created, as well as a full 3D plant model and a boiler internal 3D model. This information will also be usable at Medupi power station, which has similar boilers and turbines.

Capability building



Engineering Institute

Eskom has resolved to establish a Power Plant Engineering Institute to produce a stream of highly skilled engineers within identified specialisation areas and to serve as a catalyst in the creation and subsequent development of a local knowledge base around these specialisation areas. The institute would also help to build capacity in developing universities, creating and sustaining a pipeline of qualified engineers in areas relevant to the power industry.

Welding skills development programme

Eskom has consistently experienced high levels of below-standard weld reject rates, with attendant cost overruns and production losses. The productivity (weld quantity and quality) of temporary contracted foreign welders has been consistently higher than that of local welders. Eskom needs a sustainable welding skills base and as such the Eskom professional welder development programme was launched in January 2011.

The current weld reject rate is ~7%. Through this programme, Eskom aims to reach reject levels of 1% or less in five years, reducing weld costs (which averaged R300 million over the past five years).

For South Africa, the programme means hundreds of new young welding trainees. They attain internationally recognised certification in professional welding, guaranteeing employment. This will boost South Africa's performance in technical skills development and reduce Eskom's reliance on international contractors for skilled welds.

Generation Business continued

Generation Engineering division continued

Project engineering

Generation Engineering has partnered with Black & Veatch to develop engineering project controls capability, including planning, scheduling, dashboard management and estimating.

The engineering schedule for Medupi has been developed and integrated into the master schedule, enabling Generation Engineering to start reporting on progress and performance based on an earned value management system. In addition, the division is now managing engineering critical path by discipline.

Generation Engineering has contracted Black & Veatch to develop and define the 100MW Sere wind facility project near Koekenaap in the Western Cape Province. A significant achievement is the wind resource assessment of the site, which helps select a suitable wind turbine and the more accurate estimate of annual wind energy output. The wind resource assessment included the installation of a 60m metrological mast, which has now been in operation for more than 18 months.



Engineers at Medupi power station.

Plant energy efficiency



Eskom has identified internal energy efficiency as a strategic priority. Improving the energy efficiency of existing power stations is a cost-effective and fast way to improve the reserve margin and reduce national CO₂ emissions. In this way Eskom will take a leading position in the nation's drive to save electricity, and complement the demand-side management programme of its major industrial customers.

Eskom's planned energy efficiency measures will have a substantial impact on production capacity and coal consumption and is expected to be cashflow positive. The programme is estimated to yield a minimum of 150MW of increased capacity and 400 kilotons per annum in reduced coal consumption across the coal-fired fleet – a substantial financial benefit as well. The reduced coal consumption translates into 1.5 million tons reduced CO₂ emissions per annum – a significant contribution to South Africa's drive to reduce its overall carbon footprint.

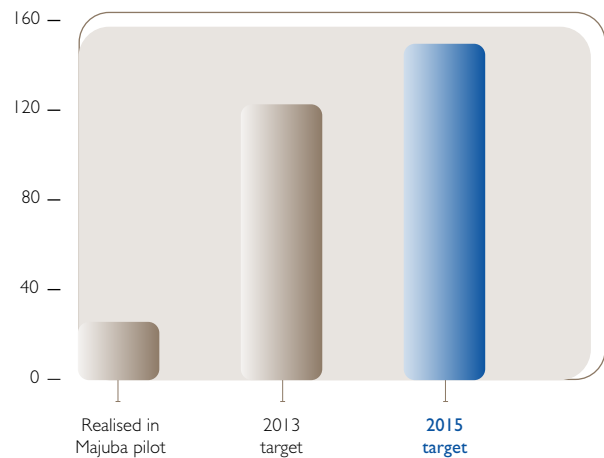
The Majuba power station energy efficiency pilot site, in its first four months of implementation, has already yielded positive results. A multifunctional team consisting of Eskom and international experts, has implemented several improvement measures, to increase Majuba's output during peak demand by an estimated 26MW and improved its heat rate (coal energy consumed per electric energy produced) by an estimated 1% which translates to approximately 40 kilotons in reduced coal consumption per year. These improvements are being independently verified by Eskom's measurement and verification department.

The full energy efficiency programme will be rolled out across Eskom's fleet to realise the total anticipated benefit. Several improvements will be captured in the short term before the winter of 2011 in order to alleviate anticipated supply constraints. The programme will be rolled out to all coal-fired stations in four waves during 2011 and 2012. The benefits from these initiatives will be realised during 2015.

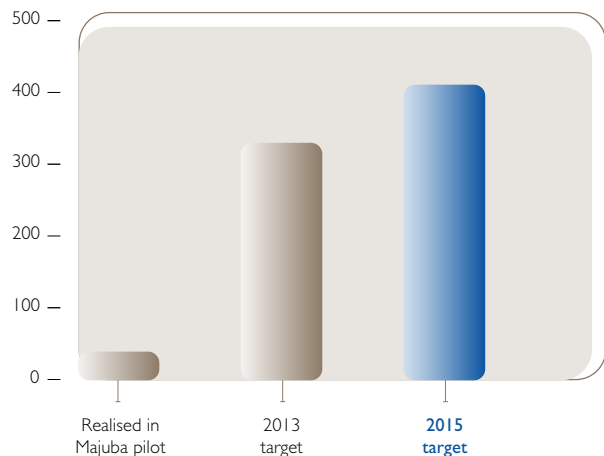
Ramp-up of energy efficiency improvements

- 26MW already realised at Majuba
- 150MW of energy efficiency improvements expected by end of 2015
- Coal savings of ~400 kilotons per annum expected by end of 2015

Additional capacity
(MW)



Coal savings
(Kt per annum)





Customer Network Business

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Customer Network Business



Erica Johnson Chief Officer: Customer Network Business

Mandate

Accountable for the network and customer services business in Eskom. This entails the planning, operations and maintenance of the transmission and distribution network, the management of the customer base, long-term electricity capacity planning and the revenue stream.

Highlights	Challenges
<ul style="list-style-type: none">• Provided an incident-free electricity supply for the 2010 FIFA World Cup™• Increased the uptake of solar water heater rebates offered by Eskom• Launched Operation Khanyisa as part of the energy loss and theft management programme• Exceeded the target for schools connections• Lost significantly less energy than targeted: the 2.63^{RA} system minutes lost against a target of 3.4 and a three-year historical average of 3.8 is exceptional• There were no major interruptions^{RA} (this performance level was last achieved in 2004/05)• Made demand-side management savings of 354.1^{RA} MW against an Eskom target of 301 MW	<ul style="list-style-type: none">• Very high levels of theft of equipment and electricity, which are affecting plant performance and increasing cost• The deaths by accident of three Distribution employees and seven contract workers, as well as three contract workers from Transmission• R123 million overdue municipal debt payments at year-end• Non-payment by large and residential customers, and some lengthy contractual payment disputes• Employee security is becoming a concern• Not meeting the target of 158 430 overall electrification connections this year (149 914 made)• Collisions and electrocutions of birds on distribution power lines• Acquisition of land and rights for electricity infrastructure

Future priorities

- Facilitate the participation of independent power producers at local and regional levels
- Facilitate vibrant energy trade in sub-Saharan Africa
- Intensify demand management and the regional inflow of green power
- Manage internal electricity usage across Eskom
- Integrate energy and power delivery planning into Eskom's strategic planning
- Acquire and retain the right skills
- Improve asset management
- Make step changes in safety and security
- Institute integrated demand management across all Eskom divisions
- Support government initiatives such as the universal access plan and solar water heating
- Contribute to socioeconomic development by:
 - Reducing public safety incidents through awareness
 - Achieving demonstrated climate change deliverables
 - Providing viable electricity options to informal settlements
 - Contributing to broad-based black economic empowerment and small business development

R millions

Financial results	Transmission and Systems Operations and Planning	Distribution and Integrated Demand Management	Total Customer Network Business
2011			
• Total revenue	42 390	55 137	97 527
• Profit for the year	146	1 875	2 021
• Total assets	40 863	51 535	92 398
• Capital expenditure (including capitalised interest)	6 485	8 474	14 959
2010			
• Total revenue	29 492	43 577	73 069
• Profit for the year	2 080	290	2 370
• Total assets	28 438	43 995	72 433
• Capital expenditure (including capitalised interest)	7 143	7 079	14 222

Debtors days

	Measure	2011	2010	2009
Average debtor days: Distribution	Days	22.2	22.0	20.8
Average debtor days: Transmission	Days	16.0	16.1	18.1

Overview

Customer Network Business (CNB), which has been functioning for three years, comprises Distribution, Transmission, System Operations and Planning and Integrated Demand Management with the mandate to ensure that power system risk can be managed in an integrated manner. The focus of the division is to align resources, delivery processes and operational and planning strategies across the company in a consistent and coherent manner. This approach resulted in working across divisional boundaries to ensure that the challenges of managing aged networks, a tight power system, and providing customer services were managed within a coherent risk management framework, building resilience whenever a learning opportunity arose.

Customer Network Business plays a key role in delivering on the shareholder expectations of ensuring a reliable supply of electricity to all South Africans, ensuring adequate future electricity for South

Africa, supporting the developmental objectives of South Africa and significantly contributing to the sustainability of Eskom.

Key performance measures in this regard include the licence to operate, financial sustainability, regaining confidence, keeping the lights on, talent management, customer centricity, Eskom strategy and included an incident free electricity supply for the 2010 FIFA World Cup™.

The maintenance and refurbishment of existing plant and network expansion, through new infrastructure, ensures optimal electricity delivery to Eskom's approximately 4.6 million customers.

Transmission and Distribution network infrastructure as at 31 March 2011

- 395 419km of power lines (2010: 390 338km)
- 351 297 transformers (2010: 344 369)
- 232 058MVA transformer capacity (2010: 223 398MVA)

Customer Network Business continued

The divisional structure was enhanced during the year to accommodate the integrated demand management project that was initiated in 2009. This approach completed the strategy to manage the tight capacity situation by adding an additional focus area in the ever challenging supply/demand balance management process. Integrated demand management provides customer solutions to reduce the demand for electricity through increased energy efficiency.

Technical system performance

Transmission, Distribution and System Operations & Planning have worked tirelessly to maintain top quartile performance in areas where this has already been achieved. They have also worked very hard on those areas aspiring for appropriate benchmark performance. An aged network such as Eskom's makes this aspiration a difficult challenge.

South Africa's electricity system continues to be under pressure. There is a low reserve margin, which results in shorter windows of opportunity to perform essential maintenance on power stations, as well as less opportunity to schedule the major refurbishments required by the older power stations (refer page 152 in Generation). However, the system has performed well over the past year, and there has been no load shedding since January 2008. The supply/demand margin will remain slim for the next 5 – 6 years, in particular the next two years. Customer Network Business manages this dynamic and complex system in real time, continuously analysing power system risks as they appear in key subsystems and interact with each other, mitigating the effects.

Thirty Transmission interruptions were recorded in 2011 (2010: 31) against a target of 35. There were no major incidents^{RA} (more severe interruptions) (2010: 1^{RA} incident). This is a substantial improvement,

although the risk on the network of such incidents has not fundamentally been reduced.

The Transmission total system minutes lost (for incidents of less than one system minute) has also performed above expectation – 2.63^{RA} against a target of 3.40 (2010: 4.09^{RA} against a target of 3.40). This was the result of continued intense focus on asset management and operations within the Transmission division.

Distribution's system average interruption duration index (SAIDI) actual performance is 52.61^{RA}, a slight improvement on the 2010 figure of 54.41^{RA}, but disappointing against the 2011 target of 49.50. The system average interruption frequency index (SAIFI) for 2011 is 25.31^{RA} against a target of 23.20, (2010: 24.65^{RA}). Performance against these two indices is a concern, and is largely due to the long restoration times in mainly rural areas, where technical staff cover long distances to repair faults.

System resilience building

A system resilience building programme has been initiated to enhance the division's ability to identify, anticipate, and adapt rapidly to threats and vulnerabilities arising from changes in the internal and external environment, to operate at elevated levels of stress without failure for extended periods of time, to respond to a shock by containing the impact (severity/duration) of the event, to recover quickly in a co-ordinated manner, and implement learning from near misses and recovery experiences.

System adequacy and integrated resource planning

The system adequacy and integrated resource planning processes ensure that network and energy adequacy plans are established.



Liveline maintenance work reduces downtime on networks.

^{RA} – Reasonable Assurance provided by the independent assurance provider (refer page 200).

The Department of Energy is accountable for government's recently approved Integrated Resource Plan (IRP 2010), which incorporates South Africa's energy plan and the related electricity generation capacity plan. Customer Network Business has supported the department by making key modelling skills and energy information available. IRP 2010 was approved by Government during March 2011.

In terms of licence requirements, Transmission publishes an annual document detailing how the transmission network will be developed over 10 years. A requirement is that public forum(s) are held to share such plans with stakeholders in order to facilitate a joint planning process. A public forum was held on 5 April 2011 (see page 18 for more details).

The total capital expenditure on the Transmission grid for 2011 was R6.5 billion (2010: R7.1 billion), of which refurbishment constituted R657 million (2010: R605 million). The capital expenditure projections for the coming three years amount to R46.2 billion. This is largely made up of projects relating to power station integration and corridor strengthening in the KwaZulu-Natal, Cape and North East areas.

The Distribution Capital Plan, prepared on an annual basis, presents a five-year window. As part of the response strategy to the poor SAIDI performance, Distribution is changing the planning approach and criteria. The total capital expenditure on the Distribution grid for 2011 was R8.5 billion (2010: R7.1 billion), of which refurbishment constituted R1.2 billion (2010: R900 million). The capital expenditure projections for the coming three years amount to R34.9 billion.

At present there are about 800 to 1 000 constrained feeders in Distribution which means that due to either voltage or transformer capacity limitations, no new connections can be made. Most of these constraints can only be removed by means of sub-transmission infrastructure strengthening. The amount of capital required and not spent was around R5 billion in 2011, which indicates the extent of the backlog. The amount that can be implemented is in the order of R3 billion. It is hoped to remove the backlog by 2014/15.

The 10-year electrification programme does not cater for the government plan of universal access by 2014. There is a backlog of 3.4 million households at an estimated cost of R32 billion (2007 estimate). The 10-year plan aims to spend R29 billion over the period and deliver about 2.6 million connections. The total programme of 3.4 million connections can be completed in 2021/2022 for an estimated R36 billion (2009 estimate). Even this timetable implies that over 500 000 connections will have to be done in 2020, which is ambitious. If this programme has to be expedited, it will severely limit the ability to execute the spend in other categories and increase the operational expenditure due to increased connection numbers. Eskom is currently reviewing options to accelerate this programme.

People and skills

Even though there is a tight capacity situation, Eskom staff have shown intense commitment to keep the lights on. The low attrition levels are indicative that employees are committed to be part of the organisation even through these tough times.

Skills development, as part of our shareholder compact, continued to be a focus as one of the roles in the contribution to the country's socioeconomic drive. The total number of learners within CNB for the financial year was approximately 2 057. This complement constituted learners at FET colleges, university and university of technology bursars. The skills areas ranged from technical to business-related skills. CNB continued with its training programmes in all areas of its business; but the ability to meet the ever growing skills shortages in specifically field operations remains a challenge. A recent study by the Electric Power Research Institute (EPRI) has commended CNB for its senior skills capability that it refers to as "pillars of strength".

Safety, health, environment and quality

Distribution's greatest success has been the achievement of 340 days without an employee fatality, which is a first in the history of Distribution. This was substantially overshadowed by three Distribution employee fatalities, seven contractor fatalities and 43 public fatalities.

Transmission had no employee fatalities during the year; however, contractor and public safety remain a concern with three contractor fatalities and one public fatality.

The System Operations & Planning division is progressing well towards their ISO 9001 certification with the stage 1 certification audit successfully passed in March 2011 at the first attempt. The Distribution ISO 9001 programme to achieve certification has commenced. While Transmission remains ISO 9001 compliant, they have not maintained their ISO 9001 certification for the first time in over four years.

Energy loss management

One of the key challenges that exacerbates the supply/demand balance and threatens Eskom's revenue security is that of energy loss through theft. In this regard, Eskom has launched Operation Khanyisa to make a strategic shift in addressing this challenge.

For the financial year, the overall energy losses were 8.25% against a budget of 8.75% (2010: 8.45% against a budget of 8.76%). The total energy losses for the Distribution network and Transmission network were 5.68%^{RA} and 3.27%^{RA} (2010: 5.87% and 3.27%, respectively). This Distribution figure compares favourably with the international benchmark.

Theft of cables and transmission tower components and other equipment continues to be a challenge. Municipalities are experiencing a similar challenge, which points to the need for a country-wide security initiative to reverse the current trends. Non-technical losses are estimated to be between 1.4% and 2.3% (2010: 1.5% and 2.4%) of Distribution energy losses.

Customer Network Business continued

Revenue management

The management of large power user debt is under control, except for municipal arrear debt. The risk of defaulting metropolitan municipalities is increasing and may result in cash flow implications for Eskom. There is a prolonged arbitration process to deal with these issues.

The major challenge for small power user debt is in the Soweto area where current debt management strategies are only achieving limited success. There is a need for an elevated and co-ordinated strategy for Soweto. CNB remains confident that the current strategies being followed by Distribution should further improve the current and emerging debt issues being experienced.

Inclining block tariff

In February 2010, the National Energy Regulator of South Africa (NERSA) introduced an inclining block tariff (IBT) to the electricity consumers in South Africa. IBT is a tariff that sets electricity prices in blocks where the rates increase as usage increases. The IBT structure gives significant relief to low consumption customers, who make up the majority of residential customers. These low consumption customers are seeing reductions in their monthly bill, while higher consumption customers, using more than 1 500kWh per month, have higher than the average increases. IBT was full implemented for residential metered customers, but, due to technical challenges regarding Eskom's 3.9 million prepaid residential customers, the roll-out of IBT to these customers was implemented on 1 April 2011.

Customer service levels

Key Sales and Customer Services (KSACS) customers are largely serviced through customer executives allocated per region. During the past financial year numerous interactions have taken place, in the form of customer visits, workshops, and forums. Customer interventions vary from small meetings to large key customer forums. These strong key industrial customer relationships must continue and need to permeate other customer segments to realise Eskom's drive for customer centricity. For this financial year, the KSACS customer service level was 101% against a target of 100% compared to 98% against a target of 103% in 2010. The strategies that were implemented in 2010 have proven to be effective.

Distribution customers are serviced through customer centres, walk-in centres, customer executives, and electronic channels such as internet and sms. Customer service in the Distribution environment is measured through the customer service index and, for this financial year, the score was 84.37% against a target of 83.71% (2010: 85.05% against a target of 82.65%).

One of the key focuses for CNB going forward, includes a new Customer Services Division to focus on customer services, to continuously improve the customer services performance and to improve the customer experience.

Stakeholder engagement

The key customer section ensures regular and meaningful interactions with key stakeholders. These interactions allow for meaningful engagement and dialogue on various topics and assess the impact of Eskom's decisions on key customers' businesses. Customer interventions can vary from small meetings to large key customer forums. See section in Transmission on page 181 for detail.

Future focus areas

Overcoming the energy gap over the next two years requires the support of all stakeholders to ensure that the lights stay on. In this context, the Eskom build programme, the signing up of IPPs nationally and, in the region, focus on demand management and careful day-to-day management of the power system is critical. Skills and talent development must continue and Eskom needs to continue to attract and retain the best people for its operations.

CNB, over its three-year existence, has created the opportunity to build tighter relationships for the wires, customer service, demand management and system operations functions within Eskom. This process has resulted in firmer leadership interaction, which is vital, especially in an era of aged infrastructure and a supply/demand imbalance. This achievement has contributed significantly to the achievement of the division's mandate. The interaction has created extensive opportunities for the highly talented people in the wires, retail and operations portfolios for divisional cross-learning and created many deep and important improvements for Eskom.

System Operations and Planning division



Kannan Lakmeharan Divisional Executive: System Operations and Planning

Mandate

Provide an integrative function for the reliable development, operation and risk management of the interconnected power system.

Highlights	Future priorities
<ul style="list-style-type: none"> Signed power purchase agreements for 373MW with five independent power producers Produced and disseminated quarterly "state of the system" updates for stakeholders Put in place formal processes that are more sophisticated and robust to identify areas of vulnerability and track progress on the risk treatment plan on a quarterly basis 	<ul style="list-style-type: none"> Create a wide enough maintenance window for the generation fleet to pro-actively ensure future generation performance Set up governance structures for the single buyer office that are independent from Eskom

Benchmarking

System Operations and Planning participates in the International Comparison for Transmission System Operators, an international group of about 20 transmission system operators. System Operations and Planning has also recently joined the Very Large Power Grid Operators (VLPGO) group, comprising the largest transmission grid and system operators in the world. The division achieved top quartile performance, but resources are higher than the average system operator.

Material issues

Status of the power supply system in South Africa



Electricity demand levels were close to 2009/10 levels in 2010/11. Eskom will rely on energy-efficiency measures, as the supply-demand balance will remain tight beyond winter 2011 until new power stations come online.

While the peak demand during the winter of 2010 was 36 664MW, the current forecast peak for winter 2011 is 37 553MW.

Medium-term outlook



Based on current assumptions, South Africa's energy gap will peak in 2012, when demand will exceed supply by 9TWh, equivalent to about 1 000MW of baseload capacity. The projected gap will only go down to zero in 2016, and the reduction depends strongly on Eskom's build programme, the Department of Energy's independent power producers project, the renewable energy process, and the roll-out of the funded demand-side management programme.

System Operations and Planning executes and facilitates solutions to maintain the power system with minimal disruptions, taking into account real constraints. The focus is on balancing supply and demand

Customer Network Business continued

System Operations and Planning division continued

and the availability of delivery networks with long-term asset health and sustainability. The current challenge includes creating a wide enough maintenance window for the generation fleet to pro-actively assure future performance.

Key objectives

- Ensure that supply-side initiatives are implemented by improving existing generation fleet performance by 2% in three years; complete planned new build capacity on time or earlier; upgrade the capacity of some existing units; procure 1 025MW renewable generation in the next three years; and increase available capacity by contracting municipal power stations and independent power producers (including renewable and co-generation), including finalising a framework for the relationship between Eskom and the independent power producers for their generators
- Reduce demand by accelerating the demand-side management programmes to install energy-efficient technologies and drive behavioural change; continue to implement the demand market participation programme and the demand response pilot programme; ensure that Eskom's own internal energy efficiency programme is delivered on
- Establish a safety net for the residual demand gap through additional demand response initiatives, an energy conservation scheme, and the ability to use the open-cycle gas turbines if required
- Pursue partnerships with private and public partners to implement the medium-term risk mitigation project
- Secure the national power system by implementing and enhancing the national code of practice for emergency load reduction.

Ten-year transmission development plan (TDP)



Eskom's transmission licence requires the annual publication of a document detailing how the transmission network will develop in the next five years.

The details that are required of how the transmission network will develop in the next five years are:

- A description of the acquisition of servitudes for strategic purposes
- A list of planned investments, including costs
- Diagrams of the planned changes to the transmission system
- An indication of the impact on customers
- Any other information as specified by the National Energy Regulator of South Africa from time to time.

A further requirement is that public forums are held with stakeholders to facilitate a joint planning process. The transmission development plan that covers the years 2011 to 2020 was published in 2010/11.

 See www.eskom.co.za/annreport11/008.html for further details.

New assets

Over 6 000km of 765kV and 8 000km of 400kV new transmission lines have been approved or proposed over the 10-year transmission development plan period. Major network reinforcements are required for the supply to the Western Cape (South and West grids) and KwaZulu-Natal (East grid). The large volume of 400kV transmission lines are part of the more meshed transmission network being developed to improve reliability and network security. The integration of new power stations into the developing Limpopo West power pool (Medupi and Coal 3 close to Matimba) also requires significant lengths of transmission line as they are very remote from the main load centres. Some 1 700km of new 800kV high-voltage direct current lines are required for exporting excess power from Coal 3 directly to load centres in Gauteng and KwaZulu-Natal (Central and East grids).

The addition of over 72 000MVA of transformer capacity is an indication of both the increasing load demand and the increasing capacity requirements of customers.

About 2 800MVars of capacitive support is required for areas of the network under contingency conditions to ensure that the required voltage levels are maintained. They also improve system efficiency by reducing network losses.



High-voltage lines near Johannesburg.

From a grid code perspective, the current transmission system is not fully compliant with the reliability criteria as stipulated in the South African grid code and a substantial number of projects in the TDP are required for this purpose.

It is Eskom's intent that the transmission system should attain compliance in terms of the reliability criteria by 2018.

Facilitating the entry of IPPs



Eskom is committed to facilitating the entry of independent power producers in collaboration with government, the National Energy Regulator of South Africa and project developers. Eskom has already signed agreements with independent power producers and will continue to do so within the framework of the integrated resource plan and the multi-year pricing determination.

Government is preparing the commercial documentation to procure renewable energy through the renewable energy feed-in tariff programme (REFIT), for release in the near future. Eskom is assisting government in this process and will be the buyer of this energy.

To fulfil the ambition that independent power producers account for 30% of South Africa's generation capacity in the next 20 years requires a different approach to providing network access to independent generators. Eskom is preparing for this complex new business, and will provide a grid access framework to manage future independent power producer connections to the Eskom networks.

The grid access framework will be managed by a new unit (the grid access unit set up in the new Customer Services division) that will ensure efficient internal operational processes for independent power producers. Eskom's existing single buyer office will continue in its role of facilitating the signing of power purchase agreements with IPPs. The single buyer office has been ringfenced in a separate organisational unit to accommodate concerns that Eskom may have conflicts of interest in procuring from IPPs, provide transparency, and include external parties in the procurement processes.

System resilience building



Elements of improved system resilience:

- React to threats and vulnerabilities from changes in the internal and external environment
- Operate at elevated levels of stress without failure for extended periods of time
- Respond to a shock by containing the impact (severity and duration) of the event
- Recover quickly in a co-ordinated manner
- Implement learning from near-misses and recovery experiences.

Various internal and external exercises were run before the 2010 FIFA World Cup™ and in early 2011 to test the resilience structures in Eskom and South Africa. Formal codes of practice have been developed and published. Formal processes to identify areas of vulnerability and track progress on risk treatment plans on a quarterly basis have been put in place and are improving in sophistication and robustness.

Current performance

Statistical information

	2011	2010
Peak demand on integrated system excluding load reductions	36 664MW	35 850MW
Peak demand on integrated system including load reductions	36 970MW	35 912MW



National control centre in Simmerpan, Johannesburg.

Customer Network Business continued

Transmission division



Mongezi Ntsokolo Divisional Executive: Transmission

Mandate

Operate and maintain the lifecycle of the South African Transmission network, while managing key customer relationships and trading energy internationally.

The Transmission network consists of 28 790km of transmission lines of voltages ranging between 132 to 765kV and a network of 160 substations.

Highlights	Challenges
<ul style="list-style-type: none"> • Had no cases of non-compliance with environmental legislation, attributable to the controls and oversight mechanisms implemented in all Transmission business units • Developed and implemented biodiversity and land environmental management plans for 330 existing power lines based on a phase-in approach: The proposed target for 2011 was 100%, and this was achieved (2010: 95%) • Conformed with ISO 14001 in all Transmission business units' environmental systems • Substantially improved the number of system minutes lost – system minutes <1 at 2.63^{RA} is exceptional against a target of 3.4 and a three-year historical average of 3.8. • Experienced no major interruptions • The Eskom KeyCare Total Quality Index for the year ending March 2011 was 101% against a target of 100% • Successfully renegotiated one of the remaining two special price agreements. 	<ul style="list-style-type: none"> • Losses of almost R3 million due to conductor theft and more than R5 million due to the theft of steel tower members (pylon theft) • The number of line faults, mainly due to an increase in the number of fire and bird-related faults, and lightning following increased rainfall this season • Non-payment by key customers, including a large customer liquidation case; and some contractual payment disputes experiencing lengthy resolution delays • Employee security is becoming a concern.
<h3>Future priorities</h3>	
<ul style="list-style-type: none"> • Strengthen and maintain the network • Continue efforts to reduce conductor and pylon theft • Improve asset management • Ensure continuous improvement in the effective implementation of conditions of environmental authorisations, including environmental management plans • Continue negotiations on the remaining special price agreement. 	

Benchmarking

Transmission participated in the International Transmission Operations and Maintenance Study, which is primarily focused on maintenance and plant performance, with 27 international transmission companies. Maintenance performance was compared and best practices for the transmission industry worldwide were set. Eskom's transmission asset failure rates are in the first quartile for extra-high voltage switchgear and instrument transformers. Its performance is below average in the overhead line and compensation equipment failure rates.

A study conducted by an independent international consulting group to establish first quartile transmission performance based on European utilities provided the following conclusions:

- Average number of interruptions (per 10 000km of line) is eight and Eskom scored 11.
- Average duration of interruptions is 87 minutes and Eskom achieved 69 minutes.
- Total Eskom Transmission costs are low relative to other utilities.

Benchmarking Eskom's Transmission system performance against other similar utilities is challenging due to differences in network

firmness and reliability criteria, definitions and data capturing practices between utilities.

Material issues

Maintenance and refurbishment



Maintenance of transmission plant is informed by lifecycle management plans through to end of plant life.

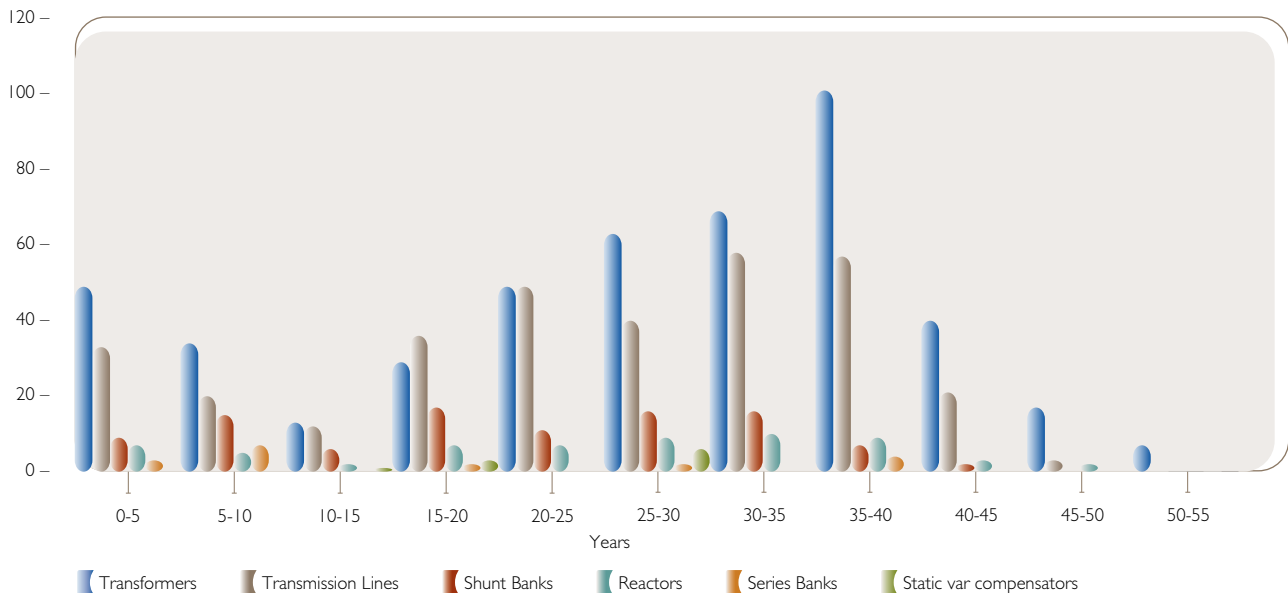
Major asset classes on which maintenance is performed:

- Transformers
- Transmission lines
- Shunt capacitor banks
- Reactors
- Series capacitor banks
- Static var compensators
- Circuit breakers.

Some 60% of Eskom's transformers and 54% of its power lines are older than 25 years, as are 50% of the circuit breakers in the voltage range 220kV – 765kV. This demands high-level plant and equipment maintenance and continual refurbishment of plant that has reached the end of its useful life.

Transmission grid: Age of major equipment

Number of units



Age of circuit breakers

Nominal AC voltage

Nominal AC voltage	Period (Years)										Total
	0 – 5	5 – 10	10 – 15	15 – 20	20 – 25	25 – 30	30 – 35	35 – 40	40 – 45	45 – 50	
220kV – 765kV	170	217	56	149	160	255	196	281	56	3	1 543

See www.eskom.co.za/annreport11/009.html for further detail

Customer Network Business continued

Transmission division continued

Environmental impact assessments and land acquisitions



Acquiring land, land rights and environmental authorisation to build electricity infrastructure, particularly transmission lines, is a major challenge for the new build programme. Most delays and cost overruns are related to these activities. There have, however, been significant improvements as a result of various initiatives in previous years.

Key initiatives for securing environmental authorisations and land rights

- Capital expansion stakeholder forums in regions where Eskom has major projects, such as Lephalale
- Strategic environmental assessments
- Enhanced public participation processes
- Annual communication of strategic plans to major stakeholders.

The implementation of Eskom's recently approved environmental impact assessment and land rights strategy will ensure that the related processes are executed effectively.

Positive trends in environmental impact assessments and land acquisition

With the active participation of affected and interested parties and stakeholders, objections to Eskom projects are raised early in the environmental impact assessment process, allowing the environmental team to deal with these issues before the environmental impact report is submitted to the Department of Environmental Affairs for authorisation.

In response to concerns raised by interested and affected parties, Eskom has improved the review process, giving the public enough time to respond. The public uses the time to consult specialist professionals to assist them to make informed contributions. This has benefited both Eskom and the receiving communities.

There are fewer appeals against environmental authorisations. And where there are appeals, they are normally regarded as not having substance.

The success rate of projects has been encouraging in 2010/11. With the exception of one, all environmental authorisations received were uncontested and for those that were contested, the appeals were dismissed.

Expropriation



During negotiations about servitudes and land, Eskom sometimes reaches a deadlock if it cannot meet the landowner's demands. When all possible alternatives have been exhausted, expropriation is still the only tool to resolve such an impasse.

This is not the best approach as it:

- Affects the long-term relationship between Eskom and the land owner
- Normally affects project delivery times because it is a long process
- Leaves little room for negotiation, as the decision is made by the State.

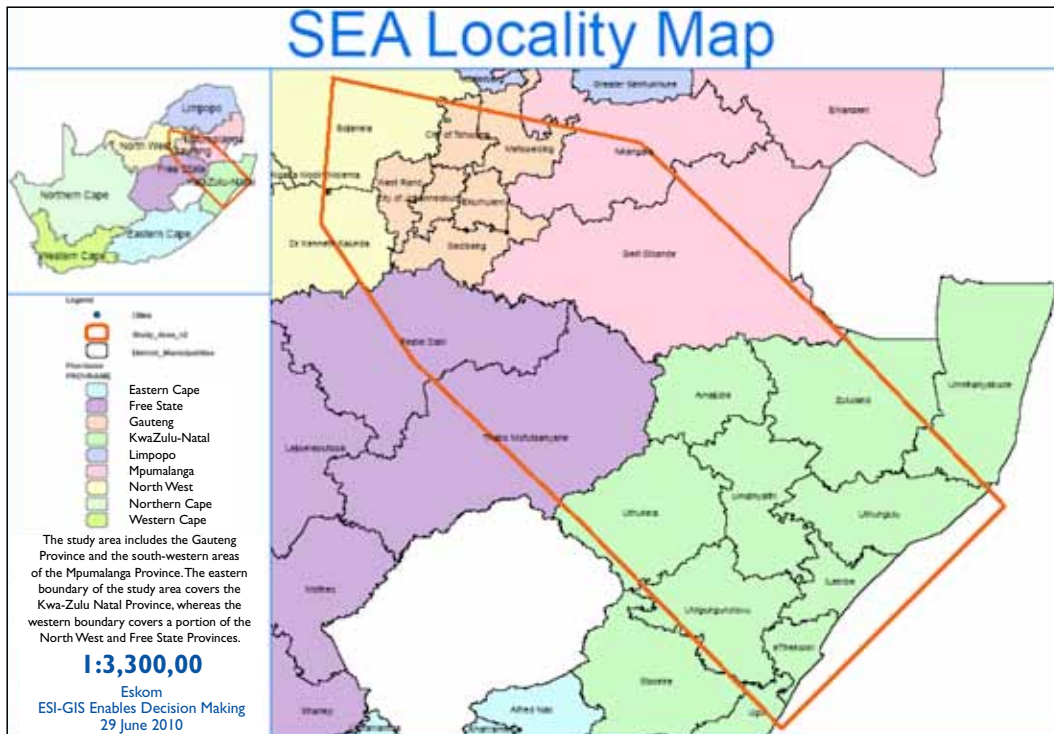
The current expropriation process requires Eskom as the applicant to consult with the public and the affected landowners before an application can be lodged with the Department of Public Works. Data indicates that expropriation applications lodged with the National Energy Regulator of South Africa and the Department of Energy take not less than two years to be completed. The longest application process so far is four years. Transmission has embarked on a process with the newly delegated ministry, the Department of Public Works, to improve the turnaround time.

Due to difficulty in acquiring servitudes for certain projects, Eskom has initiated the process of expropriating eight servitudes in 2010. The intention to expropriate these servitudes was communicated with the affected landowners and they were given an opportunity to raise their comments, concerns and objections where necessary. Despite all these processes, the expropriation still has to be finalised for Eskom to have access to the required servitude in time for construction.

Strategic environmental assessment (SEA)



A strategic environmental assessment is a process to assess the environmental implications of a proposed strategic decision, policy, plan and programme, piece of legislation or major plan. Transmission embarked on such an assessment in June 2010 to guide Eskom grid planners to develop the 20 to 30-year electrical infrastructure expansion plan. The plan addresses the placement of future electrical infrastructure and the recycling of existing infrastructure. Although the plan covers the whole of South Africa, the strategic environmental assessment focuses on a priority study area – parts of the North West, Gauteng, Mpumalanga, Free State and KwaZulu-Natal provinces.



Copper and pylon theft



In the year under review the Transmission division suffered losses of R2.9 million due to conductor theft and R5.3 million due to theft of steel tower members (pylon theft).

While these thefts continue to be of concern, there has been a reduction in copper theft losses of as much as 45% compared to 2009/10, attributable to increased physical security and new security technologies at Eskom's substations.

Pylon theft remains a challenge. There has only been a marginal reduction in losses (3%) compared to last year. Nevertheless, Eskom's aggressive community engagement campaigns, the increased and new security, and expanded intelligence activities in high-risk areas are beginning to bear fruit.

Contracting with SADC utilities



Eskom is a net exporter of power, where exports from South Africa into the Southern African Development Community region exceed imports from the region.

The Eskom international sales and purchases for the year were 13 296GWh and 10 190GWh, respectively. This excludes both wheeling and "buy-en-route". International sales for the year were 5.9% of total sales.

The bulk of the imports are from Cahora Bassa (HCB) in north-west Mozambique and small volumes from Lesotho and Zambia.

Eskom exports firm power to the national utilities of Botswana (BPC), Namibia (NamPower), Swaziland (SEC) and Lesotho (LEC). Eskom also has trading relationships with Zimbabwe (ZESA) and Zambia (ZESCO), but these agreements are for non-firm power when there is surplus capacity and during emergency situations. Eskom also exports to three end-use customers, one in Mozambique and two in Namibia. Eskom also wheels (transports) power on behalf of Electricidade de Mozambique (EDM), the national utility of Mozambique, from Cahora Bassa to the load centre in the south of Mozambique and also undertakes other wheeling transactions on behalf of the various utilities. Such wheeling is netted off neutral in exports and imports.

Customer Network Business continued

Transmission division continued

The entire Southern African Development Community region is experiencing a shortage of capacity and, since the height of the crisis in 2008, the various utilities have increased focus on generation options.

Potential energy resources identified in the Southern African Development community are:

- Hydro resources – Mozambique, Zambia, Angola and the Democratic Republic of Congo
- Coal – Botswana, Mozambique and Zimbabwe
- Natural gas – Mozambique, Namibia and Angola.

Large power generation projects take years to reach commissioning, but in the next year Botswana will commission their Moropule B

coal-fired power station and Namibia is installing an additional generating unit at the Ruacana hydro station. These significant steps reduce the dependence on Eskom and create a more vibrant regional energy market. Other projects will be commissioned over the next few years.

Eskom has increased its focus on regional projects, and the first important step is the recognition of electricity imports in the integrated resource plan, which provides the impetus to pursue additional imports. The imports will assist not only with the energy balance in South Africa, but also with improving South Africa's energy mix.

Current performance

Transmission system performance

Measure (and unit)	Description of measure	Target 2011	Actual 2011	Actual 2010	Actual 2009	
Number of interruptions	Interruptions affecting the continuity of supply	≤35	30	31	31	●
Number of system minutes lost	Total number of system minutes lost (for incidents of less than one system minute)	≤3.40	2.63 ^{RA}	4.09 ^{RA}	4.21 ^{RA}	●
Number of major incidents	Records number of incidents with a severity greater than one system minute.					
	– severity degree one (≥ 1 but less than 10)	≤2	0 ^{RA}	1 ^{RA}	3 ^{RA}	●
	– severity degree two (≥ 10 but less than 100)	0	0	0	0	●
	– severity degree three (≥ 100)	0	0	0	1	●
Number of line faults	Number of transmission line faults per 100km	≤2.45	2.72	2.54	2.46	●

RA – Reasonable assurance provided by the independent assurance provider.

Transmission's interruption performance is stable. The number of system minutes lost for all interruptions in 2010/11 is a substantive improvement, primarily attributable to reduced plant failure rates and improved plant availability and restoration times for major loads. The risk associated with unfirm and constrained networks did not materially change in 2011.

The line faults target has not been achieved in 2011, mainly due to an increase in the number of fire and bird-related faults and due to lightning following increased rainfall this summer. The increased deployment of fire response teams and servitude vegetation management investments will improve this performance. But post-

fault investigation, root-cause analysis and targeted corrective actions remain Eskom's prime methods to curtail poor asset performance at the lowest cost.

Environmental performance

Environmental performance is managed as an integral part of Transmission's governance structure. Accountable environmental personnel ensure the implementation and management of the environmental management system throughout the division. Transmission's objective is to ensure continual improvement in environmental performance by setting environmental indicators and through management.

Key Transmission division environmental and safety performance indicators

	Target	2011	2010	2009	
Number of environmental legal contraventions (number)	0	0	1	20	●
Number of environmental legal contraventions reported in terms of Eskom's operational health dashboard (number) ¹	0	0	0	2	●
Materials containing asbestos disposed of (tons) ²	n/a	10.5	21.5	391.4	
Material containing polychlorinated biphenyls (PCBs) thermally destructed (tons)	n/a	400.7	3.7	489.2	
Lost-time incident rate (index) ³	0.26	0.65	0.80	0.63	●

1. Under certain conditions, contraventions of environmental legislation are classified in terms of the Eskom operational health dashboard (OHD) index. These include instances where censure was received from authorities, non-reporting to authorities as may be legally required, non-reporting in Eskom, a repeat legal contravention, or when the contravention was not addressed adequately. Divisional executives can escalate any significant environmental legal contravention to the OHD.

2. Quantities of waste disposed of at registered waste sites.

3. Lost-time incidents improved from 60 in 2009/10 to 46 this year. Although none of these incidents resulted in an employee fatality, sadly three contractors passed away over the past three years.

Environmental expenditure

Funds are allocated for environmental capital and operational expenditures. These amounted to R39.1 million on capital projects (2010: R65.9 million) and R35.3 million on operational figures (2010: R31.7 million).

Key customer update

The Key Sales and Customer Services team is the interface with major industrial customers (customers using a minimum of 100GWh of energy per year). The Eskom KeyCare total quality index measures the satisfaction of about 120 such customers with Eskom's service. An independent research supplier conducts interviews with senior managers at three levels, namely general management, engineering and accounting. The KeyCare index produces a 12-month moving average as its key performance indicator:

The KeyCare index for 2010/11 was 101% against a target of 100% (2010: 98%).

The Key Sales and Customer Services team has regular interactions, in large and small forums, with key stakeholders, facilitating dialogue and assessing the impact of Eskom's decisions on key customers' businesses.

Some customer interactions:

- Regular customer visits by regional key account managers, lead customer executives and key customer executives are part of day-to-day business and cover the full spectrum of service delivery
- Regional workshops are held on mining and industrial energy optimisation and NRS 048/9
- Quarterly Energy Intensive User Group and Eskom tariff working group meetings update and inform customers on all tariff-related issues
- Quarterly Energy Intensive User Group and industry energy forums update key customers and industry on all electricity-related matters that might impact their businesses
- Eskom liaises with the Energy Intensive User Group monthly to determine the group's needs and arranges for presenters and presentations
- Key industrial customer forums take place at least once a year to update and inform customers on critical issues affecting their businesses
- Annual strategic planning sessions with the Chamber of Mines and the Energy Intensive User Group solicit their inputs
- Regular chief executive breakfast sessions are held with key industrial customers
- Regular high-level strategic meetings are held with corporate groups to explore opportunities and strengthen relationships.

Customer Network Business continued

Distribution division



Ayanda Noah Divisional Executive: Distribution

Mandate

To manage a successful retail business and optimally operate and maintain the Eskom distribution electricity network, while managing the Distribution customer base.

Eskom owns 46 712km of distribution lines, 308 899km of reticulation power lines and 11 018km of underground cables in South Africa, representing the largest power line system on the continent of Africa.

Highlights	Challenges
<ul style="list-style-type: none"> • The marginal improvement of the system average interruption duration index performance • Achieved a customer service score of 84.37% (2010: 85.05%) against a target of 83.71% • Improved level of energy losses due to increased interventions in the management thereof • Electrified a total of 4 050 968 homes (2010: 3 901 054) since the inception of the electrification programme in 1991 • Taken action on more than 90% of wildlife interactions reported to the Eskom/Endangered Wildlife Trust partnership and implemented mitigation measures within four months • Performed an internal ISO 14001 review on all regions, highlighting best practices and areas for improvement • Engaged with some provincial authorities about permits for cutting protected trees • Seen positive results in waste management and data integrity • Rolled out various environmental awareness initiatives about climate change. 	<ul style="list-style-type: none"> • The marginal deterioration of the system average interruption frequency index performance • The number of legal contraventions, especially tree-cutting incidents, and a few incidents of non-conformance with environmental authorisations.
Future priorities	
<ul style="list-style-type: none"> • Improve network reliability and technical performance • Appropriate network maintenance and capital investments • Focus on and respond to current and future customer needs • Renew focus on safety improvements • Enhance focus on revenue management and collections • Continue roll-out of Operation Khanyisa to reduce energy theft • Continue roll-out of split metering • Standardise, optimise and integrate business processes (Back2Basics) • Grow human capital through retention of core, critical and scarce resources, complemented by effective skills and talent management. 	

Benchmarking

Distribution has participated in a 2007 benchmarking study, conducted by an independent international consulting group, with utilities in North and South America. The reporting methodology, network characteristics, environment and operational processes and practices of the distributors in the benchmarking panels are not the same, which results in a wide range of performance levels. This makes any direct performance comparison a challenge.

Eskom's network interruption performance is dominated by the performance of rural lines, which have been built on a least-cost basis. In this way, Eskom's distribution networks differ significantly from those of other distribution companies that have supply areas which include large cities and towns. Rural lines in South Africa include long radial lines with very limited redundancy and back-feed capability. This significantly distorts direct comparison with North American distributors in the benchmarking panel.

The South American peer group is more appropriate from a network investment and customer point of view than the North American peer group (as well as European peer groups). The Eskom system average interruption duration index and system average interruption frequency index is in the fourth quartile.

- System average interruption duration index performance in South America (2007) is between 3.5 and 90 hours per year and for Eskom it is 52.61^{RA} hours.
- System average interruption frequency index performance in South America is between 2.5 and 60 sustained supply interruption events per year; and for Eskom it is 25.31^{RA} events.

International benchmarks for the distribution supply loss index and the reticulation supply loss index are not available.

Material issues

Distribution capital planning



Distribution's five-year capital plan is updated every year. The plan is derived from all projects in the Distribution regions, divided into lines, cables, transformer numbers and transformer capacity per voltage level per category. The voltage levels used are sub-transmission (above 33kV) and 33kV and below.

As part of its response to the poor system average interruption duration index performance, Distribution is changing the planning approach and criteria.

Strengthening and refurbishment

Strengthening caters for the growth in the network as a result of economic growth, and refurbishment refers to the maintenance of existing network assets. Growth in the electrification programme also requires strengthening the supporting network infrastructure to open up un-electrified areas of South Africa. The National Energy Regulator of South Africa and the grid code require that Eskom maintains a level of network stability and flexibility that can support the growth of existing customers.

There are about 800 to 1 000 constrained feeders in Distribution which means that due to either voltage or transformer capacity limitations, no new connections can be made. Most of these constraints can only be removed by means of sub-transmission infrastructure strengthening. The capital required is about R5 billion which indicates the extent of the backlog. What can be implemented is in the order of R3 billion in the period up to 2014/15.

There is a significant refurbishment backlog, which this capital plan is addressing. Refurbishment expenditure of R1.4 billion per year will ensure that the backlog does not increase. There is a need to change refurbishment strategies and Distribution's resource constrained ability to execute the strategy. Spending on refurbishment aims to eliminate the backlog over a 10-year period. Distribution is building additional sub-transmission substations to create more feeders and split the existing feeders in response to the reliability challenges with long feeders (in excess of 200km).

Split metering

Split meters reduce the amount of non-technical losses. These devices use two-way communications to detect tampering. In Soweto, the cost of split meters has increased due to the need for secure housings for the meters to prevent tampering or bypassing. After 2014/15, the split metering technology will be incorporated into normal business.

Customer service



Eskom's service delivery and efficiency is important to South Africa's economic prosperity, transformation and sustainable development. By monitoring customer satisfaction, Distribution can plan to ensure that it delivers the required quality of service at the appropriate time and price. A range of statistical perception surveys, conducted by an independent research organisation, is used to measure customers' satisfaction with the service delivered.

RA – Reasonable Assurance provided by the independent assurance provider (refer page 200).

Customer Network Business continued

Distribution division continued

Tariffs



NERSA approved a revenue requirement of R85.18 billion and a price increase of 24.8% on tariff-based sales for 2010/11. This resulted in a standard average price of 41.57c/kWh.

Refer to the Regulatory and Legal Framework section on page 35 for details of the MYPD 2 process.

The National Energy Regulator of South Africa also decided to replace Eskom's residential tariff structures with an inclining block tariff. This includes measures to protect the poor, so there are

different increases per tariff category. The inclining block tariff has been implemented for metered residential customers. Implementation for prepaid residential customers was limited to the NERSA IBT price levels within the existing structures at first, with full implementation on 1 April 2011.

The inclining block tariff gives significant relief to most residential customers, with customers with low consumption seeing reductions in their costs. Customers using more than 1 500kWh per month see higher than average increases.

Case study

The introduction of the inclining block rate tariff

NERSA in its determination announced "In order to provide for cross-subsidies for low income domestic customers, as required by the Electricity Pricing Policy (EPP1), implement residential inclining block rate tariffs concurrently with this price increase. The structure of the inclining block tariffs, together with the average c/kWh and percentage price increases, are as follows:

Monthly level	Consumption	2010/11		2011/12		2012/13	
		c/kWh	% increase	c/kWh	% increase	c/kWh	% increase
Block 1 (≤50kWh)		54.70	(10.59)	57.65	5.40	60.83	5.50
Block 2 (51 – 350kWh)		58.48	(5.20)	66.16	13.23	75.09	13.50
Block 3 (351 – 600kWh)		76.35	21.95	96.05	25.80	120.93	25.90
Block 4 (>600kWh)		83.74	35.82	105.35	25.80	132.63	25.90
Average residential tariff		60.60		68.83		78.62	


Explanation of the price increase implemented to the retail tariffs on 1 April 2010

The annual average price increase approved by the National Energy Regulator of South Africa on all tariffs is 24.8%, calculated from the annual revenues and sales volumes between 2009/10 and 2010/11. The percentage increase is the average impact on customers.

The following should be noted with regards to the tariff:

- The environmental levy charge stays the same and is not included when determining the average increases for the tariff rates
- The National Energy Regulator of South Africa's subsidy of R1.32 billion for the inclining block tariff is to be recovered from the urban tariffs, further increasing these tariffs by an average 4.8%. Eskom's rural tariff and tariffs applicable to municipal supplies were excluded from paying the additional subsidy

- The annual increase to municipal tariffs, in compliance with the Municipal Finance Management Act (56 of 2003), was only effective from 1 July 2010. This resulted in a different price increase than the announced annual average, as the increase calculated took into account the environmental levy, the three months at a lower tariff, and the nine months at a higher tariff
- On 1 July 2010, municipal tariff rates increased by 28.9% plus the environmental levy of 2c/kWh, resulting in a year-on-year annual increase of 24.01%
- In 1 April 2010, the total non-municipal tariff rates increased by an average of 18.7% plus the environmental levy of 2c/kWh, resulting in a 23.8% year-on-year annual increase.

 For details on Eskom's price increases over the past 17 years, go to www.eskom.co.za/annreport11/010.html

Free basic electricity



Government aims to bring relief to low-income households through the national electricity basic services support tariff, thereby ensuring optimal socioeconomic benefits from the national electrification programme. Qualifying customers are eligible for 50kWh of free electricity per month.

Free basic electricity

Description	Unit of measure	Actual 2011	Actual 2010	Actual 2009
Municipalities contracted to provide FBE	number	243	243	243
Municipal contracts rolled out	%	99	99	99
Customers approved by municipalities for FBE	number	1 132 421	1 308 357	1 289 804
Customers' meters reconfigured to receive FBE	number	1 141 235	1 294 997	1 233 012
Reconfigured FBE customer meters in the year	average %	100	99	96
Amount invoiced to contracted municipalities	Rm	273	308	197

 Refer to www.eskom.co.za/annreport11/011.html for more information regarding free basic electricity.

Management of total energy losses



Energy losses reflect the difference between the quantity of energy sent out from the power stations and the quantity sold to the various customers at the end of the value chain.

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 2010/11, total Distribution energy losses were 5.68%^{RA}, of which non-technical losses are estimated to be between 1.4% and 2.3%. Compared to other utilities globally, Eskom continues to perform well on energy loss management. Distribution has participated in a 2007 benchmarking study, conducted by an independent international consulting group, mainly with South American utilities. The 2007 benchmarking parameters for total distribution losses were 5.60% to 12.07%. Eskom is currently in the first quartile of the top performing distribution utilities.

Even though Eskom compares favourably with other utilities, energy losses are a key focus area and the level of energy losses has improved. Actual results are better than the National Energy Regulator of South Africa's target energy losses.

Customer Network Business continued

Distribution division continued

Total actual losses were:

Energy losses	Target 2011	Actual 2011 GWh	Actual 2010 GWh	Actual 2009 GWh	
Total Eskom energy flow		253 084	246 705	240 673	
Total distribution network energy flow ¹		224 328	218 663	214 313	
Actual loss – distribution		12 734	12 839	11 706	
Actual loss – transmission		8 157	8 009	7 407	
Total actual loss		20 891	20 848	19 113	
NERSA MYPD allowance		22 535	21 131	20 558	
Energy loss (%)					
Total distribution loss	≤6.00%	5.68%^{RA}	5.87%	5.46%	●
Total transmission loss	≤3.40%	3.27%^{RA}	3.27%	3.08%	●
Total Eskom loss	≤8.75%	8.25%	8.45%	7.94%	●

RA – Reasonable assurance provided by the independent assurance provider (refer page 200).

1. Inclusive of energy flows to KSACS customers.

For internal evaluation purposes the estimated technical losses range between 60% and 75% of total losses in Distribution, while 100% is estimated for the Transmission networks. The actual percentage in Distribution is influenced by factors such as network design, network topology, load distribution on the network and network operations.

Operation Khanyisa

The energy losses management programme has stabilised distribution energy losses at below 6% through audits and corrective measures, conducting energy balancing of ring-fenced areas, implementing tested technologies, and a public awareness campaign, called Operation Khanyisa.

Operation Khanyisa, launched in October 2010, is a national campaign to mobilise all sectors of South African society around legal power use. The theme of the campaign is sustainability for economic growth. Last year, the losses suffered by Eskom and local government were estimated at R4.4 billion a year. Electricity theft contributes to power outages, rising prices, the slowing down of the economy, job losses and fatalities and injuries due to electrocutions. It also affects government's universal access programme.

The core partners of Operation Khanyisa are Proudly South African, Business Against Crime, Business Unity South Africa, the South African Local Government Association and Primedia Crime Line. The campaign is currently active only in Eskom areas of supply, but

the intention is to expand into areas serviced by municipalities, hence the importance of the partnership with the South African Local Government Association. Although the focus of the campaign is electricity theft, it integrates related issues such as safety, non-payment, energy efficiency and infrastructure theft.

Some of the major milestones achieved in the current financial year include:

- Testing the approach
- Agricultural launch, National Maize Producers Organisation (NAMPO) – May 2010
- Soweto media launch – June 2010
- Eskom employee launch – June 2010
- National launch – October 2010
- Formal memorandum of understanding concluded with core branding partners – Proudly SA, Business Against Crime, Business Unity SA, SA Local Government Association and Primedia Crime Line
- Letter of endorsement from the President – October 2010
- External and internal baseline research completed
- Five pilot sites successfully launched – November and December 2010
- Full media roll out – print, electronic and outdoor billboards.

Operation Khanyisa will be fully implemented in 2011/12.

Electrification



The Department of Energy began funding the integrated national electrification programme in April 2001. Eskom implements the programme in its licensed areas of supply on the department's behalf. (Electrification in a municipality's licensed areas of supply is carried out by that municipality.) Eskom carries the operating costs for the electrification programme, as the licensed distributor supplying electricity to its customers. Funding is currently made available for new connections and infrastructure development that are part of

the integrated national electrification programme. The average cost of infrastructure development and the cost per connection is likely to increase as more remote rural areas are electrified. In addition, technical specifications for network design have been enhanced to better accommodate future growth in electricity demand and to improve the quality and reliability of the electricity supply in these areas.

Since the start of the electrification programme in 1991, 4 050 968 homes (2010: 3 901 054) have been electrified.

Electrification programme

	Unit of measure	Target 2011	Actual 2011	Actual 2010	Actual 2009	
Total connections	number	158 430	149 914	149 901	112 965	●
Direct connections, excluding farm workers	number	157 844	149 112	149 028	111 903	●
Farm worker connections	number	586	802	873	1 062	●
Total capital investment	Rm	1 849	1 512	1 086	798	●
Reticulation and connections	Rm	1 208	949	914	682	●
Sub-transmission infrastructure development	Rm	637	559	169	113	●
Farm worker connection incentives paid	Rm	4	4	3	3	●

The targets have not been achieved due to delays in concluding some commercial contracts. Targets for connections funded by the Department of Energy have been met. The shortfall relates to Eskom funded infills for which approval to continue was only obtained later in the financial year.

Meeting universal access targets in the future is primarily dependent on the availability of funding from the department via the integrated national electrification programme. Eskom engages with the department and other key stakeholders on the planning, funding and other requirements for universal access.

Electrification of grid schools and clinics

	Unit of measure	Target 2011	Actual 2011	Actual 2010	Actual 2009	
Capital investment	Rm	175	158	142	108	●
Total connections	number	644	854	774	479	●

The electrification of schools and clinics is funded by the Department of Energy through the National Electrification Fund. This programme is focused on electrifying specifically identified schools and clinics.

Customer Network Business continued

Distribution division continued

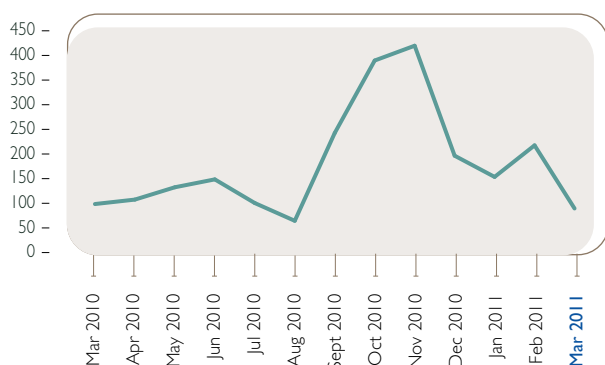
Customer debt



Customer debt has doubled in rand value over the past three to four years. It is growing fastest in Soweto, where it includes historical debt. Large power user debt is fairly well managed, but recently risks in this category have increased with the redistributors (municipalities) and EB Steam and Pamodzi. Supply to EB Steam cannot be suspended due to a court interdict. Pamodzi's energy supply has been suspended except for their water pump, due to health and safety reasons. Significant tariff increases are contributing to the 10% growth in small power user debt since the end of June 2010. This is a lagging but emerging risk.

Municipal arrear electricity debts decrease significantly in July, November and March, as the municipalities utilise their equitable share allocations from National Treasury to settle their Eskom debt. The annual equitable share allocations to municipalities are gazetted and are transferred in three tranches, 41.7% in July, 33.3% in November and 25.0% in March. Eskom regions work closely with municipalities and the Provincial Departments of Cooperative Governance to understand the exact amounts being transferred to municipalities. Delays in equitable share transfers do occur sometimes, which results in the late settlement of the arrear debt. In some instances, the arrear debt exceeds the equitable share amount received, resulting in the inability of a municipality to clear the arrear debt with Eskom. It is a concern that these payments and actions taken through the normal Promotion of Administrative Justice Act (PAJA) process to recover Eskom debt are not creating a long-term sustainable solution for Eskom.

Municipal debt older than 30 days
(R million)



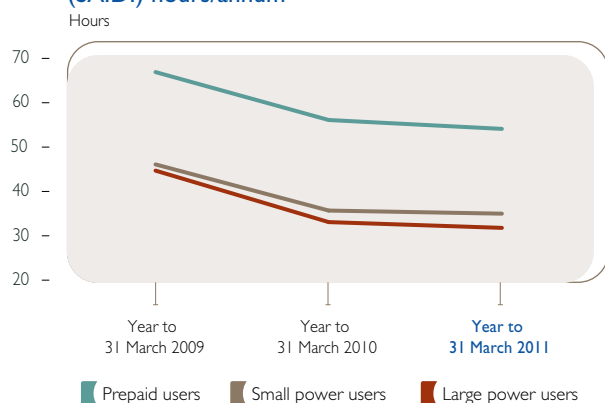
A turnaround strategy for Soweto debt is being developed as part of the energy losses management programme. The strategy will focus on persuading Soweto customers to voluntarily change their behaviour and become legal power users. This will include among others, rolling out an integrated social marketing campaign to secure community buy-in, stakeholder support, forging partnerships with local key influencers, facilitating community development and driving transparent communication. Incentives will also be provided to encourage the right behaviour. Investment in the latest technology in the form of protective enclosures with split prepaid meters to discourage illegal connections and encourage payment for electricity consumed is being considered as part of the solution.

Strategies to address non-payment:

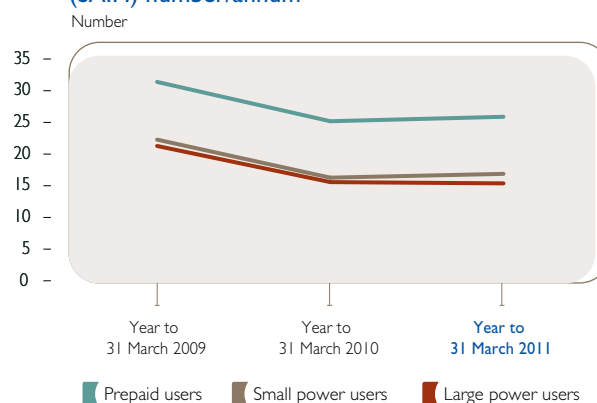
- Convert to prepaid in the residential sector
- Focus on customers that struggle to afford electricity
- Focus on agricultural, industrial, mining and commercial customers with overdue debt of more than R10 000
- Review the revenue security policy to ensure risk mitigation relating to customer payments
- Consult with government and the National Energy Regulator of South Africa
- Get buy-in from stakeholders in the collection process to deal with redistributors
- Deploy the adopt-a-municipality programme with national government
- Report regularly to National Treasury on the status of municipal debt
- Mobilise a contact centre to do national debt collection
- Rationalise contact centres to maximise revenue collection (dependent on strategic direction project)
- Improve payment at day 30 by listing slow-paying small power user customers with credit bureaux
- Review debt and credit management structures in the Distribution division.

Current performance

System average interruption duration index (SAIDI) hours/annum



System average interruption frequency index (SAIFI) number/annum



Distribution system performance


Measure	Description of measure (and unit)	Target 2011	Actual 2011	Actual 2010	Actual 2009	Comments
Distribution supply loss index (DSLII)	Distribution network unavailability index (minutes per month)	n/a ¹ (≤8.70)	12.81	12.30	9.17	Target not achieved. See comments for DSLII and RSLI below. ●
Reticulation supply loss index (RSLI)	Reticulation network unavailability index (hours per annum)	n/a ¹ (≤2.20)	2.28	2.43	2.16	Target not achieved. See comments for DSLII and RSLI below. ●
Reticulation supply loss index (RSLI)	Unplanned reticulation network unavailability index (hours per annum)	n/a ¹ (≤1.60)	1.85	1.84	1.70	Target not achieved. See comments for DSLII and RSLI below. ●
System average interruption frequency index (SAIFI)	Reliability of supply index (number per annum)	≤23.20	25.31 ^{RA}	24.65 ^{RA}	24.16 ^{RA}	Target not achieved. See comments for SAIFI and SAIDI below. ●
System average interruption duration index (SAIDI)	Availability of supply index (hours per annum)	≤49.50	52.61 ^{RA}	54.41 ^{RA}	51.51 ^{RA}	Target not achieved. See comments for SAIFI and SAIDI below. ●

Distribution has begun to improve the accuracy of reporting on the distribution supply loss index and the reticulation supply loss index. Current reporting is a best estimate, and this needs to be taken into consideration for year-on-year evaluation and comparative analysis.

Performance on the interruption frequency index has marginally deteriorated, and performance has marginally improved on the interruption duration index since last year. Targets have not been achieved because of resource constraints, impact of conductor/equipment theft on resources and adverse weather conditions in 2010/11. Initiatives to improve network performance are taking longer than anticipated to show results. There has been an increased focus on planned work.

Key initiatives to improve performance and reduce the impact of planned and unplanned outages on customers

- Increased use of live-line techniques
- Increased network visibility and remote control of switching devices
- Improved outage management and co-ordination
- Enhanced asset management processes
- Increased maintenance and refurbishment expenditure
- Improvement plans for worst performing networks.

 Refer to www.eskom.co.za/annreport11/012.html or more information on distribution system performance.

RA – Reasonable assurance provided by the independent assurance provider (refer page 200).

1. There are no DSLII and RSLI targets for 2010/11. The figures in brackets represent the targets for financial year end March 2010.

Customer Network Business continued

Distribution division continued

Customer service index

Eskom uses a composite index to measure the service delivered to its Distribution customers. The index combines the results of two external customer service perception surveys and four internal customer service process measures. Eskom achieved a score of 84.37% (2010: 85.05%) against the target of 83.71%.


Eskom uses these results to identify which aspects of service require improvement. Once action plans have been re-prioritised and implemented, success is tracked by monitoring the trends for those specific aspects of service.

Customer service index results:

	Target 2011 %	Actual 2011 %	Actual 2010 %	Actual 2009 %	Benchmark (2009)	Regulatory standard	
External customer perception surveys:							
– Enhanced MaxiCare	≥90.60	89.40	92.95	92.80	n/a	n/a	●
– CustomerCare	≥80.00	82.30	80.70	81.70	n/a	n/a	●
Internal performance measures:							
– Restoration time <7,5 hours	≥80.00	66.93	72.15	72.80	n/a	90.00	●
– Minor projects quotations <30 days	≥85.00	86.00	90.00	85.00	n/a	95.00	●
– Minor projects connections <90 days	≥81.00	82.00	78.00	73.00	n/a	95.00	●
– Contact centre service level	≥80.00	83.80	82.60	84.00	Q1	80.00	●
Weighted customer service index	≥83.71	84.37	85.05	84.74			●

Distribution has participated in a 2009, international benchmarking study, conducted by an independent international consulting group. As per the benchmarking study, the first quartile performance for contact centre service level is >70%.

Eskom is currently in the first quartile of contact centre service performance per the benchmarking study. The minimum standard specified in NRS047-1:2005 is 80%. Eskom achieved year-on-year improvement despite the growth in call volumes queued into the contact centres, which increased by 6.1% to 5.66 million calls (2010: 5.33 million). The improvement is due to good planning, performance management and efficiencies in virtual call flow between sites. The handling of emergency situations also improved.

 Refer to www.eskom.co.za/annreport11/013 for more information about the measuring of customer satisfaction.

Environmental and safety performance

	Target 2011	Actual 2011	Actual 2010	Actual 2009	
Number of environmental legal contraventions (number)	0	12	4	5	●
Number of environmental legal contraventions reported in terms of Eskom's operational health dashboard ¹ (number)	0	2²	0	0	●
Materials containing asbestos disposed of (tons)	n/a	285.8	16.2	40.2	
Material containing polychlorinated biphenyls (PCBs) disposed of (tons)	n/a	18.0	13.3	15.0	
Lost-time incident rate (index) ³	0.26	0.64	0.72	0.57	●

1. Under certain conditions, contraventions of environmental legislation are classified in terms of the Eskom operational health dashboard (OHD) index. These include instances where censure was received from authorities, non-reporting to authorities as may be legally required, non-reporting in Eskom, a repeat legal contravention, or when the contravention was not addressed adequately. Divisional executives can escalate any significant environmental legal contravention to the OHD.

2. Repeat environmental legal contraventions registered in Eastern Region and Northern Region related to occasions where protected Marula trees were cut without permits.

3. Lost-time incidents improved to 154 in 2010/11 from 163 in 2009/10. Unfortunately there were eight employees fatalities and 23 contractor fatalities over the past three years.

Integrated Demand Management division



Andrew Etzinger Senior General Manager: Integrated Demand Management

Mandate

Design integrated solutions to mobilise a culture of energy efficiency to solve complex energy demand issues for a sustainable future for South Africa.

Overview

The Integrated Demand Management division, dedicated to ensuring short-term security of supply, was created in 2010. Eskom has long offered programmes for supporting and funding energy efficiency. Integrated Demand Management integrates previously fragmented activities across the business and positions energy efficiency as a key core business in Eskom for the first time. The division's initiatives and programmes are all aimed at balancing supply and demand in the short to medium term, and are consolidated and co-ordinated for optimal effect. The division is mandated to drive Eskom's demand management response to the projected shortage of electricity, and the building of a sustainable, energy-efficient society.

How Integrated Demand Management will achieve its objectives:

- Implement a step change in demand management delivery through an integrated and innovative portfolio of demand management initiatives
- Use Eskom and national resources to deliver the national demand management initiative
- Communicate transparently the extent and nature of the electricity crisis to create acute national awareness to drive the required response
- Partner with stakeholders through a pro-active and collaborative approach to contribute to national energy efficiency objectives.

The National Energy Regulator of South Africa has allocated R5.44 billion to fund these initiatives over three years. Certain initiatives are fully funded, while Eskom contributes to others.

Highlights	Future priorities
<ul style="list-style-type: none"> • Achieved the demand and annualised energy savings targets for the year • Successfully concluded the roll-out of over 47 million compact fluorescent lamps in the residential sector nation-wide since the programme began. This has realised an equivalent annual demand savings of 1 958MW for all CFLs verified since inception in December 2003 • Accelerated the solar water heating rebate whereby over 10 000 claims are being received and processed monthly • Power Alert continued to drive savings in critical time. During the year average demand savings of 174MW were attained which translated to 44.4GWh of energy savings. During the 2010 FIFA World Cup™ period an estimated demand reduction of 608MW was achieved • Rolled out a massive marketing and communications campaign regarding energy savings. 	<ul style="list-style-type: none"> • Implement the energy conservation scheme • Step up demand management projects • Investigate new opportunities such as efficient downlighters.

Customer Network Business continued

Integrated Demand Management division continued

Benchmarking

Eskom's compact fluorescent lamp programme is the largest free mass roll-out of compact fluorescent lamps in the world, with over 47 million bulbs distributed.

Mexico and India have large programmes. Mexico's target is 30 million bulbs. The programme will be in stages, with the first stage targeting only 1 million bulbs. India will be targeting a 400 million bulb project, but it will not be free distribution. It is planned that 85% of the cost of a bulb will be subsidised. The roll-out of 15 million bulbs has started in the Kerala province and is due for completion in mid-2011.

England, Rwanda, Senegal and China have all had smaller compact fluorescent lamp roll-outs of less than 1.5 million bulbs each.

Source: Project Design Document (PDD), CUIDEMOS Mexico (Campana De Uso Inteligente De Energia Mexico) Smart Use of Energy Mexico.

Material issues

Demand market participation (DMP)



The demand market participation programme allows customers with flexible load to contract with Eskom to reduce their load on a year-ahead or day-ahead basis. On any contracted day, Eskom has the right to instruct the participant to reduce their load, if and when needed, as part of Eskom's contracted reserves for the day. This occurs on Eskom's instruction during periods of supply constraints. The programme has various categories in which a customer can participate, determined by their unique plant characteristics, response time ability, period they can reduce load, cost implication, etc.

On a daily basis, Eskom compares the cost of these flexible load resources with other resources it has available for the next day, and schedules the required reserves days ahead. The programme is approved by NERSA and has resulted in major benefits to customers and the economy – electricity charges are reduced and load shedding is avoided.

Energy conservation scheme



In January 2008, Eskom began developing the power conservation programme on behalf of national government. The programme is to help the Department of Energy create a sufficient reduction in demand to allow for both essential generation plant maintenance as well as economic growth. The gap between available supply and projected electricity consumption is still a major concern, especially for the period 2011 to 2015.

The medium-term risk mitigation team recommended the formation of the energy conservation scheme. The team is a joint technical initiative between government, industry and business, the municipalities and Eskom, established to advise the Department of Energy on the appropriate strategies to address security of supply risks.

Eskom implemented a voluntary energy conservation scheme in July 2008 with its top 250 customers. The scheme has been developed to align as closely as possible with the envisaged regulatory scheme and also has an allocation management system to help customers load their baselines and manage their monthly allocations. Since the start of the programme, 134 customers have accepted their baselines and an energy saving of about 5% has been achieved.

Efficient lighting



The mass implementation of compact fluorescent lamps was concluded in 2010/11. Since the inception of the DSM programme in December 2003 over 47 million bulbs have been installed country-wide in the residential sector, realising demand savings of 1 958MW. An exchange programme swapped about eight million compact fluorescent bulbs with incandescent bulbs at exchange points in high public traffic areas.


Solar water heating



South Africa has one of the highest incoming solar radiation levels in the world, making it a prime candidate for solar water heating. It is an ideal solution for households and has industrial and commercial applications. Eskom's solar water heating programme offers a rebate to customers to use solar power instead of electricity to heat water. Customers can either replace existing electrically heated geysers with solar heated systems or they can install low-pressure solar water heating systems to replace water heating via other electrical appliances.

A decrease in the rebate was announced in April 2011 in order to extend the available funds as far as possible while supporting the manufacture of systems locally.

The revised rebate gave momentum to the sales of solar water heating systems. Some 60 183 claims were received, of which 41 690 were paid. Of these, 28 612 claims (13 147 high-pressure systems and 15 465 low-pressure systems) were submitted to Energy Audits for measurement and verification. Units not verified this financial year will be verified in 2011/12.

 Refer to www.eskom.co.za/annreport11/014.html for information about other energy saving tools and schemes being promoted by Eskom.

Energy efficiency marketing and communications



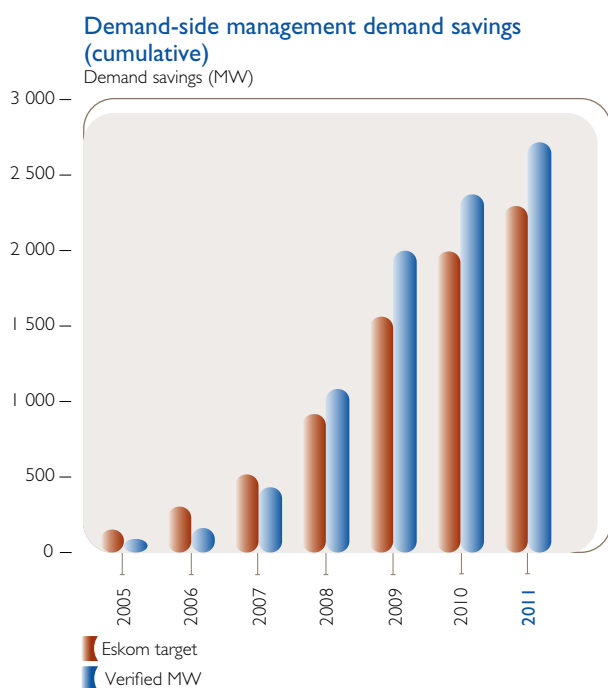
An extensive marketing and communications strategy has been implemented, strengthening relationships with customers, municipalities and the public. Various campaigns have been launched, using advertising (print and radio), public relations (including media) and community activation and education.

Refer to www.eskom.co.za/annreport11/015.html for information about marketing and communications campaigns.

Current performance

Since 2004, when demand-side management projects were initiated and measured, the demand savings in the evening peak (18:00 to 20:00) have risen in line with the growing requirement for demand reduction. Integrated Demand Management has used energy services company-related projects in the industrial, mining, and commercial sectors of the economy in addition to hot water load management within the municipal environments.

The accumulated verified demand savings, for the combined financial years 2005 to 2011, is 2 717MW. A single power station generator unit contributes approximately 600MW to the national grid and therefore DSM has "freed up" more than four generators (a typical power station has six) in the past four years.



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

The total Eskom evening peak demand savings achieved over the period is 354.1MW against the Eskom target of 301MW (2010: 372MW). This includes 345.1MW^{RA} verified for NERSA and Department of Energy funded projects and 9MW for a project implemented through the DSM advisory service policy. The annualised energy savings for this financial year are 1 339GWh against the target of 994GWh. These results are made up as per the table below:

Programme category	Savings achieved (MW)
Residential lighting	199.1
Water heating load management	31.7
Compressed air systems	41.9
Industrial process optimisation	73.1
Commercial and industrial lighting and air-conditioning	2.1
Solar water heating	5.9
Heat pumps	0.3
Total	354.1

The following expenditure for the financial year was incurred on the above programmes:

Programme category	R million
Residential lighting	47
Water heating load management	25
Compressed air systems	98
Industrial process optimisation	70
Commercial and industrial lighting and air-conditioning	40
Solar water heating	225
Heat pumps	40
Total	545





Eskom Enterprises (Pty) Limited

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Eskom Enterprises (Pty) Limited



Dan Marokane Acting Chief Executive Officer: Eskom Enterprises

Mandate

Provides lifecycle support and plant maintenance, network protection and support for the capacity expansion programme for all Eskom Holdings Limited divisions.

<i>Highlights</i>	<i>Challenges</i>
<ul style="list-style-type: none">• Supported Eskom in managing coal supplies during the transport strike• Rotek Industries provided a flexible response to the tight power station outage programme• Supported Eskom's road repair initiatives• Signed the settlement agreement, covering exit from the Eskom Energie Manantali concession• Rotek Industries opened a state-of-the art new transformer repair and testing facility.	<ul style="list-style-type: none">• Five recorded fatalities, and a deterioration in overall safety performance• Reduction in sustained demand for civil construction• Suboptimal utilisation of assets and resources.
<i>Future priorities</i>	
<ul style="list-style-type: none">• Reposition Eskom Enterprises' divisional assets into Eskom Holdings• Integrate Rotek and Roshcon into a single company, with high quality products and focused on meeting Eskom's needs cost effectively• Focus on skills – through a retention strategy, talent management and pipelining of skills – to grow the capacity and capabilities of the group• Implement Back2Basics supported by Eskom Holdings' standard policy, process and system solution• Upgrade and integrate Eskom's telecommunications assets in support of an integrated ICT solution• Manage the final exit from the Eskom Energie Manantali concession• Improve safety initiatives as part of the safety excellence programme• Effective contractor safety management.	

Financial results

<i>R millions</i>	2011	2010
Total revenue	6 214	6 797
Profit for the year (after tax)	283	152
Total assets	7 165	7 295
Capital expenditure	208	509

Structure of Eskom Enterprises¹

Eskom Enterprises was formed in 1999 to carry out the non-regulated, electricity-related activities of the Group in South Africa, and all its other energy and related activities outside South Africa. Eskom Enterprises is an asset- and investment-holding company, carrying out non-regulated work such as telecommunication, network protection and measurement. It also houses a number of operating subsidiaries. The group is structured as below.

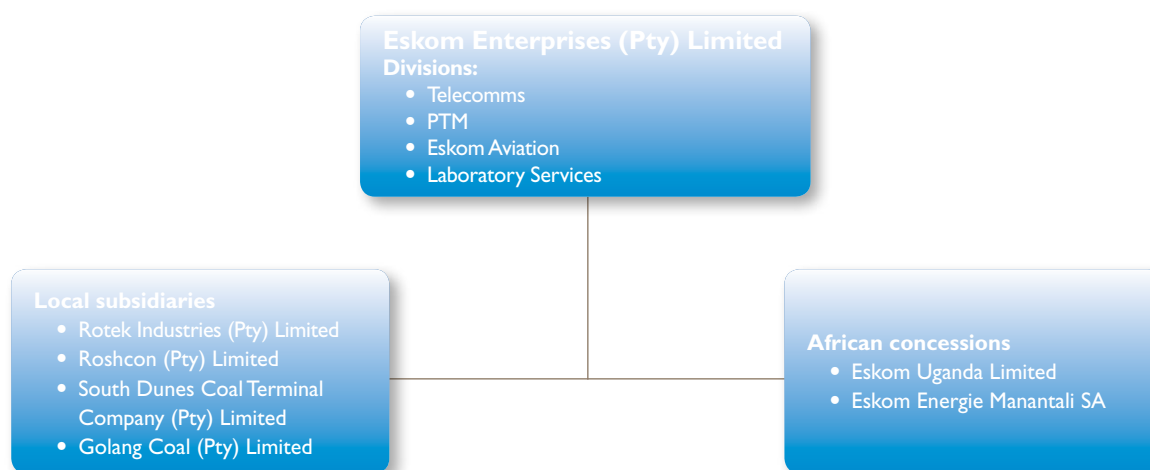
Rotek Industries (Pty) Limited

- Power generation services – repairs and maintains turbo machinery.
- Power distribution services – repairs and maintains transformers and switchgear equipment.
- Bulk water services – operates, repairs and maintains water schemes.

Roshcon (Pty) Limited

- Electrical infrastructure – manages electrification contracts and electricity revenue management services.
- Civil infrastructure – is active in general civil construction.
- Waste, environmental and bulk materials – manages bulk materials vital to Eskom, specifically ash and coal.

Eskom Enterprises also operates and maintains Eskom's private telecommunications network, which is vital to the operation of the system that integrates the delivery of power from Eskom's power stations to the major substations. Eskom Enterprises played a significant role in developing the telecommunications technology strategy for Eskom.



1. Only operating companies are depicted

Eskom Enterprises (Pty) Ltd continued

Current performance

Safety performance

<i>Performance measure</i>	<i>Target 2011</i>	<i>Actual 2011</i>	<i>Actual 2010</i>	<i>Actual 2009</i>	
Lost-time incident rate (employees)	0.20	0.39	0.33 ¹	0.50	●
Lost-time incident rate (contractors)	0.40	0.44	0.24	0.43	●
Fatalities (employees (number))	0	3	0	3	●
Fatalities (contractors (number))	0	2	1	2	●

In 2011, 61 lost-time incidents (2010: 55¹) were reported, for employees and contractors. Regrettably, there were five fatal incidents during the year (2010: 1) – three employees and two contractors. The employee lost-time incident rate worsened from 0.33¹ in 2010 to 0.39 during the current financial year, while the contractor lost-

time incident rate also deteriorated from 0.24 in 2010 to 0.44 at year end, mainly as a result of the fatalities and a higher number of incidents than the previous year.

Environmental performance

Environmental performance indicators

	<i>Target</i>	<i>2011</i>	<i>2010</i>	<i>2009</i>	
Number of environmental legal contraventions (number)	0	3⁴	15	24	●
Number of environmental legal contraventions reported in terms of Eskom's operational health dashboard (number) ²	0	4	0	3	●
Materials containing asbestos disposed of (tons) ³	n/a	6.6	73.6	279.4	
Materials containing polychlorinated biphenyls (PCBs) thermally destroyed (tons)	n/a	1.1	1.2	1.4	

1. Restated.

2. Under certain conditions, contraventions of environmental legislation are classified in terms of the Eskom operational health dashboard (OHD) index. These include instances where censure was received from authorities, non-reporting to authorities as may be legally required, non-reporting in Eskom, a repeat legal contravention, or when the contravention was not addressed adequately. Divisional executives can escalate any significant environmental legal contravention to the OHD.

3. Quantities of waste disposed of at registered waste sites.

4. The figure is not comparable to prior years, due to business structural changes.

Rotek Industries opens state-of-the art new transformer repair and testing facility

On 1 November 2010, Rotek Industries, a subsidiary of Eskom specialising in the repair of transformers, opened its new transformer test bay facility in Rosherville, Germiston, where Eskom transformers will be refurbished and tested. The new facility will speed up refurbishment and ensure that Eskom's transformers meet national and international performance standards.

The Rotek Industries facility is the only test bay in Africa that can run high-voltage tests in a short space of time compared to the conventional two-week process. It is capable of testing some of the largest power generation and transmission transformers in the world. The test facility uses state-of-the art technology, such as static converters for power frequency and high frequency tests. It will have a significant impact on capacity and will heighten Eskom's maintenance plan, thus ensuring a secure electricity supply. The facility can serve not only Eskom but also large private energy users.

The measuring instrumentation is digital, with a measurement error of less than 0.05%. This will improve the reliability factor significantly.



Rotek Industries, a subsidiary of Eskom specialising in the repair of transformers, opened its new transformer test bay facility in Rosherville, Germiston.

Independent assurance report on selected sustainability information

To the directors of Eskom Holdings Limited

We have undertaken an assurance engagement on selected sustainability information as described below and presented it in the 2011 Eskom Integrated Annual Report (the report) of Eskom Holdings Limited (Eskom) for the year ended 31 March 2011.

We have complied with the International Federation of Accountants (IFAC) Code of Ethics for Professional Accountants, which includes comprehensive independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. Our engagement was conducted by a multi-disciplinary team of health, safety, social, environmental and assurance specialists with extensive experience in sustainability reporting.

Level of assurance on selected sustainability information

The assurance we are required to provide is as follows:

1. Limited assurance on Eskom's assertions regarding its alignment with AA1000APS (2008)¹ principles (inclusivity, materiality and responsiveness) as described on page 20 of the report,
2. Reasonable assurance on the following key performance indicators prepared in accordance with the Global Reporting Initiative (GRI) G3 Guidelines, marked with an "RA" on the relevant pages of the report:
 - Technical performance parameters – *Unplanned capability loss factor, unit capability factor, energy availability factor, system minutes lost, major incidents, system average interruption frequency index (SAIFI), system average interruption duration index (SAIDI), national load shedding (Generation induced) or unserved energy and energy losses (transmission and distribution)*
 - Environmental performance parameters – *Coal purchased – stock days, specific water consumption, liquid fuel usage, demand-side management (megawatts and annualised gigawatts), particulate emissions, carbon dioxide emissions, sulphur dioxide emissions, nitrogen oxides emissions, low-level radioactive waste generated and disposed, intermediate level radioactive waste generated and disposed, polychlorinated biphenyls (PCBs) thermally destructed, asbestos disposed, ash (produced, recycled and disposed), environmental legal contraventions and internal energy efficiency (non-essential energy consumption)*
 - Social performance parameters – *Skills and development (Eskom trainees/bursars – learner pipeline, number of engineering trainees/apprentices, additional number of non-Eskom learners on Eskom-sponsored learning), human resource operational measurements (disabilities), corporate social investment spend, employee and contractor work-related fatalities, employee lost-time injury rate (LTIR), Broad-Based Black Employment*

Equity (B-BBEE) expenditure – Company (attributable spend, attributable spend percentage and attributable black women-owned spend)

- Economic parameters – *Generation capacity installed and commissioned, transmission lines installed, transmission mega volt amperes (MVA) installed, percentage of local content in new build contracts, cost of electricity, ratio of debt to equity (the debt:equity ratio) and interest cover.*

3. Limited assurance on Eskom's self-declaration of the GRI B+ Application Level (page 20)

Directors' responsibilities

The directors are responsible for the selection, preparation and presentation of the sustainability information, the identification of stakeholder requirements and material issues, for commitments with respect to sustainability performance, and establishing and maintaining appropriate performance management and internal control systems from which the reported information is derived, and for such internal control as the directors determine to be necessary to enable the preparation of the report that is free from material misstatement, whether due to fraud or error.

The directors are also responsible for the selection and application of the criteria detailed below:

- The AA1000APS (2008)¹ for Eskom's assertions regarding its alignment with AA1000APS (2008)¹ principles (inclusivity, materiality and responsiveness);
- The GRI G3 Guidelines applied to the selected key performance indicators; and
- The GRI G3 Guidelines on Eskom's self-declaration of the GRI B+ Application Level.

Our responsibility

Our responsibility is to express assurance conclusions on the selected sustainability information based on our work performed. We have conducted our engagement in accordance with the International Standard on Assurance Engagements (ISAE 3000), Assurance Engagements other than the Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standards Board. That standard requires that we plan and perform our engagement to obtain assurance about whether the selected sustainability information is free from material misstatement.

Our procedures and the extent of our procedures depend on our judgement including the risks of material misstatement of the selected sustainability information. In a limited assurance engagement, the evidence gathering procedures are less than where reasonable

1. AA1000 AccountAbility Principles Standard (2008), issued by AccountAbility.

assurance is expressed. In making our risk assessments, we considered internal control relevant to Eskom's preparation of the report. We believe the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusions.

Summary of work performed

Our work included the following evidence-gathering procedures at corporate, divisional and site level:

- Interviews with management and senior executives to evaluate the application of the GRI G3 Guidelines and the AA1000APS (2008)¹ principles and to obtain an understanding of the control environment relative to the reported sustainability information
- Inspecting documentation to corroborate the statements of management and senior executives in our interviews
- Testing the processes and systems to generate, collate, aggregate, monitor and report the selected sustainability information
- Inspecting supporting documentation and performing analytical procedures
- Visiting business units including Koeberg (nuclear power station), Arnot (coal power station), Tutuka (coal power station), Lethabo (coal power station), Matla (coal power station), Kendal (coal power station), Kriel (coal power station), Majuba (coal power station), Camden (coal power station), Duvha (coal power station), Transmission division, the Western Distribution region, Northern Distribution region, Central Distribution region, Roshcon (Enterprises) and Rotek (Enterprises)
- Conducting an application level check on the report to evaluate whether all disclosure requirements of the GRI B+ Application Level have been adhered to. Evaluating whether the information presented in the report is consistent with our findings, overall knowledge and experience of sustainability management and performance at Eskom.

Conclusions

1. On the AA1000APS (2008)¹ principles of inclusiveness, materiality and responsiveness on which we are required to express limited assurance

Based on our work performed, nothing has come to our attention that causes us to believe that Eskom's assertions regarding its alignment with the AA1000APS (2008)¹ principles of inclusivity, materiality and responsiveness, described on page 20, is not fairly stated, in all material respects.

2. On the selected key performance indicators on which we are required to express reasonable assurance

In our opinion, the selected key performance indicators for the year ended 31 March 2011 are fairly stated, in all material respects, in accordance with the GRI G3 Guidelines.

3. On Eskom's self-declaration on the GRI G3 B+ Application Level on which we are required to express limited assurance

Based on our work performed, nothing has come to our attention that causes us to believe that Eskom's self-declaration of a B+ Application Level is not fairly stated, in all material respects, in accordance with the GRI G3 Guidelines.

Comparability

This report includes the provision of reasonable assurance on unit capability factor; energy availability factor; energy losses (transmission and distribution), internal energy efficiency (non-essential energy consumption), low and intermediate level radioactive waste generated, demand-side management (annualised gigawatts) and B-BBEE expenditure company (attributable spend, attributable spend percentage and attributable black women-owned spend). We were not previously required to provide assurance on unit capability factor; energy availability factor; energy losses (transmission and distribution), low and intermediate level radioactive waste generated, demand-side management (annualised gigawatts) and B-BBEE expenditure company (attributable spend, attributable spend percentage and attributable black women-owned spend). We previously provided limited assurance on internal energy efficiency (non-essential energy consumption) and B-BBEE expenditure company (top 295 suppliers).

Limitation of liability

Our work has been undertaken to enable us to express the conclusions on the selected sustainability information to the directors of Eskom in accordance with the terms of our engagement, and for no other purpose. We do not accept or assume liability to any party other than Eskom, for our work, for this report, or for the conclusions we have reached.

KPMG Services (Pty) Limited



Per PD Naidoo

Director

Johannesburg

31 May 2011

85 Empire Road

Parktown

2193



AH Jaffer

Director

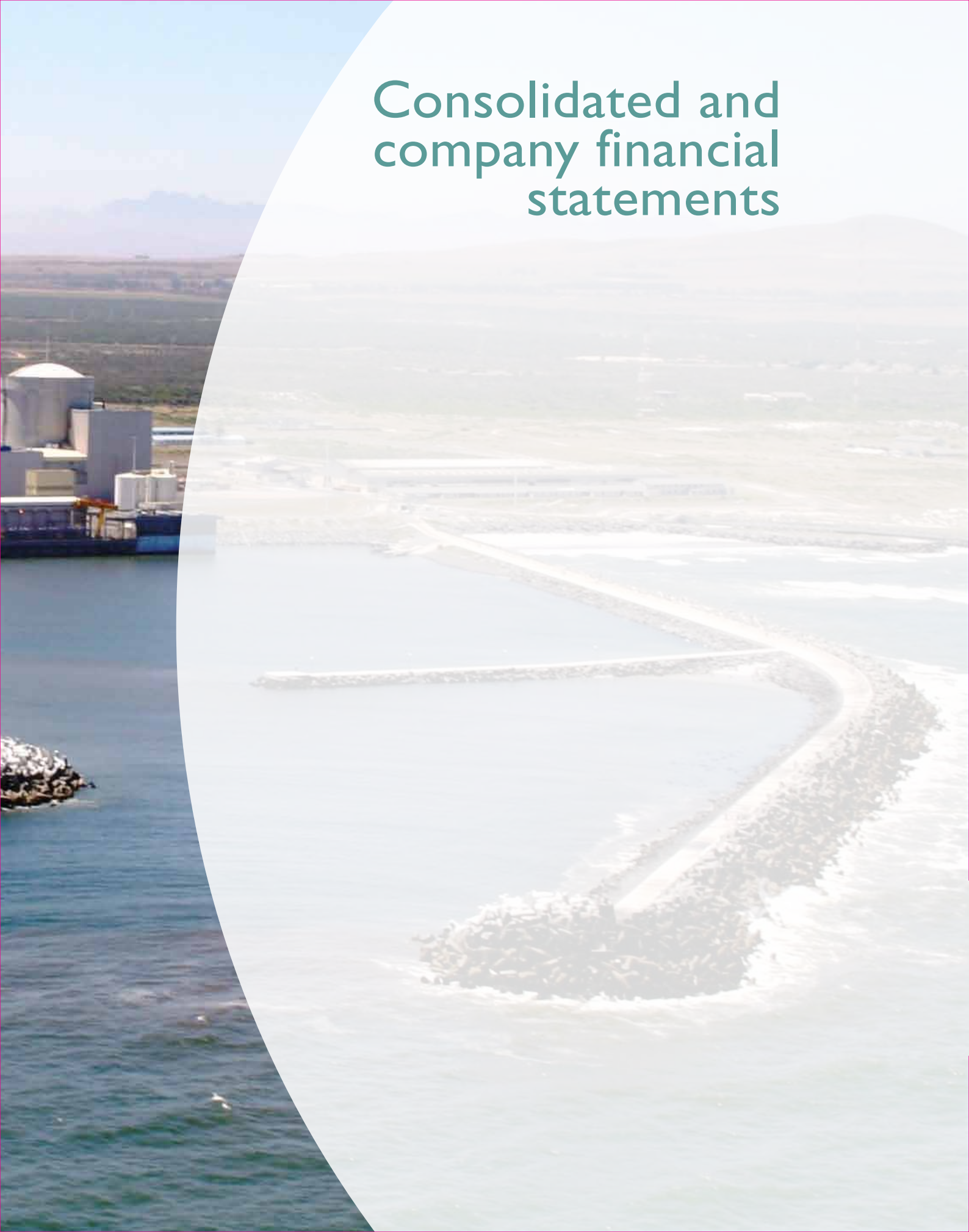
Johannesburg

31 May 2011

1. AA1000 AccountAbility Principles Standard (2008), issued by AccountAbility



Consolidated and company financial statements





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1. Not part of the audited consolidated and company financial statements.

Currency of financial statements

The financial statements are expressed in South African rand (R), which is the functional currency of the group and company. The following are approximate values of R1.00 to the selected currencies and one unit of the selected currencies to the rand:

	R1.00 to the selected currency		One unit of the selected currency to the rand	
	March 2011	March 2010	March 2011	March 2010
EUR	0.10	0.10	9.61	9.92
USD	0.15	0.14	6.78	7.34
GBP	0.09	0.09	10.87	11.11
CHF	0.13	0.14	7.41	6.94
JPY	12.50	12.50	0.08	0.08
SEK	0.93	0.98	1.08	1.02
CAD	0.14	0.14	6.98	7.23
AUD	0.14	0.15	7.00	6.73
NOK	0.81	0.81	1.23	1.24

Currency	Abbreviation
Euro	EUR
United States dollar	USD
Pound sterling (United Kingdom)	GBP
Swiss franc	CHF
Japanese yen	JPY

Currency	Abbreviation
Swedish krona	SEK
Canadian dollar	CAD
Australian dollar	AUD
Norwegian krone	NOK

Statement of responsibilities and approval

The Public Finance Management Act requires the directors to ensure that Eskom Holdings Limited (Eskom) and its subsidiaries (the group) keep full and proper records of their financial affairs. The financial statements should fairly present the state of affairs of Eskom and the group, its financial results, cash flows, its performance against predetermined objectives for the year and its financial position at the end of the year in terms of International Financial Reporting Standards.

To enable the directors to meet the above-mentioned responsibilities, the Eskom board of directors sets standards and management implements systems of internal control. The controls are designed to provide cost-effective assurance that assets are safeguarded, and that liabilities and working capital are efficiently managed. Policies, procedures, structures and approval frameworks provide direction, accountability and division of responsibilities, and contain self-monitoring mechanisms. The controls throughout Eskom focus on those critical risk areas identified by operational risk management and confirmed by executive management. Both management and the internal audit department closely monitor the controls, and actions are taken to correct deficiencies as they are identified.

The financial statements are the responsibility of the directors. The external auditors are responsible for independently auditing the financial statements in accordance with International Standards of Auditing and the Public Audit Act.

The directors have made an assessment of the ability of Eskom and the group to continue as going concerns in the foreseeable future and are satisfied that they have access to adequate resources and facilities to be able to continue its operations. Accordingly the board have continued to adopt the going-concern basis in preparing the financial statements.

The financial statements of Eskom and the group have been prepared in terms of International Financial Reporting Standards, and the Companies Act of South Africa, 61 of 1973, as amended, and the Public Finance Management Act, 1 of 1999, as amended. These financial statements are based on appropriate accounting policies, supported by reasonable and prudent judgements and estimates and are prepared on the going-concern basis.

Based on the information and explanations given by management, the internal audit department and discussions held with the independent external auditors, the directors are of the opinion that the internal accounting controls are adequate to ensure that the financial records may be relied upon for preparing the financial statements, and that accountability for assets and liabilities is maintained.

The audit and risk committee has reviewed the effectiveness of Eskom and the group's internal controls and considers the systems appropriate for the effective operation of Eskom and the group. The committee has evaluated Eskom and the group's annual financial statements and has recommended their approval to the board. The audit and risk committee's approval is set out on page 207.

Nothing significant has come to the attention of the directors to indicate that any material breakdown has occurred in the functioning of these controls, procedures and systems during the year under review.

In the opinion of the directors, based on the information available to date, the financial statements fairly present the financial position of Eskom and the group at 31 March 2011 and the results of its operations and cash flow information for the year then ended.

The financial statements of Eskom and the group for the year ended 31 March 2011 have been approved by the board of directors and signed on its behalf on 31 May 2011 by



PM Makwana
Chairman
31 May 2011



BA Dames
Chief executive
31 May 2011



PS O'Flaherty
Finance director
31 May 2011

Report of the audit and risk committee

Report in terms of the Public Finance Management Act, 1 of 1999

The audit and risk committee reports that it has adopted appropriate formal terms of reference as its audit and risk committee charter; has regulated its affairs in compliance with this charter; and has discharged all of its responsibilities contained therein.

In the conduct of its duties, the audit and risk committee has, inter alia, reviewed the following:

- the adequacy, reliability and accuracy of financial information provided by management
- accounting and auditing concerns identified as a result of internal and external audits, including reportable irregularities
- the effectiveness of the system and process of risk management including the following specific risks:
 - financial reporting
 - internal financial controls
 - fraud risks relating to financial reporting
 - information technology risks relating to financial reporting
- all factors and risks that may impact on the integrity of the integrated report
- the disclosure of sustainability issues in the integrated report to ensure that it is reliable and it does not conflict with the financial information
- the expertise, resources and experience of the finance function
- the independence of and objectivity of the external auditors
- the effectiveness of the internal control systems
- the effectiveness of the assurance and forensic department
- the activities of the assurance and forensic department, including its annual work programme, co-ordination with the external auditors, the reports of significant investigations and the responses of management to specific recommendations
- the effectiveness of the entity's compliance with legal and regulatory provisions

Eskom is in the process of developing a combined assurance model to ensure that it is applied going forward, in order to provide a coordinated approach to all assurance activities.

The audit and risk committee is of the opinion, based on the information and explanations given by management and the assurance and forensic department and discussions with the independent external auditors on the result of their audits, that the internal accounting controls are adequate to ensure that the financial records may be relied upon for preparing the financial statements, and accountability for assets and liabilities is maintained. Having considered the matters set out in section 270A(5) of the Companies Act of South Africa as amended by the Corporate Law Amendment Act, the audit and risk committee is satisfied with the independence and objectivity of the external auditors.

Nothing significant has come to the attention of the audit and risk committee to indicate that any material breakdown in the functioning of these controls, procedures and systems has occurred during the year under review.

The audit and risk committee has evaluated the financial statements of Eskom Holdings Limited and the group for the year ended 31 March 2011 and based on the information provided to the audit and risk committee, considers that they comply, in all material respects, with the requirements of the Companies Act of South Africa, 61 of 1973, as amended, the Public Finance Management Act, 1 of 1999, as amended, and International Financial Reporting Standards. The audit and risk committee concurs with the board of directors and management that the adoption of the going-concern premise in the preparation of the financial statements is appropriate. The audit and risk committee has therefore, at their meeting held on 30 May 2011, recommended the adoption of the financial statements by the board of directors.



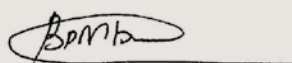
JRD Modise

Chairman

31 May 2011

Statement by company secretary

I certify that the company has lodged with the Companies and Intellectual Property Registration Office (Companies and Intellectual Property Commission from 1 May 2011) all such returns as are required of a public company in terms of the Companies Act, 61 of 1973, as amended, and that all such returns are true, correct and up to date.



B Mbomvu

Company secretary

31 May 2011

Independent auditors' report to the shareholder – Minister of Public Enterprises

Report on the annual financial statements

We have audited the group and company annual financial statements of Eskom Holdings Limited (Eskom) which comprise the directors' report, the consolidated and separate statements of financial position at 31 March 2011, the consolidated and separate income statements and statements of comprehensive income, statement of changes in equity and cash flows for the year then ended, and the notes to the financial statements which contain a summary of significant accounting policies and other explanatory notes as set out on pages 209 to 314.

Directors' responsibility for the annual financial statements

The board of directors, which constitute the accounting authority, are responsible for the preparation and fair presentation of these financial statements in accordance with International Financial Reporting Standards, the requirements of the Public Finance Management Act of South Africa and in the manner required by the Companies Act of South Africa, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' responsibility for the annual financial statements

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal controls relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal controls. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements present fairly, in all material respects, the consolidated and separate financial position of Eskom Holdings at 31 March 2011 and its consolidated and separate financial performance and cash flows for the year then ended in accordance with International Financial Reporting Standards, the requirements of the Public Finance Management Act of South Africa, 1 of 1999 and in the manner required by the Companies Act of South Africa, 61 of 1973.

Report on other legal and regulatory requirements

In terms of the Public Audit Act of South Africa and General Notice 1111 of 2010, issued in Government Gazette No 33872 of 15 December 2010, we report on the following:

Predetermined objectives

We are required by the Auditor-General to undertake a limited assurance engagement on the *performance against the shareholder compact* as set out on pages 66 and 67 of the Integrated Report, in the leadership overview section, in which the actual performance of the group for the year ended 31 March 2011 is compared with target key performance indicators (predetermined objectives) and report thereon to those charged with governance. In this report we are required to report our findings from our engagement relating to non-compliance with regulatory requirements, where the reported information was inadequately presented or not received timeously, and where we have evaluated reported information to be useful or reliable. We report that there are no material findings on the performance against the shareholder compact.

Compliance with laws and regulations

We are required to report on compliance with laws and regulations in accordance with the guidance contained in the applicable R3: Reporting Guide of the Auditor-General. We report that there were no material findings on non-compliance with laws and regulations on the basis set out in the guide. Refer to the directors' report on page 211 for further information.

Internal control

We considered internal control relevant to our audit of the financial statements, and the reports on predetermined objectives and compliance with laws and regulations, but not for the purpose of expressing an opinion on the effectiveness of internal control. We report that there were no material deficiencies identified during our audit that resulted in a modification of the auditors' opinion on the financial statements and/or material findings on predetermined objectives and/or compliance with laws and regulations.

Other matters

Investigations in progress and completed

During the financial year under review the group initiated investigations into alleged irregularities and fraud within the procurement and asset management environments. No material findings were identified relating to those investigations completed during the year. At the reporting date, investigations are still ongoing.

KPMG Inc



Per AH Jaffer
Chartered Accountant (SA)
Registered auditor
Director
31 May 2011

85 Empire Road
Parktown 2193

SizweNtsaluba VSP



Per SY Lockhat
Chartered Accountant (SA)
Registered auditor
Director
31 May 2011

20A Morris Street East
Woodmead 2191

Directors' report

The directors are pleased to present their report for the year ending 31 March 2011.

Principal activities, state of affairs and business review

The principal activities of the Eskom group are described on page 2 and 3 in the profile section.

State of affairs and business overview

The operating profit for the year for the Eskom group, before fair value gains and losses and net finance costs, was R18 880 million (2010: R10 311 million) and for the company a profit of R17 297 million (2010: R8 351 million).

The net profit for the year for the Eskom group was R8 356 million (2010: R3 620 million). The net profit for the year for the company was R7 951 million (2010: R3 187 million).

Eskom applied for a 35% price increase for the period 2010/11 to 2012/13. NERSA awarded Eskom a price determination of 24.8% (2010/11), 25.8% (2011/12) and 25.9% (2012/13). Further information in this regard is set out on page 35 in the regulatory and legal framework section.

Special pricing agreements (SPAs) have linked the price of electricity to commodity prices, which has resulted in embedded derivatives in the financial statements. The renegotiation of the Skorpion SPA relating to commodity-linked revenue has been finalised. The negotiation regarding the remaining Hillside and Bayside Potline 1 and 2 SPAs is expected to be concluded in the medium term.

The forward electricity price curve used to value the remaining embedded derivatives at 31 March 2011 was based on an appropriate current tariff with increases determined by NERSA as referred to above. The curve assumes two additional annual increases of 25% and CPI thereafter. A sensitivity analysis for the embedded derivatives appears in note 3.2 to the annual financial statements on page 244.

An amount of R55 457 million (2010: R57 003 million) was spent on capital expenditure including borrowing cost capitalised during the year and is disclosed in notes 6 and 7 to the annual financial statements. The funding of the capital expansion programme is discussed on page 83.

For more detailed information on the performance for the year, refer to the annual financial statements and the business and sustainability performance review from page 16 to 199.

Change of company name – Eskom Holdings SOC Limited

In terms of the new Companies Act, 71 of 2008, which came into operation on 1 May 2011, Eskom Holdings Limited will change its name to Eskom Holdings SOC¹ Limited as of that date.

Share capital and shareholder

The Government of the Republic of South Africa is the sole shareholder of Eskom Holdings Limited. The shareholder's representative is the Minister of Public Enterprises.

Dividends

No dividend was declared during the current and prior year; after taking into account the resource impact of the build programme, the current capital structure, and the dividend policy.

Going concern

The board has given particular attention to the assessment of the going concern of the group and is of the view that the group has access to adequate resources to continue in operational existence for the foreseeable future and to complete its current committed capacity expansion programme.

Directors

The board currently consists of 11 non-executive directors, and two executive directors – the chief executive and the finance director:

Mr Mpho Makwana, a non-executive director, was appointed as acting chairman with executive powers, effectively for the period November 2009 to June 2010, to lead Eskom while searching for a new chairman and a new chief executive.

In June 2010, Mpho Makwana was appointed as the chairman of Eskom (without executive powers).

In addition, three new directors were appointed to the board during this period:

Mr Brian Dames, after having served in various senior executive positions in Eskom, was appointed as the chief executive and ex-officio director in June 2010.

Dr Boni Mehlomakulu and Dr Bernie Fanaroff, who had previously served as an external committee member on the sustainability and remuneration committees, were appointed as directors.

The board of directors and their details are discussed on page 54 and on page 39 in the corporate governance report.

Remuneration of directors and members of Exco

The remuneration of the directors and the executives who were members of Exco during the financial year, is disclosed in note 45 to the annual financial statements, on page 309.

Company secretary

The details of the company secretary and her declaration in terms of section 268G(d) of the Companies Act are disclosed in her statement on page 207.

Auditors

The statutory auditors for the forthcoming financial year will be appointed at the annual general meeting scheduled for 27 June 2011.

Eskom's policy is, where possible, not to use the external auditors for non-audit services. In cases where the external auditors are to be used for non-audit services, the prior approval of the board audit and risk committee must be obtained.

1. State-owned company.

Internal control

An effective internal control framework is the responsibility of the board. The control framework provides cost-effective assurance that the assets of the organisation are safeguarded and that the liabilities and working capital are efficiently managed and that the organisation complies with relevant legislation and regulations.

Information technology

The board is responsible for the governance of information technology (IT), including the implementation of an appropriate IT strategy. The IT control framework provides cost-effective assurance that the IT process is effective and that the IT assets of the organisation are safeguarded.

The internal and IT controls are monitored and evaluated through the audit and risk committee. Refer to the governance section on page 44 and the statement of responsibilities and approval on page 206 for further details on internal control and integrated risk management.

Events after the reporting date

There were no significant events after the reporting date.

Subsidiaries, associates and joint venture companies

The investment of Eskom in subsidiaries, associates and joint venture companies is disclosed in notes 8 and 9 in the annual financial statements. Refer also to the organisational structure on page 4.

A decision was made by the board of directors in the prior year not to dispose of Eskom Finance Company (Pty) Limited and it has been accounted for in this manner. This is still subject to government approval.

Interests of directors and officers

Details of directors' and officers' interests in the Eskom incentive scheme are disclosed in note 45 to the annual financial statements. Refer to page 143 for Eskom's ethics policies and their application regarding interests in contracts.

Research and development activities

Research is focused on the needs of the operational divisions within Eskom. The focus is therefore predominantly on applied, not pure research and the outputs are linked to the strategic and operational needs of Eskom. In order to remain relevant, a portion of research resources is allocated to technology innovation and emerging technology options.

The research expenditure of R199 million (2010: R197 million) for the financial year was higher than the budget of R158 million. The increase is indicative of the commitment to research.

Research and development activities are discussed in greater detail under research and demonstration within the Corporate Services division section on page 117.

Employee information

The Eskom Group had a staff complement of 41 778 men and women at the end of the financial year. Training has always been a major focus area and this past year R998 million (2010: R758 million) was spent on training and developing staff. The staff turnover during the year was again low at 3.6% (2010: 3.5%) but, with the build programme under

way, Eskom faces a number of skills-related challenges. The management of human resources is discussed in the Human Resources division section on page 126.

Safety

Despite the reduction in employee fatalities from 2008 to 2010 there has been an increase in all fatalities during this financial year. A number of safety improvement initiatives have been and are in the process of being implemented, to reduce the number of safety-related incidents to zero. The implementation of a safety improvement programme has led to enhanced operational discipline among employees and visible, felt leadership in safety. Critical behaviours or actions that, when performed, have a very high probability of causing incidents resulting in severe injuries or fatalities have been identified and led to the implementation of non-negotiable cardinal rules that if not complied with will lead to a disciplinary process. The result of this initiative has been encouraging in that incidents involving these high-risk activities have substantially reduced. Eskom's safety performance is further discussed on page 114 in the Corporate Services division section.

Environmental issues

Environmental controls and oversight mechanisms are in place through our environmental management systems to ensure controls over those activities that have the potential to impact the environment and ensure informed decision making through the obtaining of environmental approvals and permits for proposed projects.

Eskom's environmental management performance is discussed on page 112 in the Corporate Services section and divisional reports.

Corporate social investment

Eskom recognises the need to align its corporate social investment (CSI) activities to that of its business strategies and the communities where Eskom operates. As a corporate citizen Eskom's corporate social investment initiatives aim to contribute to the wellbeing of communities; but also towards skills development, education and enterprise development and in turn promoting jobs, alleviating poverty and employability. Refer also to page 121 in the Corporate Services division section.

Information required by the Public Finance Management Act

Performance in terms of the shareholder compact

The performance of Eskom against the shareholder compact key performance indicators is shown in the table on page 66 in the profile section.

Reasons for not meeting the targets on the shareholder compact:

- Generation capacity
The installation and commissioning of the 625MW target was not achieved due to ongoing challenges at Grootvlei unit 5 and Komati unit 4. At Grootvlei, a super-heater boiler tube leak occurred. At Komati a turbine failure resulted in an unexpected blow, which caused the front end of the high-pressure (HP) rotor shaft, to shear. This rotor drives the oil pump in the front pedestal.
- Transmission lines built
The installation of the 446km transmission lines target was missed by a small margin due to outstanding land and rights issues (outstanding approvals and permits); late access and unsuccessful

land acquisition for servitudes due to landowner resistance; the unavailability of required outages and rain.

Performance management of Eskom subsidiaries

The performance of Eskom's wholly owned subsidiaries is managed and monitored regularly through shareholder compacts with Eskom and annual business plans and budgets that are approved by the respective boards of directors of the subsidiaries.

At the end of the 2011 financial year, shareholder compacts were in place for all South African based subsidiaries that traded throughout the year. The performance of foreign subsidiaries is managed through the monitoring of the respective entities' board approved business plans taking into account the country-specific legislation.

The performance results of trading subsidiaries are reported monthly to, and reviewed by, Eskom's Exco. Delays were encountered in the approval of certain subsidiary shareholder compacts during the year because of shortcomings in the approval processes. A centralised pro-active and co-ordinated approach under the accountability of the divisional executive: Regulation and Governance is currently being implemented which will facilitate timeous approval of shareholder compacts and ongoing monitoring thereof.

Losses through criminal conduct and irregular or fruitless and wasteful expenditure

In terms of the materiality framework agreed with the shareholder, any losses due to criminal conduct or irregular or fruitless and wasteful expenditure, that individually (or collectively where items are closely related) exceed R10 million must be reported.

Irregular or fruitless and wasteful expenditure

PN Energy Services (Pty) Limited (PNES)

PNES is a wholly owned subsidiary of Eskom Holdings Limited, whose business comprises the construction, maintenance, operation, administration and development of an electrical and telecommunication distribution network in Khayelitsha in the Western Cape. The operations of this company were closed down during 2010 and it did not trade during the current financial year.

On 21 May 2010, the Board of PNES confirmed that it was investigating potential irregular, fruitless and wasteful expenditure suffered by the company during the 2009 and 2010 financial years. PNES subsequently reported an amount of R58.7 million as irregular expenditure in its 2010 annual financial statements. This amount relates to irregular contracts entered into with a third party. Included in this amount is fruitless and wasteful expenditure of R17 million incurred due to additional costs arising from the irregular contracts. The legality of two agreements was challenged in court. On 11 May 2011 the court found that both agreements were void ab initio. Eskom is considering further action against all the parties involved.

Incidents of fruitless and wasteful expenditure below the materiality threshold

The aggregate of other fruitless and wasteful expenditure which individually (or collectively where items are closely related) were below the materiality threshold was R26.9 million comprising

301 incidents of which three incidents collectively accounted for R13.3 million. Management has instituted preventive and corrective measures as considered appropriate, including disciplinary action.

Management has controls in place within each operating unit to report on and monitor this type of expenditure on a monthly basis. This information is consolidated monthly and presented to the Exco for review and quarterly to the audit and risk committee for review. Management believes, based on the controls in place that the information reported is materially complete.

Criminal conduct

Conductor theft

Losses due to conductor theft (including copper, cable and tower related structures) totalled R38.7 million (2010: R45.5 million), and involved 2 559 incidents (2010: 2 580 incidents). Actions to combat conductor theft are managed by the Eskom Network and Energy Crime Committee in collaboration with other affected state-owned enterprises and the South African Police Service. The combined effort resulted in 412 arrests (2010: 367 arrests). Stolen material worth R4.7 million (2010: R6.3 million) was recovered.


Fraud

During the year Eskom management pro-actively initiated investigations into alleged irregularities and fraud within the procurement and asset management environments. No material findings have been noted to date and investigations are ongoing.

Tabling of the Eskom Holdings Limited annual financial statements in Parliament

The group annual financial statements of Eskom Holdings Limited for the year ended 31 March 2010 were approved by the board of directors on 10 June 2010, and were tabled in Parliament on 4 August 2010.

Promotion of Access to Information Act

 Refer to www.eskom.co.za/annreport11/015.html for statistics relating to requests received during the year in terms of the Promotion of Access to Information Act.

Management of energy losses

Energy losses reflect the difference between the quantity of energy sent out from the power stations and the quantity sold to the various customers at the end of the value chain. Losses are categorised as technical or non-technical in nature. Refer to page 185 for more details regarding energy losses.

Total actual losses were:

Energy losses	Target 2011 %	Actual 2011 %	Actual 2010 %	Actual 2009 %
Distribution loss	≤6.00	5.68	5.87	5.46
Transmission loss	≤3.40	3.27	3.27	3.08
Eskom loss	≤8.75	8.25	8.45	7.94

Statements of financial position

at 31 March 2011

	Note	Group		Company	
		2011 Rm	Restated ¹ 2010 Rm	2011 Rm	Restated ¹ 2010 Rm
Assets					
Non-current assets		265 183	203 162	260 277	199 723
Property, plant and equipment	6	236 724	187 905	236 217	187 008
Intangible assets	7	1 377	1 305	1 303	1 177
Investments in equity-accounted investees	8	220	196	95	95
Investment in subsidiaries	9	–	–	2 337	2 341
Future fuel supplies	11	4 089	3 768	4 089	3 768
Deferred tax assets	12	59	79	–	–
Investment in securities	13	13 259	1 923	13 259	1 923
Loans receivable	13	5 958	4 579	–	–
Derivatives held for risk management	13, 15	6	–	6	–
Finance lease receivables	13, 16	570	532	570	532
Payments made in advance	17	2 396	2 856	2 387	2 856
Trade and other receivables	13, 18	525	19	14	23
Current assets		62 258	42 953	60 914	41 622
Financial instruments with group companies	13, 10	–	–	3 806	2 461
Inventories	19	8 904	7 378	8 809	7 287
Taxation		59	88	–	–
Investment in securities	13	24 546	2 148	22 310	1 035
Loans receivable	13	100	655	–	549
Embedded derivative assets	13, 14	–	110	–	110
Derivatives held for risk management	13, 15	116	112	116	112
Finance lease receivables	13, 16	15	13	15	13
Payments made in advance	17	1 651	1 413	1 627	1 384
Trade and other receivables	13, 18	10 953	9 391	9 568	8 247
Financial trading assets	13	3 827	6 104	3 197	5 553
Cash and cash equivalents	13	12 087	15 541	11 466	14 871
Non-current assets held-for-sale	22	704	20	–	–
Total assets		328 145	246 135	321 191	241 345
Equity		87 259	70 222	83 787	67 119
Capital and reserves attributable to owner of the company		87 259	70 222	83 787	67 119
Liabilities					
Non-current liabilities		196 270	132 700	194 470	130 544
Debt securities issued	13	84 396	59 322	84 031	58 538
Borrowings	13	63 380	34 628	62 940	34 153
Embedded derivative liabilities	13, 14	5 357	4 583	5 357	4 583
Derivatives held for risk management	13, 15	4 576	3 626	4 576	3 626
Deferred tax liabilities	12	7 931	5 262	7 503	4 834
Deferred income	23	8 395	7 036	8 395	7 036
Retirement benefit obligations	24	7 317	6 988	7 140	6 823
Provisions	25	11 203	8 494	11 118	8 194
Finance lease liabilities	13, 26	521	632	865	965
Trade and other payables	13, 27	1 508	1 134	859	797
Payments received in advance	28	1 686	995	1 686	995
Current liabilities		43 756	43 213	42 934	43 682
Financial instruments with group companies	13, 10	–	–	1 462	1 897
Debt securities issued	13	2 880	2 880	1 574	2 141
Borrowings	13	9 654	9 143	9 571	9 094
Embedded derivative liabilities	13, 14	516	139	515	138
Derivatives held for risk management	13, 15	1 404	4 644	1 404	4 644
Deferred income	23	638	342	638	342
Retirement benefit obligations	24	234	210	234	210
Provisions	25	4 021	2 010	3 503	1 447
Finance lease liabilities	13, 26	8	52	37	74
Trade and other payables	13, 27	18 876	16 331	18 480	16 370
Payments received in advance	28	1 221	1 883	1 212	1 802
Taxation		–	66	–	10
Financial trading liabilities	13	4 304	5 513	4 304	5 513
Non-current liabilities held-for-sale	22	860	–	–	–
Total liabilities		240 886	175 913	237 404	174 226
Total equity and liabilities		328 145	246 135	321 191	241 345

1. Refer to note 44.

Income statements

for the year ended 31 March 2011

Note	Group		Company		
	2011 Rm	Restated ¹ 2010 Rm	2011 Rm	Restated ¹ 2010 Rm	
Continuing operations					
Revenue	29	91 447	71 130	90 873	70 064
Primary energy ²		(35 795)	(29 100)	(35 795)	(29 100)
Employee benefit expense	30	(16 695)	(14 694)	(15 360)	(13 325)
Depreciation and amortisation expense	31	(7 219)	(5 716)	(7 059)	(5 953)
Net impairment loss	32	(788)	(660)	(734)	(654)
Other operating expenses	33	(12 070)	(10 649)	(14 628)	(12 681)
Operating profit before net fair value loss and net finance cost		18 880	10 311	17 297	8 351
Other income	34	587	552	1 688	1 589
Net fair value loss on financial instruments, excluding embedded derivatives	35	(3 691)	(5 943)	(3 762)	(6 097)
Net fair value (loss)/gain on embedded derivatives		(1 261)	2 284	(1 261)	2 283
Operating profit before net finance cost		14 515	7 204	13 962	6 126
Net finance cost		(2 866)	(1 234)	(2 895)	(1 303)
Finance income	36	2 436	1 614	2 425	1 577
Finance cost	37	(5 302)	(2 848)	(5 320)	(2 880)
Share of profit of equity-accounted investees, net of tax	8	24	14	–	–
Profit before tax		11 673	5 984	11 067	4 823
Income tax	38	(3 261)	(2 080)	(3 116)	(1 636)
Profit for the year from continuing operations		8 412	3 904	7 951	3 187
Discontinued operations					
Loss for the year from discontinued operations	22	(56)	(284)	–	–
Profit for the year		8 356	3 620	7 951	3 187
Attributable to:					
Owner of the company		8 356	3 642	7 951	3 187
Non-controlling interest		–	(22)	–	–
		8 356	3 620	7 951	3 187

Statements of comprehensive income

for the year ended 31 March 2011

Note	Group		Company		
	2011 Rm	2010 Rm	2011 Rm	2010 Rm	
Profit for the year		8 356	3 620	7 951	3 187
Other comprehensive (loss)/income		(2)	(6 155)	34	(6 162)
Available-for-sale financial assets – net change in fair value		(40)	(25)	(36)	(17)
Cash flow hedges					
Effective portion of changes in fair value		(1 031)	(8 450)	(1 031)	(8 450)
Changes in fair value		(1 025)	(8 604)	(1 025)	(8 604)
Ineffective portion of changes in fair value reclassified to profit or loss		(6)	154	(6)	154
Net amount transferred to initial carrying amount of hedged items		246	(51)	246	(51)
Foreign currency translation differences for foreign operations		(33)	13	–	–
Net actuarial gain/(loss) on post-retirement medical aid benefits	24	408	(317)	408	(317)
Income tax on other comprehensive loss	38	448	2 675	447	2 673
Total comprehensive profit/(loss) for the year		8 354	(2 535)	7 985	(2 975)
Total comprehensive profit/(loss) for the year attributable to:					
Owner of the company		8 354	(2 513)	7 985	(2 975)
Non-controlling interest		–	(22)	–	–
		8 354	(2 535)	7 985	(2 975)

1. Refer to note 44.

2. Primary energy relates to the acquisition of coal, uranium, water, gas and diesel that are used in the generation of electricity.

Statements of changes in equity

for the year ended 31 March 2011

	Share capital ¹	Equity reserve ²	Attributable to owner of the company					Accumulated profit ⁸	Total	Non-controlling interest	Total equity
			Cash flow hedge reserve ³	Available-for-sale reserve ⁴	Unrealised fair value reserve ⁵	Insurance reserve ⁶	Foreign currency translation reserve ⁷				
	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	
Group											
Balance at 31 March 2009	–	8 444	5 172	(113)	(1 649)	122	12	47 361	59 349	229	59 578
Profit/(loss) for the year	–	–	–	–	–	–	–	3 642	3 642	(22)	3 620
Other comprehensive (loss)/income, net of tax	–	–	(5 922)	(18)	–	–	13	(228)	(6 155)	–	(6 155)
Available-for-sale financial assets											
Net change in fair value	–	–	–	(18)	–	–	–	–	(18)	–	(18)
Cash flow hedges											
Effective portion of changes in fair value	–	–	(5 885)	–	–	–	–	–	(5 885)	–	(5 885)
Net amount transferred to initial carrying amount of hedged items	–	–	(37)	–	–	–	–	–	(37)	–	(37)
Foreign currency translation differences on foreign operations	–	–	–	–	–	–	13	–	13	–	13
Net actuarial loss on post-retirement medical aid benefits	–	–	–	–	–	–	–	(228)	(228)	–	(228)
Subordinated loan from shareholder	–	13 393	–	–	–	–	–	–	13 393	–	13 393
Sale of investment in subsidiary	–	–	–	(22)	15	–	–	–	(7)	(207)	(214)
Transfer between reserves	–	–	–	–	550	(67)	–	(483)	–	–	–
Balance at 31 March 2010	–	21 837	(750)	(153)	(1 084)	55	25	50 292	70 222	–	70 222
Profit for the year	–	–	–	–	–	–	–	8 356	8 356	–	8 356
Other comprehensive (loss)/income, net of tax	–	–	(233)	(29)	–	–	(33)	293	(2)	–	(2)
Available-for-sale financial assets											
Net change in fair value	–	–	–	(29)	–	–	–	–	(29)	–	(29)
Cash flow hedges											
Effective portion of changes in fair value	–	–	(410)	–	–	–	–	–	(410)	–	(410)
Net amount transferred to initial carrying amount of hedged items	–	–	177	–	–	–	–	–	177	–	177
Foreign currency translation differences on foreign operations	–	–	–	–	–	–	(33)	–	(33)	–	(33)
Net actuarial gain on post-retirement medical aid benefits	–	–	–	–	–	–	–	293	293	–	293
Subordinated loan from shareholder	–	8 683	–	–	–	–	–	–	8 683	–	8 683
Transfer between reserves	–	–	2	364	(193)	55	–	(228)	–	–	–
Balance at 31 March 2011	–	30 520	(981)	182	(1 277)	110	(8)	58 713	87 259	–	87 259

	Attributable to owner of the company						Total
	Share capital ¹	Equity reserve ²	Cash flow hedge reserve ³	Available-for-sale reserve ⁴	Unrealised fair value reserve ⁵	Accumulated profit ⁶	
	Rm	Rm	Rm	Rm	Rm	Rm	
Company							
Balance at 31 March 2009	–	8 444	5 174	(147)	(1 633)	44 863	56 701
Profit for the year	–	–	–	–	–	3 187	3 187
Other comprehensive loss, net of tax	–	–	(5 922)	(12)	–	(228)	(6 162)
Available-for-sale financial assets							
Net change in fair value	–	–	–	(12)	–	–	(12)
Cash flow hedges							
Effective portion of changes in fair value	–	–	(5 885)	–	–	–	(5 885)
Net amount transferred to initial carrying amount of hedged items	–	–	(37)	–	–	–	(37)
Net actuarial loss on post-retirement medical aid benefits	–	–	–	–	–	(228)	(228)
Subordinated loan from shareholder	–	13 393	–	–	–	–	13 393
Transfer between reserves	–	–	–	–	550	(550)	–
Balance at 31 March 2010	–	21 837	(748)	(159)	(1 083)	47 272	67 119
Profit for the year	–	–	–	–	–	7 951	7 951
Other comprehensive (loss)/income, net of tax	–	–	(233)	(26)	–	293	34
Available-for-sale financial assets							
Net change in fair value	–	–	–	(26)	–	–	(26)
Cash flow hedges							
Effective portion of changes in fair value	–	–	(410)	–	–	–	(410)
Net amount transferred to initial carrying amount of hedged items	–	–	177	–	–	–	177
Net actuarial gain on post-retirement medical aid benefits	–	–	–	–	–	293	293
Subordinated loan from shareholder	–	8 683	–	–	–	–	8 683
Transfer between reserves	–	–	–	366	(194)	(172)	–
Balance at 31 March 2011	–	30 520	(981)	181	(1 277)	55 344	83 787

Dividends proposed

No dividend has been proposed in the current or prior year.

1. Nominal amount.
2. The equity reserve comprises the day-one gain on initial recognition of the subordinated loan from the shareholder (refer to note 13.6).
3. The cash flow hedge reserve comprises the effective portion of the cumulative net change in the fair value of cash flow hedging instruments (comprising forward exchange contracts, interest rate swaps and cross-currency swaps) related to hedged transactions that have not yet occurred. The cross-currency swap hedges foreign exchange rate risk of future interest payments and the principal repayment on fixed rate bonds and loans (denominated in US dollar, euro and yen).
4. The available-for-sale reserve comprises the cumulative net change in the fair value of available-for-sale financial assets until the investments are derecognised.
5. The cumulative net change in the fair value of derivatives that have not been designated as cash flow hedging instruments is recognised in profit or loss. The unrealised portion of the net change in fair value is not distributable and has been reallocated from a distributable reserve (accumulated profit) to a non-distributable reserve.
6. The insurance reserve is a contingency reserve created in terms of the Short-term Insurance Act, 1998.
7. The foreign currency translation reserve comprises exchange differences resulting from the translation of the results and financial position of foreign operations.
8. Accumulated profit is the amount of cumulative profit retained in the business after tax.

Statements of cash flows

for the year ended 31 March 2011

	Note	Group		Company	
		2011 Rm	Restated ¹ 2010 Rm	2011 Rm	Restated ¹ 2010 Rm
Cash flows from operating activities					
Cash generated from operations	39	28 275	15 999	27 384	15 176
Net cash flows from financial trading assets		2 925	(4 908)	2 929	(4 871)
Net cash flows from financial trading liabilities		(1 456)	3 040	(1 456)	3 040
Net cash flows from current derivatives held for risk management		(7 212)	(4 726)	(7 212)	(4 726)
Net cash flows from non-current assets held-for-sale		(97)	(77)	–	–
Income taxes paid		(151)	(210)	–	–
Net cash generated from operating activities		22 284	9 118	21 645	8 619
Cash flows from investing activities					
Proceeds from disposal of property, plant and equipment		135	118	144	92
Proceeds from disposal of intangible assets		–	23	–	–
Acquisitions of property, plant and equipment		(43 975)	(44 184)	(44 098)	(43 664)
Acquisitions of intangible assets		(350)	(698)	(374)	(644)
Expenditure on future fuel supplies		(1 079)	(1 127)	(1 079)	(1 127)
Increase in deferred income		463	293	463	293
Proceeds from disposal of investments in subsidiary companies		–	–	4	–
(Decrease)/increase in non-current trade and other receivables		(509)	163	6	–
Increase in non-current loans receivable		(1 469)	(1 812)	–	–
(Increase)/decrease in finance lease receivables		(20)	2	(20)	2
Net cash flows from non-current assets and liabilities held-for-sale		(10)	(224)	–	–
Proceeds from disposal of non-current assets held-for-sale-disposal		–	76	–	–
Dividends received – non-current assets held-for-sale		–	166	–	–
Dividends received – other		26	12	15	166
Increase/(decrease) in non-current trade and other payables		793	(332)	481	(500)
Net cash used in investing activities		(45 995)	(47 524)	(44 458)	(45 382)
Cash flows from financing activities					
Debt raised		78 758	60 107	71 101	60 107
Debt securities issued		26 144	16 286	26 144	16 286
Subordinated loan from shareholder ²		20 000	30 000	20 000	30 000
Borrowings		32 614	13 821	24 957	13 821
Debt repaid		(18 756)	(20 351)	(11 215)	(20 576)
Debt securities issued		(641)	(2 263)	(778)	(2 393)
Borrowings		(18 115)	(18 088)	(10 437)	(18 183)
Net cash flows from financial instruments with group companies		–	–	(1 771)	(1 147)
Net cash flows from non-current assets held-for-sale		43	24	–	–
(Increase)/decrease in investment in securities		(33 693)	3 924	(32 564)	3 600
(Decrease)/increase in finance lease liabilities		(17)	40	(41)	(50)
Net cash flows from non-current derivatives held for risk management		(89)	(4 179)	(89)	(4 179)
Interest received		2 353	1 512	2 331	1 465
Interest paid		(8 269)	(5 577)	(8 344)	(5 507)
Net cash from financing activities		20 330	35 500	19 408	33 713
Net decrease in cash and cash equivalents		(3 381)	(2 906)	(3 405)	(3 050)
Cash and cash equivalents at beginning of the year		15 541	18 382	14 871	17 921
Cash and cash equivalents (attributable to)/transfer from non-current assets held-for-sale		(73)	65	–	–
Cash and cash equivalents at end of the year	13.1	12 087	15 541	11 466	14 871

	Note	Group		Company	
		2011 Rm	Restated ¹ 2010 Rm	2011 Rm	Restated ¹ 2010 Rm
Reconciliation of net cash flow to movement in net debt					
Net increase in debt securities issued		25 503	14 023	25 366	13 893
Net increase in borrowings		34 499	25 733	34 520	25 638
Net cash flows from financial instruments with group companies		–	–	(1 771)	(1 147)
(Increase)/decrease in investment in securities		(33 693)	3 924	(32 564)	3 600
(Increase)/decrease in loans receivable		(826)	(2 459)	549	(549)
(Decrease)/increase in finance lease liabilities		(17)	40	(41)	(50)
Net cash flows utilised in derivatives held for risk management		(7 301)	(8 905)	(7 301)	(8 905)
Net debt raised		18 165	32 356	18 758	32 480
Portion on subordinated loan from shareholder allocated to equity		(8 683)	(13 393)	(8 683)	(13 393)
Non-cash flow movements		7 842	20 929	7 836	19 728
Cash and cash equivalents attributable to/(transfer from) non-current assets held-for-sale		73	(65)	–	–
Net decrease in cash and cash equivalents for the year		3 381	2 906	3 405	3 050
Movement in net debt for the year		20 778	42 733	21 316	41 865
Net debt at beginning of the year		89 969	47 236	94 181	52 316
Net debt at end of the year		110 747	89 969	115 497	94 181
Analysis of net debt					
Debt securities issued	13	87 276	62 202	85 605	60 679
Borrowings	13	73 034	43 771	72 511	43 247
Finance lease liabilities	13, 26	529	684	902	1 039
Financial instruments with group companies	13, 10	–	–	(2 344)	(564)
Derivatives held for risk management	13, 15	5 858	8 158	5 858	8 158
		166 697	114 815	162 532	112 559
Cash and cash equivalents	13	(12 087)	(15 541)	(11 466)	(14 871)
Investment in securities	13	(37 805)	(4 071)	(35 569)	(2 958)
Loans receivable	13	(6 058)	(5 234)	–	(549)
Net debt at end of the year		110 747	89 969	115 497	94 181

1. Refer to note 44.

2. Includes R11 317 million (2009: R23 445 million) which is included in borrowings (refer to note 13.5). The remainder of the balance is recognised in equity.

Notes to the consolidated financial statements

for the year ended 31 March 2011

1. General information

Eskom Holdings Limited (Eskom), 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, redistributors, and residential customers and to international customers in southern Africa. The nature of the businesses of the significant operating subsidiaries is set out in note 9.

2. Summary of significant accounting policies

The principal accounting policies applied in the preparation of these separate and consolidated financial statements are set out below. These policies have been consistently applied to all years presented, unless otherwise stated.

2.1 Basis of preparation and measurement

Statement of compliance

The consolidated financial statements of Eskom at and for the year ended 31 March 2011 comprise the company and its subsidiaries (together referred to as the group) and the group's interest in associates and joint ventures. The separate and consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) and in the manner required by the Public Finance Management Act, 1 of 1999, and the Companies Act of South Africa, 61 of 1973, as amended.

Basis of measurement

The separate and consolidated financial statements are prepared on the historical cost basis except for the following financial instruments 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

The preparation of financial statements in conformity with IFRS requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements, are disclosed in note 4.

Functional and presentation currency

Items included in the financial statements of each of the group's entities are measured using the currency of the primary economic environment in which the entity operates (functional currency). The consolidated financial statements are presented in South African rand (rounded to the nearest million unless otherwise stated), which is the group and company's functional and presentation currency.

Changes in accounting policies and comparability

The group has adopted certain new standards, amendments and interpretations to existing standards which were effective for the group for the financial year beginning on or after 1 April 2010. The effects of adopting these standards are discussed in note 44.

Standards, interpretations and amendments to published standards that are not yet effective

The following new standards, amendments and interpretations to existing standards that are applicable for future accounting periods but have not been adopted early by the group have been published:

IAS 12 Income taxes (effective 1 January 2012) (amended)

The amendment to IAS 12 introduces a rebuttable presumption that an investment property measured at fair value will be recovered in its entirety through sale. The amendment is not expected to have an impact on the group's financial statements.

IAS 24 Related party disclosures (effective 1 January 2011) (revised)

The revised IAS 24 provides a partial exemption for government-related entities. The revised standard still requires disclosures that are important to users of financial statements but eliminates requirements to disclose information that is costly to gather and of less value to users. It achieves this balance by requiring disclosure about these transactions only if they are individually or collectively significant. The revised standard also amends the definition of a related party. The standard is applicable retrospectively. The group is still determining the impact of the revised standard on the notes to the financial statements.

IFRS 1 First-time adoption of International Financial Reporting Standards (effective 1 July 2011) (amended)

IFRS 1 was amended to provide guidance for entities emerging from severe hyperinflation and resuming presentation of IFRS compliant financial statements, or presenting IFRS compliant financial statements for the first time. Furthermore, the fixed date of 1 January 2004 relating to the retrospective application of the derecognition requirements of IAS 39 was removed, and relief provided for first-time adopters from calculating day one gains on transactions that occurred before the date of adoption. The amendment will not have an impact on the group's financial statements.

IFRS 7 Financial instruments: Disclosures (effective 1 January 2011)

The amendments to IFRS 7 require additional disclosure on transfer transactions of financial assets, including the possible effects of any residual risks that the transferring entity retains. The amendment also requires additional disclosures if a disproportionate amount of transfer transactions is undertaken around the end of a reporting period. The

amendment is not expected to have an impact on the group's financial statements.

IFRS 9 Financial instruments (effective 1 January 2013)

IFRS 9 addresses the initial measurement and classification of financial assets and financial liabilities, and replaces the relevant sections of IAS 39 *Financial instruments: Recognition and measurement*. IFRS 9 retains but simplifies the mixed measurement model and establishes two primary measurement categories for financial assets: amortised cost and fair value. The basis of classification depends on the entity's business model and the contractual cash flow characteristics of the financial asset. The group is still determining the impact of the standard on the financial statements.

IFRIC 14 and IAS 19 – The limit on a defined benefit asset, minimum funding requirements and their interaction (effective 1 January 2011) (amended)

The amendment applies in the limited circumstances when an entity is subject to minimum funding requirements and makes an early payment of contributions to cover those requirements. The amendment permits such an entity to treat the benefit of such an early payment as an asset on the basis that the entity has a future economic benefit. The amendment is not expected to have an impact on the group's financial statements.

IFRIC 19 Extinguishing financial liabilities with equity instruments (effective 1 July 2010)

IFRIC 19 provides guidance on how to account for the extinguishment of a financial liability by the issue of equity instruments. The interpretation clarifies the requirements of IFRS when an entity renegotiates the terms of a financial liability with its creditor and the creditor agrees to accept the entity's shares or other equity instruments to settle the financial liability fully or partially. The interpretation is not expected to have an impact on the group's financial statements.

Standards, interpretations and amendments to published standards that are effective and applicable to the group

The following standards, interpretations and amendments were effective and applicable to the group for the year ended 31 March 2011, but had no impact on the financial statements:

IAS 32 Financial instruments: Presentation

The amendment to IAS 32 in respect of the classification of rights issues states that rights issues offered pro rata to all of an entity's existing shareholders in the same class for a fixed amount of currency, should be classified as equity regardless of the currency in which the exercise price is denominated.

IAS 39 Financial instruments: Recognition and measurement

IAS 39 provides additional guidance on the designation of a hedged item. The amendment clarifies the designation of a

one-sided risk in a hedged item and inflation in a financial hedged item.

IAS 39 Financial instruments: Recognition and measurement and IFRIC 9: Reassessment of embedded derivatives

The amendments to IAS 39 and IFRIC 9 clarify that on reclassification of a financial asset out of the *fair value through profit or loss* category all embedded derivatives have to be assessed and, if necessary, separately accounted for in the financial statements. The amendments did not have an impact on the group's financial statements as the group did not reclassify any of its financial assets out of the *fair value through profit or loss* category.

IFRS 2 Share-based payment

IFRS 2 provides that an entity receiving goods or services in a share-based payment transaction, that is settled by any other entity in the group or any shareholder of such an entity in cash or other assets, is now required to recognise the goods or services received in its financial statements.

IFRS 5 Non-current assets held-for-sale and discontinued operations

The amendment to IFRS 5 specifies the disclosures required in respect of non-current assets (or disposal groups) classified as held-for-sale or discontinued operations. Disclosures in other IFRS do not apply to such assets (or disposal groups) unless those IFRS require specific disclosures in respect of non-current assets (or disposal groups) classified as held-for-sale or discontinued operations; or disclosures about measurement of assets and liabilities within a disposal group that are not within the scope of the measurement requirement of IFRS 5 and such disclosures are not already provided in the other notes to the financial statements.

IFRIC 17 Distribution of non-cash assets to owners

IFRIC 17 provides guidance on when and how a liability for certain distributions of non-cash assets is recognised and measured, and how to account for settlement of that liability.

The following standards, interpretations and amendments were effective and applicable to the group for the year ended 31 March 2011 and had an impact on the financial statements (refer to note 44):

- IFRS 3 Business combinations
- IAS 27 Consolidated and separate financial statements

Various improvements to IFRS

A number of standards have been amended as part of the International Accounting Standards Board's (IASB) annual improvement project. Management is in the process of considering the relevant amendments to the standards and determining the financial implications and impact on the group.

2. Summary of significant accounting policies

(continued)

2.2 Consolidation

Investment in subsidiaries

Subsidiaries are all entities (including special-purpose entities) over which the group has the power to govern the financial and operating policies to obtain benefits from the activities of the entity. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether the group controls another entity. Subsidiaries are consolidated from the date on which control is transferred to the group. They are de-consolidated from the date that control ceases.

Investments in subsidiaries are accounted for at cost less impairment losses in the separate financial statements of the company.

Business combinations

The group uses the acquisition method of accounting to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair values of the assets transferred, the liabilities incurred and the equity interests issued by the group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. On an acquisition-by-acquisition basis, the group recognises any non-controlling interest in the acquiree either at fair value or at the non-controlling interest's proportionate share of the acquiree's net assets.

The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the group's share of the identifiable net assets acquired is recorded as goodwill. If this is less than the fair value of the net assets of the subsidiary acquired in the case of a bargain purchase, the difference is recognised directly in profit or loss.

Inter-company transactions, balances and unrealised gains on transactions between group companies are eliminated. Unrealised losses are also eliminated, but are considered an impairment indicator of the asset transferred. Accounting policies of subsidiaries have been changed where necessary, to ensure consistency with the policies adopted by the group.

Transactions with non-controlling interests

The group treats transactions with non-controlling interests as transactions with equity owners of the group. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

Investment in equity-accounted investees

Associates are all entities over which the group has significant influence but no control over the financial and operating policies, generally linked to a shareholding of between 20% and 50% of the voting rights.

Joint ventures are contractual arrangements whereby two or more parties undertake an economic activity that is subject to joint control.

Investments in associates and joint ventures are accounted for at cost less impairment losses in the separate financial statements of the company. These investments are accounted for using the equity method of accounting and are initially recognised at cost in the financial statements of the group. The group's investment in associates and joint ventures includes goodwill (net of any accumulated impairment loss) identified on acquisition.

The group's share of its associates' and joint ventures' post-acquisition profits or losses is recognised in profit or loss within *share of profit of equity-accounted investees*, and its share of post-acquisition movements in other comprehensive income is recognised in other comprehensive income. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment. When the group's share of losses in an associate or joint venture equals or exceeds its interest in the associate or joint venture, including any other unsecured receivables, the group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associate or joint venture.

Unrealised gains on transactions between the group and its associates or joint ventures are eliminated to the extent of the group's interest in the associates or joint ventures. Unrealised losses are also eliminated, unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates or joint ventures have been changed where necessary to ensure consistency with the policies adopted by the group.

2.3 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the group executive committee (Exco).

An operating segment is a component of the group that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with any of the group's other components. An operating segment's results are reviewed regularly by Exco to make decisions about resources to be allocated to the segment and assess performance, and for which discrete financial information is available.

2.4 Foreign currency translation

Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in profit or loss, except when recognised in other comprehensive income for qualifying cash flow hedges.

Changes in the fair value of monetary securities denominated in foreign currency classified as available-for-sale are analysed between translation differences resulting from changes in the amortised cost of the security, and other changes in the carrying amount of the security. Translation differences relating to changes in the amortised cost are recognised in profit or loss and other changes in the carrying amount are recognised in other comprehensive income within *available-for-sale financial assets*.

Translation differences on non-monetary financial assets and liabilities, such as equities held at fair value through profit or loss, are recognised in profit or loss as part of the fair value gain or loss. Translation differences on non-monetary financial assets, such as equities classified as *available-for-sale*, are recognised in other comprehensive income within *available-for-sale financial assets*.

Foreign loans are initially recognised at the exchange rate prevailing at transaction date and are translated at spot on every reporting date. Foreign exchange gains and losses that relate to *loans and receivables, debt securities issued and borrowings* are presented in profit or loss within *finance income or finance cost*.

Foreign operations

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition, are translated to rand at exchange rates on the reporting date. The income and expenses of foreign operations, excluding foreign operations in hyperinflationary economies, are translated to rands at the average exchange rate. The group does not have any foreign operations in hyperinflationary economies.

Foreign currency differences arising as a result of the above are recognised in other comprehensive income within *foreign currency translation reserve*.

2.5 Property, plant and equipment

Land and buildings comprise mainly office, power station, substation, workshop and related buildings.

Property, plant and equipment is stated at cost less accumulated depreciation and impairment losses. Cost includes:

- any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management
- the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, the obligation for which an entity incurs either when the item is acquired or as a consequence of having used the item during a particular period for purposes other than to produce inventories during that period
- borrowing cost (refer to note 2.8)

Cost may also include transfers from equity of any gains or losses on qualifying cash flow hedges of foreign currency purchases of property, plant and equipment.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the group and the cost of the item can be measured reliably. When part of an asset is being replaced, the carrying amount of the replaced part is derecognised. Repairs and maintenance are charged to profit or loss during the financial period in which they are incurred.

Works under construction are stated at cost which includes cost of materials and direct labour and any directly attributable costs incurred in bringing it to its present location and condition. Materials used in the construction of property, plant and equipment are stated at weighted average cost.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

2. Summary of significant accounting policies

(continued)

2.5 Property, plant and equipment (continued)

Land is not depreciated. Depreciation on other assets is calculated using the straight-line method to allocate their cost to their residual values over their estimated useful lives, as follows:

	Years
Buildings and facilities	10 to 40
Plant – Generation	6 to 80
– Transmission	5 to 40
– Distribution	10 to 35
– Test, telecommunication and other plant	3 to 20
Equipment and vehicles	1 to 10

The depreciation method, residual values and useful lives of assets are reviewed, and adjusted if appropriate, on each reporting date.

Where parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

Gains or losses on disposals are determined by comparing proceeds with the carrying amount. These gains or losses are included in profit or loss within *other income* or *other operating expenses*.

2.6 Intangible assets

Goodwill

Goodwill represents the excess of the cost of an acquisition over the fair value of the group's share of the net identifiable assets of the acquired subsidiary/associate/joint venture at the date of acquisition. Goodwill on acquisition of subsidiaries is included in *intangible assets*. Goodwill on acquisition of associates and joint ventures is included in *investments in equity-accounted investees* and is tested for impairment as part of the overall balance. Separately recognised goodwill is tested annually for impairment and carried at cost less accumulated impairment losses. Impairment losses on goodwill are not reversed. Gains or losses on the disposal of an entity include the carrying amount of goodwill relating to the entity sold.

Goodwill is allocated to cash-generating units for the purpose of impairment testing. The allocation is made to those cash-generating units or groups of cash-generating units that are expected to benefit from the business combination in which the goodwill arose. The group allocates goodwill to each business segment in each country in which it operates.

Licences

Licences are shown at historical cost. Licences have a finite useful life and are carried at cost less accumulated amortisation and impairment losses. Amortisation is calculated using the straight-line method to allocate the cost of licences over their estimated useful life.

Computer software

Acquired computer software is capitalised on the basis of the costs incurred to acquire and bring to use the specific software. These costs are amortised over their estimated useful lives. If software is integral to the functionality of related equipment, then it is capitalised as part of the equipment.

Costs that are directly associated with the development of identifiable and unique software products controlled by the group, and that will probably generate economic benefits exceeding costs beyond one year are recognised as *intangible assets* and amortised as above. Costs include employee costs incurred as a result of developing software and an appropriate portion of relevant overheads. Costs associated with maintaining computer software programs are recognised as an expense as incurred.

Rights

Rights consist mainly of servitudes and rights of way under power lines. Rights are not amortised as they have an indefinite useful life. A servitude right is granted to Eskom for an indefinite period. The life of the servitude will remain in force as long as the transmission or distribution line is used to transmit electricity.

A servitude will only become impaired if the line to which the servitude is linked is derecognised. In practice, a derecognised line will be refurbished or replaced by a new line. The likelihood of the impairment of a servitude right is remote.

Concession assets

Concession assets consist of rights to charge for the usage of the infrastructure under service concession arrangements. Concession assets are capitalised on the basis of the cost of capital expenditure incurred in respect of service concession arrangements (which is the fair value at initial recognition), including borrowing costs on qualifying capital expenditures. Subsequent to initial recognition, the concession assets are measured at cost less accumulated amortisation and impairment losses. Concession assets are amortised over their estimated useful life, which is the concession period during which they are available for use.

Intangible assets arising from a service concession arrangement are included within *intangible assets* under concession assets.

Research and development

Research expenditure is recognised as an expense as incurred. Costs incurred on development projects (relating to the design and testing of new or improved products) are recognised as intangible assets when the following criteria are fulfilled:

- it is technically feasible to complete the intangible asset so that it will be available for use or sale
- management intends to complete the intangible asset and use or sell it
- there is an ability to use or sell the intangible asset
- it can be demonstrated how the intangible asset will generate probable future economic benefits
- adequate technical, financial and other resources to complete the development and to use or sell the intangible asset are available
- the expenditure attributable to the intangible asset during its development can be measured reliably

Research and other development expenditure that do not meet these criteria are recognised in profit or loss within *other operating expenses*. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period. Capitalised development costs are recorded as *intangible assets* and amortised from the point at which the asset is ready for use on a straight-line basis over its useful life.

2.7 Impairment of non-financial assets

The carrying amounts of the group's non-financial assets, other than inventories and deferred tax assets, are reviewed at each reporting date to determine whether there is any indication of impairment. Assets that have an indefinite useful life, for example land, are not subject to amortisation or depreciation and are tested annually for impairment. Assets that are subject to amortisation or depreciation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units). Non-financial assets other

than goodwill that were subject to impairment are reviewed for possible reversal of the impairment at each reporting date. Impairment (loss)/reversal is recognised in profit or loss within *net impairment (loss)/reversal*.

2.8 Capitalisation of borrowing costs

Borrowing costs attributable to the construction of qualifying assets are capitalised as part of the cost of these assets over the period of construction to the extent that the assets are financed by borrowings. The capitalisation rate applied is the weighted average of the borrowing costs applicable to the borrowings of the entities in the group unless an asset is financed by a specific loan, in which case the specific rate is used.

2.9 Service concession arrangements

A service concession arrangement is an arrangement involving an operator constructing and/or upgrading, operating and maintaining infrastructure used to provide a public service for a specified period of time. The operator is paid for its services over the period of the arrangement. The arrangement is governed by a contract that sets out performance standards, mechanisms for adjusting prices and arrangements for arbitrating disputes. The grantor (the party that grants the service arrangement) controls the infrastructure, and the operator is required to return to the grantor the infrastructure at the end of the arrangement.

Financial asset

The group recognises a financial asset arising from a service concession arrangement to the extent that it has an unconditional right to receive cash or another financial asset from or at the direction of the grantor, for the construction, upgrade or operation services of concession assets. Financial assets recognised as a result of the service concession arrangement are measured at fair value upon initial recognition. Subsequent to initial recognition, the financial asset is accounted for in accordance with IAS 39 *Financial Instruments: Recognition and Measurement* (refer to note 2.11, non-derivative financial instruments).

Financial assets arising from a service concession arrangement are included within *trade and other receivables* under other receivables.

Construction or upgrade services

The group accounts for revenue and costs relating to construction or upgrade services in accordance with IAS 11 *Construction contracts*.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

2. Summary of significant accounting policies

(continued)

2.9 Service concession arrangements (continued)

Operation services

The group accounts for revenue relating to operation services in accordance with IAS 18 Revenue.

Contractual obligations to maintain and restore the infrastructure

The group accounts for the contractual obligations to maintain or restore the infrastructure in accordance with IAS 37 Provisions, contingent liabilities and contingent assets. The provision to restore the infrastructure is included within provisions.

2.10 Leases

A lease is an agreement whereby the lessor conveys to the lessee, in return for a payment, or series of payments, the right to use an asset for an agreed period of time.

Finance leases – where the group is the lessee

The group leases certain property, plant and equipment. Leases of property, plant and equipment where the group has substantially transferred all the risks and rewards of ownership are classified as finance leases. Finance leases are capitalised at the lease's commencement at the lower of the fair value of the leased asset and the present value of the minimum lease payments.

Each lease payment is allocated between the liability and finance charges so as to achieve a constant rate on the finance balance outstanding. The corresponding rental obligations, net of finance charges, are included in other short-term and long-term payables. The interest element of the finance cost is charged to profit or loss within *finance cost* over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The property, plant and equipment acquired under finance leases are depreciated or amortised over the shorter of the useful life of the asset and the lease term.

Finance lease liabilities are derecognised in accordance with the derecognition requirements for financial liabilities (refer to note 2.11). Derivatives embedded in leases are accounted for in accordance with the requirements for embedded derivatives (refer to note 2.11).

Cost-plus coal contracts are treated as finance leases where the group is the lessee.

Finance leases – where the group is the lessor

When property, plant and equipment are leased out under a finance lease, the present value of the lease payments is recognised as a receivable. The difference between the gross receivable and the present value of the receivable is disclosed as unearned finance income within *finance lease receivables*.

Lease income is recognised over the term of the lease using the net investment method, which reflects a constant periodic rate of return.

Finance lease receivables are assessed for impairment and derecognised in accordance with the requirements for financial assets (refer to note 2.11). Derivatives embedded in leases are accounted for in accordance with the requirements for embedded derivatives (refer to note 2.11).

Premium power supplies are treated as finance leases where the group is the lessor.

Fair value

The fair value of finance lease receivables and finance lease liabilities is determined by discounting the future cash flows with respect to the finance lease at the interest rate implicit in the lease.

Operating leases

Leases where substantially all of the risks and rewards of ownership are not transferred to the group are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to profit or loss within *other operating expenses* on a straight-line basis over the period of the lease.

Leases where substantially all of the risks and rewards of ownership are not transferred to the lessee (ie the group is the lessor) are classified as operating leases. Payments received under operating leases are recognised in profit or loss within *other income* on a straight-line basis over the period of the lease.

2.11 Financial instruments

2.11.1 Non-derivative financial instruments

Recognition, measurement and derecognition of financial assets

Non-derivative financial assets comprise *investment in securities, financial instruments with group companies, financial trading assets, loans receivable, trade and other receivables, finance lease receivables and cash and cash equivalents*.

Cash and cash equivalents comprise balances with local and international banks, monies in call accounts, short-term assets and money market assets with an original maturity of less than 90 days. Bank overdrafts are shown within *borrowings* in current liabilities on the statement of financial position.

All non-derivative financial assets are recognised on the date of commitment to purchase (trade date). Financial assets are derecognised when the rights to receive cash flows from the investments have expired or the group has transferred substantially all the risks and rewards of ownership. Realised gains or losses on derecognition are determined using the FIFO (first in first out) method.

Non-derivative financial assets plus any directly attributable transaction costs are recognised initially at fair value. Directly attributable transaction costs related to financial assets at fair value through profit or loss are recognised in profit or loss on initial recognition when incurred. Subsequent to initial recognition, non-derivative financial assets are measured per asset category (as stated below). The appropriate classification of the financial asset is determined at the time of commitment to acquire the financial asset.

When entering into a transaction, the financial instrument is recognised initially at the transaction price which is the best indicator of fair value. Where fair value of the financial instrument is different from the transaction price a day-one gain or loss may arise. The day-one gain or loss is immediately recognised in profit or loss (except for embedded derivatives and the subordinated loan from the shareholder) within *net fair value gain/(loss) on financial instruments, excluding embedded derivatives*, provided that the fair value has been determined based on market-observable data.

Held-to-maturity investments

Held-to-maturity investments are non-derivative financial assets with fixed or determinable payments and fixed maturity that management has both the ability and intent to hold to maturity.

Subsequent to initial recognition, held-to-maturity investments are measured at amortised cost using the effective interest method, less any accumulated impairment losses.

The amortised cost of a financial asset is the amount at which the financial asset is measured at initial recognition minus principal payments, plus or minus the cumulative amortisation using the effective interest method and minus any reduction for impairment or uncollectibility.

The effective interest rate is the rate that discounts the estimated future cash receipts of the financial asset exactly to its net carrying amount.

Financial assets at fair value through profit or loss

An instrument is classified at fair value through profit or loss if it is held-for-trading or is designated as such upon initial recognition. An instrument may be designated at fair value through profit or loss only when certain criteria are met. The group has elected not to designate financial assets at fair value through profit or loss.

A financial asset is classified as held-for-trading if it is:

- acquired for the purpose of selling it in the short term
- part of a portfolio of identified financial instruments that is managed together and for which there is evidence of a recent pattern of short-term profit taking
- a derivative instrument

Subsequent to initial recognition, changes in the fair value of these financial assets are recognised in profit or loss within *net fair value gain/(loss) on financial instruments, excluding embedded derivatives*.

Loans and receivables

The loans, trade and other receivables of the group are classified as loans and receivables. Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market, other than:

- those that management intends to sell immediately or in the short term, which are classified as held-for-trading
- those that upon initial recognition are designated as available-for-sale
- those for which the group may not recover substantially all of its initial investment, other than because of credit deterioration, which shall be classified as available-for-sale

Subsequent to initial recognition, loans and receivables are measured at amortised cost using the effective interest method, less any accumulated impairment losses.

Available-for-sale assets

Available-for-sale financial assets are those assets that are designated as such or do not qualify to be classified as fair value through profit or loss, held-to-maturity or loans and receivables.

Subsequent to initial recognition, available-for-sale financial assets are measured at fair value and changes therein, other than impairment losses and foreign exchange gains and losses (for monetary items), are recognised in other comprehensive income within *available-for-sale financial assets*. When the asset is derecognised, the cumulative gain or loss in equity is transferred to profit or loss.

Impairment losses on available-for-sale financial assets are recognised by reclassifying the losses accumulated in the fair value reserve in equity, to profit or loss. The cumulative loss that is reclassified from equity to profit or loss is the difference between the acquisition cost, net of any principal repayment and amortisation, and the current fair value, less any impairment loss recognised previously in profit or loss. Changes in impairment provisions attributable to application of the effective interest method are reflected as a component of interest income. If, in a subsequent period, the fair value of an impaired available-for-sale debt security increases and the increase can be related objectively to an event occurring after the impairment loss was recognised in profit or loss, then the impairment loss is reversed, with the amount of the reversal recognised in profit or loss. However, any subsequent recovery in the fair value of an impaired available-for-sale equity security is recognised in other comprehensive income.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

2. Summary of significant accounting policies

(continued)

2.11 Financial instruments (continued)

2.11.1 Non-derivative financial instruments (continued)

Recognition, measurement and derecognition of financial assets (continued)

Fair value

The fair values of trading assets, available-for-sale assets and assets carried at amortised cost are based on quoted bid prices. For assets that are not quoted in an active market, valuation techniques are used. Where pricing models are used, inputs are based on market-related measures at the reporting date. Where discounted cash flow techniques are used, estimated future cash flows are based on management's best estimates and the discount rate is a market-related rate for a financial asset with similar terms and conditions at the reporting date.

The fair value of trade and other receivables is estimated as the present value of future cash flows, discounted at the market rate of interest at the reporting date.

Impairment (held-to-maturity investments, loans and receivables)

A review for impairment indicators is carried out at each financial year end to determine whether there is any objective evidence that a financial asset not carried at fair value through profit or loss is impaired. A financial asset is considered to be impaired if objective evidence indicates that one or more events has/have had a negative effect on the estimated future cash flows of that asset. In the case of equity securities classified as available-for-sale, a significant or prolonged decline in the fair value of the security below its cost is considered to be an indicator that the securities are impaired.

An impairment loss in respect of a financial asset measured at amortised cost is calculated as the difference between its carrying amount and the present value of the estimated future cash flows discounted at the original effective interest rate. An impairment loss in respect of an available-for-sale financial asset is calculated by reference to its fair value.

Individually significant financial assets are tested for impairment on an individual basis. The remaining financial assets are assessed collectively in groups that share similar credit risk characteristics.

All impairment losses are recognised in profit or loss within *net impairment loss*. In the case of available-for-sale financial assets, the cumulative loss – measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that financial asset previously recognised in profit or loss – is removed from other comprehensive income and recognised in profit or loss.

An impairment loss is reversed if the reversal can be related objectively to an event occurring after the impairment loss

was recognised. For financial assets carried at amortised cost and available-for-sale financial assets that are debt securities, the reversal is recognised in profit or loss within *net impairment loss*. For available-for-sale financial assets that are equity securities, a subsequent increase/decrease in fair value is recognised directly in other comprehensive income.

Where an asset has been impaired, the carrying amount of the asset is reduced through an allowance account.

Recognition, measurement and derecognition of financial liabilities

Non-derivative financial liabilities comprise *debt securities issued, borrowings, financial instruments with group companies, financial trading liabilities, finance lease liabilities and trade and other payables*.

Non-derivative financial liabilities are recognised initially at fair value plus any directly attributable transaction costs except for financial liabilities at fair value through profit or loss. Directly attributable transaction costs related to liabilities recognised at fair value through profit or loss are recognised in profit or loss on initial recognition when incurred. Subsequent to initial recognition, non-derivative financial liabilities are measured at amortised cost or fair value as per the relevant liability category (as described below).

All non-derivative financial liabilities are recognised on the date of commitment (trade date) and are derecognised when the obligation expires, is discharged or cancelled, or there is a substantial modification to the terms of the liability. Realised gains and losses are determined using the FIFO method.

Financial liabilities at fair value through profit or loss (held-for-trading)

An instrument is classified at fair value through profit or loss if it is held-for-trading or is designated as such upon initial recognition. An instrument may be designated at fair value through profit or loss only when certain criteria are met. The group has not elected to designate financial liabilities at fair value through profit or loss.

A financial liability is classified as held-for-trading if it is:

- incurred principally for the purpose of selling or repurchasing it in the near term
- part of a portfolio of identified financial instruments that is managed together and for which there is evidence of a recent pattern of short-term profit taking, or
- a derivative instrument

Subsequent to initial recognition, financial liabilities at fair value through profit or loss continue to be measured at fair value.

Financial liabilities at amortised cost

Financial liabilities that are not held-for-trading are classified as financial liabilities at amortised cost. Debt securities issued,

including foreign loans, that are not held-for-trading are classified as held at amortised cost. Subsequent to initial recognition, these liabilities are measured at amortised cost using the effective interest method. The *trade and other payables* of the group are classified as financial liabilities at amortised cost.

Fair value

The fair value of *financial trading liabilities* is based on quoted offer prices. For liabilities that are not quoted in an active market, valuation techniques are used. Where pricing models are used, inputs are based on market-related measures at the reporting date. Where discounted cash flow techniques are used, estimated future cash flows are based on management's best estimates and the discount rate is a market-related rate for a financial liability with similar terms and conditions at the reporting date.

2.11.2 *Financial guarantees*

Recognition

Financial guarantees are contracts that require the group to make specified payments to reimburse the holder for a loss that may occur because a specified counterparty fails to make payment when due in accordance with the terms of a debt instrument.

Financial guarantee liabilities are initially recognised at fair value, and the initial fair value is amortised over the life of the financial guarantee. The guarantee liability is subsequently carried at the higher of this amortised cost and the present value of any expected payment (when a payment under the guarantee has become probable). Financial guarantees are included within other liabilities.

Fair value

Financial guarantees are valued initially by taking into account discounted future cash flows adjusted according to the probability of occurrence of the trigger event. The resultant guarantee is raised as a liability, with the costs being charged to profit or loss. The unprovided portion is disclosed as a contingent liability. As a result of using discounted cash flows, interest rate risk may arise due to the possibility of the actual yields on assets being different from the rates assumed in the discounting process.

2.11.3 *Derivative financial instruments and hedging activities*

Recognition

A derivative is a financial instrument whose value changes in response to an underlying variable, requires little or no initial investment and is settled at a future date. All derivatives are classified as held-for-trading instruments, unless they meet the criteria for hedge accounting and have been designated for purposes of applying hedge accounting. Derivatives are initially recognised at fair value and re-measured subsequently at fair value. Fair values are obtained from quoted market prices, discounted cash flow models and options pricing models which consider current market and contractual

prices for the underlying instruments as well as the time value of money.

All derivative instruments of the group are included in the statement of financial position as derivatives held for risk management. Realised and unrealised gains or losses for derivatives used for economic hedging are recognised in profit or loss within *net fair value gain/(loss) on financial instruments, excluding embedded derivatives*. Realised and unrealised gains or losses for derivatives used for cash flow hedging are recognised in other comprehensive income within *cash flow hedges*.

Hedge accounting

The method of recognising the resulting gain or loss on the derivative depends on whether the derivative is designated as a hedging instrument and, if so, the nature of the item being hedged. Derivatives can be designated as:

- hedges of the fair value of recognised liabilities and assets (fair value hedge)
- hedges of a particular risk associated with a recognised liability, asset or a highly probable forecast transaction (cash flow hedge)
- hedges of a net investment in a foreign operation (net investment hedge)

The group applies only cash flow hedge accounting.

The group documents, at the inception of the transaction, the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedging transactions. The group also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items.

Movements on the hedging reserve are shown in other comprehensive income within *cash flow hedges*. The full fair value of a hedging derivative is classified as a non-current asset or liability when the remaining period of the hedged item is more than 12 months; it is classified as a current asset or liability when the remaining period of the hedged item is less than 12 months. Trading derivatives are classified as current assets or liabilities.

Cash flow hedges

Insignificant day-one profits and losses are expensed in profit and loss while significant day-one profits and losses are deferred in equity and then amortised over the term of the hedging instrument in profit and loss. Day-one profits and losses on hedging instruments are predominantly a function of the inclusion of credit, liquidity and basis risk in the terms of the traded hedging instrument. These risks are not included in the determination of a hypothetical derivative used to measure fair value movements in a hedged item and are therefore excluded from any hedge accounting relationships.

2. Summary of significant accounting policies

(continued)

2.11 Financial instruments (continued)

2.11.3 Derivative financial instruments and hedging activities

(continued)

Cash flow hedges (continued)

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in other comprehensive income *within cash flow hedges*. The gain or loss relating to the ineffective portion and the forward points portion which is not designated (as part of the hedge) is recognised immediately in profit or loss within *net fair value gain/(loss) on financial instruments, excluding embedded derivatives*.

When the forecast transaction occurs, any cumulative gain or loss existing in equity at that time is included in the initial cost or other carrying amount of the asset or liability.

When a hedging instrument expires, is sold or a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in equity at that time remains in other comprehensive income until the forecast transaction occurs. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately transferred to profit or loss within the relevant expense category.

Economic hedging

Certain derivative instruments do not qualify for hedge accounting and are used for economic hedging. Changes in the fair value of these derivative instruments are recognised in profit or loss.

2.11.4 Repurchase and resale agreements

Securities sold subject to repurchase agreements are disclosed in the financial statements as financial assets. The liability to the counterparty is recorded as repurchase agreements and is included in *financial trading liabilities*.

Securities purchased under agreements to resell are recorded as repurchase agreements and are included in *financial trading assets*.

The difference between the sale and repurchase price or purchase and resale price is treated as interest accrued over the life of the repurchase or resale agreement using the effective-yield method.

2.11.5 Embedded derivatives

Recognition

An embedded derivative is a component of a hybrid (combined) instrument that also includes a non-derivative host contract, with the effect that some of the cash flows of the combined instrument vary in a way similar to those of a

standalone derivative. An embedded derivative causes some or all of the cash flows that otherwise would be required by the contract to be modified according to a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, or other variable. The hybrid contract is the entire contract and the host contract is the main body of the contract excluding the embedded derivative.

An embedded derivative is separated from the host contract and accounted for as a derivative if:

- the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract
- a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative and
- the combined instrument is not measured at fair value with changes in fair value recognised in profit or loss

The determination of the host contract of an electricity contract (which includes an embedded derivative) is based on the standard electricity tariff specified in the contract and, where no standard tariff is specified, the tariff that would normally apply to such a customer.

Fair value

Embedded derivatives are disclosed separately from *derivatives held for risk management*. The changes in fair value are included in *net fair value gain/(loss) on embedded derivatives* in profit or loss. The impact of the fair value gains or losses is taken into account in the calculation of current and deferred taxation.

Embedded derivatives that are not separated are effectively accounted for as part of the hybrid instrument.

Non-option based derivatives are separated on terms that result in a fair value at the date of inception of zero. Option-based derivatives are separated on the terms stated in the contracts and will not necessarily have a fair value equal to zero at the initial recognition of the embedded derivative resulting in day-one gains. These day-one gains or losses are spread equally over the period of the agreement. The fair value will depend on the strike price at inception.

The valuation at initial recognition is adjusted for cash flows since inception. The value of the embedded derivatives which involve a foreign currency is first determined by calculating the future cash flows and then discounting the cash flows by using the relevant interest rate curve and only then is the net present value of the cash flows converted at the relevant rand/foreign currency spot rate to the reporting currency.

The fair value of the embedded derivative is determined on the basis of its terms and conditions. If this is not possible, then the value of the embedded derivative is determined by fair valuing the whole contract and deducting from it the fair value of the host contract.

Where there is no active market for the embedded derivatives, valuation techniques are used to ascertain their fair values. Financial models are developed incorporating valuation methods, formulae and assumptions. The valuation methods include:

- swaps: electricity tariff is swapped for a commodity in a foreign currency
- forwards: electricity tariff or other revenue or expenditure is based on a foreign currency
- options: electricity tariff or other revenue is based on an embedded derivative floor or cap on foreign consumer or production price indices or interest rates. The Monte Carlo simulation technique is used to produce various cap and floor strike prices

The fair value of embedded derivatives is adjusted, where applicable, to take into account the inherent uncertainty relating to the future cash flows of embedded derivatives such as liquidity, model risk and other economic factors.

The more important assumptions, which include the following, are obtained either with reference to the contractual provisions of the relevant contracts or from independent market sources where appropriate:

- spot and forward commodity prices
- spot and forward foreign currency exchange rates
- spot and forward interest rates
- forecast sales volumes
- spot and forward consumer and foreign production price indices
- spot and forward electricity prices
- liquidity, model risk and other economic factors

2.12 Inventories

Coal, maintenance spares and consumables

Inventories are stated at the lower of cost and net realisable value. Cost is determined on the weighted average basis and includes expenditure incurred in acquiring inventories, production and conversion costs and other costs incurred in bringing inventory to present location and condition.

Nuclear fuel

Nuclear fuel is stated at the lower of cost and net realisable value. Cost is determined on the FIFO basis. Nuclear fuel consists of raw materials, fabricated fuel assemblies and fuel in reactors.

Net realisable value is the estimated selling price in the ordinary course of business, less applicable variable selling expenses. Costs of inventories include the transfer from

equity of any gains/losses on qualifying cash flow hedges relating to purchases of raw materials.

2.13 Future fuel supplies

Coal

Non-refundable advance payments to suppliers, together with related borrowing costs thereon, are deferred in the statement of financial position within *future fuel supplies* and amortised against the cost of coal supplied on the basis of the estimated life of the asset procured by the suppliers.

Repayable advances to suppliers are capitalised, and the related interest earned is credited to profit or loss within *finance income* and the refunds are repaid in terms of the agreements.

Nuclear

Fuel assemblies in the process of fabrication are stated at cost within *future fuel supplies*, which includes the non-refundable advance payments made in terms of the agreement. Hedge accounting is applied to foreign exchange contracts entered into with respect to the purchase of nuclear fuel, with the effective portion being capitalised during the fabrication period. Advance payments in terms of agreements are capitalised.

2.14 Share capital

Ordinary shares are classified as equity.

2.15 Equity reserve

The subordinated loan from the shareholder is held at amortised cost. The market value of the loan at inception is calculated for each tranche utilising the expected cash flows which are discounted at market rates to determine the effective interest rates. The effective interest rates for each tranche remain constant over the life of the loan tranche. The future cash flows are re-assessed annually and the loans are remeasured at each reporting period. Although the loan is interest bearing, the interest payment terms could potentially be favourable and are dependent on the liquidity and gearing of Eskom. The change in the loan value with respect to interest amortised and the remeasurement is reflected in the profit and loss in *finance cost* and is eligible for capitalisation as borrowing costs.

2.16 Income tax

Income tax expense comprises current and deferred tax. Income tax expense is recognised in profit or loss except to the extent that it relates to items recognised in other comprehensive income, in which case it is recognised in other comprehensive income.

Current tax is expected tax payable on taxable income for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

2. Summary of significant accounting policies

(continued)

2.17 Deferred tax

Deferred tax is recognised, using the statement of financial position method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the statement of financial position. Deferred tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction, affects neither accounting nor taxable profit or loss. However, deferred tax is provided in respect of the temporary differences arising on the assets and provisions created in respect of decommissioning and nuclear waste management and closure, pollution control and rehabilitation. Deferred tax is determined using tax rates (and laws) enacted or substantively enacted at the reporting date and that are expected to apply when the related deferred tax asset is realised or the deferred tax liability is settled.

Deferred tax assets are recognised to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised. Deferred tax assets are reviewed at each reporting date and reversed if it is no longer probable that the related tax benefits will be realised.

Deferred tax is provided on temporary differences arising on investments in subsidiaries and associates, except where the timing of the reversal of the temporary difference is controlled by the group and it is probable that the temporary difference will not reverse in the foreseeable future.

2.18 Payments received in advance

Payments received in advance consist mainly of upfront capital contributions for the construction of assets and funding for electrification. From 1 July 2009, upfront capital contributions are recognised in profit or loss within *other revenue*, excluding *electricity revenue* when the customer is connected to the electricity network.

2.19 Deferred income

Grants

Government grants received relating to the creation of electrification assets are included in non-current liabilities as *deferred income* and are credited to profit or loss within *depreciation and amortisation expense* on a straight-line basis over the expected useful lives of the related assets.

Government grants which become receivable as compensation for expenses or losses already incurred, or for the purpose of giving immediate financial support to the entity with no future related costs, are recognised in profit or loss within *other income* for the period in which they become receivable.

Capital contributions received from customers

Contributions paid in advance by electricity customers relating to the construction of regular distribution and

transmission assets (with a standard supply) are credited to profit or loss within *other revenue* on a straight-line basis over the expected useful lives of the related assets when these assets have been placed in commercial operation up to 30 June 2009. From 1 July 2009 the contributions paid in advance are credited to profit and loss within *other revenue*, excluding *electricity revenue* when the customer is connected to the electricity network (refer to note 2.18).

2.20 Insurance contracts

The group, through its subsidiary – Escap Limited, issues contracts that transfer insurance risk. An insurance contract is one under which one party (the insurer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder or other beneficiary, if a specified uncertain future event (the insured event) adversely affects the policyholder or other beneficiary. The group insures accident and health, engineering, guarantee, liability, motor, property, transportation and miscellaneous classes of short-term insurance business.

At each reporting date, liability adequacy tests are performed to ensure the adequacy of the claims liabilities. In performing these tests, current best estimates of future contractual cash flows and claims handling and administration expenses are used. Where a shortfall is identified an additional provision is made and the company recognises the deficiency in profit or loss.

Contracts are entered into with reinsurers, under which the group is compensated for losses on one or more contracts issued by it and that meet the classification requirements for insurance contracts. The benefits that Escap is entitled to under its reinsurance contracts held are recognised as reinsurance assets in the statement of financial position. Amounts recoverable are dependent on the expected claims and benefits arising under the related reinsured insurance contracts. Amounts due from or due to reinsurers are measured consistently with the amounts associated with the reinsured insurance contracts and in accordance with the terms of each reinsurance contract. Reinsurance liabilities are primarily premiums payable for reinsurance contracts and are recognised as an expense when due. Reinsurance assets and liabilities are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment.

A full contingency reserve of ten percent of net premium income is maintained in Escap Limited in terms of the Short-term Insurance Act, 53 of 1998.

2.21 Employee benefits

Annual and performance bonus

The group recognises a liability for annual and performance bonuses. A liability for annual bonuses is accrued on a proportionate basis as services are rendered. A provision

for a performance bonus is raised on the estimated amount payable in terms of the incentive scheme which is based on the business and employee's performance in the applicable year.

Occasional and service leave

The group recognises a liability for occasional and service leave as the leave is of a long-term nature. An actuarial valuation is performed on an annual basis for occasional and service leave. The accrued liabilities are determined by valuing all future leave expected to be taken and payments expected to be made in respect of benefits up to the valuation date. Allowance has been made in the calculations for the assumed benefit options employees will exercise, as well as salary increases and investment returns up to the date the benefit is received. All actuarial gains or losses and past service costs are recognised immediately in profit or loss within *employee benefit expense*. The present values of the benefit are determined by using the yield of long-dated corporate bonds (or government bonds where high-quality corporate bonds are not available).

Pension obligations

Retirement benefits are provided for employees through the Eskom Pension and Provident Fund. Contributions to the fund are based on a percentage of pensionable emoluments and are expensed in the period in which they are incurred.

Post-retirement medical aid obligations

The liability for post-retirement medical aid is the present value of the obligation by using long-dated corporate bonds (or government bonds where high-quality corporate bonds are not available) which have maturities similar to the liability. Provision is made by accounting, through profit or loss, for the estimated cost over the expected period to retirement of the employees. The cost to the employer, in the form of employer contributions, is determined by using the projected unit credit method, with actuarial valuations being carried out at reporting date. Actuarial gains or losses are recognised in other comprehensive income within *net actuarial gain or loss on post-retirement medical aid benefits* immediately. No deferred recognition mechanism is applied.

The entitlement to these benefits is usually conditional on the employee remaining in service up to retirement. All employees qualify for post-retirement medical aid, except for new employees appointed on or after 1 June 2003 at a managerial level.

2.22 Provisions

Provisions are recognised when the group has a present legal or constructive obligation as a result of a past event, when it is probable that an outflow of resources will be required to settle the obligation and when the amount can

be reliably estimated. Provisions are not recognised for future operating losses.

Provisions are determined by discounting the expected future cash flows using a pre-tax discount rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. The increase in the provision due to the passage of time is recognised as *finance cost*.

The provisions below are restated on an annual basis to reflect changes in measurement that result from changes in the estimated timing or amount of the outflow of resources embodying economic benefits required to settle the obligation, or a change in discount rate, which shall be accounted for as follows:

- changes in the liability shall be added to, or deducted from, the cost of the related asset in the current period
- the amount deducted from the cost of the asset shall not exceed its carrying amount. The excess shall be recognised in profit or loss
- any additions to the cost of an asset shall be reviewed in terms of the normal impairment principles

Decommissioning and nuclear waste management

Nuclear and other generation plant

A provision is raised for the estimated decommissioning cost of nuclear and other generation plant and capitalised to the cost of nuclear or other generation plant when it is commissioned. The estimated cost of decommissioning at the end of the productive life of plant is based on engineering estimates and reports from independent experts. Decommissioning costs capitalised to the cost of nuclear or other generation plant are written off on a straight-line basis over the estimated useful life of the plant.

Spent nuclear fuel

A provision is raised for the management of spent nuclear fuel assemblies and radioactive waste. The charge to profit or loss is based on the latest available cost information and is included in *primary energy*.

Closure, pollution control and rehabilitation

Expenditure on property, plant and equipment for pollution control is capitalised and depreciated over the useful lives of the assets. The cost of current ongoing programmes to prevent and control pollution and to rehabilitate the environment is charged to profit or loss within *primary energy* as incurred, unless a present legal or constructive obligation exists to recognise such expenditure, in which case a provision is created based on the best estimates available.

A provision is raised for the estimated cost of closure, pollution control and rehabilitation during and at the end of the life of the mines where a legal or constructive obligation exists to pay coal suppliers. Closure, pollution control and rehabilitation costs capitalised are written off over the estimated useful life of the power station.

2. Summary of significant accounting policies

(continued)

2.22 Provisions (continued)

Service concession arrangements

A provision is raised for contractual obligations to maintain and restore the infrastructure (refer to note 2.9). These contractual obligations to maintain or restore infrastructure, except for any upgrade element, are recognised and measured at the best estimate of the expenditure that would be required to settle the present obligation at the end of the reporting period.

2.23 Revenue recognition

Revenue comprises the fair value of the consideration received or receivable for the sale of goods and services in the ordinary course of the group's activities. Revenue is shown, net of value added tax, estimated returns, rebates and discounts, but includes the 2c/kWh environmental levy introduced from 1 July 2009.

The group recognises revenue when the amount of revenue can be reliably measured, it is probable that future economic benefits will flow to the entity and specific criteria have been met for each of the group's activities as described below. The amount of revenue is not considered to be reliably measured until all contingencies relating to the sale have been resolved. The group bases its estimates on historical results, taking into consideration the type of customer, the type of transaction and the specifics of each arrangement.

Revenue is recognised as follows:

Sale of goods

Sale of goods is recognised when significant risks and rewards of ownership have passed and the collectibility of the related receivable is reasonably assured.

Electricity revenue is recognised when electricity is consumed by the user.

Sale of services

Sale of services is recognised in the reporting period in which the services are rendered, by reference to the stage of completion of the specific transaction assessed on the basis of the actual service provided as a proportion of the total services to be provided.

Other revenue

Other revenue is recognised when the significant risks and rewards of ownership are transferred to the buyer and the amount of revenue can be measured reliably.

Construction contracts

Contract revenue includes the initial amount agreed in the contract plus any variations in contract work to the extent that it is probable that they will result in revenue and can be measured reliably. As soon as the outcome of a construction contract can be estimated reliably, contract revenue is

recognised in profit or loss within *other revenue*, excluding *electricity revenue* in proportion to the stage of completion of the contract.

The stage of completion is assessed by reference to the contract costs incurred to the reporting date as a percentage of total estimated costs for each contract. When an outcome of a construction contract cannot be estimated reliably, contract revenue is recognised only to the extent of contract costs incurred that are likely to be recoverable. An expected loss on a contract is recognised immediately in profit or loss.

Service concession arrangements

Revenue relating to construction or upgrade services under a service concession arrangement (refer to note 2.9) is recognised based on the stage of completion of the work performed, consistent with the group's accounting policy on recognising revenue on construction contracts.

Operation or service revenue is recognised in the period in which the services are provided by the group. When the group provides more than one service in a service concession arrangement the consideration received is allocated by reference to the relative fair values of the services delivered.

2.24 Finance income

Finance income comprises interest receivable on loans, advances, trade receivables, finance lease receivables and income from financial market investments. Interest income is recognised as it accrues in profit or loss, using the effective interest method.

2.25 Finance cost

Finance cost comprises interest payable on borrowings and interest resulting from the unwinding of discount on liabilities. Borrowing costs which are not capitalised (refer to note 2.8) are recognised in profit or loss.

2.26 Dividend income

Dividend income is recognised when the right to receive payment is established.

2.27 Dividend distribution

Dividend distribution to the shareholder is recognised as a liability in the financial statements of the group in the period in which the dividends are approved by the shareholder.

2.28 Non-current assets and liabilities held-for-sale

Assets and liabilities which meet the definition of held-for-sale and discontinued operation under IFRS 5 *Non-current assets held-for-sale and discontinued operations*, except for assets excluded from the scope of IFRS 5 for measurement purposes, are stated at the lower of their carrying amount and fair value less costs to sell if their carrying amount is recovered principally through a sale transaction rather than through continuing use.

3. Financial risk management

The group has an integrated risk management framework. The group's approach to risk management is based on risk governance structures, risk management policies, risk identification, measurement and reporting. Three types of risks are reported as part of the risk profile, namely operational, strategic and business continuity risks. Operational risks are events, hazards, variances or opportunities which could influence the achievement of Eskom's compliance and operational objectives. For Eskom, a strategic risk is a significant unexpected or unpredictable change or outcome beyond what was factored into the organisation's strategy and business model which could have an impact on the group's performance. Business continuity risks are those events, hazards, variances and opportunities which could influence the continuity of Eskom. The financial risks, as defined by IFRS 7 *Financial instruments: Disclosures*, and the management thereof, form part of this key risk area. For more information on risk, refer to page 43 in the corporate governance report and page 21 in the profile.

The board of directors (the board) has delegated the management of enterprise-wide risk to the audit and risk management committee which operates through various subcommittees. One of the committee's objectives is to ensure that the group is not unduly exposed to financial risks. Most of the financial risks arising from financial instruments are managed in the centralised treasury function of the group, except for instruments such as trade and finance lease receivables and trade and finance lease payables which are managed by the other divisions and subsidiaries.

The group's exposure to risk, its objectives, policies and processes for managing the risk and the methods used to measure it have been consistently applied in the years presented, unless otherwise stated.

The exposure of the centralised treasury function to the major financial risks is unique to its activities and therefore different to those of the divisions and subsidiaries within the Eskom group. A distinction is therefore made between the treasury department and other divisions and subsidiaries in the group in respect of financial risk management where relevant.

The group has exposure to the following risks as a result of its financial instruments:

- credit risk (refer to note 3.1)
- market risk (refer to note 3.2)
- liquidity risk (refer to note 3.3)

3.1 Credit risk

Credit risk is the risk of financial loss to the group if a customer or other counterparty (including government and financial institutions) to a financial instrument fails to meet its contractual obligations. Credit risk arises primarily from the sale of electricity and related services in the ordinary course of business and financial instruments managed in the centralised treasury activities. Credit risk includes counterparty risk and delivery or settlement risk.

Counterparty risk is the risk that a counterparty is unable to meet its financial and/or contractual obligations during the period of a transaction. Delivery or settlement risk is the risk that a counterparty does not deliver on its contractual commitment on maturity date (including the settlement of money and delivery of securities).

3.1.1 Management of credit risk

Financial instruments managed by the treasury function

Credit risk arises from cash and cash equivalents, investment in securities, derivatives held for risk management, financial trading assets and deposits made with counterparties. Processes are in place to identify, measure, monitor, control and report credit risk. The objective of Eskom's credit risk management framework is firstly to protect cash and investments and, secondly to project and maximise the rate of return of financial market investments.

Responsibility and governance

The treasury credit risk committee, a subcommittee of the audit and risk committee, manages counterparty credit risk which arises from the treasury activities in the financial markets. This committee is chaired by the finance director and reports on a quarterly basis to Exco and the audit and risk committee. The activities of the committee are guided by the terms of reference that are updated and approved by the audit and risk committee.

The terms of reference set out the minimum acceptable standards to be adhered to by those responsible for credit-related transactions within the treasury department. The terms of reference are aligned to the Exco credit risk governance standards and are supplemented by appropriate policies and procedures.

The treasury credit risk committee:

- assesses the credit quality of counterparties and types of instruments used
- approves credit limits with such counterparties
- facilitates and manages the issuing of financial guarantees by the group
- ensures that transactions with counterparties are supported by trading agreements, where applicable
- approves methodologies used for the management of counterparty exposure

3. Financial risk management (continued)

3.1 Credit risk (continued)

3.1.1 Management of credit risk (continued)

Responsibility and governance (continued)

The senior credit risk advisor in the risk assessment division provides feedback on all treasury credit risk-related matters to the treasury management, finance director, treasury credit risk committee and audit and risk committee.

The management of credit risk is governed by the following policies:

- trading in financial instruments is conducted and entered into with selected counterparties after credit limits have been authorised. Individual risk limits are set based on internal and external ratings in line with limits set by the board. All credit limits are approved by the treasury credit risk committee. The use of credit limits is regularly monitored
- only banks and financial institutions with an independent minimum rating of A1 are accepted. If there are no independent ratings, the credit quality of the counterparty is assessed, taking into account its financial position, past experience and other factors
- all exposures are mark-to-market. Transaction or close-out netting takes place in accordance with the terms and conditions of the underlying trading agreements
- minimum credit-rating requirements for financial institutions are maintained to assess the risk categories by rating class and to ascertain the probability of default inherent in each rating class
- approved concentration risk parameters and collateral management procedures are in place

Concentration of credit risk is managed by setting credit risk limits at a counterparty-specific level. Concentration credit risk limits are used as second-tier limits in relation to counterparty credit limits. Counterparty-specific exposure is monitored against a set concentration of credit risk limits in relation to the total credit risk exposure to all counterparties.

Credit risk measurement, monitoring and reporting

Risk is measured by determining a default probability per counterparty (using default probabilities assessed by rating agents for various types of credit ratings) which is then applied to the market value of the investment placed to determine the capital at risk.

The treasury department's policies and practices are designed to preserve the independence and integrity of decision making and ensure credit risks are accurately assessed, properly approved, continually monitored and actively managed.

Aggregate credit exposure, hold-limit exceptions and risk profile changes are reported to Exco and the audit and risk committee on a quarterly basis. There is regular detailed reporting of limits' utilisation, limit breaches and customer concentrations to ensure these are appropriately managed and monitored.

Impairment assessments are performed to evaluate the credit risk exposure. The assessments focus on the following areas:

- significant financial difficulty of the issuer or counterparty
- high probability of bankruptcy
- breach of contract

Financial instruments managed by other divisions and subsidiaries

(a) Trade receivables (electricity)

Eskom supplies electricity to customers in its licensed areas of supply. A large number of the residential customers is on a prepaid basis.

Eskom's exposure to credit risk is influenced by the individual characteristics of each customer. In monitoring credit risk, customers are grouped according to their credit characteristics, including whether they are large or small power users, geographic location, ageing profile, security (deposits and guarantees) held and payment history.

The main classes of electricity receivables are international, local large and local small power users.

Electricity supply agreements are entered into with key international customers who comprise utility companies and governments of neighbouring countries. These customers are not required to provide any security unless they default on their payment terms.

Key large power users comprise mainly South African commercial, industrial and mining customers and redistributors. Some key large power users are not required to provide any security if they have an acceptable credit rating from an approved rating agency. New customers are required to provide security equivalent to the value of three months' estimated consumption. Existing customers are required to provide security to the value of three months' consumption if they default on their payment terms.

Non-key customers (other than large power users and small power users) are required to provide security equivalent to between one to three months' consumption at the commencement of the supply agreement. The level of security is reviewed when a customer defaults on their payment obligation or requires additional electricity supply

capacity in which case they are required to either provide security or increase their existing security to an amount equivalent to between one to three months of recent consumption before supply will commence. Redistributors are not required to provide any security and are currently re-evaluated based on their payment history to determine if any security is necessary. Eskom is currently developing a municipal model to manage any associated risk exposure.

Payment terms vary between customer classes as follows:

- Key international customers: 10 to 45 days
- Key and other large power users: individually negotiated up to a maximum of 15 days
- Small power users: 30 days

Interest is charged at market-related rates on balances in arrears.

The group has well-established credit control procedures that monitor activity on customer accounts and allow for remedial action should the customer not comply with payment terms. These procedures include an internal collection process, follow up with the customer either telephonically or in person, negotiations of mutually acceptable payment arrangements and the issue of a notice of disconnection of supply and letters of demand. Non-payment will result in disconnection of supply and the customer's account being closed. The legal collection process is pursued thereafter.

The decision to impair overdue amounts is assessed on the probability of recovery based on the customer's credit risk profile.

Progress on the collection process is reviewed on a regular basis and if it is evident that the amount will not be recovered, it is recommended for write-off in terms of the Eskom policy and delegation of authority. The process of recovery continues unless it is confirmed that there is no prospect of recovery or the costs of such action will exceed the benefits to be derived. Amounts written off are determined after taking into account the value of the security held.

The total cumulative allowance for impairment for electricity receivables at 31 March 2011 was R2.80 billion (2010: R2.15 billion) (refer to note 3.1.2(a)). A substantial portion relates to outstanding debt in problematic areas. The collection of revenue from small power users in Soweto remains a challenge. The enhancement of credit control strategies and monitoring of payment levels in this area continue to receive management attention. The payment levels from these customers, expressed as a percentage of billed revenue, was 22% (2010: 32%).

Eskom is currently testing the strategy of secured split metering and debt recovery via prepayment as a key approach to minimise the risk of non-collection. Significant

stakeholder and political support at local and national government level is required to ensure the successful roll out of this new strategy.

In addition, the following strategies are currently in operation and are largely successful in other high-risk areas of non-paying customers. These include:

- disconnections
- conversion to prepayment
- increased internal debt management capacity
- use of debt collectors
- payment arrangements
- focus on early identification and letters of demand
- increased securities
- efficient internal process, for example, system automation of credit and collections such as automated notices and letters of demand

Certain redistributors have fallen into arrears during the course of the financial year. Some have subsequently either settled or made significant payments towards their arrear debts. Monitoring of these redistributor payment levels continues to receive ongoing management attention and remains a high priority focus area.

(b) *Other trade receivables*

Eskom Enterprises (Pty) Limited provides plant life-cycle support, plant maintenance work, network protection and measurement mainly to Eskom with a small component relating to external customers. Therefore, the group's credit exposure in respect of other trade receivables is considered to be insignificant.

(c) *Other receivables*

Other receivables include recoverable work, employee receivables, inter-group balances (company only), reinsurance, value added tax and sundry receivables.

Recoverable work is mainly project work carried out by Eskom on behalf of external parties. The projects include repairing damaged power lines, moving of power lines or underground cables and engineering-related work.

(d) *Finance lease receivables*

Finance lease receivables mainly comprise premium power supply contracts. The supply of electricity to customers may be either in the form of standard or premium power supply.

A standard supply is the least-cost technically acceptable solution as defined in the Distribution Network Code whereas the premium power supply is where the customer's requirement exceeds the specifications of a standard supply. Premium supply customers may already have a standard supply from Eskom but wish to reserve dedicated additional equipment to provide a backup supply. This is achieved through the installation of dedicated premium supply equipment for which the customer is required to pay the full capital costs.

3. Financial risk management (continued)

3.1 Credit risk (continued)

3.1.1 Management of credit risk (continued)

Financial instruments managed by other divisions and subsidiaries (continued)

(d) Finance lease receivables (continued)

Connection charges for premium supply contracts can be repayable on a monthly basis over a maximum period of 25 years.

The credit risk exposure resulting from premium supply contracts is managed in a similar manner as for the standard supply contracts. Security is required from customers for premium supply assets which covers irrecoverable costs in the event of the early termination of the supply contract. Premium supply customers have maintained a good payment history with Eskom over the years. The standard payment terms are also applicable to the connection charge relating to the premium supply equipment which is billed monthly to the customer.

(e) Insurance activities

Escap Limited (Escap), a 100% subsidiary of Eskom, acts as the primary insurer for the group. It insures the accident and health, engineering liability, motor, property, transportation and miscellaneous classes of the short-term insurance business. It also insures motor vehicles in terms of Eskom's employee vehicle allowance scheme.

Escap self-insures the group up to agreed limits by risk category whereafter the risks are covered by the reinsurance market.

Reinsurers

The creditworthiness of reinsurers is regularly assessed by the Escap risk management committee, especially prior to finalisation of any contract. Minimum credit ratings and credit limits per counterparty are set. The major reinsurers used during the financial year had market security ratings of A- or higher (based on Standard & Poor's ratings). There were no write-offs made during the current and prior financial year. Management is confident that the group's exposure in respect of the possibility of default by its reinsurers remains minimal.

(f) Loans receivable

Home and personal loans are made available to employees in the group via the Eskom Finance Company (Pty) Limited (EFC). Credit risk policies are in place which require various criteria to be met prior to the approval of a loan. These criteria include the valuation of property, affordability and credit history of the employee.

The amounts advanced are secured by first mortgages over the property purchased and are repayable over an average period of up to 27 years (2010: 26 years). The risk of default

by the employee is reduced as the monthly instalments are deducted from the employee's salary. Employees who are no longer in the employ of the group are required to settle their home loans with EFC within 90 days of leaving the group's service. Loans are not extended where the purchase price of the property exceeds its open market value. The weighted average loan amount as a percentage of the total home loan book was 0.01% (2010: 0.01%).

In the event of default, the debtor is notified verbally and in writing. If payment has not been received for a period exceeding three months, a process to foreclose on the loan is initiated and the property is sold by public auction or repossessed. Should the property be sold by public auction, a reserve value is set that takes into account the value of the property, arrear rates and taxes, legal costs and commissions payable. If the reserve value is not achieved, the property is repossessed and is held for resale.

EFC entered into a securitisation arrangement with Nqaba Finance 1 (Pty) Limited (Nqaba), a special-purpose entity. The securitising of the home loan book converted the loan assets into marketable securities traded on the South African Bond Exchange. The special-purpose entity is consolidated in the annual financial statements of the EFC group. EFC is the preferential shareholder of Nqaba which entitles it to all the residual profits (residual cash after priority payments).

EFC provides a first-loss credit enhancement loan equal to 14.87% of the notes in issue. At 31 March 2011 the loan was R290 million (2010: R63 million). As the servicer of Nqaba, EFC earns a servicing fee equal to 0.15% (2010: 0.35%) of the quarterly outstanding loan book balance. At the end of the financial year, the net asset value of Nqaba was R20 million (2010: R16 million).

3.1.2 Credit exposure

The carrying amount of financial assets represents the maximum credit exposure at the reporting date (refer to note 13). The following table represents an analysis per credit rating level (as determined by rating agencies) of the credit risk of financial assets, except for embedded derivatives, loans receivable, trade and other receivables and financial instruments with group companies.

	Investment in securities	Financial trading assets	Cash and cash equivalents	Derivatives held for risk management	Finance lease receivables
	Rm	Rm	Rm	Rm	Rm
2011					
Group					
AAA	13 427	2 223	-	-	-
AA+	-	-	-	-	4
AA-	-	-	-	-	1
A+	-	-	-	-	23
A1+	23 722	762	10 471	108	-
A1	656	265	1 549	14	4
A2	-	81	-	-	-
BBB-	-	24	-	-	-
Unrated	-	472	67	-	553
	37 805	3 827	12 087	122	585
Company					
AAA	13 427	2 223	-	-	-
AA+	-	-	-	-	4
AA-	-	-	-	-	1
A+	-	-	-	-	23
A1+	21 486	657	9 939	108	-
A1	656	146	1 507	14	4
A2	-	-	-	-	-
Unrated	-	171	20	-	553
	35 569	3 197	11 466	122	585
2010					
Group					
AAA	1 934	5 022	-	-	-
AA	-	-	1	-	-
A1+	2 137	1 078	7 915	104	-
A1	-	-	7 267	8	-
A2	-	-	-	-	4
Unrated	-	4	358	-	541
	4 071	6 104	15 541	112	545
Company					
AAA	1 934	5 022	-	-	-
AA	-	-	1	-	-
A1+	1 024	527	7 857	104	-
A1	-	-	6 783	8	-
A2	-	-	-	-	4
Unrated	-	4	230	-	541
	2 958	5 553	14 871	112	545

No credit limits were exceeded during the reporting period, nor does management expect any losses from non-performance by these counterparties.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

3. Financial risk management (continued)

3.1 Credit risk (continued)

3.1.2 Credit exposure (continued)

	Note	Group		Company	
		2011 Rm	2010 Rm	2011 Rm	2010 Rm
The maximum exposure to credit risk for trade and other receivables per class was:					
<i>Electricity receivables</i>		8 746	6 964	8 746	6 964
International		399	297	399	297
Local large power users		7 064	5 535	7 064	5 535
Local small power users		1 272	1 109	1 272	1 109
Service delivery framework ¹		11	23	11	23
<i>Other trade receivables</i>		301	300	–	–
International		9	32	–	–
Local		292	268	–	–
<i>Other receivables</i>		2 431	2 146	836	1 306
Recoverable work		56	67	56	67
Employee receivables		40	47	40	47
Inter-company receivables		–	–	472	223
Reinsurance receivables		377	424	–	–
Value added tax receivable		105	207	102	193
Concession receivables		11	519	–	–
Sundry receivables		1 842	882	166	776
Total trade and other receivables	18	11 478	9 410	9 582	8 270
The analysis per credit rating level of the credit risk of trade and other receivables was:					
AAA		–	2	–	2
AA+		–	32	–	32
AA		209	287	–	287
AA-		623	527	397	527
A+		125	301	1	301
A1+		1 626	584	1 006	201
A1		204	38	204	38
A2		97	–	97	–
A3		81	200	81	200
BBB-		11	43	11	43
Unrated		8 502	7 396	7 785	6 639
		11 478	9 410	9 582	8 270
The maximum exposure to credit risk for loans receivable was:					
		6 058	5 234	–	549
The maximum exposure to credit risk for non-current assets held-for-sale was:					
Trade and other receivables	22	618	–	–	–

(a) Electricity receivables

Group and company

	Carrying amount	Not past due	Not impaired ² Days past due				Not past due	Impaired ³ Days past due														
			0-15	16-45	46-75	>75		0-15	16-45	46-75	>75											
												Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm			
2011	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm											
<i>Individually assessed for impairment</i>																						
International	399	346	6	16	1	29	-	-	1	-	-											
Gross	403	346	6	16	1	29	-	-	1	1	3											
Impairment	(4)	-	-	-	-	-	-	-	-	(1)	(3)											
Local large power users	7 064	6 803	77	75	44	39	1	1	2	1	21											
Gross	7 761	6 803	77	75	44	39	28	9	41	17	628											
Impairment	(697)	-	-	-	-	-	(27)	(8)	(39)	(16)	(607)											
							<table border="1"> <thead> <tr> <th rowspan="2">Not past due</th> <th colspan="3">Days past due</th> </tr> <tr> <th>0-30</th> <th>31-60</th> <th>>60</th> </tr> </thead> <tbody> <tr> <td>Rm</td> <td>Rm</td> <td>Rm</td> <td>Rm</td> </tr> </tbody> </table>					Not past due	Days past due			0-30	31-60	>60	Rm	Rm	Rm	Rm
Not past due	Days past due																					
	0-30	31-60	>60																			
Rm	Rm	Rm	Rm																			
<i>Collectively assessed for impairment</i>																						
Local small power users	1 272						615	142	247	268												
Gross	3 139						681	203	314	1 941												
Impairment	(1 867)						(66)	(61)	(67)	(1 673)												
Service delivery framework	11						1	1	-	9												
Gross	238						2	2	2	232												
Impairment	(227)						(1)	(1)	(2)	(223)												
Total carrying amount	8 746																					

1. Negotiated agreement with stakeholders in residential areas which is a specific initiative aimed at resolving the non-payment of accounts.

2. Receivables past due but not impaired are receivables where contractual payment terms are past due but the group believes that impairment is not required on the basis of the level of security or collateral available and the stage of collection of amounts owed to the group.

3. Impaired receivables are receivables for which the group determines that it is probable that it will be unable to collect all amounts due in accordance with the contractual payment terms.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

3. Financial risk management *(continued)*

3.1 Credit risk *(continued)*

3.1.2 Credit exposure *(continued)*

(a) Electricity receivables *(continued)*

Group and company

	Carrying amount	Not past due	Not impaired ¹ Days past due				Not past due	Impaired ² Days past due			
			0-15	16-45	46-75	>75		0-15	16-45	46-75	>75
2010	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
<i>Individually assessed for impairment</i>											
International	297	224	59	1	–	13	–	–	–	–	–
Gross	308	224	59	1	–	13	1	1	1	1	7
Impairment	(11)	–	–	–	–	–	(1)	(1)	(1)	(1)	(7)
Local large power users	5 535	5 260	84	57	32	40	3	1	2	2	54
Gross	5 983	5 260	84	57	32	40	40	10	41	31	388
Impairment	(448)	–	–	–	–	–	(37)	(9)	(39)	(29)	(334)
<i>Collectively assessed for impairment</i>											
Local small power users	1 109						590	95	58	366	
Gross	2 356						620	134	96	1 506	
Impairment	(1 247)						(30)	(39)	(38)	(1 140)	
Service delivery framework	23						4	1	1	17	
Gross	465						13	4	4	444	
Impairment	(442)						(9)	(3)	(3)	(427)	
Total carrying amount	6 964										

Electricity receivables include an amount of R59 million (2010: R75 million) relating to receivables that were renegotiated³. These electricity receivables would have been past due had their terms not been renegotiated.

Interest is accrued on all arrear debts and R298 million (2010: R216 million) was credited to profit or loss within *finance income*.

1. Receivables past due but not impaired are receivables where contractual payment terms are past due but the group believes that impairment is not required on the basis of the level of security or collateral available and the stage of collection of amounts owed to the group.
2. Impaired receivables are receivables for which the group determines that it is probable that it will be unable to collect all amounts due in accordance with the contractual payment terms.
3. Receivables with renegotiated terms are receivables that have been restructured due to the deterioration in the customer's financial position and where the group has made concessions that it would not otherwise consider.

(b) Other trade receivables

Group

	Carrying amount	Not past due	Not impaired Days past due				Not past due	Impaired Days past due			
			0-30	31-60	61-90	>90		0-30	31-60	61-90	>90
Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm		
2011											
<i>Individually assessed for impairment</i>											
<i>International</i>	9	7	2	-	-	-	-	-	-	-	-
Gross	9	7	2	-	-	-	-	-	-	-	-
Impairment	-	-	-	-	-	-	-	-	-	-	-
<i>Local</i>	292	181	24	26	7	54	-	-	-	-	-
Gross	309	181	24	26	7	54	-	-	2	2	13
Impairment	(17)	-	-	-	-	-	-	-	(2)	(2)	(13)
Total carrying amount	301										
2010											
<i>International</i>	32	16	15	-	1	-	-	-	-	-	-
Gross	32	16	15	-	1	-	-	-	-	-	-
Impairment	-	-	-	-	-	-	-	-	-	-	-
<i>Local</i>	268	205	13	7	10	17	16	-	-	-	-
Gross	281	205	13	7	10	17	17	-	-	1	11
Impairment	(13)	-	-	-	-	-	(1)	-	-	(1)	(11)
Total carrying amount	300										

(c) Other receivables

Other receivables comprise mainly receivables for which there are no specific repayment terms.

	Group		Company	
	2011 Rm	2010 Rm	2011 Rm	2010 Rm
<i>Recoverable work</i>	56	67	56	67
Gross	56	67	56	67
Impairment	-	-	-	-
<i>Employee receivables</i>	40	47	40	47
Gross	41	48	41	48
Impairment	(1)	(1)	(1)	(1)
<i>Inter-company receivables</i>	-	-	472	223
Gross	-	-	472	223
Impairment	-	-	-	-
<i>Reinsurance receivables</i>	377	424	-	-
Gross	377	424	-	-
Impairment	-	-	-	-
<i>Value added tax receivable</i>	105	207	102	193
Gross	105	207	102	193
Impairment	-	-	-	-
<i>Concession receivables</i>	11	519	-	-
Gross	11	521	-	-
Impairment	-	(2)	-	-
<i>Sundry receivables</i>	1 842	882	166	776
Gross	1 884	1 097	206	991
Impairment	(42)	(215)	(40)	(215)
Total carrying amount	2 431	2 146	836	1 306

Long-standing debts or amounts handed over to debt collectors were considered for impairment per class of sundry and employee receivables.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

3. Financial risk management *(continued)*

3.1 Credit risk *(continued)*

3.1.2 Credit exposure *(continued)*

(d) Loans receivable

	Carrying amount	Not past due	Days past due		
			0-30	31-60	>60
	Rm	Rm	Rm	Rm	Rm
Group					
2011					
<i>Collectively assessed for impairment</i>					
Loans receivable	6 058	5 961	22	14	61
Home loans	5 357	5 258	23	14	62
Loan to Richards Bay Coal Terminal	445	445	-	-	-
Other	276	265	-	1	10
Impairment	(20)	(7)	(1)	(1)	(11)
Total carrying amount	6 058				
Group					
2010					
<i>Collectively assessed for impairment</i>					
Loans receivable	5 234	5 155	10	10	59
Home loans	3 893	3 801	11	11	70
Loan to Richards Bay Coal Terminal	569	569	-	-	-
Deposit – cross-border lease	549	549	-	-	-
Other	241	241	-	-	-
Impairment	(18)	(5)	(1)	(1)	(11)
Total carrying amount	5 234				
Company					
2010					
<i>Collectively assessed for impairment</i>					
Loans receivable					
Deposit – cross-border lease	549	549	-	-	-

Loans receivable include an amount of R47 million (2010: R61 million) relating to receivables that were renegotiated. These loans receivable would have been past due had their terms not been renegotiated.

(e) Non-current assets held-for-sale

Group

	Carrying amount	Not past due	Days past due		
			0-30	31-60	>60
	Rm	Rm	Rm	Rm	Rm
2011					
<i>Individually assessed for impairment</i>					
Trade and other receivables	618	618	-	-	-
Gross	719	719	-	-	-
Impairment	(101)	(101)	-	-	-
Total carrying amount	618				

Note	Group		Company	
	2011 Rm	2010 Rm	2011 Rm	2010 Rm
(f) Security relating to amounts receivable				
The security held against <i>trade and other receivables</i> for the group companies comprises guarantees and deposits. The estimate of the fair value of the security held is:				
Electricity receivables	3 123	2 674	3 123	2 674
Local large power users	2 198	1 935	2 198	1 935
Local small power users	921	734	921	734
Service delivery framework	4	5	4	5
The total amount of the security above includes R2 184 million (2010: R1 935 million) relating to electricity receivables (international and large power users) which were not impaired.				
Loans receivable secured by mortgage bonds	5 344	3 882		
(g) Allowance for impairment				
The movement in the allowance for impairment in respect of <i>trade and other receivables</i> during the year was:				
Balance at beginning of the year	2 379	2 157	2 364	2 136
Impairment loss recognised (net of reversals)	687	583 ¹	682	601
Write offs	(211)	(361)	(210)	(373)
Balance at end of the year	2 855	2 379	2 836	2 364
<i>Comprising:</i>				
Electricity receivables	2 795	2 148	2 795	2 148
Other trade receivables	17	13	-	-
Other receivables	43	218	41	216
	2 855	2 379	2 836	2 364

Eskom establishes an allowance for impairment that represents its estimate of incurred losses in respect of trade and other receivables. This allowance consists of a specific loss component that relates to individual exposures, and a collective loss component established for groups of similar customers in respect of losses that have been incurred but not yet identified.

(h) Financial guarantees issued

The group's maximum exposure as a result of financial guarantees issued was R156 million (2010: R188 million) and R637 million (2010: R475 million) for the company (refer to note 40.1 for more information on financial guarantees issued).

¹. Includes an impairment reversal of R8 million relating to trade and other receivables classified as non-current assets held-for-sale.

3. Financial risk management (continued)

3.2 Market risk

Market risk is the risk that the fair value or future cash flows of financial instruments will fluctuate because of changes in foreign exchange rates, commodity prices, interest rates and equity prices.

A significant part of the market risk encountered arises from financial instruments that are managed centrally within the treasury function of the group or from contracts containing embedded derivatives.

The objective of the group's market risk management policy is to protect and enhance the statement of financial position and profit or loss by managing and controlling market risk exposures and to optimise the funding of business operations and facilitate capital expansion.

Financial instruments managed by the treasury function

The treasury department is responsible for managing market risk within the risk management framework approved by Exco and the board. The overall authority for the management of market risk within the treasury department is vested in the asset and liability committee (Alco) and the credit risk committee. Measurement and reporting occurs on a daily and/or monthly basis and is performed by an independent section within the treasury department. Financial derivatives are used to manage market risk.

Financial instruments managed by other divisions and subsidiaries

Market risk arises mainly from changes in foreign exchange rates and to a limited extent from changes in commodity prices and equity prices. The divisions and subsidiaries are responsible for identifying the exposure arising from these risks. They liaise with the centralised treasury function to hedge (economic and cash flow hedges) these exposures appropriately on their behalf.

Embedded derivatives

Eskom entered into a number of agreements to supply electricity to electricity-intensive industries where the revenue from these contracts is based on commodity prices and foreign currency rates (mainly USD) or foreign production price indices. This gives rise to embedded derivatives that require separation as a result of the different characteristics of the embedded derivative and the host contract. The remaining contractual periods at 31 March 2011 vary from one year up to a maximum of 17 years. Certain of these contracts are currently being renegotiated.

The net impact on profit or loss of changes in the fair value of the embedded derivatives for the group is a fair value loss of R1 261 million (2010: R2 284 million gain) and a fair value loss of R1 261 million (2010: R2 283 million gain) for the company. At 31 March 2011, the embedded derivative assets amounted to Rnil (2010: R110 million) for the group and Rnil (2010: R110 million) for the company. The embedded derivative liabilities at 31 March 2011 were R5 873 million (2010: R4 722 million) for the group and R5 872 million (2010: R4 721 million) for the company.

The valuation methods and inputs are discussed in the accounting policies (refer to note 2.11.5, page 228) and the valuation assumptions are disclosed under critical accounting estimates and judgements (refer to note 4, page 256). Risks arising from these contracts are discussed under the relevant risk areas as follows:

- currency risk (refer to note 3.2.1, page 245)
- commodity risk (refer to note 3.2.2, page 247)
- interest rate risk (refer to note 3.2.3, page 249)
- other price risk (refer to note 3.2.5, page 250)

Electricity contracts that contain embedded derivatives are considered for economic hedging. Hedging in respect of commodity risk and foreign currency exposure resulting from these embedded derivatives takes place on a short-term basis up to a maximum of five years. The South African Reserve Bank currently allows Eskom to hedge commodity price risk up to a maximum of five years with a foreign or local party.

Loans receivable

Market risks in respect of loans receivable, arise from changes in interest rates and market prices. Market risk is monitored and analysed through the treasury department and reported to the EFC finance committee. A strategy aimed at protecting the EFC group from changes in market risk that may have a negative impact on earnings has been implemented. Funds to finance operations are raised over the short term, usually for periods of three to six months, but not exceeding one year. This enables the pricing of assets to be matched with changes in the pricing of liabilities. The cost of funding is based on prevailing conditions in the South African money market. Rates charged on outstanding loans receivable are based on movements in the South African Reserve Bank repurchase rate.

3.2.1 Currency risk

Currency risk arises primarily from purchasing imported goods and services directly from overseas or indirectly via local suppliers, foreign sales and foreign borrowings. The group is exposed to foreign exchange risk arising from future commercial transactions and recognised assets and liabilities that are denominated in a currency other than the functional currency of the group. All transactions in excess of R50 000 are hedged (ie economic or cash flow hedges). Currency exposure is identified by the business and hedged by the central treasury department. All hedging activities are conducted and managed by the treasury department. Hedging instruments consist principally of forward exchange contracts, most of which have a maturity of less than one year from the reporting date, but which are rolled over at maturity when necessary. The group also uses currency swaps. The hedging instrument is entered into once the exposure is firm and ascertainable.

The major exposure to foreign currency risk at 31 March, based on notional amounts, (in million):

2011	EUR	USD	GBP	JPY	SEK	AUD	CHF	CAD	NOK
Group Assets									
Trade and other receivables	-	1	-	-	-	-	-	-	-
Liabilities									
Debt securities issued	(501)	(1 752)	-	-	-	-	-	-	-
Borrowings	(814)	(663)	-	(11 400)	-	-	-	-	-
Trade and other payables	(64)	(16)	(3)	(265)	(71)	(2)	(2)	-	(1)
Gross statement of financial position exposure	(1 379)	(2 430)	(3)	(11 665)	(71)	(2)	(2)	-	(1)
Estimated forecast purchases ¹	(2 301)	(407)	(35)	(6 743)	(139)	(4)	(23)	(7)	(5)
Coupon payments	(184)	(17)	-	(48)	-	-	-	-	-
Gross exposure	(3 864)	(2 854)	(38)	(18 456)	(210)	(6)	(25)	(7)	(6)
Derivatives held for risk management	3 858	2 850	38	18 456	204	4	25	7	2
Net exposure	(6)²	(4)³	-	-	(6)³	(2)³	-	-	(4)³
Company Assets									
Trade and other receivables	-	1	-	-	-	-	-	-	-
Liabilities									
Debt securities issued	(501)	(1 752)	-	-	-	-	-	-	-
Borrowings	(814)	(663)	-	(11 400)	-	-	-	-	-
Trade and other payables	(60)	(15)	(3)	(265)	(70)	(1)	(1)	-	(1)
Gross statement of financial position exposure	(1 375)	(2 429)	(3)	(11 665)	(70)	(1)	(1)	-	(1)
Estimated forecast purchases ¹	(2 301)	(407)	(35)	(6 743)	(139)	(4)	(23)	(7)	(5)
Coupon payments	(184)	(17)	-	(48)	-	-	-	-	-
Gross exposure	(3 860)	(2 853)	(38)	(18 456)	(209)	(5)	(24)	(7)	(6)
Derivatives held for risk management	3 858	2 850	38	18 456	204	4	25	7	2
Group exposures covered by company	(4)	(1)	-	-	-	-	-	-	-
Net exposure	(6)²	(4)³	-	-	(5)³	(1)³	1³	-	(4)³

1. Represents future purchases contracted for.

2. Over/underhedging may result from changes in future interest to be paid.

3. Transactions less than R50 000 that are not required to be hedged.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

3. Financial risk management (continued)

3.2 Market risk (continued)

3.2.1 Currency risk (continued)

2010	EUR	USD	GBP	JPY	SEK	AUD	CHF	CAD	NOK
Group									
Assets									
Trade and other receivables	–	12	–	–	–	–	–	–	–
Liabilities									
Debt securities issued	(500)	–	–	–	–	–	–	–	–
Borrowings	(90)	(291)	–	(10 256)	–	–	–	–	–
Trade and other payables	(155)	(6)	(29)	(1 143)	(50)	(4)	(2)	(1)	–
Gross statement of financial position exposure									
	(745)	(285)	(29)	(11 399)	(50)	(4)	(2)	(1)	–
Estimated forecast sales ¹	–	155	–	–	–	–	–	–	–
Estimated forecast purchases ²	(2 552)	(364)	(19)	(9 724)	(170)	–	(23)	(10)	(2)
Gross exposure									
	(3 297)	(494)	(48)	(21 123)	(220)	(4)	(25)	(11)	(2)
Derivatives held for risk management	3 299	490	49	21 123	214	3	24	11	2
Other exposures covered by company ³	(7)	–	–	–	–	–	–	–	–
Net exposure									
	(5) ⁴	(4) ⁴	1	–	(6) ⁴	(1) ⁴	(1) ⁴	–	–
Company									
Assets									
Trade and other receivables	–	12	–	–	–	–	–	–	–
Liabilities									
Debt securities issued	(500)	–	–	–	–	–	–	–	–
Borrowings	(90)	(291)	–	(10 256)	–	–	–	–	–
Trade and other payables	(144)	(5)	(29)	(1 143)	(50)	(4)	(1)	(1)	–
Gross statement of financial position exposure									
	(734)	(284)	(29)	(11 399)	(50)	(4)	(1)	(1)	–
Estimated forecast sales ¹	–	155	–	–	–	–	–	–	–
Estimated forecast purchases ²	(2 552)	(364)	(19)	(9 724)	(170)	–	(23)	(10)	(2)
Gross exposure									
	(3 286)	(493)	(48)	(21 123)	(220)	(4)	(24)	(11)	(2)
Derivatives held for risk management	3 299	490	49	21 123	214	3	24	11	2
Group exposures covered by company	(11)	(1)	–	–	–	–	(1)	–	–
Net exposure									
	2	(4) ⁴	1	–	(6) ⁴	(1) ⁴	(1) ⁴	–	–

1. Represents foreign denominated sales for the next 12 months.

2. Represents future purchases contracted for.

3. Cover relates to exposure of a non-controlled wholly owned entity.

4. Cover can only be taken on firm commitments where there is certainty of 90% take up. Cover is taken out when orders are placed.

The following significant exchange rates applied during the year (rand values for one unit of selected currencies):

	Average rate		Reporting date mid-spot rate	
	2011	2010	2011	2010
EUR	9.50	10.90	9.61	9.92
USD	7.17	7.75	6.78	7.34
GBP	11.14	12.29	10.87	11.11
CHF	7.14	7.27	7.41	6.94
JPY	0.08	0.08	0.08	0.08
SEK	1.03	1.06	1.08	1.02
CAD	7.03	7.09	6.98	7.23
AUD	6.78	6.60	7.00	6.73
NOK	1.20	1.28	1.23	1.24

Sensitivity analysis

The group is mainly exposed to euros and United States dollars. The sensitivity analysis has been performed on the same basis as the prior year. The analysis assumes that all other variables, in particular interest rates, remain constant and the possible impact on profit or loss and equity is:

	Group and company			
	2011 1% increase Rm	2011 1% decrease Rm	2010 1% increase Rm	2010 1% decrease Rm
<i>Profit/(loss), excluding embedded derivatives</i>				
Total exposure	41	(41)	207	(219)
Rand/euro exposure	27	(27)	10	(10)
Rand/USD exposure	11	(11)	191	(203)
<i>Equity, excluding embedded derivatives</i>				
Total exposure	245	(245)	196	(200)
Rand/euro exposure	215	(215)	192	(197)
Rand/USD exposure	18	(18)	4	(4)
<i>Profit/(loss) – embedded derivatives¹</i>				
Rand/USD exposure	104	(109)	107	(110)

3.2.2 Commodity risk

The group is exposed to commodity risk where commodities are either used directly (eg coal or liquid fuels) or indirectly as a component of plant, equipment or inventory (eg aluminium, copper or steel). Although the revenue from certain special pricing arrangements is linked to commodity prices, some of these contracts are in the process of being re-negotiated.

The exposures are hedged economically by means of futures and/or options. Economic hedging is applied where it is practical (a relevant hedging instrument exists) based on the most optimal economic solution and in compliance with the South African Reserve Bank requirements.

The underlying exposure to commodity price risk could result in embedded derivatives. Where the embedded derivatives are closely related to the host contracts, the embedded derivatives are not accounted for separately. Where the embedded derivatives are not closely related to the host contracts, the contracts have been valued and accounted for separately.

At year end only the special pricing arrangements gave rise to commodity-linked (aluminium) embedded derivatives (refer to note 3.2 on page 244).

Commodities used directly

Eskom purchases coal that is used in the generation of electricity from mines and is exposed to price and supply risks. Eskom has entered into long-term supply agreements with mines to ensure continuous supply of coal. In the fixed price contracts the price escalation is fixed, whereas Eskom pays for all the operational costs of the collieries where the contracts are on a cost-plus basis. The contracts are monitored closely and managed to ensure that costs are maintained within acceptable levels. All production requirements above those of the long-term contracts are supplied via short- to medium-term contracts which usually have a transport element included in the purchase price. Refer to page 103 for further information on coal.

¹ Impact on profit or loss is before calibration adjustments.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

3. Financial risk management (continued)

3.2 Market risk (continued)

3.2.2 Commodity risk (continued)

There is also price risk exposure in the long-term primary energy water supply agreements entered into with the Department of Water Affairs (DWA) where Eskom pays for a portion of the operational costs incurred by DWA on certain of the water schemes. Refer to page 105 for further information on water.

Eskom is exposed to price risk on the diesel that is used for the generation of electricity at its open-cycle gas-turbine power stations. The price of diesel is a function of the crude oil and USD exchange rates. Refer to page 152 for further information on diesel.

Commodities used indirectly

The exposure where commodities formed a part of plant, equipment or inventory is relatively small at year-end. Eskom hedged all its base metal exposures (aluminium, copper, zinc and nickel) during the year via commodity swaps (refer to note 15). Eskom currently does not hedge its exposure to steel as no economic viable hedging instruments exist.

The group's quantitative exposure to commodity risk is:

	Group and company							
	2011	2011	2011	2011	2010	2010	2010	2010
	Tons	Gross exposure Rm	Hedged Rm	Net exposure Rm	Tons	Gross exposure Rm	Hedged Rm	Net exposure Rm
Copper	1 350	26	26	–	2 285	58	58	–
Nickel	52	8	8	–	123	21	21	–
Zinc	7 153	158	158	–	13 750	290	290	–
		192	192	–		369	369	–

Sensitivity analysis

From a commodity perspective the group is exposed mainly to changes in the aluminium price. The sensitivity analysis has been performed on the same basis as the prior year. The analysis assumes that all other variables remain constant and the possible impact on profit or loss is:

	Group and company			
	2011	2011	2010	2010
	1% increase Rm	1% decrease Rm	1% increase Rm	1% decrease Rm
<i>Profit/(loss), excluding embedded derivatives</i>				
Aluminium options	1	(1)	1	(1)
<i>Profit/(loss) including embedded derivatives¹</i>				
Aluminium price	76	(76)	91	(91)

The periods of the hedging instrument and that of the hedged item are not the same because of South African Reserve Bank regulations that limit the number of years which can be hedged.

3.2.3 Interest rate risk

Interest rate risk is the risk that the group's financial position may be adversely affected as a result of changes in interest rate levels, yield curves and spreads.

The group's interest rate risk arises mainly from borrowings, debt securities and forward exchange contracts. Borrowings and debt securities issued at variable rates expose the group to cash flow interest rate risk. Borrowings and debt securities issued at fixed rates expose the group to fair value interest rate risk. The group's policy is to restrict the maximum effective portion of the external debt (excluding the trading portfolio which is managed within the constraints of the treasury policy and control manual) exposed to an interest rate reset within the next 12 month period to 40%.

Refer to note 13.5 and 13.6 for the group's quantitative exposure to interest rate risk.

Sensitivity analysis

The group analyses its interest rate exposure on a dynamic basis by conducting a sensitivity analysis. This involves determining the impact on profit or loss of defined interest rate shifts. For each simulation, the same interest rate shift is used for all currencies.

The sensitivity analysis for interest rate risk assumes that all other variables, in particular foreign exchange rates, remain constant. The calculation excludes borrowing costs capitalised in terms of the group's accounting policy. The analysis relates to variable-rate instruments and has been performed on the same basis as the prior year.

The simulation is performed on a monthly basis to verify that the maximum loss potential is within the limit set by management. The results of the simulation are included in the table below.

The South African rand and the United States dollar interest rates are used in determining the fair value of embedded derivatives. The sensitivity analysis below indicates the impact on profit or loss if these rates change. The sensitivity analysis assumes that all other variables remain constant and has been prepared on the same basis as for the prior year.

A significant portion of the floating debt issued has been hedged with interest rate swaps. Accordingly, cash flow hedge accounting is applied and the fair value changes due to interest rates are allocated to equity. The following represents the sensitivity of equity to movement, in the rand interest rates. The sensitivity analysis on equity assumes that all other variables remain constant and has been prepared on the same basis as the prior year.

	Group				Company			
	2011 +100 basis points Rm	2011 -100 basis points Rm	2010 +100 basis points Rm	2010 -100 basis points Rm	2011 +100 basis points Rm	2011 -100 basis points Rm	2010 +100 basis points Rm	2010 -100 basis points Rm
<i>Profit/(loss), excluding embedded derivatives</i>								
Rand interest rates	80	(103)	(19)	19	64	(89)	1	(2)
<i>Profit/(loss), including embedded derivatives¹</i>								
Rand interest rates	652	(570)	437	(455)	652	(570)	437	(455)
USD interest rates	(376)	379	(273)	283	(376)	379	(273)	283
<i>Equity</i>								
Rand interest rates	320	(395)	238	(278)	320	(395)	238	(278)

Fixed and floating rate debt

The fixed and floating rate debt percentages at 31 March were:

	Group				Company			
	2011 Fixed %	2011 Floating %	2010 Fixed %	2010 Floating %	2011 Fixed %	2011 Floating %	2010 Fixed %	2010 Floating %
Continuing operations	90	10	91	9	90	10	91	9

1. Impact on profit or loss is before calibration adjustments.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

3. Financial risk management *(continued)*

3.2 Market risk *(continued)*

3.2.4 Equity price risk

Equity price risk arises from listed shares invested in Escap. Changes in the fair value of equity securities held by the group will fluctuate because of changes in market prices, caused by factors specific to the individual equity issuer, or factors affecting all similar equity securities traded on the market.

All the equity investments are listed on the JSE Limited (JSE). A 1% decrease in the equity portfolio at the reporting date would have increased profit or loss by R9.2 million (2010: R8.1 million) after tax. An equal change in the opposite direction would have decreased profit or loss by R8.9 million (2010: R8.1 million). There will be no impact on equity. The analysis assumes that all other variables remain constant and is performed on the same basis as for the prior year.

Movements of financial assets and equity prices are monitored on a monthly basis and equity price changes assessed against the JSE Shareholder Weighted Index as a benchmark.

3.2.5 Other price risk

Inflation price risk arises from embedded derivatives as discussed under note 3.2 on page 244. The risk arises from movements in the electricity tariffs, the United States of America production price index (PPI) and the South African consumer price index (CPI).

Refer to note 14 for the group's quantitative exposure to other price risk.

The following is the sensitivity analysis of the change in the value of the embedded derivatives (relating to customised pricing agreements) as a result of changes in electricity tariffs, the South African CPI or the United States of America PPI. This analysis has been performed on the same basis as the prior year. The analysis assumes that all other variables remain constant and the possible impact on profit or loss is:

	Group and company			
	2011 1% increase Rm	2011 1% decrease Rm	2010 1% increase Rm	2010 1% decrease Rm
<i>Profit/(loss), including embedded derivatives¹</i>				
Electricity tariffs	(106)	106	(95)	95
South African CPI	(314)	303	(316)	309
United States of America PPI	93	(97)	39	(39)

3.3 Liquidity risk

Liquidity risk is the risk that the group will not have sufficient financial resources to meet its obligations when they fall due, or will have to do so at excessive cost. This risk can arise from mismatches in the timing of cash flows from revenue and capital and operational outflows. Funding risk arises when the necessary liquidity to fund illiquid asset positions, such as building new electricity capacity, cannot be obtained at the expected terms and when required.

The objective of the group's liquidity and funding management is to ensure that all foreseeable operational, capital expansion and loan commitment expenditure can be met under both normal and stressed conditions. The group has adopted an overall statement of financial position approach, which consolidates all sources and uses of liquidity, while aiming to maintain a balance between liquidity, profitability and interest rate considerations.

The management of consolidated liquidity and funding risk is centralised in the treasury department in accordance with practices and limits set by the Exco and the board. The group's liquidity and funding management process includes:

- projecting cash flows and considering the cash required by the group and optimising the short-term liquidity requirements as well as the long-term funding
- monitoring financial position liquidity ratios
- maintaining a diverse range of funding sources with adequate back-up facilities
- managing the concentration and profile of debt maturities
- actively managing the funding risk by evaluating optimal entry points into the various markets per the official funding plan
- maintaining liquidity and funding contingency plans

Eskom has an established corporate governance structure and process for managing the risks regarding guarantees and contingent liabilities (refer to note 40). All significant guarantees issued by Eskom are approved by the board, and are managed on an ongoing basis through the quarterly meetings of the treasury credit committee, and by Exco and the audit and risk committee of the board.

The guarantees are administratively managed by the treasury department. Updated guarantee schedules are compiled every month, taking cognisance of any changed risk factors, and are submitted to each of the committees for consideration and action, if necessary. Risk factors and assumptions affecting probability calculations are reassessed twice a year and presented to the above committees.

Eskom's guarantees are diverse and unlinked, such that a trigger event for any one guarantee is unlikely to precipitate a trigger event in respect of other guarantees.

Given that there would be forewarning of payments required in terms of the other guarantees, and considering the amounts of the guarantees, it is expected that Eskom will be able to raise the required liquidity to effect any required payments.

Primary sources of funding and unused facilities

The primary sources to meet Eskom's liquidity requirements are cash generated from operations, cash inflows from maturing financial assets purchased, funds committed by government, as well as local and foreign debt issued in the market. To supplement these liquidity sources under stress conditions, overdraft facilities (for which there was no requirement to use), undrawn loans, financing and guarantee facilities are in place as indicated below.

	Currency	Group and company	
		2011 m	2010 m
Japan Bank for International Cooperation (JBIC)			
Untied facility	JPY	12 600	14 300
Tied facility	JPY	30 000	30 000
European Investment Bank	EUR	41	88
General banking facilities	ZAR	500	2 500
Subordinated loan from shareholder	ZAR	–	20 000
African Development Bank loan facility	EUR	889	930
African Development Bank loan facility	ZAR	7 154	10 630
Export Credit Agency floating rate facility	EUR	830	530
Export Credit Agency fixed rate facility	EUR	1 126	250
Export Credit Agency loan facility	EUR	–	1 890
World Bank	USD	3 379	–
Development Bank of Southern Africa (DBSA)	ZAR	14 000	–
Government guarantees – (uncommitted)	ZAR	244 300	91 116
Government guarantees – (remaining on domestic multi-term note programme) ²	ZAR	4 336	18 110

1. Impact on profit or loss is before calibration adjustments.

2. Amount included in the Government guarantees – (uncommitted) of R244 300 million.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

3. Financial risk management (continued)

3.3 Liquidity risk (continued)

Key indicators used for liquidity management

Duration

Management has set minimum duration limits to help optimise returns for the group on its debt portfolio. Group policy is to ensure that the external debt portfolio (excluding the trade portfolio) has a minimum duration of five years, should it exceed R10 billion. The duration limits are independently monitored and reported to the assets and liabilities committee (Alco) on a monthly basis and to Exco and the audit and risk committee on a quarterly basis.

The duration (a weighted average term to maturity measure based on future cash flows) of the debt measured at fair value at 31 March was:

	Group		Company	
	2011 Years	2010 Years	2011 Years	2010 Years
Continuing operations	6.33	6.75	6.33	6.75

Liquid assets

Liquid assets are investments identified as having the potential to be quickly converted into cash. These investments include negotiable certificates of deposit and floating rate notes as disclosed in investment in securities (refer to notes 13.1, 13.2 and 13.3). The liquid assets were:

	Group		Company	
	2011 Rm	2010 Rm	2011 Rm	2010 Rm
Continuing operations	53 719	25 716	50 232	23 382

Capital expenditure ratio

The capital expenditure ratio¹ measures whether there are liquid funds available to invest in capital expenditure. The capital expenditure ratio for the period was:

	Group		Company	
	2011 %	2010 %	2011 %	2010 %
Continuing operations	64	36	62	34

1. The ratio is calculated as cash generated from operations divided by capital expenditure (excluding finance cost capitalised) on property, plant and equipment and intangible assets.

Contractual cash flows

The table below indicates the contractual undiscounted cash flows of the group's financial assets and liabilities (refer to note 13) on the basis of their earliest possible contractual maturity. The undiscounted cash flows in respect of the group's financial assets are presented net of impairment losses and include estimates where there are no contractual repayment terms or the receivable is past due. The cash flows of the group's financial liabilities are indicated on a gross undiscounted basis. The cash flows for derivatives are presented as gross inflows and outflows even though physically they are settled simultaneously.

The table contains only cash flows relating to financial instruments and commitments (financial guarantees and loan commitments). It does not include future cash flows expected from the normal course of business and related commodity-linked pricing agreements.

	Carrying amount			Cash flows			
	Non-current	Current	Nominal inflow or outflow	0 to 3 months	4 to 12 months	1 to 5 years	More than 5 years
2011	Rm	Rm	Rm	Rm	Rm	Rm	Rm
Group							
<i>Financial assets</i>							
Investment in securities	13 259	24 546	42 203	9 650	16 635	15 918	–
Loans receivable	5 958	100	9 524	139	374	1 841	7 170
Derivatives held for risk management	6	116	19	12	–	7	–
Finance lease receivables	570	15	1 432	21	69	349	993
Trade and other receivables	525	10 953	11 480	9 702	1 251	526	1
Financial trading assets	–	3 827	4 738	4 738	–	–	–
Cash and cash equivalents	–	12 087	12 087	12 087	–	–	–
	20 318	51 644	81 483	36 349	18 329	18 641	8 164
<i>Financial liabilities</i>							
Debt securities issued	84 396	2 880	191 807	1 808	6 210	41 458	142 331
Borrowings	25 449	9 654	67 689	2 413	8 364	12 034	44 878
Subordinated loan from shareholder	37 931	–	146 266	–	–	5 293	140 973
Derivatives held for risk management	4 576	1 404	4 503	541	2 796	5 954	(4 788)
Finance lease liabilities	521	8	1 699	45	86	381	1 187
Trade and other payables	1 508	18 876	20 708	15 277	3 606	1 623	202
Financial trading liabilities	–	4 304	7 479	7 479	–	–	–
Financial guarantees	–	1	156	156	–	–	–
	154 381	37 127	440 307	27 719	21 062	66 743	324 783
Company							
<i>Financial assets</i>							
Financial instruments with group companies	–	3 806	3 852	2 316	1 536	–	–
Investment in securities	13 259	22 310	39 967	8 879	15 170	15 918	–
Derivatives held for risk management	6	116	19	12	–	7	–
Finance lease receivables	570	15	1 432	21	69	349	993
Trade and other receivables	14	9 568	9 583	8 961	607	14	1
Financial trading assets	–	3 197	4 108	4 108	–	–	–
Cash and cash equivalents	–	11 466	11 466	11 466	–	–	–
	13 849	50 478	70 427	35 763	17 382	16 288	994
<i>Financial liabilities</i>							
Financial instruments with group companies	–	1 462	1 483	690	793	–	–
Debt securities issued	84 031	1 574	190 136	900	5 812	41 229	142 195
Borrowings	25 009	9 571	67 115	2 380	8 271	11 585	44 879
Subordinated loan from shareholder	37 931	–	146 266	–	–	5 293	140 973
Derivatives held for risk management	4 576	1 404	4 503	541	2 796	5 954	(4 788)
Finance lease liabilities	865	37	2 348	67	150	729	1 402
Trade and other payables	859	18 480	19 659	16 137	2 345	975	202
Financial trading liabilities	–	4 304	7 479	7 479	–	–	–
Financial guarantees	–	2	637	637	–	–	–
	153 271	36 834	439 626	28 831	20 167	65 765	324 863

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

3. Financial risk management (continued)

3.3 Liquidity risk (continued)

	Carrying amount			Cash flows			
	Non-current	Current	Nominal inflow or outflow	0 to 3 months	4 to 12 months	1 to 5 years	More than 5 years
2010	Rm	Rm	Rm	Rm	Rm	Rm	Rm
Group							
<i>Financial assets</i>							
Investment in securities	1 923	2 148	4 868	2 192	620	350	1 706
Loans receivable	4 579	655	11 173	135	1 061	2 456	7 521
Derivatives held for risk management	–	112	1 063	287	776	–	–
Finance lease receivables	532	13	1 400	22	63	329	986
Trade and other receivables	19	9 391	9 410	8 803	588	18	1
Financial trading assets	–	6 104	7 138	487	1 720	1 090	3 841
Cash and cash equivalents	–	15 541	15 541	15 541	–	–	–
	7 053	33 964	50 593	27 467	4 828	4 243	14 055
<i>Financial liabilities</i>							
Debt securities issued	59 322	2 880	145 960	2 620	4 095	25 741	113 504
Borrowings	11 183	9 143	35 031	1 394	9 084	4 917	19 636
Subordinated loan from shareholder	23 445	–	77 114	–	–	8 808	68 306
Derivatives held for risk management	3 626	4 644	40 985	6 743	30 089	3 802	351
Finance lease liabilities	632	52	2 240	58	152	672	1 358
Trade and other payables	1 134	16 331	17 936	12 775	3 556	1 203	402
Financial trading liabilities	–	5 513	10 430	699	457	1 400	7 874
Financial guarantees	–	1	188	188	–	–	–
	99 342	38 564	329 884	24 477	47 433	46 543	211 431
Company							
<i>Financial assets</i>							
Financial instruments with group companies	–	2 461	2 571	936	1 635	–	–
Investment in securities	1 923	1 035	3 749	528	728	852	1 641
Loans receivable	–	549	549	–	549	–	–
Derivatives held for risk management	–	112	1 063	287	776	–	–
Finance lease receivables	532	13	1 400	22	63	329	986
Trade and other receivables	23	8 247	8 270	7 659	588	22	1
Financial trading assets	–	5 553	6 027	271	825	1 090	3 841
Cash and cash equivalents	–	14 871	14 871	14 871	–	–	–
	2 478	32 841	38 500	24 574	5 164	2 293	6 469
<i>Financial liabilities</i>							
Financial instruments with group companies	–	1 897	1 897	161	1 736	–	–
Debt securities issued	58 538	2 141	144 438	1 882	4 095	24 957	113 504
Borrowings	10 708	9 094	34 452	1 362	8 988	4 466	19 636
Subordinated loan from shareholder	23 445	–	77 114	–	–	8 808	68 306
Derivatives held for risk management	3 626	4 644	40 985	6 743	30 089	3 802	351
Finance lease liabilities	965	74	2 595	58	173	807	1 557
Trade and other payables	797	16 370	17 636	13 246	3 124	864	402
Financial trading liabilities	–	5 513	10 430	699	457	1 400	7 874
Financial guarantees	–	2	475	475	–	–	–
	98 079	39 735	330 022	24 626	48 662	45 104	211 630

Non-current assets held-for-sale

Group	Carrying amount			Cash flows			
	Non-current	Current	Nominal inflow or outflow	0 to 3 months	4 to 12 months	1 to 5 years	More than 5 years
	Rm	Rm	Rm	Rm	Rm	Rm	Rm
2011							
<i>Financial assets</i>	-	681	681	63	618	-	-
Trade and other receivables	-	618	618	-	618	-	-
Cash and cash equivalents	-	63	63	63	-	-	-
<i>Financial liabilities</i>							
Trade and other payables	-	732	732	-	732	-	-
2010							
<i>Financial assets</i>							
Cash and cash equivalents	-	9	9	9	-	-	-

3.4 Capital management

Eskom manages accumulated profit and the hedging, fair value, equity and insurance reserves as capital. The equity reserve comprises the day-one gains that result from the initial recognition of the subordinated loan tranches received from the shareholder. The day-one gains are included in equity as they are considered to be a contribution from the shareholder (refer to note 13.6). Eskom is obliged to pay interest on the loan when the solvency and debt leverage conditions per the agreement are satisfied. Future projections result in the day-one gains. The table below shows the amounts of the reserves which Eskom manages as capital:

	Group		Company	
	2011 Rm	2010 Rm	2011 Rm	2010 Rm
Accumulated profit	58 531	50 292	55 162	47 272
Cash flow hedge reserve	(981)	(750)	(981)	(748)
Unrealised fair value reserve	(729)	(1 084)	(729)	(1 083)
Equity reserve	30 520	21 837	30 520	21 837
Insurance reserve	110	55	-	-
	87 451	70 350	83 972	67 278

The objective of capital management is to ensure that Eskom is sustainable over the long term. There were no changes to Eskom's approach to capital management during the financial year.

The major items that impact the equity of Eskom include:

- the revenue received from electricity sales (which is a function of price and sales volumes)
- the cost of operating the electricity business
- the cost of funding the current business
- the cost of expanding the business to ensure that capacity growth is in line with electricity sales demand (funding and additional depreciation)
- taxation
- dividends

Eskom uses the Integrated Strategic Electricity Planning process which forecasts the growth in electricity demand for the long term and evaluates the alternative means to meet and manage that demand. This information flows into the planning process. The planning process determines a forward electricity price curve which gives an indication of the price increases which Eskom requires to be sustainable over the long term.

The tariff increases for the electricity business are subject to the process laid down by the National Energy Regulator of South Africa (NERSA). The current regulatory framework applicable to Eskom is a multi-year, incentive-based method of adjusting electricity prices.

The electricity business is currently in a major expansion phase and there is agreement with the government that the committed capital expansion programme continues. The funding related to new generating, transmitting and other capacity is envisaged to be obtained from cash generated by the business, shareholder support and funds borrowed on the local and overseas debt markets. The adequacy of price increases allowed by the regulator and the level and timing of shareholder support are key factors in the sustainability of Eskom. Any capacity expansion beyond the Kusile project will need to be carried out in a prefunded/project finance type manner in order to ensure the stability of Eskom's statement of financial position. Refer to page 35 and page 184 for further information on electricity prices.

The government as the sole shareholder and the board have the responsibility to ensure that the company is adequately capitalised to ensure continuity of supply and that the business is attractive to investors to enable Eskom to fund the expansion programme.

Eskom has targeted achieving Investment Grade ratings on a standalone basis over the next four years, and is monitoring the relevant performance ratios as part of its financial policy. The free funds from operations to total debt and total debt to EBITDA ratios play an important role in the credit ratings given to Eskom which in turn influence the cost of funding.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

3. Financial risk management *(continued)*

The following ratios are closely managed:

Group	Unit	2011	2010
Earnings before interest, depreciation and amortisation (EBITDA)	Rm	21 734	12 920
Free funds from operations (FFO)	Rm	17 019	2 356
Interest cover	ratio	1.54	0.86
Electricity revenue per kWh	c/kWh	40.27	31.95
Electricity operating costs per kWh (including depreciation and amortisation)	c/kWh	32.78	28.23
FFO as percentage of gross debt	%	9.56	1.92
Gross debt/ EBITDA	%	8.19	9.50
Debt: equity including long-term provisions	ratio	1.62	1.62
Working capital	ratio	0.87	0.91

Credit ratings:

Company (including government uplift)	2011 Rating	2011 Outlook	2010 Rating	2010 Outlook
Standard & Poor's:				
Foreign currency	BBB+	Stable	BBB+	Negative
Local currency	BBB+	Stable	A-	Negative
Moody's:				
Foreign currency	Baa2	Stable	Baa2	Negative
Local currency	Baa2	Stable	Baa2	Negative
FitchRatings:				
National Long-term (zaf)	AAA	Stable	AAA	Stable
National Short-term (zaf)	FI+	Stable	FI+	Stable

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 estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below. Revisions to accounting estimates are recognised in the period in which they are revised and future periods they affect.

(a) Embedded derivatives

Eskom has entered into a number of agreements to supply electricity to electricity-intensive industries where the revenue from these contracts is linked to commodity prices and foreign currency rates or foreign production price indices that give rise to embedded derivatives.

The embedded derivatives have been divided into three categories:

- commodity and/or foreign currency derivatives
- foreign currency or interest rate derivatives
- production price and foreign currency derivatives

Valuation

The fair value of embedded derivatives is determined by using a forward electricity price curve.

Valuation assumptions

The electricity price curve used to value embedded derivatives at 31 March 2011 was the same as the 2010 forward curve (rolled forward by a year). The curve was the applicable tariff determined by NERSA on 24 February 2010. This forward curve is based on the average electricity price increase indicated by NERSA in the price applications for the 2010/11, 2011/12 to 2012/13 financial years. These rates are 24.8%, 25.8% and 25.9% and assume two additional annual increases of 25% and CPI thereafter.

The contracted electricity price used to value embedded derivatives is based on a combination of the factors in the table below over the contracted period.

Forecast sales volumes are based on the most likely future sales volumes which have been back-tested against historic volumes.

The fair value of embedded derivatives takes into account the inherent uncertainty relating to the future cash flows of embedded derivatives, such as liquidity, model risk and other economic factors.

The negotiations regarding the outstanding commodity-linked contracts are continuing. Refer to directors' report on page 209.

The following valuation assumptions for the future electricity price curve discussed above for the valuation of embedded derivatives were used and are regarded as the best estimates by the board:

2011		Year ended 31 March					
Input	Unit	2011 ¹	2012 ¹	2013 ¹	2014 ¹	2015 ¹	2016 ¹
Aluminium	USD per ton	2 598	2 716	2 779	2 830	2 869	2 903
Rand/USD	USD per rand	0.15	–	–	–	–	–
Rand interest rates	Continuous actual/365 days (%)	5.42	6.14	6.70	7.35	7.76	8.01
Dollar interest rates	Annual actual/360 days (%)	0.20	0.96	0.95	1.50	2.01	2.45
United States PPI	Year-on-year (%)	6.01	7.01	2.44	2.36	2.34	1.69
South African CPI	Year-on-year (%)	6.40	7.78	6.94	5.99	6.75	6.74

2010		Year ended 31 March					
Input	Unit	2010	2011 ¹	2012 ¹	2013 ¹	2014 ¹	2015 ¹
Aluminium	USD per ton	2 262	2 408	2 495	2 568	2 633	2 688
Rand/USD	USD per rand	0.14	–	–	–	–	–
Rand interest rates	Continuous actual/365 days (%)	6.44	7.21	6.92	7.30	7.65	7.92
Dollar interest rates	Annual actual/360 days (%)	0.23	1.10	1.20	1.82	2.35	2.78
United States PPI	Year-on-year (%)	(1.63)	4.89	1.85	3.00	1.28	2.28
South African CPI	Year-on-year (%)	(2.02)	7.85	6.70	6.21	6.79	6.59

Sensitivity analysis

The approximate change in the value of embedded derivatives if one of the inputs is changed is disclosed in note 3.2 Financial risk management – market risk on page 244.

The carrying amount of the embedded derivative assets for the group and company is Rnil (2010: R110 million). The carrying amount of the embedded derivative liabilities for the group is R5 873 million (2010: R4 722 million) and R5 872 million (2010: R4 721 million) for the company.

(b) Post-retirement medical benefits

The group recognises a liability for post-retirement medical benefits to qualifying retirees. The post-retirement medical benefits plan is unfunded.

Valuation

The estimated present value of the anticipated expenditure for both in-service and retired members is actuarially valued using the projected unit method. This method treats the accrued service liability separately from the current cost liability. The accrued service liability (on the valuation assumptions) is based on the completed service to the valuation date. The current cost is the cost of providing the benefit over the next year.

Valuation assumptions

The principal actuarial assumptions used were:

	Group and company	
	2011	2010
	%	%
Long-term investment return before tax	9.5	8.90
Long-term medical aid inflation	8.0	7.40

Sensitivity analysis

The carrying amount of the provision would be an estimated R1 017 million (2010: R689 million) lower had the medical inflation rate used in the valuation decreased by 1% and R1 272 million (2010: R794 million) higher had the medical inflation rate increased by 1%.

The carrying amount of the post-retirement medical benefits liability for the group is R7 542 million (2010: R7 190 million) and R7 374 million (2010: R7 033 million) for the company.

1. Forward curve based on financial years.

4. Critical accounting estimates and judgements *(continued)*

(c) Occasional and service leave

The group recognises a liability for occasional and service leave as the leave is of a long-term nature.

Valuation

An actuarial valuation is done on an annual basis for occasional and service leave. The accrued liability is determined by taking into account investment returns, salary increases and the probability that the employee will take this leave (in full or part), sell the leave prior to exit, or sell the leave on exit. The liability will be higher if employees are expected to take more leave as opposed to selling leave. This is due to the fact that leave taken is redeemed at a higher remuneration rate while leave sold is paid at a lower basic rate of pay.

Valuation assumptions

The principal actuarial assumptions used were:

	Group and company	
	2011 %	2010 %
Long-term investment returns before tax	9.5	8.9
Long-term general price inflation	6.0	5.4
Salary increases	7.5	6.9
Leave usage	5.0	5.0

The assumptions made in respect of resignation, death and retirement rates are the same as for the post-retirement medical aid liability.

Sensitivity analysis

Based on current experience, only 5% of the leave is taken. If the rate at which leave is taken is 10%, then the liability will increase by R42 million (2010: R38 million). The increase in liability is due to leave taken being redeemed at a higher remuneration rate compared to leave sold that is paid at a lower basic rate of pay.

The carrying amount of the occasional and service leave liability for the group is R860 million (2010: R781 million) and R811 million (2010: R730 million) for the company.

(d) Decommissioning, mine closure and rehabilitation

Nuclear and other generation plant, and spent nuclear fuel

Provision is made for the estimated decommissioning cost of nuclear and other generation plant and for the management of nuclear fuel assemblies and radioactive waste.

Closure, pollution control and rehabilitation

Provision is made for the estimated cost of closure, pollution control, rehabilitation and mine employee benefits at the end of the life of the mines, where a constructive and contractual obligation exists to pay coal suppliers.

Valuation

The provision is determined by discounting the estimated decommissioning and nuclear spent fuel management costs.

Valuation assumptions

The discount rate used for nuclear plant, coal plants, spent fuel and closure, pollution control and rehabilitation was 5.7% (2010: 6.4%) for the group and company.

Estimated payment dates

The estimated payment dates of the costs are:

	Group and company	
	2011	2010
Nuclear plant	2025 – 2039	2025 – 2039
Coal plants	2022 – 2063	2021 – 2063
Spent nuclear fuel	2011 – 2104	2010 – 2104
Closure, pollution control and rehabilitation	2011 – 2073	2009 – 2073

Sensitivity analysis

The carrying amount of the provision would be an estimated R2 200 million (2010: R1 489 million) higher had the 5.7% (2010: 6.4%) real discount rate used in the calculation of the provision decreased by 1% and R1 720 million (2010: R1 131 million) lower had the 5.7% (2010: 6.4%) real discount rate increased by 1%.

The carrying amount of the power station-related environmental restoration provision for the group and the company is R8 337 million (2010: R5 842 million). The carrying amount of the mine-related closure, pollution control and rehabilitation provision for the group and company is R2 037 million (2010: R1 619 million).

(e) Equity portion of subordinated loan from shareholder

The value of the equity portion of the loan from the shareholder is the difference between the amount advanced and the calculated loan value on the day the tranches are drawn down. The loan value is calculated using Eskom's long-term financial plan to forecast the leverage ratio and the interest cover to determine in which years interest will be payable over the period of the loan. These expected interest flows and the capital redemption are discounted at market-related rates to determine the loan amounts. Once the equity portion of a tranche is recorded it does not change.

5. Segment information

Management has determined the reportable segments, as described below, based on the reports regularly provided, reviewed and used by the group Exco to make strategic decisions and assess performance of the segments. The group's reportable segments are strategic divisions that offer different services.

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

Generation	Consists of Generation, Nuclear and Primary Energy divisions. These divisions procure primary energy and generate electricity for sale to the Transmission and Distribution divisions.
Transmission	Consists of Transmission and Systems Operations and Planning divisions. These divisions provide, operate and maintain the transmission network for transmitting and selling bulk electricity to key large and international customers.
Distribution	The Distribution division sells electricity to redistributors, small and large customers.
Eskom Enterprises group	The Eskom Enterprises group supports the Eskom Group through providing plant lifecycle support and maintenance, including return-to-service work, network protection and measurement. The Eskom Enterprises group also operates and maintains the Eskom Group private telephone network and operates electricity generation concessions in Mali and Uganda.
All other segments	Relates to 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 insurance businesses, which did not meet any of the quantitative thresholds for determining reportable segments in 2011 or in 2010.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

5. Segment information *(continued)*

The segment information provided to Exco for the reportable segments for the year ended 31 March 2011 is:

	Gener- ation	Trans- mission	Distri- bution	Eskom Enter- prises group	All other seg- ments	Cor- porate and other	Inter- segment trans- actions	Group
2011	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
Continuing operations								
External revenue	–	35 646	55 137	576	88	–	–	91 447
Intersegment revenue	63 549	6 744	–	5 638	1 206	–	(77 137)	–
Total revenue	63 549	42 390	55 137	6 214	1 294	–	(77 137)	91 447
Primary energy	(32 530)	(3 254)	(11)	–	–	–	–	(35 795)
Employee benefit expense	(5 564)	(1 129)	(5 993)	(1 303)	(30)	(2 676)	–	(16 695)
Depreciation and amortisation expense	(3 768)	(733)	(2 311)	(206)	–	(247)	46	(7 219)
Net impairment losses	(74)	(184)	(474)	(52)	(2)	(2)	–	(788)
Intersegment purchases	(2 617)	(33 620)	(38 007)	(134)	–	(2 759)	77 137	–
Other operating expenses	(5 933)	(1 095)	(5 794)	(4 244)	(1 022)	4 906	1 112	(12 070)
Operating profit/(loss) before net fair value profit/(loss) and net finance cost	13 063	2 375	2 547	275	240	(778)	1 158	18 880
Other income	268	92	270	13	37	1 136	(1 229)	587
Net fair value (loss)/gain on financial instruments, excluding embedded derivatives	(3 243)	(169)	(20)	(7)	77	(329)	–	(3 691)
Net fair value loss on embedded derivatives	–	(1 261)	–	–	–	–	–	(1 261)
Operating profit before net finance cost	10 088	1 037	2 797	281	354	29	(71)	14 515
Net finance (cost)/income	(3 863)	(279)	(350)	174	(149)	1 601	–	(2 866)
Finance income	32	83	292	208	177	2 022	(378)	2 436
Finance cost	(3 895)	(362)	(642)	(34)	(326)	(421)	378	(5 302)
Share of profit of equity-accounted investees	–	–	–	–	–	24	–	24
Profit/(loss) before tax	6 225	758	2 447	455	205	1 654	(71)	11 673
Income tax	(2 355)	(612)	(572)	(116)	(48)	423	19	(3 261)
Profit/(loss) for the year from continuing operations	3 870	146	1 875	339	157	2 077	(52)	8 412
Discontinued operations								
Loss for the year from discontinued operations	–	–	–	(56)	–	–	–	(56)
Profit/(loss) for the year	3 870	146	1 875	283	157	2 077	(52)	8 356
Other information								
Segment assets	177 680	40 863	51 535	6 442	10 638	63 501	(23 438)	327 221
Investments in equity-accounted investees	–	–	–	19	–	201	–	220
Non-current assets held-for-sale	–	–	–	704	–	–	–	704
Total assets	177 680	40 863	51 535	7 165	10 638	63 702	(23 438)	328 145
Segment liabilities	154 555	34 899	31 766	3 319	8 969	28 727	(21 349)	240 886
Capital expenditure (including borrowing costs capitalised)	40 595	6 485	8 474	208	–	117	(422)	55 457

Segment information for the year ended 31 March 2010 is:

	Gener- ation	Trans- mission	Distri- bution	Eskom Enter- prises group	All other seg- ments	Cor- porate and other	Inter- segment trans- actions	Group
2010	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
Continuing operations								
External revenue	–	26 487	43 577	707	359	–	–	71 130
Intersegment revenue	49 732	3 005	–	6 090	715	–	(59 542)	–
Total revenue	49 732	29 492	43 577	6 797	1 074	–	(59 542)	71 130
Primary energy	(26 874)	(2 224)	(2)	–	–	–	–	(29 100)
Employee benefit expense	(4 947)	(1 000)	(5 107)	(1 342)	(27)	(2 271)	–	(14 694)
Depreciation and amortisation expense	(3 100)	(618)	(2 079)	236	(1)	(154)	–	(5 716)
Net impairment (losses)/reversal	(25)	(123)	(457)	1	(11)	(49)	4	(660)
Intersegment purchases	(1 857)	(24 275)	(30 713)	–	–	(2 697)	59 542	–
Other operating expenses	(5 379)	(781)	(4 276)	(5 388)	(564)	4 429	1 310	(10 649)
Operating profit/(loss) before net fair value profit/(loss) and net finance cost	7 550	471	943	304	471	(742)	1 314	10 311
Other income	156	207	278	5	37	1 076	(1 207)	552
Net fair value (loss)/gain on financial instruments, excluding embedded derivatives	(4 188)	85	(39)	(2)	152	(1 955)	4	(5 943)
Net fair value gain on embedded derivatives	–	2 283	–	1	–	–	–	2 284
Operating profit/(loss) before net finance cost	3 518	3 046	1 182	308	660	(1 621)	111	7 204
Net finance (cost)/income	(3 429)	(242)	(450)	150	(129)	2 821	45	(1 234)
Finance income	105	71	219	250	162	1 185	(378)	1 614
Finance cost	(3 534)	(313)	(669)	(100)	(291)	1 636	423	(2 848)
Share of (loss)/profit of equity-accounted investees	–	–	–	(3)	–	17	–	14
Profit before tax	89	2 804	732	455	531	1 217	156	5 984
Income tax	103	(724)	(442)	(221)	(147)	(575)	(74)	(2 080)
Profit for the year from continuing operations	192	2 080	290	234	384	642	82	3 904
Discontinued operations								
(Loss)/profit for the year from discontinued operations	–	–	–	(82)	–	4	(206)	(284)
Profit for the year	192	2 080	290	152	384	646	(124)	3 620
Other information								
Segment assets	131 039	28 438	43 995	7 267	7 411	37 878	(10 109)	245 919
Investments in equity-accounted investees	–	–	–	18	–	178	–	196
Non-current assets held-for-sale	–	–	–	10	–	10	–	20
Total assets	131 039	28 438	43 995	7 295	7 411	38 066	(10 109)	246 135
Segment liabilities	110 425	22 752	25 647	3 702	5 895	15 461	(7 969)	175 913
Capital expenditure (including borrowing costs capitalised)	40 484	7 143	7 079	509	–	1 916	(128)	57 003

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

5. Segment information *(continued)*

Intersegment purchases and revenue of electricity are allocated between the Generation, Transmission and Distribution 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 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		Non-current assets	
	2011 Rm	2010 Rm	2011 Rm	2010 Rm
South Africa	87 199	68 251	244 755	195 932
Foreign countries	4 248	2 879	51	98
	91 447	71 130	244 806	196 030

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 intercompany 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.

	Group			Company		
	Cost Rm	Accumulated depreciation and impairment losses Rm	Carrying value Rm	Cost Rm	Accumulated depreciation and impairment losses Rm	Carrying value Rm
2011						
6. Property, plant and equipment						
<i>Owned assets</i>						
Land	1 154	–	1 154	1 126	–	1 126
Buildings and facilities	5 205	(1 589)	3 616	5 067	(1 533)	3 534
Plant – Generation	96 997	(36 001)	60 996	97 078	(36 043)	61 035
– Transmission	19 917	(7 064)	12 853	19 922	(7 065)	12 857
– Distribution	55 960	(21 237)	34 723	55 975	(21 239)	34 736
Regular distribution	39 771	(13 345)	26 426	39 786	(13 347)	26 439
Electrification	16 189	(7 892)	8 297	16 189	(7 892)	8 297
Test, telecommunication and other plant	1 822	(1 066)	756	504	(393)	111
Equipment and vehicles	9 516	(4 834)	4 682	7 572	(4 168)	3 404
Total in commission	190 571	(71 791)	118 780	187 244	(70 441)	116 803
Works under construction	117 110	(93)	117 017	118 153	(55)	118 098
Construction materials	692	(2)	690	692	(2)	690
	308 373	(71 886)	236 487	306 089	(70 498)	235 591
<i>Leased assets</i>	576	(339)	237	1 024	(398)	626
Mining assets	573	(337)	236	573	(337)	236
Plant	–	–	–	43	(26)	17
Equipment and vehicles	3	(2)	1	408	(35)	373
	308 949	(72 225)	236 724	307 113	(70 896)	236 217

	Group			Company		
	Cost	Accumulated depreciation and impairment losses	Carrying value	Cost	Accumulated depreciation and impairment losses	Carrying value
2010	Rm	Rm	Rm	Rm	Rm	Rm
Owned assets						
Land	696	–	696	668	–	668
Buildings and facilities	4 751	(1 464)	3 287	4 623	(1 413)	3 210
Plant – Generation	87 810	(32 441)	55 369	87 810	(32 441)	55 369
– Transmission	16 976	(6 482)	10 494	16 976	(6 482)	10 494
– Distribution	49 999	(19 252)	30 747	49 999	(19 252)	30 747
Regular distribution	35 132	(11 961)	23 171	35 132	(11 961)	23 171
Electrification	14 867	(7 291)	7 576	14 867	(7 291)	7 576
Test, telecommunication and other plant	2 225	(972)	1 253	505	(383)	122
Equipment and vehicles	7 650	(3 913)	3 737	6 762	(3 700)	3 062
Total in commission	170 107	(64 524)	105 583	167 343	(63 671)	103 672
Works under construction	81 636	(253)	81 383	82 223	(214)	82 009
Construction materials	575	(1)	574	575	(1)	574
	252 318	(64 778)	187 540	250 141	(63 886)	186 255
Leased assets						
	755	(390)	365	1 230	(477)	753
Mining assets	573	(324)	249	573	(324)	249
Plant	–	–	–	31	(23)	8
Equipment and vehicles	182	(66)	116	626	(130)	496
	253 073	(65 168)	187 905	251 371	(64 363)	187 008

Reconciliation of movements	Carrying value beginning of year	Additions and transfers ¹	Transfer to non-current assets held-for-sale	Change in rate of decommissioning provision and cost estimate	Disposals	Impairment losses	Reversal of impairment losses	Depreciation	Carrying value end of year
	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
2011									
Group									
Owned assets									
Land	696	459	–	–	(1)	–	–	–	1 154
Buildings and facilities	3 287	474	–	–	(6)	–	–	(139)	3 616
Plant	97 863	16 507	–	1 357	(37)	(103)	4	(6 263)	109 328
Equipment and vehicles	3 737	1 911	(10)	–	(54)	(15)	–	(887)	4 682
Works under construction	81 383	35 640	–	4	(10)	–	–	–	117 017
Construction materials	574	116	–	–	–	–	–	–	690
	187 540	55 107	(10)	1 361	(108)	(118)	4	(7 289)	236 487
Leased assets									
	365	–	–	–	(113)	–	–	(15)	237
Mining assets	249	–	–	–	–	–	–	(13)	236
Plant	–	–	–	–	–	–	–	–	–
Equipment and vehicles	116	–	–	–	(113)	–	–	(2)	1
Total property, plant and equipment	187 905	55 107	(10)	1 361	(221)	(118)	4	(7 304)	236 724

1. Included in additions and transfers are borrowing costs capitalised of R8 589 million (2010: R8 234 million) for the group and company.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

	Carrying value beginning of year	Additions and transfers ¹	Change in rate of decommissioning provision and cost estimate	Disposals	Impairment losses	Reversal of impairment losses	Depreciation	Carrying value end of year
	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
6. Property, plant and equipment								
<i>(continued)</i>								
Reconciliation of movements (continued)								
2011								
Company								
<i>Owned assets</i>								
Land	668	459	–	(1)	–	–	–	1 126
Buildings and facilities	3 210	461	–	(5)	–	–	(132)	3 534
Plant	96 732	16 987	1 357	(16)	(71)	4	(6 254)	108 739
Equipment and vehicles	3 062	1 144	–	(51)	–	–	(751)	3 404
Works under construction	82 009	36 088	4	(3)	–	–	–	118 098
Construction materials	574	116	–	–	–	–	–	690
	186 255	55 255	1 361	(76)	(71)	4	(7 137)	235 591
<i>Leased assets</i>	753	42	–	(138)	–	–	(31)	626
Mining assets	249	–	–	–	–	–	(13)	236
Plant	8	12	–	–	–	–	(3)	17
Equipment and vehicles	496	30	–	(138)	–	–	(15)	373
Total property, plant and equipment	187 008	55 297	1 361	(214)	(71)	4	(7 168)	236 217

	Note	Group		Company	
		2011 Rm	2010 Rm	2011 Rm	2010 Rm
Borrowing costs on general borrowings are capitalised at an average rate of 9.81% (2010: 10.03%). Borrowing costs on funds borrowed specifically for the purpose of obtaining a qualifying asset are capitalised at the actual rate obtained for the specific funds borrowed. The average specific rate for the year was 10.06% (2010: 19.70%). This rate includes the capitalisation of the remeasurement of the subordinated loan from the shareholder. The amounts capitalised during the year were	37	(8 589)	(8 234)	(8 589)	(8 234)
Details of land and buildings are available for examination at the registered offices of the respective businesses.					
The total depreciation charge for property, plant and equipment is disclosed in profit or loss in the following categories:		7 304	5 787	7 168	6 039
<i>Depreciation and amortisation expense</i>	31	7 290	5 773	7 154	6 025
<i>Primary energy</i>		14	14	14	14

	Group			Company		
	Cost	Accumulated amortisation and impairment losses	Carrying value	Cost	Accumulated amortisation and impairment losses	Carrying value
	Rm	Rm	Rm	Rm	Rm	Rm
7. Intangible assets						
2011						
Rights	954	(221)	733	953	(221)	732
Computer software	2 649	(2 056)	593	2 538	(1 967)	571
Concession assets	70	(19)	51	–	–	–
Total	3 673	(2 296)	1 377	3 491	(2 188)	1 303
2010						
Rights	839	(222)	617	838	(221)	617
Computer software	2 627	(2 002)	625	2 520	(1 960)	560
Concession assets	81	(18)	63	–	–	–
Total	3 547	(2 242)	1 305	3 358	(2 181)	1 177

Reconciliation of movements

	Carrying value beginning of year	Additions and transfers	Amortisation	Disposals	Carrying value end of year
	Rm	Rm	Rm	Rm	Rm
2011					
Group					
Rights	617	116	–	–	733
Computer software	625	234	(266)	–	593
Concession assets	63	–	(6)	(6)	51
Total	1 305	350	(272)	(6)	1 377
Company					
Rights	617	115	–	–	732
Computer software	560	259	(248)	–	571
Total	1 177	374	(248)	–	1 303

Amortisation of intangible assets of R272 million (2010: R222 million) for the group and of R248 million (2010: R207 million) for the company is included within *depreciation and amortisation expense* (refer to note 31) in profit or loss.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

	Note	Group		Company	
		2011 Rm	2010 Rm	2011 Rm	2010 Rm
8. Investment in equity-accounted investees					
Investment in associates	8.1	-	-	-	-
Investment in joint ventures	8.2	220	196	95	95
		220	196	95	95
8.1 Investment in associates					
Investment		-	-	-	-
Directors' valuation		-	-	-	-

The group's share of the results of its principal associates, all of which are unlisted, and its share of the assets (including goodwill) and liabilities are:

Name	Country of incorporation	Assets Rm	Liabilities Rm	Revenue Rm	Profit Rm	Interest held %
Group						
2011						
<i>Directly held</i>						
Uitenhage Electricity Supply Company (Pty) Limited ^{1,2}	South Africa	35	27	-	-	33
Western Power Corridor Company (Pty) Limited ³	Botswana	-	-	-	-	20
		35	27	-	-	
2010						
<i>Directly held</i>						
Uitenhage Electricity Supply Company (Pty) Limited ^{1,2}	South Africa	10	9	40	-	33
Western Power Corridor Company (Pty) Limited ³	Botswana	-	-	-	-	20
		10	9	40	-	

Where the above entities' financial year ends differ from that of Eskom, financial information has been obtained from published information or management accounts as appropriate.

1. Year end is 30 June.

2. The company ceased trading on 30 November 2008 and is in the process of being wound up.

3. Dormant.

	Group		Company	
	2011 Rm	2010 Rm	2011 Rm	2010 Rm
8.2 Investment in joint ventures				
Balance at beginning of the year	196	182	95	95
Share of profit ¹	24	14	–	–
Balance at end of the year	220	196	95	95
Directors' valuation	350	222	331	203

Investments are accounted for at cost in the company. The share of profits since acquisition is accounted for in the group.

The group's share of the results of its principal joint ventures, all of which are unlisted, and its share of the assets (including goodwill) and liabilities are:

Name	Main business	Country of incorporation	Interest held %	Non-current assets Rm	Current assets Rm	Non-current liabilities Rm	Current liabilities Rm	Profit/(loss) Rm	Investment at cost Rm	In-debtedness Rm
Group										
2011										
<i>Directly held</i>										
Motraco – Mozambique Transmission Company SARL ²	Electricity transmission	Mozambique	33	232	123	119	90	24	95	–
<i>Indirectly held</i>										
Trans Africa Projects (Pty) Limited ²	Engineering services	South Africa	50	2	49	–	32	–	–	–
Trans Africa Projects Limited (Mauritius) ^{2,3}	Engineering services	Mauritius	50	–	–	–	–	–	–	–
Transpoint (Pty) Limited	Telecommunications	South Africa	50	–	–	–	–	–	–	–
				234	172	119	122	24	95	–
2010										
<i>Directly held</i>										
Motraco – Mozambique Transmission Company SARL ²	Electricity transmission	Mozambique	33	252	98	146	59	17	95	–
<i>Indirectly held</i>										
Trans Africa Projects (Pty) Limited ²	Engineering services	South Africa	50	3	56	–	41	(3)	–	–
Trans Africa Projects Limited (Mauritius) ^{2,3}	Engineering services	Mauritius	50	–	–	–	–	–	–	–
Transpoint (Pty) Limited	Telecommunications	South Africa	50	–	–	–	–	–	–	–
				255	154	146	100	14	95	–

1. Share of profit is after tax.

2. Year end is 31 December.

3. Dormant.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

	Group		Company	
	2011 Rm	2010 Rm	2011 Rm	2010 Rm
9. Investment in subsidiaries				
Shares at cost			384	388
Indebtedness			1 953	1 953
Total interest in subsidiaries			2 337	2 341
Directors' valuation			5 320	5 167
Aggregate attributable after-tax profits of subsidiary companies	439	539		
Aggregate attributable after-tax losses of subsidiary companies	(1)	–		

Financial instruments with subsidiaries are disclosed in note 10.

Name	Main business	Country of incorporation	Issued/ stated share capital R	Interest held %	Investment at cost Rm	Indebtedness Rm
2011						
<i>Directly held</i>						
Eskom Finance Company (Pty) Limited	Finance (employee housing loans)	South Africa	4 000	100	1	–
Escap Limited	Insurance	South Africa	379 500 000	100	380	–
Eskom Enterprises (Pty) Limited	Non-regulated electricity supply industry activities and electricity supply and related services outside South Africa	South Africa	99 000	100	1	1 953 ²
PN Energy Services (Pty) Limited ³	Maintenance of electrical and telecommunication distribution network	South Africa	1 500 000	100	4	–
The Natal Navigation Collieries and Estate Company Limited ⁴	Properties	South Africa	1 542 850	100	1	–
<i>Indirectly held</i>						
Golang Coal (Pty) Limited	Coal exports	South Africa	1 000	67	–	–
Eskom Enterprises Global West Africa ^{4,5,6}	Operations management	Nigeria	100	100	–	–
Eskom Energie Manantali SA ^{5,6,7}	Energy supply	Mali	1 000	100	–	–
Eskom Uganda Limited ^{5,6}	Operations management	Uganda	100	100	–	–
Pebble Bed Modular Reactor (Pty) Limited ⁸	Reactor driven generation project	South Africa	100	100	–	–
Technology Services International (Pty) Limited ⁴	Technical consulting	South Africa	100	100	–	–
Rotek Industries (Pty) Limited	Maintenance and services	South Africa	4 000	100	–	–
Rosherville Properties (Pty) Limited ⁴	Properties	South Africa	1	100	–	–
Roshcon (Pty) Limited ⁹	Construction	South Africa	1	100	–	–
South Dunes Coal Terminal (Pty) Limited	Coal exports	South Africa	4 000	50	–	–
Airborne Laser Solutions (Pty) Limited ¹⁰	Aerial surveying technologies	South Africa	1	100	–	–
					384	1 953

Name	Main business	Country of incorporation	Issued/stated share capital R	Interest held %	Investment at cost Rm	Indebtedness Rm
2010						
Directly held						
Eskom Finance Company (Pty) Limited	Finance (employee housing loans)	South Africa	4 000	100	1	–
Escap Limited	Insurance	South Africa	379 500 000	100	380	–
Gallium Insurance Company Limited ^{5,11}	Insurance	Isle of Man	4 000 000	100	4	–
Eskom Enterprises (Pty) Limited	Non-regulated electricity supply industry activities and electricity supply and related services outside South Africa	South Africa	99 000	100	1	1 953 ²
PN Energy Services (Pty) Limited ³	Maintenance of electrical and telecommunication distribution network	South Africa	1 500 000	100	4	–
The Natal Navigation Collieries and Estate Company Limited ⁴	Properties	South Africa	1 542 850	100	1	–
Indirectly held						
Golang Coal (Pty) Limited	Coal exports	South Africa	1 000	67	–	–
Eskom Enterprises Global West Africa ^{4,5,6}	Operations management	Nigeria	100	100	–	–
Eskom Energie Manantali SA ^{5,6,7}	Energy supply	Mali	1 000	100	–	–
Eskom Uganda Limited ^{5,6}	Operations management	Uganda	100	100	–	–
Pebble Bed Modular Reactor (Pty) Limited ⁸	Reactor driven generation project	South Africa	100	100	–	–
Technology Services International (Pty) Limited ⁴	Technical consulting	South Africa	100	100	–	–
Rotek Industries (Pty) Limited	Maintenance and services	South Africa	4 000	100	–	–
Rosherville Properties (Pty) Limited ⁴	Properties	South Africa	1	100	–	–
Roshcon (Pty) Limited ⁹	Construction	South Africa	1	100	–	–
South Dunes Coal Terminal (Pty) Limited	Coal exports	South Africa	4 000	50	–	–
Airborne Laser Solutions (Pty) Limited ¹⁰	Aerial surveying technologies	South Africa	1	100	–	–
					388	1 953

1. Nominal.
2. The equity loan to Eskom Enterprises (Pty) Limited is interest-free.
3. The activities of PN Energy Services (Pty) Limited are being integrated into Eskom. The company did not trade during the 2011 financial year.
4. Dormant.
5. Issued/stated capital in foreign currency.
6. Year end is 31 December.
7. Classified as non-current assets and liabilities held-for-sale (refer to note 22).
8. Pebble Bed Modular Reactor (Pty) Limited is not consolidated as it is not considered to be controlled by Eskom Enterprises in terms of the shareholder's co-operation agreement.
9. The subsidiaries of Roshcon (Pty) Limited have not been disclosed.
10. The company is in the process of being deregistered.
11. The investment was disposed of during the 2011 financial year.

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for the year ended 31 March 2011

10. Financial instruments with group companies

	Eskom Finance Company Rm	Eskom Enterprises Rm	Escap Rm	Carrying value Rm	Fair value Rm
2011					
Financial assets					
<i>Loans and receivables</i>					
Loan to subsidiaries	3 805	1	–	3 806	3 806
<i>Maturity analysis</i>	3 805	1	–	3 806	3 806
Non-current	–	–	–	–	–
Current	3 805	1	–	3 806	3 806
Financial liabilities					
<i>Liabilities at amortised cost</i>					
Borrowings	52	1 357	53	1 462	1 462
Commercial paper	–	–	53	53	53
Loan from subsidiaries	52	1 357	–	1 409	1 409
<i>Maturity analysis</i>	52	1 357	53	1 462	1 462
Non-current	–	–	–	–	–
Current	52	1 357	53	1 462	1 462
2010					
Financial assets					
<i>Loans and receivables</i>					
Loan to subsidiaries	2 454	7	–	2 461	2 461
<i>Maturity analysis</i>	2 454	7	–	2 461	2 461
Non-current	–	–	–	–	–
Current	2 454	7	–	2 461	2 461
Financial liabilities					
<i>Liabilities at amortised cost</i>					
Borrowings	27	1 244	626	1 897	1 897
Commercial paper	–	–	626	626	626
Loan from subsidiaries	27	1 244	–	1 271	1 271
<i>Maturity analysis</i>	27	1 244	626	1 897	1 897
Non-current	–	–	–	–	–
Current	27	1 244	626	1 897	1 897

The loans to and from subsidiaries are payable on demand. The effective interest rate on commercial paper is 6.89% (2010: 7.34%). Commercial paper is payable within 12 months.

The above balances exclude trade and other receivables and payables balances between Eskom and group companies. These balances are disclosed as part of *trade and other receivables* and *trade and other payables*.

	Group and company			2010 Total Rm
	Coal Rm	2011 Nuclear Rm	Total Rm	
11. Future fuel supplies				
Balance at beginning of the year	3 397	371	3 768	3 510
Net additions	510	569	1 079	1 127
Change in discount rate of decommissioning provision and cost estimate	156	–	156	(144)
Transfer from equity	–	(61)	(61)	(51)
Amortised and written-off during the year ¹	(8)	(2)	(10)	(75)
Transfer to inventories	(352)	(491)	(843)	(599)
	3 703	386	4 089	3 768

	Note	Group		Company	
		2011 Rm	2010 Rm	2011 Rm	2010 Rm
12. Deferred tax					
Deferred tax assets					
Balance at beginning of year		79	56	–	–
Transfer (to)/from profit or loss	38	(20)	23	–	–
		59	79	–	–
Comprising		59	79	–	–
Property, plant and equipment		(26)	(22)	–	–
Provisions		85	90	–	–
Other		–	11	–	–
Deferred tax liabilities					
Balance at beginning of year		5 262	6 098	4 834	5 871
Transfer from profit or loss	38	3 117	1 839	3 116	1 636
Transfer to statement of comprehensive income		(448)	(2 675)	(447)	(2 673)
		7 931	5 262	7 503	4 834
Comprising		7 931	5 262	7 503	4 834
Property, plant and equipment		21 323	17 296	21 061	17 102
Inventories		174	654	174	654
Provisions		(6 491)	(5 181)	(6 400)	(5 180)
Tax losses		(2 525)	(3 974)	(2 515)	(3 969)
Embedded derivative assets and liabilities		(1 645)	(1 291)	(1 645)	(1 291)
Available-for-sale financial assets		47	57	47	57
Cash flow hedges		(417)	134	(417)	134
Post-retirement medical aid benefits		10	(104)	10	(104)
Payments received in advance		(2 797)	(2 816)	(2 797)	(2 816)
Other		252	487	(15)	247
Unused tax losses available for offset against future taxable income		9 347	14 365	8 982	14 175

Deferred tax asset amounting to R329 million (2010: R173 million) relating to unused tax losses has not been raised.

1. Amortisation and write-offs of future fuel is included in profit or loss within primary energy.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

13. Financial instruments

Accounting classifications and fair values

The classification of each class of financial assets and liabilities, and their fair values are:

2011	Note	Held-for-trading Rm	Held-to-maturity Rm	Loans and receivables Rm	Available-for-sale Rm	Liabilities at amortised cost Rm	Other assets and liabilities Rm	Total carrying amount Rm	Fair value Rm
Group									
Financial assets									
Non-current									
		6	-	6 483	13 259	-	570	20 318	20 318
Investment in securities	13.2	-	-	-	13 259	-	-	13 259	13 259
Loans receivable	13.3	-	-	5 958	-	-	-	5 958	5 958
Derivatives held for risk management	15	6	-	-	-	-	-	6	6
Finance lease receivables ¹	16	-	-	-	-	-	570	570	570
Trade and other receivables ¹	18	-	-	525	-	-	-	525	525
		4 133	-	22 868	24 546	-	97	51 644	51 644
Current									
Investment in securities	13.2	-	-	-	24 546	-	-	24 546	24 546
Loans receivable	13.3	-	-	100	-	-	-	100	100
Derivatives held for risk management	15	34	-	-	-	-	82	116	116
Finance lease receivables ¹	16	-	-	-	-	-	15	15	15
Trade and other receivables ¹	18	-	-	10 953	-	-	-	10 953	10 953
Financial trading assets	13.4	3 827	-	-	-	-	-	3 827	3 827
Cash and cash equivalents	13.1	272	-	11 815	-	-	-	12 087	12 087
		4 139	-	29 351	37 805	-	667	71 962	71 962
Total financial assets									
Financial liabilities									
Non-current									
		911	-	-	-	149 284	9 543	159 738	162 805
Debt securities issued	13.5	-	-	-	-	84 396	-	84 396	85 111
Borrowings	13.6	-	-	-	-	63 380	-	63 380	65 732
Embedded derivative liabilities	14.2	-	-	-	-	-	5 357	5 357	5 357
Derivatives held for risk management	15	911	-	-	-	-	3 665	4 576	4 576
Finance lease liabilities ¹	26	-	-	-	-	-	521	521	521
Trade and other payables ¹	27	-	-	-	-	1 508	-	1 508	1 508
		4 867	-	-	-	31 410	1 365	37 642	37 712
Current									
Debt securities issued	13.5	-	-	-	-	2 880	-	2 880	2 886
Borrowings	13.6	-	-	-	-	9 654	-	9 654	9 718
Embedded derivative liabilities	14.2	-	-	-	-	-	516	516	516
Derivatives held for risk management	15	563	-	-	-	-	841	1 404	1 404
Finance lease liabilities ¹	26	-	-	-	-	-	8	8	8
Trade and other payables ¹	27	-	-	-	-	18 876	-	18 876	18 876
Financial trading liabilities	13.4	4 304	-	-	-	-	-	4 304	4 304
		5 778	-	-	-	180 694	10 908	197 380	200 517
Total financial liabilities									

		Held-for-trading	Held-to-maturity	Loans and receivables	Available-for-sale	Liabilities at amortised cost	Other assets and liabilities	Total carrying amount	Fair value
2011	Note	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
Company									
Financial assets									
Non-current									
		6	-	14	13 259	-	570	13 849	13 849
Investment in securities	13.2	-	-	-	13 259	-	-	13 259	13 259
Derivatives held for risk management	15	6	-	-	-	-	-	6	6
Finance lease receivables ¹	16	-	-	-	-	-	570	570	570
Trade and other receivables ¹	18	-	-	14	-	-	-	14	14
Current		3 503	-	24 568	22 310	-	97	50 478	50 478
Financial instruments with group companies	10	-	-	3 806	-	-	-	3 806	3 806
Investment in securities	13.2	-	-	-	22 310	-	-	22 310	22 310
Derivatives held for risk management	15	34	-	-	-	-	82	116	116
Finance lease receivables ¹	16	-	-	-	-	-	15	15	15
Trade and other receivables ¹	18	-	-	9 568	-	-	-	9 568	9 568
Financial trading assets	13.4	3 197	-	-	-	-	-	3 197	3 197
Cash and cash equivalents	13.1	272	-	11 194	-	-	-	11 466	11 466
Total financial assets		3 509	-	24 582	35 569	-	667	64 327	64 327
Financial liabilities									
Non-current									
		911	-	-	-	147 830	9 887	158 628	161 695
Debt securities issued	13.5	-	-	-	-	84 031	-	84 031	84 746
Borrowings	13.6	-	-	-	-	62 940	-	62 940	65 292
Embedded derivative liabilities	14.2	-	-	-	-	-	5 357	5 357	5 357
Derivatives held for risk management	15	911	-	-	-	-	3 665	4 576	4 576
Finance lease liabilities ¹	26	-	-	-	-	-	865	865	865
Trade and other payables ¹	27	-	-	-	-	859	-	859	859
Current		4 867	-	-	-	31 087	1 393	37 347	37 417
Financial instruments with group companies	10	-	-	-	-	1 462	-	1 462	1 462
Debt securities issued	13.5	-	-	-	-	1 574	-	1 574	1 580
Borrowings	13.6	-	-	-	-	9 571	-	9 571	9 635
Embedded derivative liabilities	14.2	-	-	-	-	-	515	515	515
Derivatives held for risk management	15	563	-	-	-	-	841	1 404	1 404
Finance lease liabilities ¹	26	-	-	-	-	-	37	37	37
Trade and other payables ¹	27	-	-	-	-	18 480	-	18 480	18 480
Financial trading liabilities	13.4	4 304	-	-	-	-	-	4 304	4 304
Total financial liabilities		5 778	-	-	-	178 917	11 280	195 975	199 112

1. The carrying amounts of these financial instruments approximate their fair values. The effect of discounting is not expected to be material.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

13. Financial instruments (continued)

Accounting classifications and fair values (continued)

The classification of each class of financial assets and liabilities, and their fair values are:

2010	Note	Held-for-trading Rm	Held-to-maturity Rm	Loans and receivables Rm	Available-for-sale Rm	Liabilities at amortised cost Rm	Other assets and liabilities Rm	Total carrying amount Rm	Fair value Rm
Group									
Financial assets									
Non-current									
		–	–	4 598	1 923	–	532	7 053	7 053
Investment in securities	13.2	–	–	–	1 923	–	–	1 923	1 923
Loans receivable	13.3	–	–	4 579	–	–	–	4 579	4 579
Finance lease receivables ¹	16	–	–	–	–	–	532	532	532
Trade and other receivables ¹	18	–	–	19	–	–	–	19	19
		6 471	–	25 318	2 148	–	137	34 074	34 074
Current									
Investment in securities	13.2	–	–	–	2 148	–	–	2 148	2 148
Loans receivable	13.3	–	–	655	–	–	–	655	655
Embedded derivative assets	14.1	–	–	–	–	–	110	110	110
Derivatives held for risk management	15	98	–	–	–	–	14	112	112
Finance lease receivables ¹	16	–	–	–	–	–	13	13	13
Trade and other receivables ¹	18	–	–	9 391	–	–	–	9 391	9 391
Financial trading assets	13.4	6 104	–	–	–	–	–	6 104	6 104
Cash and cash equivalents	13.1	269	–	15 272	–	–	–	15 541	15 541
Total financial assets		6 471	–	29 916	4 071	–	669	41 127	41 127
Financial liabilities									
Non-current									
		767	–	–	–	95 084	8 074	103 925	105 423
Debt securities issued	13.5	–	–	–	–	59 322	–	59 322	60 154
Borrowings	13.6	–	–	–	–	34 628	–	34 628	35 294
Embedded derivative liabilities	14.2	–	–	–	–	–	4 583	4 583	4 583
Derivatives held for risk management	15	767	–	–	–	–	2 859	3 626	3 626
Finance lease liabilities ¹	26	–	–	–	–	–	632	632	632
Trade and other payables ¹	27	–	–	–	–	1 134	–	1 134	1 134
		6 120	–	–	–	28 354	4 228	38 702	38 883
Current									
Debt securities issued	13.5	–	–	–	–	2 880	–	2 880	2 885
Borrowings	13.6	–	–	–	–	9 143	–	9 143	9 319
Embedded derivative liabilities	14.2	–	–	–	–	–	139	139	139
Derivatives held for risk management	15	607	–	–	–	–	4 037	4 644	4 644
Finance lease liabilities ¹	26	–	–	–	–	–	52	52	52
Trade and other payables ¹	27	–	–	–	–	16 331	–	16 331	16 331
Financial trading liabilities	13.4	5 513	–	–	–	–	–	5 513	5 513
Total financial liabilities		6 887	–	–	–	123 438	12 302	142 627	144 306

2010	Note	Held-for-trading Rm	Held-to-maturity Rm	Loans and receivables Rm	Available-for-sale Rm	Liabilities at amortised cost Rm	Other assets and liabilities Rm	Total carrying amount Rm	Fair value Rm
Company									
Financial assets									
Non-current									
		–	–	23	1 923	–	532	2 478	2 478
Investment in securities	13.2	–	–	–	1 923	–	–	1 923	1 923
Finance lease receivables ¹	16	–	–	–	–	–	532	532	532
Trade and other receivables ¹	18	–	–	23	–	–	–	23	23
Current		5 920	–	25 859	1 035	–	137	32 951	32 951
Financial instruments with group companies	10	–	–	2 461	–	–	–	2 461	2 461
Investment in securities	13.2	–	–	–	1 035	–	–	1 035	1 035
Loans receivable	13.3	–	–	549	–	–	–	549	549
Embedded derivative assets	14.1	–	–	–	–	–	110	110	110
Derivatives held for risk management	15	98	–	–	–	–	14	112	112
Finance lease receivables ¹	16	–	–	–	–	–	13	13	13
Trade and other receivables ¹	18	–	–	8 247	–	–	–	8 247	8 247
Financial trading assets	13.4	5 553	–	–	–	–	–	5 553	5 553
Cash and cash equivalents	13.1	269	–	14 602	–	–	–	14 871	14 871
Total financial assets		5 920	–	25 882	2 958	–	669	35 429	35 429
Financial liabilities									
Non-current									
		767	–	–	–	93 488	8 407	102 662	104 160
Debt securities issued	13.5	–	–	–	–	58 538	–	58 538	59 370
Borrowings	13.6	–	–	–	–	34 153	–	34 153	34 819
Embedded derivative liabilities	14.2	–	–	–	–	–	4 583	4 583	4 583
Derivatives held for risk management	15	767	–	–	–	–	2 859	3 626	3 626
Finance lease liabilities ¹	26	–	–	–	–	–	965	965	965
Trade and other payables ¹	27	–	–	–	–	797	–	797	797
Current		6 120	–	–	–	29 502	4 249	39 871	40 052
Financial instruments with group companies	10	–	–	–	–	1 897	–	1 897	1 897
Debt securities issued	13.5	–	–	–	–	2 141	–	2 141	2 146
Borrowings	13.6	–	–	–	–	9 094	–	9 094	9 270
Embedded derivative liabilities	14.2	–	–	–	–	–	138	138	138
Derivatives held for risk management	15	607	–	–	–	–	4 037	4 644	4 644
Finance lease liabilities ¹	26	–	–	–	–	–	74	74	74
Trade and other payables ¹	27	–	–	–	–	16 370	–	16 370	16 370
Financial trading liabilities	13.4	5 513	–	–	–	–	–	5 513	5 513
Total financial liabilities		6 887	–	–	–	122 990	12 656	142 533	144 212

1. The carrying amounts of these financial instruments approximate their fair values. The effect of discounting is not expected to be material.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

	Group				Company			
	2011 Carrying value Rm	2011 Fair value Rm	2010 Carrying value Rm	2010 Fair value Rm	2011 Carrying value Rm	2011 Fair value Rm	2010 Carrying value Rm	2010 Fair value Rm
13. Financial instruments <i>(continued)</i>								
13.1 Cash and cash equivalents								
Bank balances	9 436	9 436	7 114	7 114	8 815	8 815	6 489	6 489
Unsettled deals	272	272	269	269	272	272	269	269
Fixed deposits	2 308	2 308	8 158	8 158	2 308	2 308	8 113	8 113
Negotiable certificates of deposit	71	71	–	–	71	71	–	–
	12 087	12 087	15 541	15 541	11 466	11 466	14 871	14 871
Made up as follows:	12 087	12 087	15 541	15 541	11 466	11 466	14 871	14 871
Held-for-trading	272	272	269	269	272	272	269	269
Loans and receivables	11 815	11 815	15 272	15 272	11 194	11 194	14 602	14 602
13.2 Investment in securities								
Available-for-sale	37 805	37 805	4 071	4 071	35 569	35 569	2 958	2 958
Government bonds	13 427	13 427	1 933	1 933	13 427	13 427	1 933	1 933
Negotiable certificates of deposits	13 204	13 204	2 136	2 136	10 968	10 968	1 025	1 025
Gilt carries	2 205	2 205	–	–	2 205	2 205	–	–
Commercial paper	2 715	2 715	–	–	2 715	2 715	–	–
Treasury bills	6 254	6 254	–	–	6 254	6 254	–	–
Other	–	–	2	2	–	–	–	–
Maturity analysis	37 805	37 805	4 071	4 071	35 569	35 569	2 958	2 958
Non-current	13 259	13 259	1 923	1 923	13 259	13 259	1 923	1 923
Current	24 546	24 546	2 148	2 148	22 310	22 310	1 035	1 035

No impairment loss was recognised on investment in securities.

	Group				Company			
	2011 Carrying value Rm	2011 Fair value Rm	2010 Carrying value Rm	2010 Fair value Rm	2011 Carrying value Rm	2011 Fair value Rm	2010 Carrying value Rm	2010 Fair value Rm
13.3 Loans receivable								
Loans and receivables	6 058	6 058	5 234	5 234	–	–	549	549
Secured by mortgages	5 347	5 347	3 875	3 875	–	–	–	–
Loan to Richards Bay Coal Terminal	445	445	569	569	–	–	–	–
Deposit – cross-border lease	–	–	549	549	–	–	549	549
Other	266	266	241	241	–	–	–	–
Maturity analysis	6 058	6 058	5 234	5 234	–	–	549	549
Non-current	5 958	5 958	4 579	4 579	–	–	–	–
Current	100	100	655	655	–	–	549	549
13.4 Financial trading assets and liabilities								
Financial trading assets								
Negotiable certificates of deposits	519	519	803	803	519	519	803	803
Repurchase agreements	455	455	1 552	1 552	455	455	1 552	1 552
Other money market securities	–	–	4	4	–	–	4	4
Listed shares	630	630	551	551	–	–	–	–
Government bonds	2 223	2 223	3 194	3 194	2 223	2 223	3 194	3 194
	3 827	3 827	6 104	6 104	3 197	3 197	5 553	5 553
Financial trading liabilities								
Eskom bonds	3 135	3 135	3 681	3 681	3 135	3 135	3 681	3 681
Short-sold government bonds	–	–	315	315	–	–	315	315
Commercial paper issued	505	505	798	798	505	505	798	798
Repurchase agreements	371	371	11	11	371	371	11	11
Unsettled deals	293	293	708	708	293	293	708	708
	4 304	4 304	5 513	5 513	4 304	4 304	5 513	5 513

Encumbered assets

Eskom has concluded sale and repurchase transactions of commercial paper, comprising Eskom bonds and government bonds, with approved counterparties. Application of trade date accounting resulted in the continued recognition of this commercial paper even though legal title has passed from Eskom to the counterparty. At year end, Eskom has sold, and is committed to repurchase commercial paper after year end with a fair value of R2 295 million (2010: R2 825 million). Of this amount, R1 742 million (2010: R2 156 million) relates to government securities and R553 million (2010: R669 million) relates to Eskom bonds.

13.5 Debt securities issued	87 276	87 997	62 202	63 039	85 605	86 326	60 679	61 516
Eskom bonds	66 339	65 911	52 452	52 479	66 339	65 911	52 452	52 479
Electrification participation notes	–	–	980	985	–	–	980	985
Promissory notes	185	230	159	213	185	230	159	213
Commercial paper	1 671	1 671	1 523	1 523	–	–	–	–
Eurorand zero coupon bonds	2 406	3 149	2 127	2 890	2 406	3 149	2 127	2 890
Foreign bonds	16 675	17 036	4 961	4 949	16 675	17 036	4 961	4 949
Maturity analysis	87 276	87 997	62 202	63 039	85 605	86 326	60 679	61 516
Non-current	84 396	85 111	59 322	60 154	84 031	84 746	58 538	59 370
Current	2 880	2 886	2 880	2 885	1 574	1 580	2 141	2 146

Notes to the consolidated financial statements continued

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13. Financial instruments (continued)

13.5 Debt securities issued (continued)

	Currency	Security number	Interest rate		Nominal		Maturity date	Group Carrying value		Company Carrying value	
			2011	2010	2011	2010		2011	2010	2011	2010
			%	%	m	m		Rm	Rm	Rm	Rm
Eskom bonds					65 033	51 505		66 339	52 452	66 339	52 452
	ZAR	EL15 ¹	3.00	3.00	5 000	4 000	Jun 15	5 391	4 181	5 391	4 181
	ZAR	ES18 ¹	9.46	9.55	6 827	6 160	Apr 18	7 051	6 314	7 051	6 314
	ZAR	E170 ^{2,3}	9.57	10.13	11 608	11 805	Aug 19 ^{2,3}	14 100	14 482	14 100	14 482
	ZAR	ES23 ¹	9.45	9.73	10 080	4 450	Jan 23	10 649	4 617	10 649	4 617
	ZAR	ES26 ¹	9.49	9.09	13 786	12 431	Apr 26	12 941	11 637	12 941	11 637
	ZAR	ES33 ¹	9.35	8.68	13 457	12 659	Sept 33	11 909	11 221	11 909	11 221
	ZAR	ES15 ¹	7.78	–	4 275	–	Aug 15	4 298	–	4 298	–
Electrification participation notes	ZAR	EPN	–	20.70	–	796	Apr 10	–	980	–	980
Promissory notes					320	320		185	159	185	159
	ZAR	PN04 ³	16.03	16.03	90	90	Feb 12	79	68	79	68
	ZAR	PN05 ³	16.10	16.10	60	60	Feb 13	45	39	45	39
	ZAR	PN06 ³	16.13	16.13	60	60	Feb 14	38	33	38	33
	ZAR	PN07 ³	15.34	15.34	20	20	Aug 20	5	4	5	4
	ZAR	PN08 ³	15.08	15.08	20	20	Aug 21	5	4	5	4
	ZAR	PN09 ³	14.80	14.80	35	35	Aug 22	7	6	7	6
	ZAR	PN10 ³	14.61	14.91	35	35	Aug 23	6	5	6	5
Commercial paper					1 670	1 526		1 671	1 523	–	–
	ZAR	n/a	–	8.62	–	742	May 10	–	739	–	–
	ZAR	n/a	6.61	7.58	907	784	May 11	907	784	–	–
	ZAR	n/a	7.24	–	398	–	Nov 11	398	–	–	–
	ZAR	n/a	6.89	–	30	–	May 12	30	–	–	–
	ZAR	n/a	7.74	–	199	–	May 13	199	–	–	–
	ZAR	n/a	10.18	–	136	–	May 20	137	–	–	–
Eurorand zero coupon bonds ³					17 500	17 500		2 406	2 127	2 406	2 127
	ZAR	n/a	13.92	13.92	2 000	2 000	Dec 18	727	638	727	638
	ZAR	n/a	13.35	13.35	8 000	8 000	Aug 27	1 028	907	1 028	907
	ZAR	n/a	11.88	11.88	7 500	7 500	Dec 32	651	582	651	582
Foreign bonds					2 250	500		16 675	4 961	16 675	4 961
	EUR	n/a	4.00	4.08	500	500	Mar 13	4 810	4 961	4 810	4 961
	USD	n/a	5.75	–	1 750	–	Jan 21	11 865	–	11 865	–
Total								87 276	62 202	85 605	60 679

1. Government guaranteed.

2. Earliest in a range of maturity dates is indicated for this instrument.

3. Secured by Eskom's assets (section 7 of Eskom Conversion Act).

	Group				Company			
	2011	2011	2010	2010	2011	2011	2010	2010
	Carry- ing value Rm	Fair value Rm	Carry- ing value Rm	Fair value Rm	Carry- ing value Rm	Fair value Rm	Carry- ing value Rm	Fair value Rm
13.6 Borrowings	73 034	75 450	43 771	44 613	72 511	74 927	43 247	44 089
Development financing institutions	11 835	12 360	5 148	5 586	11 835	12 360	5 148	5 586
Export credit facilities	8 788	10 229	1 670	1 730	8 788	10 229	1 670	1 730
Floating rate notes	3 828	4 105	3 835	4 126	3 828	4 105	3 835	4 126
Commercial paper	9 117	9 181	9 149	9 190	9 117	9 181	9 149	9 190
Subordinated loan from shareholder	37 931	37 931	23 445	23 457	37 931	37 931	23 445	23 457
Development Bank of Southern Africa	1 012	1 121	–	–	1 012	1 121	–	–
Rand loans	523	523	524	524	–	–	–	–
<i>Maturity analysis</i>	73 034	75 450	43 771	44 613	72 511	74 927	43 247	44 089
Non-current	63 380	65 732	34 628	35 294	62 940	65 292	34 153	34 819
Current	9 654	9 718	9 143	9 319	9 571	9 635	9 094	9 270

	Currency	Interest rate		Nominal		Maturity date	Group		Company	
		2011	2010	2011	2010		Carrying value		Carrying value	
		%	%	m	m		2011	2010	2011	2010
Development financing institutions				7 588	3 275		11 835	5 148	11 835	5 148
USD	1.60	1.54	291	291	Aug 28	1 980	2 132	1 980	2 132	
ZAR	6.93	8.54	2 000	2 000	Aug 28	2 021	2 028	2 021	2 028	
EUR	5.74	–	41	–	Aug 29 ¹	398	–	398	–	
ZAR	1.71	–	3 476	–	Aug 29 ¹	3 508	–	3 508	–	
ZAR	5.98	7.39	1 409	984	Sep 31	1 413	988	1 413	988	
USD	0.73	–	371	–	May 38 ¹	2 515	–	2 515	–	
Export credit facilities			13 086	10 290		8 788	1 670	8 788	1 670	
EUR	1.53	1.16	87	90	May 19	807	865	807	865	
JPY	1.38	1.54	11 390	10 200	May 20	933	805	933	805	
EUR	3.46	–	531	–	Sep 23	4 673	–	4 673	–	
EUR	5.14	–	152	–	Oct 23	1 424	–	1 424	–	
ZAR	7.84	–	926	–	Oct 24	951	–	951	–	
Floating rate notes ¹			3 800	3 800		3 828	3 835	3 828	3 835	
ZAR	6.26	7.87	1 800	1 800	Aug 26	1 813	1 817	1 813	1 817	
ZAR	6.43	8.04	2 000	2 000	Aug 33	2 015	2 018	2 015	2 018	
Commercial paper			9 393	9 590		9 117	9 149	9 117	9 149	
ZAR	–	7.18	–	1 187	Apr 10	–	1 170	–	1 170	
ZAR	–	7.51	–	2 703	Jun 10	–	2 633	–	2 633	
ZAR	–	7.50	–	5 700	Sept 10	–	5 346	–	5 346	
ZAR	6.49	–	9 393	–	Apr 11	9 117	–	9 117	–	
Subordinated loan from shareholder			60 000	40 000		37 931	23 445	37 931	23 445	
ZAR	7.52	7.52	5 000	5 000	Dec 38	3 297	3 072	3 297	3 072	
ZAR	8.95	8.95	5 000	5 000	Mar 39	3 275	3 197	3 275	3 197	
ZAR	9.43	9.43	7 500	7 500	Jun 39	4 701	4 464	4 701	4 464	
ZAR	9.15	9.15	7 500	7 500	Sept 39	4 756	4 316	4 756	4 316	
ZAR	9.57	9.57	7 500	7 500	Dec 39	4 674	4 122	4 674	4 122	
ZAR	9.52	8.81	7 500	7 500	Mar 40	4 721	4 274	4 721	4 274	
ZAR	9.54	–	5 000	–	Jun 40	3 182	–	3 182	–	
ZAR	8.58	–	5 000	–	Sep 40	3 195	–	3 195	–	
ZAR	9.03	–	5 000	–	Dec 40	3 091	–	3 091	–	
ZAR	9.83	–	5 000	–	Mar 41	3 039	–	3 039	–	
Development Bank of Southern Africa	ZAR	10.13	–	1 000	–	1 012	–	1 012	–	
Rand loans						523	524	–	–	
Total						73 034	43 771	72 511	43 247	

1. Government guaranteed.

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13. Financial instruments (continued)

13.6 Borrowings (continued)

Subordinated loan from shareholder

The subordinated loan from the shareholder of R60 billion has been fully drawn down in the current year (2010: R40 billion cumulative). Eskom is obliged to pay interest on the loan when Eskom is solvent and the debt leverage conditions per the agreement are satisfied. The interest on the subordinated loan is not cumulative.

The loan has been classified as a financial liability in accordance with IAS 32 *Financial instruments: Presentation* and has been measured at amortised cost. The loan was initially measured at fair value and the difference between the fair valued amount and the advanced amount accounted for under *borrowings* gave rise to a day-one gain. This day-one gain is disclosed in equity, under *equity reserve* (refer to page 214).

13.7 Collateral obtained

Eskom has called upon security deposits and guarantees from customers who have defaulted on their accounts. The carrying amount of the security deposits and guarantees which were called upon is R185 million (2010: R81 million).

13.8 Collateral held

Eskom has bought commercial paper from approved counterparties and has committed to sell this commercial paper back to the counterparties in the following financial year. Although Eskom has legal title to the commercial paper at year end, it has not been recognised on the statement of financial position due to the application of trade date accounting. This has also resulted in the recognition of a loan receivable with a fair value of R2 295 million (2010: R2 824 million) at year end. Of this amount, R1 742 million (2010: R2 156 million) relates to government securities and R553 million (2010: R669 million) to Eskom bonds. The total loan receivable is secured by commercial paper of an equivalent fair value.

13.9 Collateral placed

In terms of the credit support annexure of the International Securities Market Association/International Swap and Derivative Association (ISMA/ISDA) agreements, Eskom placed Rnil (2010: R459 million) reflected in available-for-sale assets as collateral as a result of changes in the market value of the financial instruments traded in the market.

13.10 Fair value hierarchy

The financial instruments carried at fair value are analysed in the table below. The different levels have been identified as follows:

Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (ie as prices) or indirectly (ie derived from prices).

Level 3: inputs for the financial asset or financial liability that are not based on observable market data (unobservable inputs).

	Note	Level 1 Rm	Level 2 Rm	Level 3 Rm	Total Rm
2011					
Group					
Investment in securities classified as available-for-sale	13.2	13 427	24 378	–	37 805
Derivatives held for risk management	15	–	122	–	122
Financial trading assets	13.4	2 853	974	–	3 827
		16 280	25 474	–	41 754
Embedded derivative liabilities	14.2	–	–	5 873	5 873
Derivatives held for risk management	15	–	5 980	–	5 980
Financial trading liabilities	13.4	3 135	1 169	–	4 304
		3 135	7 149	5 873	16 157
Company					
Investment in securities classified as available-for-sale	13.2	13 427	22 142	–	35 569
Derivatives held for risk management	15	–	122	–	122
Financial trading assets	13.4	2 223	974	–	3 197
		15 650	23 238	–	38 888
Embedded derivative liabilities	14.2	–	–	5 872	5 872
Derivatives held for risk management	15	–	5 980	–	5 980
Financial trading liabilities	13.4	3 135	1 169	–	4 304
		3 135	7 149	5 872	16 156

	Note	Level 1 Rm	Level 2 Rm	Level 3 Rm	Total Rm
2010					
Group					
Investment in securities classified as available-for-sale	13.2	1 933	2 138	–	4 071
Embedded derivative assets	14.1	–	–	110	110
Derivatives held for risk management	15	–	112	–	112
Financial trading assets	13.4	3 746	2 358	–	6 104
		5 679	4 608	110	10 397
Embedded derivative liabilities	14.2	–	–	4 722	4 722
Derivatives held for risk management	15	–	8 270	–	8 270
Financial trading liabilities	13.4	3 996	1 517	–	5 513
		3 996	9 787	4 722	18 505
Company					
Investment in securities classified as available-for-sale	13.2	1 933	1 025	–	2 958
Embedded derivative assets	14.1	–	–	110	110
Derivatives held for risk management	15	–	112	–	112
Financial trading assets	13.4	3 195	2 358	–	5 553
		5 128	3 495	110	8 733
Embedded derivative liabilities	14.2	–	–	4 721	4 721
Derivatives held for risk management	15	–	8 270	–	8 270
Financial trading liabilities	13.4	3 996	1 517	–	5 513
		3 996	9 787	4 721	18 504

There have been no transfers between the fair value hierarchy levels (2010: no transfers).

A reconciliation has been performed for fair value measurements in level 3 of the fair value hierarchy as follows:

	Group		Company	
	2011 Rm	2010 Rm	2011 Rm	2010 Rm
Embedded derivative assets				
Carrying value at beginning of the year	110	1 366	110	1 366
Net fair value loss on embedded derivatives ¹	(110)	(1 256)	(110)	(1 256)
Carrying value at end of the year	–	110	–	110
Embedded derivative liabilities				
Carrying value at beginning of the year	4 722	8 262	4 721	8 260
Net fair value gain/(loss) on embedded derivatives ¹	1 151	(3 540)	1 151	(3 539)
Carrying value at end of the year	5 873	4 722	5 872	4 721

Refer to note 3.2 for a sensitivity analysis disclosing the effect of fair value changes that would result if one or more of the inputs were to change.

1. Included within net fair value gain/(loss) on embedded derivatives in profit or loss.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

	Current	Non-current		Total	Total
	1 year	1 – 5 years	After	non-current	
	Rm	Rm	5 years	Rm	Rm
			Rm		
14. Embedded derivative assets and liabilities					
14.1 Embedded derivative assets					
2010					
Group and company					
Commodity and/or foreign currency	110	–	–	–	110
14.2 Embedded derivative liabilities					
2011					
Group					
Commodity and/or foreign currency	453	4 206	–	4 206	4 659
Foreign currency or interest rate	1	–	–	–	1
PPI and foreign currency	62	242	909	1 151	1 213
	516	4 448	909	5 357	5 873
Company					
Commodity and/or foreign currency	453	4 206	–	4 206	4 659
PPI and foreign currency	62	242	909	1 151	1 213
	515	4 448	909	5 357	5 872
2010					
Group					
Commodity and/or foreign currency	–	3 291	1	3 292	3 292
Foreign currency or interest rate	1	–	–	–	1
PPI and foreign currency	138	965	326	1 291	1 429
	139	4 256	327	4 583	4 722
Company					
Commodity and/or foreign currency	–	3 291	1	3 292	3 292
PPI and foreign currency	138	965	326	1 291	1 429
	138	4 256	327	4 583	4 721

15. Derivatives held for risk management

	Group and company					
	2011			2010		
	Assets	Liabilities	Notional amount	Assets	Liabilities	Notional amount
Rm	Rm	Rm	Rm	Rm	Rm	
Derivatives held for economic hedging	40	1 474	18 525	98	1 374	10 451
Foreign exchange derivatives	26	1 433	18 180	38	1 090	7 208
Swaps	–	930	2 790	–	767	2 790
Foreign exchange contracts	26	503	15 390	38	299	3 899
Cross-border lease	–	–	–	–	24	519
Interest rate derivatives	–	–	–	–	1	637
Forward rate agreements	–	–	–	–	1	637
Commodity derivatives	14	41	345	60	283	2 606
Aluminium options	–	–	–	–	184	337
Swaps	14	41	345	60	99	2 269
Derivatives held for cash flow hedging	82	4 506	49 709	14	6 896	43 979
Foreign exchange contracts	82	612	24 171	14	4 037	31 323
Interest rate swap	–	230	3 800	–	355	3 800
Cross-currency swap	–	3 664	21 738	–	2 504	8 856
Total derivatives held for risk management	122	5 980		112	8 270	
Maturity analysis	122	5 980		112	8 270	
Derivatives held for economic hedging	40	1 474		98	1 374	
Non-current	6	911		–	767	
Current	34	563		98	607	
Derivatives held for cash flow hedging	82	4 506		14	6 896	
Non-current	–	3 665		–	2 859	
Current	82	841		14	4 037	

The hedging practices and accounting treatment are disclosed in note 2.11.3 in the accounting policies (refer to page 227).

The group uses forward exchange contracts, cross-currency swaps and interest rate swaps for cash flow hedging. Only the changes in cash flows attributable to movements in the spot exchange rates are hedged.

- Foreign exchange contracts: used to hedge the changes in the cash flows resulting from the purchase of services and goods denominated mainly in US dollars, euro and yen.
- Cross-currency swap: used to hedge the currency risk arising from the fixed rate bonds (denominated in US dollar, euro and yen) issued by the group.
- Interest rate swaps: used to hedge the interest expense variability of the issued floating rate notes.

During the year R6 million (2010: R154 million) was recognised in profit or loss as ineffectiveness arising from cash flow hedges. There were no transactions for which cash flow hedge accounting had to be ceased in the current or comparative financial years as a result of highly probable cash flows no longer being expected to occur.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

15. Derivatives held for risk management *(continued)*

Cash flow hedges

The periods in which the cash flows of derivatives designated as cash flow hedges are expected to occur are:

	Carrying amount	Undiscounted cash flows	0 to 3 months	4 to 12 months	1 to 5 years	More than 5 years
	Rm	Rm	Rm	Rm	Rm	Rm
2011						
Group and company						
Forward exchange contracts						
Assets	82	(4 277)	(382)	(3 895)	–	–
Liabilities	(612)	(19 895)	(3 164)	(16 731)	–	–
Interest rate swaps						
Liabilities	(230)	(463)	(31)	(82)	(70)	(280)
Cross-currency swaps						
Liabilities	(3 664)	(2 376)	(87)	(1 479)	(5 878)	5 068
	(4 424)	(27 011)	(3 664)	(22 187)	(5 948)	4 788
2010						
Group and company						
Forward exchange contracts						
Assets	14	(120)	31	(151)	–	–
Liabilities	(4 037)	(31 203)	(5 231)	(25 972)	–	–
Interest rate swaps						
Liabilities	(355)	(888)	(17)	(50)	(124)	(697)
Cross-currency swaps						
Liabilities	(2 504)	(2 852)	(85)	123	(3 123)	233
	(6 882)	(35 063)	(5 302)	(26 050)	(3 247)	(464)

Gains or losses recognised in the hedging reserve in equity are first recognised in the initial cost of the carrying amount of the asset or liability when the forecast transaction results in the recognition of a non-financial asset or non-financial liability. Therefore, gains and losses recognised in the hedging reserve in equity will affect profit or loss in the periods during which the relevant non-financial assets are depreciated or finance cost is recognised for the relevant financial liability. The periods in which the cash flows associated with derivatives are expected to impact profit or loss are:

	Carrying amount	Undiscounted cash flows	0 to 3 months	4 to 12 months	1 to 5 years	More than 5 years
	Rm	Rm	Rm	Rm	Rm	Rm
2011						
Group and company						
Forward exchange contracts						
Assets	82	(4 277)	(382)	(3 895)	–	–
Liabilities	(652)	(19 935)	(3 164)	(16 740)	(9)	(22)
Interest rate swaps						
Liabilities	(230)	(463)	(31)	(82)	(70)	(280)
Cross-currency swaps						
Liabilities	(3 664)	(2 376)	(87)	(1 479)	(5 878)	5 068
	(4 464)	(27 051)	(3 664)	(22 196)	(5 957)	4 766
2010						
Group and company						
Forward exchange contracts						
Assets	14	(120)	31	(151)	–	–
Liabilities	(4 403)	(31 569)	(5 237)	(25 977)	(186)	(169)
Interest rate swaps						
Liabilities	(355)	(888)	(17)	(50)	(124)	(697)
Cross-currency swaps						
Liabilities	(2 504)	(2 852)	(85)	123	(3 123)	233
	(7 248)	(35 429)	(5 308)	(26 055)	(3 433)	(633)

	Group		Company	
	2011 Rm	2010 Rm	2011 Rm	2010 Rm
16. Finance lease receivables				
Gross receivables	1 432	1 400	1 432	1 400
Unearned finance income	(847)	(855)	(847)	(855)
Present value of minimum lease payments	585	545	585	545
<i>Maturity analysis of gross receivables from finance leases</i>				
Due within one year	90	85	90	85
Due between one and five years	349	329	349	329
Due after five years	993	986	993	986
	1 432	1 400	1 432	1 400
Future finance charges	(847)	(855)	(847)	(855)
	585	545	585	545
<i>Maturity analysis of net investment in finance leases</i>				
Non-current	570	532	570	532
Due between one and five years	72	62	72	62
Due after five years	498	470	498	470
Current				
Due within one year	15	13	15	13
	585	545	585	545
The finance lease receivables are raised in terms of IFRIC 4 <i>Determining whether an arrangement contains a lease.</i>				
Average implicit rate (%)	13	13	13	13

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

	Group			2010 Total	Company			2010 Total
	2011				2011			
	Pay- ments made in advance	Environ- mental rehabili- tation trust fund	Total		Pay- ments made in advance	Environ- mental rehabili- tation trust fund	Total	
Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	
17. Payments made in advance								
Balance at beginning of the year	4 207	62	4 269	6 167	4 178	62	4 240	6 087
Transfer to the income statement	(296)	–	(296)	(80)	(296)	–	(296)	(80)
Transfer to the statement of financial position	(3 438)	–	(3 438)	(3 692)	(3 438)	–	(3 438)	(3 692)
Payments made during the year	3 500	12	3 512	1 874	3 496	12	3 508	1 925
	3 973	74	4 047	4 269	3 940	74	4 014	4 240
<i>Maturity analysis</i>	3 973	74	4 047	4 269	3 940	74	4 014	4 240
Non-current	2 322	74	2 396	2 856	2 313	74	2 387	2 856
Current	1 651	–	1 651	1 413	1 627	–	1 627	1 384

Payments made in advance to suppliers are primarily to reserve manufacturing capacity for the future construction of assets and for future goods and services. These amounts will be used as partial settlement towards the future amounts payable to the suppliers. There is no contractual right to receive a refund in cash or another financial instrument from the suppliers. In the event of default or non-performance, there are performance bonds in place that can be used to recover outstanding payments made in advance.

Payments made in advance also include contributions made by Eskom to an environmental rehabilitation trust fund. The fund was established to fund Eskom's financial obligation in respect of the rehabilitation of certain coal mines from which Eskom sources its coal for the generation of electricity. Eskom's access to the fund assets is restricted as the Department of Energy (DoE) will only release the funds once a mine closure certificate is obtained.

	Note	Group		Company	
		2011 Rm	2010 Rm	2011 Rm	2010 Rm
18. Trade and other receivables					
Trade receivables		11 859	9 425	11 541	9 112
Other receivables		2 474	2 364	877	1 522
		14 333	11 789	12 418	10 634
Allowance for impairment of trade and other receivables	3.1.2(g)	(2 855)	(2 379)	(2 836)	(2 364)
		11 478	9 410	9 582	8 270
<i>Maturity analysis</i>		11 478	9 410	9 582	8 270
Non-current		525	19	14	23
Current		10 953	9 391	9 568	8 247
19. Inventories					
Coal		3 709	2 838	3 709	2 838
Nuclear fuel		1 029	929	1 029	929
Maintenance spares and consumables		4 166	3 611	4 071	3 520
		8 904	7 378	8 809	7 287

The group and company reversed R7 million (2010: R2 million) of a previous inventory write-down. The amount reversed has been included in *net impairment loss* in profit or loss (refer to note 32).

20. Service concession arrangements

The Eskom group operates two service concessions for the generation and/or transmission of electricity, through its operations in Mali and Uganda.

Mali

Eskom Energie Manantali (EEM) entered into an operation and maintenance agreement with La Société de Gestion de L'Energie de Manantali (SOGEM) in 2001 to operate and maintain a 200MW hydro-electricity facility in Mali and supply power to the national electrical companies in Mali, Senegal and Mauritania. The dam, hydro-electric generating plant and eastern and western transmission networks together constitute the energy assets in terms of the agreement. The concession period is 15 years (ending December 2017).

EEM is responsible for the day-to-day maintenance, repairs and replacement of the energy assets.

During the current financial year, EEM signed a settlement agreement with SOGEM to resolve contractual difficulties in executing the contract. Under the settlement agreement, SOGEM will find a new operator for the concession, and EEM will exit the arrangement at the end of October 2011.

Based on the above, it is management's determination that the assets of EEM constitute non-current assets held-for-sale in terms of IFRS 5. Operations have been classified as discontinued operations, and the comparatives in the statement of comprehensive income have been restated in terms of IFRS 5.

EEM has been classified as a discontinued operation. Refer to note 22.

Uganda

Eskom Uganda Limited (Eskom Uganda) entered into an operation and maintenance agreement with Uganda Electricity Generation Company Limited (UEGCL) in 2002, which is linked to a power purchase agreement concluded with Uganda Electricity Transmission Company Limited (UETCL). In terms of the agreements, Eskom Uganda operates and maintains two hydro-electric power stations in Uganda, from which it supplies electricity to UETCL. The dams, powerhouses, related switchyard facilities, high-voltage substation, land and movable property together constitute the "energy assets" in terms of the agreement. The concession period is 20 years (ends in December 2023).

Eskom Uganda is entitled to receive revenue from UETCL, based on electricity supplied at tariffs regulated by the Electricity Regulatory Authority of Uganda. It also receives a fee to cover it for investment in additional energy assets where required. This has been recognised as an intangible asset.

The plant remains the property of UEGCL and will revert to UEGCL at the end of the concession period. At that point Eskom Uganda will have no further obligations in respect of the plant.

	2011		2010
	Discontinued operation Eskom Energie Manantali Rm	Continuing operation Eskom Uganda Rm	Continuing operation Rm
Income statements			
Revenue	112	121	223
(Loss)/profit for the year before tax	(56)	9	(96)
Taxation	-	(1)	(7)
(Loss)/profit for the year after tax	(56)	8	(103)
Statements of financial position			
Property, plant and equipment	-	-	35
Intangible assets	-	51	63
Inventories	4	14	42
Trade and other receivables ¹	618	11	652
Cash and cash equivalents	63	36	81
Total assets	685	112	873
Provisions	128	8	266
Borrowings	-	16	45
Trade and other payables ¹	732	14	685
Other liabilities	-	6	9
Total liabilities	860	44	1 005

	Group		Company	
	2011 R	2010 R	2011 R	2010 R
21. Share capital				
Authorised				
1 000 ordinary shares of R1 each	1 000	1 000	1 000	1 000
Issued				
1 ordinary share of R1	1	1	1	1

In terms of the memorandum and articles of association, the unissued share capital is under the control of the Government of the Republic of South Africa, represented by the Department of Public Enterprises, as the sole shareholder.

1. Includes concession debtors of R618 million (2010: R519 million) which relates to amounts to be collected by EEM on behalf of SOGEM which will settle the outstanding amount included in trade and other payables.

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22. Non-current assets and liabilities held-for-sale

A discontinued operation is a component which has been disposed of or is classified as held-for-sale as it is intended to be sold and it represents a separate major line of business or geographical area of operations.

Directly held subsidiary – Gallium Insurance Company Limited

The assets and liabilities of Gallium Insurance Company Limited (Gallium) have historically been presented as held-for-sale after approval by the Eskom board of directors to close down the company. The closure of Gallium was completed during the current financial year.

Indirectly held subsidiary – Eskom Energie Manantali SA (EEM)

During the current financial year, EEM signed a settlement agreement with SOGEM to resolve contractual difficulties in executing the contract. Under the settlement agreement, SOGEM will find a new operator for the concession, and EEM will exit the arrangement at the end of October 2011.

Based on the above, it is management's determination that the assets of EEM constitute non-current assets held-for-sale in terms of IFRS 5. Operations have been classified as discontinued operations, and the comparatives in the statement of comprehensive income have been restated in terms of IFRS 5.

Details regarding EEM can be found under the service concession arrangements. Refer to note 20.

A consolidated analysis of the results of these discontinued operations, and the result recognised on the remeasurement of assets is:

	2011			2010
	Aviation assets Rm	Eskom Energie Manantali Rm	Total Rm	Total Rm
Income statements				
Revenue	–	112	112	687
Employee benefit expense	–	(28)	(28)	(372)
Net impairment (loss)/reversal	–	(106)	(106)	42
Depreciation and amortisation expense	–	(4)	(4)	(34)
Loss on disposal of investment	–	–	–	(8)
Other operating expenses	–	(17)	(17)	(405)
Operating loss before net fair value loss and net finance cost	–	(43)	(43)	(90)
Other income	–	–	–	7
Net fair value loss on financial instruments excluding embedded derivatives	–	(10)	(10)	(2)
Operating loss before net finance income	–	(53)	(53)	(85)
Finance income	–	–	–	17
Finance cost	–	(3)	(3)	(7)
Loss before tax	–	(56)	(56)	(75)
Income tax	–	–	–	(209)
Loss for the year from discontinued operations	–	(56)	(56)	(284)

The loss from discontinued operations relating to the prior year includes operating expenditure which will still be incurred by the continuing operations after these entities have been disposed of.

	2011			2010
	Aviation assets Rm	Eskom Energie Manantali Rm	Total Rm	Total Rm
Statements of cash flows				
Operating cash flows	-	(4)	(4)	34
Investing cash flows	-	(10)	(10)	(224)
Financing cash flows	-	43	43	24
Total cash flows	-	29	29	(166)
Statements of financial position				
Assets				
Non-current assets				
Property, plant and equipment	19	-	19	11
Current assets				
Trade and other receivables	-	618	618	-
Inventories	-	4	4	-
Cash and cash equivalents	-	63	63	9
Total assets	19	685	704	20
Liabilities				
Current liabilities				
Trade and other payables	-	732	732	-
Provisions	-	128	128	-
Total liabilities	-	860	860	-

Accounting classifications and fair values

The classification of each class of financial assets and liabilities for all discontinued operations, and their fair values are:

	Held-for- trading Rm	Held-to- maturity Rm	Loans and receivables Rm	Available- for-sale Rm	Liabilities at amortised cost Rm	Other assets and liabilities Rm	Total carrying amount Rm	Fair value Rm
2011								
Financial assets								
Trade and other receivables	-	-	618	-	-	-	618	618
Cash and cash equivalents	-	-	63	-	-	-	63	63
Financial liabilities								
Trade and other payables	-	-	-	-	732	-	732	732
2010								
Financial assets								
Cash and cash equivalents	-	-	9	-	-	-	9	9

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

	Government grant	2011 Capital contributions received from customers	Total	2010 Total
	Rm	Rm	Rm	Rm
23. Deferred income				
Group and company				
Balance at beginning of the year	5 333	2 045	7 378	6 030
Additions and transfers	1 506	600	2 106	1 737
Income recognised	(343)	(108)	(451)	(389)
Balance at end of the year	6 496	2 537	9 033	7 378
Maturity analysis				
Non-current	5 966	2 429	8 395	7 036
Current	530	108	638	342

		Group and company	
	Note	2011 Rm	2010 Rm
The total income for the group and company of R451 million (2010: R389 million) is disclosed in profit or loss in the following categories:			
<i>Depreciation and amortisation expense</i>	31	(343)	(279)
<i>Other income</i>	34	-	(22)
<i>Other revenue</i>		(108)	(88)
		(451)	(389)

Government grant

The government's transitional electrification programmes are managed by Eskom on behalf of the Department of Energy (DoE). The funding for the electrification of homes is provided by the DoE. Eskom retains ownership of and responsibility for the electrification assets created upon conclusion of the agreement.

Capital contributions received from customers

Contributions relating to the construction of electricity network assets were paid in advance by electricity customers.

	Note	Group		Company	
		2011 Rm	2010 Rm	2011 Rm	2010 Rm
24. Retirement benefit obligations					
Post-retirement medical benefits	24.2	7 542	7 190	7 374	7 033
Gratuities	24.3	9	8	–	–
		7 551	7 198	7 374	7 033
<i>Maturity analysis</i>		7 551	7 198	7 374	7 033
Non-current		7 317	6 988	7 140	6 823
Current		234	210	234	210
The total charge in profit or loss and other comprehensive income is disclosed in the following categories:					
<i>Pension benefits</i>		1 330	1 179	1 245	1 108
<i>Post-retirement medical benefits</i>		570	1 136	550	1 114
<i>Gratuities</i>		1	1	–	–
		1 901	2 316	1 795	2 222
24.1 Pension benefits					
The amounts recognised in profit or loss are:					
Contributions	30	1 330	1 179	1 245	1 108
The total charge is included in <i>employee benefit expense</i> in profit or loss.					
The net benefit asset at the reporting date is not accounted for in the financial statements. The rules of the Eskom Pension and Provident Fund state that any deficit on the valuation of the fund will be funded by increases in future contributions or reductions in benefits. If there is a substantial surplus on the valuation of the fund, future contributions may be decreased or benefits may be improved as determined by the trustees of the fund.					
The Eskom Pension and Provident Fund is registered in terms of the Pension Funds Act, 1956, as amended. All employees are members of the fund. Contributions comprise 20.8% of pensionable emoluments of which members pay 7.3%. The assets of the fund are held separately from those of the group in respect of funds under the control of the trustees.					
The fund was actuarially valued on the IAS 19 <i>Employee Benefits</i> basis on 31 March 2011 (previous valuation at 31 March 2010). The actuarial present value of retirement benefits at 31 March 2011 was R59 191 million (2010: R52 216 million), while the fair value of the fund's assets was R66 867 million (2010: R60 345 million).					
The principal actuarial assumptions used were:					
Long-term investment return before tax (%)		9.5	8.9	9.5	8.9
Future general salary increases (%)		7.5	6.9	7.5	6.9
Future pension increases (inflation) (%)		6.0	5.4	6.0	5.4
In-service mortality		Per experience analysis	SA56-62 composite plus allowance for HIV	Per experience analysis	SA56-62 composite plus allowance for HIV
Pensioner mortality		Per experience analysis	PA (90) less 1 year	Per experience analysis	PA (90) less 1 year

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

	Note	Group		Company	
		2011 Rm	2010 Rm	2011 Rm	2010 Rm
24. Retirement benefit obligations <i>(continued)</i>					
24.2 Post-retirement medical benefits					
The group has anticipated expenditure in terms of continued contributions to medical aid subscriptions in respect of employees who retire. The estimated present value of the anticipated expenditure for both in-service and retired members was calculated by independent actuaries.					
Present value of unfunded obligations		7 542	7 190	7 374	7 033
Unrecognised actuarial losses		–	–	–	–
Liability in the statement of financial position		7 542	7 190	7 374	7 033
Movement in the liability					
Balance at beginning of the year		7 190	6 238	7 033	6 103
Total expense charged to profit or loss and other comprehensive income		570	1 136	550	1 114
Contributions paid		(218)	(184)	(209)	(184)
Balance at end of the year		7 542	7 190	7 374	7 033
The amounts recognised in profit or loss and other comprehensive income are:					
Current service cost		352	285	332	263
Finance cost		626	534	626	534
Net actuarial (gain)/loss recognised for the year		(408)	317	(408)	317
		570	1 136	550	1 114
The charge is disclosed in profit or loss in the following categories:					
Employee benefit expense	30	352	285	332	263
Finance cost	37	626	534	626	534
The actuarial (gain)/loss is disclosed in other comprehensive income in the following category:					
Net actuarial (gain)/loss recognised for the year		(408)	317	(408)	317
		570	1 136	550	1 114
The expected current service cost for the 2012 financial year end is estimated at R350 million for group and R328 million for company.					
Refer to note 4(b) for the sensitivity analysis and principal actuarial assumptions used.					
24.3 Gratuities					
The estimated cost of gratuities is accounted for over the potential working life of the qualifying employees based on the assessment by independent actuaries, which takes into account the probability of employees remaining in the applicable group company's employment.					
Movement in the liability					
Balance at beginning of the year		8	7	–	–
Total expense charged to profit or loss (current service cost)		1	1	–	–
Payments made		–	–	–	–
Balance at end of the year		9	8	–	–
The total charge is disclosed in profit or loss and other comprehensive income in the following category:					
Employee benefit expense	30	1	1	–	–

	Note	2011					Total	2010 Total
		Power station- related environ- mental restora- tion ¹	Mine- related closure, pollution control and rehabili- tation ²	Leave ³	Annual and perform- ance bonus ⁴	Other ⁵		
		Rm	Rm	Rm	Rm	Rm	Rm	
25. Provisions								
Group								
Balance at beginning of the year		5 842	1 619	781	1 380	882	10 504	10 381
Provision raised for the year		1 370	203	355	1 646	1 949	5 523	1 372
(Reversed)/raised to profit and loss		–	(9)	355	1 646	1 949	3 941	2 058
Capitalised to property, plant and equipment		1 361	–	–	–	–	1 361	(604)
Capitalised to inventories		9	56	–	–	–	65	62
Capitalised to future fuel supplies		–	156	–	–	–	156	(144)
Finance cost		1 125	215	–	–	–	1 340	448
Unwinding of discount	37	815	197	–	–	–	1 012	1 015
Change in discount rate applied to provision	37	310	18	–	–	–	328	(567)
Transfer to non-current assets held-for-sale		–	–	–	–	(253)	(253)	–
Provisions used		–	–	(276)	(1 558)	(56)	(1 890)	(1 697)
Balance at end of the year		8 337	2 037	860	1 468	2 522	15 224	10 504
Maturity analysis		8 337	2 037	860	1 468	2 522	15 224	10 504
Non-current		8 268	2 037	860	–	38	11 203	8 494
Current		69	–	–	1 468	2 484	4 021	2 010
Company								
Balance at beginning of the year		5 842	1 619	730	1 321	129	9 641	9 977
Provision raised for the year		1 370	203	351	1 585	1 917	5 426	846
(Reversed)/raised to profit and loss		–	(9)	351	1 585	1 917	3 844	1 532
Capitalised to property, plant and equipment		1 361	–	–	–	–	1 361	(604)
Capitalised to inventories		9	56	–	–	–	65	62
Capitalised to future fuel supplies		–	156	–	–	–	156	(144)
Finance cost		1 125	215	–	–	–	1 340	448
Unwinding of discount	37	815	197	–	–	–	1 012	1 015
Change in discount rate applied to provision	37	310	18	–	–	–	328	(567)
Provisions used		–	–	(270)	(1 494)	(22)	(1 786)	(1 630)
Balance at end of the year		8 337	2 037	811	1 412	2 024	14 621	9 641
Maturity analysis		8 337	2 037	811	1 412	2 024	14 621	9 641
Non-current		8 268	2 037	811	–	2	11 118	8 194
Current		69	–	–	1 412	2 022	3 503	1 447

1. Provision is made for the estimated decommissioning cost of nuclear and other generation plant of R2 235 million (2010: R1 731 million) and for the management of nuclear fuel assemblies and radioactive waste of R2 235 million (2010: R1 677 million) (refer to note 4d).
2. Provision is made for the estimated cost of closure, pollution control, rehabilitation and mine employee benefits at the end of the life of the mines, where a constructive and contractual obligation exists to pay coal suppliers (refer to note 4d).
3. The group recognises a liability for occasional and service leave as the leave is of a long-term nature (refer to note 4c).
4. The annual bonus equals one month's salary for employees on Tuned Assessment of Skills and Knowledge (TASK) grading levels 1 to 13. Employees on TASK grading levels 14 to 26 can choose to spread their bonus amount over the year or take it as a 13th cheque. The performance bonus is based on the performance of the company and employees.
5. Includes provision made for contractual obligations to maintain and restore the infrastructure under service concession arrangements, onerous contracts and guarantees.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

	Group		Company	
	2011 Rm	2010 Rm	2011 Rm	2010 Rm
26. Finance lease liabilities				
Gross finance lease liabilities to subsidiaries	–	–	652	661
Other gross finance lease liabilities	1 699	2 240	1 696	1 934
Gross finance lease liabilities	1 699	2 240	2 348	2 595
Future finance charges on finance leases	(1 170)	(1 556)	(1 446)	(1 556)
Present value of finance lease liabilities	529	684	902	1 039
<i>Maturity analysis of gross lease liability</i>				
Due within one year	131	210	217	231
Due between one and five years	381	672	729	807
Due after five years	1 187	1 358	1 402	1 557
	1 699	2 240	2 348	2 595
Future finance charges	(1 170)	(1 556)	(1 446)	(1 556)
	529	684	902	1 039
<i>Maturity analysis of net lease liability</i>				
Non-current	521	632	865	965
Due between one and five years	47	145	222	280
Due after five years	474	487	643	685
Current				
Due within one year	8	52	37	74
	529	684	902	1 039
The finance lease liabilities are raised in terms of IFRIC 4 <i>Determining whether an arrangement contains a lease</i> .				
Average implicit interest rate or incremental borrowing rate (%)	18	17	18	17
27. Trade and other payables				
Trade and other payables	15 696	13 027	15 186	13 478
Accruals	3 343	3 298	2 808	2 549
Deposits	1 345	1 140	1 345	1 140
	20 384	17 465	19 339	17 167
<i>Maturity analysis</i>	20 384	17 465	19 339	17 167
Non-current	1 508	1 134	859	797
Current	18 876	16 331	18 480	16 370
Non-current trade and other payables consist mainly of retention payables that are payable after 12 months.				
28. Payments received in advance				
Upfront capital contributions	1 900	1 782	1 900	1 782
Grant funding	280	658	280	658
Other	727	438	718	357
	2 907	2 878	2 898	2 797
<i>Maturity analysis</i>	2 907	2 878	2 898	2 797
Non-current	1 686	995	1 686	995
Current	1 221	1 883	1 212	1 802
Payments received in advance are allocated to deferred income when the related assets have been placed in commercial operation (refer to note 2.18).				

	Note	Group		Company	
		2011 Rm	2010 Rm	2011 Rm	2010 Rm
29. Revenue					
Electricity revenue		90 375	69 834	90 375	69 834
Other revenue, excluding electricity revenue		1 072	1 296	498	230
		91 447	71 130	90 873	70 064
30. Employee benefit expense					
Salaries and other staff costs		16 951	14 990	15 742	13 749
Pension benefits	24.1	1 330	1 179	1 245	1 108
Post-retirement medical aid benefits	24.2	352	285	332	263
Gratuities	24.3	1	1	-	-
Direct training and development		241	205	226	175
Temporary and contract staff costs		1 505	1 208	1 500	1 204
		20 380	17 868	19 045	16 499
Employee benefit expense capitalised to property, plant and equipment		(3 685)	(3 174)	(3 685)	(3 174)
		16 695	14 694	15 360	13 325
31. Depreciation and amortisation expense					
Depreciation of property, plant and equipment	6	7 290	5 773	7 154	6 025
Amortisation and impairment of intangible assets	7	272	222	248	207
Deferred income recognised (government grant on electrification)	23	(343)	(279)	(343)	(279)
		7 219	5 716	7 059	5 953
32. Net impairment loss					
Impairment		809	674	755	668
Property, plant and equipment	6	118	51	71	51
Inventories		2	20	2	16
Loans receivable		2	12	-	-
Trade and other receivables (net of reversals)	3.1.2 (g)	687	591	682	601
Reversal		(11)	(5)	(11)	(5)
Property, plant and equipment	6	(4)	(3)	(4)	(3)
Inventories	19	(7)	(2)	(7)	(2)
Bad debts recovered		(10)	(9)	(10)	(9)
		788	660	734	654
33. Other operating expenses					
Managerial, technical and other fees		2 561	1 799	2 488	1 787
Research and development		199	197	199	197
Operating lease expense		321	334	261	288
Auditors' remuneration ¹		86	60	67	47
Onerous contract		-	97	-	-
Net loss on disposal of property, plant and equipment		-	1	-	1
Repairs and maintenance, transport and other expenses		8 903	8 161	11 613	10 361
		12 070	10 649	14 628	12 681

1. There were no non-audit services rendered by the group's statutory auditors.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

	Note	Group		Company	
		2011 Rm	2010 Rm	2011 Rm	2010 Rm
34. Other income					
Insurance proceeds		–	–	449	279
Management fee income		–	–	635	641
Government grant		1	–	1	–
Deferred income	23	–	22	–	22
Net surplus on disposal of property, plant and equipment		52	–	68	–
Operating lease income		199	180	207	187
Dividend income		26	12	15	166
Sale of scrap		111	111	111	111
Other income		198	227	202	183
		587	552	1 688	1 589
35. Net fair value loss on financial instruments, excluding embedded derivatives					
Gain on financial trading assets held-for-trading		(655)	(318)	(580)	(166)
Gain on financial trading liabilities held-for-trading		(46)	(1)	(46)	(1)
Loss on financial trading assets held-for-trading		7	46	7	46
Loss on financial trading liabilities held-for-trading		293	294	293	294
Net loss on derivatives held for risk management (economic hedges) held-for-trading ¹		3 975	6 389	3 973	6 391
Net gain on other financial assets held-for-trading		(14)	–	(14)	–
Net loss/(gains) on financial liabilities measured at amortised cost		137	(621)	135	(621)
Ineffective portion of changes in fair value of cash flow hedges (reclassified from equity)		(6)	154	(6)	154
		3 691	5 943	3 762	6 097
36. Finance income²					
Loans and receivables		1 493	1 102	1 445	1 056
Interest income		1 496	1 284	1 447	1 238
Exchange differences		(3)	(182)	(2)	(182)
Available-for-sale financial assets		871	439	702	282
Interest received from subsidiaries		–	–	206	166
Interest earned on finance lease receivables		72	73	72	73
		2 436	1 614	2 425	1 577

1. Includes forward exchange contract premium of R2 257 million (2010: R3 498 million) for the group and company.

2. Finance income includes preference dividends received of Rnil (2010: R105 million) for both the group and the company.

	Note	Group		Company	
		2011 Rm	2010 Rm	2011 Rm	2010 Rm
37. Finance cost					
Debt securities issued		5 328	3 864	5 328	3 703
Interest expense		6 048	4 726	6 048	4 565
Exchange differences		(720)	–	(720)	–
Cash flow hedges reclassified from equity		–	(862)	–	(862)
Borrowings		6 431	6 055	6 269	6 028
Interest expense		1 816	1 713	1 654	1 686
Exchange differences		(114)	(930)	(114)	(930)
Subordinated loan from shareholder ³		4 729	5 272	4 729	5 272
Borrowing costs capitalised to property, plant and equipment ⁴	6	(8 589)	(8 234)	(8 589)	(8 234)
Unwinding of discount		1 710	1 629	1 710	1 629
Post-retirement medical benefits	24.2	626	534	626	534
Provisions	25	1 012	1 015	1 012	1 015
Trade and payables		72	80	72	80
Change in discount rate of provisions	25	328	(567)	328	(567)
Interest paid to subsidiaries		–	–	119	175
Interest paid on finance lease liabilities		94	101	155	146
		5 302	2 848	5 320	2 880
38. Income tax					
Current tax		124	260	–	–
Secondary tax on companies		–	2	–	–
Deferred tax	12	3 137	1 816	3 116	1 636
Reversal of temporary differences		1 688	2 976	1 662	2 796
Tax losses		1 449	(1 160)	1 454	(1 160)
Tax from discontinued operations		–	2	–	–
Total income tax in profit or loss		3 261	2 080	3 116	1 636

3. Finance cost on the subordinated loan from the shareholder includes R2 481 million (2010: R4 570 million) relating to the remeasurement of the loan.

4. Borrowing cost capitalised includes R2 481 million (2010: R4 570 million) relating to the remeasurement of the subordinated loan from the shareholder.

	Group		Company	
	2011 Rm	2010 Rm	2011 Rm	2010 Rm
39. Cash generated from operations				
Profit before tax	11 673	5 984	11 067	4 823
Adjustments for:	19 424	13 366	19 283	13 247
Depreciation and amortisation expense	7 219	5 716	7 059	5 953
Depreciation expense – primary energy	14	14	14	14
Amortisation and write-offs of future fuels	10	75	10	75
Net impairment loss (excluding bad debts recovered)	798	669	744	663
Net fair value loss on financial instruments including embedded derivatives	4 952	3 659	5 023	3 814
Net (surplus)/loss on disposal of property, plant and equipment	(52)	1	(68)	1
Dividend income	(26)	(12)	(15)	(166)
Increase in provisions	4 294	2 344	4 176	1 795
Decrease in deferred income	(108)	(110)	(108)	(110)
Payments made in advance recognised in profit or loss	296	80	296	80
Payments received in advance recognised in profit or loss	(819)	(175)	(747)	(175)
Other non-cash items	4	–	4	–
Finance income	(2 436)	(1 614)	(2 425)	(1 577)
Finance cost	5 302	2 848	5 320	2 880
Share of profit of equity-accounted investees	(24)	(14)	–	–
Non-current assets held-for-sale	–	(115)	–	–
	31 097	19 350	30 350	18 070
Changes in working capital	(2 822)	(3 351)	(2 966)	(2 894)
Increase in payments made in advance	(3 512)	(1 874)	(3 508)	(1 925)
(Increase)/decrease in inventories	(721)	256	(694)	207
Increase in trade and other receivables	(2 871)	(1 762)	(1 981)	(1 775)
Decrease/(increase) in loans receivable	643	(647)	549	(549)
Increase in trade and other payables	3 256	245	2 172	663
Expenditure incurred on provisions	(2 108)	(1 881)	(1 995)	(1 814)
Increase in payments received in advance	2 491	2 312	2 491	2 299
	28 275	15 999	27 384	15 176

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

	Group		Company	
	2011 Rm	2010 Rm	2011 Rm	2010 Rm
40. Guarantees and contingent liabilities				
Eskom issues guarantees for strategic and business purposes to facilitate other business transactions.				
40.1 Financial guarantees				
(a) Long-term debt raised by Motraco				
Mozambique Transmission Company SARL (Motraco), a private joint venture company between Eskom, Electricidade de Moçambique and Swaziland Electricity Board, owns transmission lines connecting the South African, Mozambican and Swaziland national grids to establish a secure source of electrical power for the Mozal aluminium smelter in Maputo, Mozambique.				
Eskom has guaranteed the long-term debt raised by Motraco. At 31 March 2011 the outstanding amount was USD23 million (2010: USD26 million), which translates into R156 million (2010: R188 million). The loans of USD23 million mature on 6 September 2019. The guarantees would be triggered if Motraco was unable to meet its obligations in terms of the long-term debt.				
The risk of default resulting from the political risk in Mozambique is mitigated through a guarantee arranged with an established international insurance company, which specialises in facilitating investments in high-risk, low-income countries.				
The risk-adjusted credit exposure of Motraco is calculated by applying a rating agency's annual default probabilities. Applying the default probability of 0.23% (2010: 0.24%), the financial liability in respect of these guarantees is calculated as R1 million (2010: R1 million). This amount has been raised as a provision in the current year, and is included in <i>other provisions</i> (refer to note 25).				
The default probability trend into the future is seen to be positive, and changes in variables will not have a significant impact on profit or loss.				
No payments have been made in terms of these guarantees since their inception in 1999.				
The unprovided portion, disclosed as a contingent liability amounted to				
	155	187	155	187

	Group		Company	
	2011 Rm	2010 Rm	2011 Rm	2010 Rm
(b) EFC loans to Eskom group employees				
Eskom Finance Company (Pty) Limited (EFC) has granted loans (secured by mortgage bonds on the properties) to employees of the Eskom group. Eskom Holdings Limited issued guarantees to EFC to the extent to which the loan values of employees exceed the current value of the mortgage security. At 31 March 2011 the guaranteed amounts were R481 million (2010: R287 million).				
Historically EFC has absorbed any losses incurred, and has not called up any guarantee payments. Eskom's guarantee exposure is therefore governed by the default probability of EFC, which is influenced by the risk of significant fluctuations in interest rates that might cause employees to default on their repayments.				
The risk-adjusted credit exposure of EFC is calculated by applying a rating agency's annual default probabilities. The default probability for the unsecured portion of the EFC loan book (representing 10% of the loan book) is calculated at 27% (2010: 28%), while the secured portion of the loan book (90% of the loan book) is calculated at 0.10% (2010: 0.10%). Applying the combined default probability, the financial liability in respect of this guarantee is calculated for the company at R1 million (2010: R1 million). This amount has been included as a provision in Eskom in the current year, and is included in <i>other provisions</i> (refer to note 25).				
Changes in variables will not have a significant impact on profit or loss.				
The unprovided portion, disclosed as a contingent liability amounted to	-	-	480	286
Summary of financial guarantees				
Unprovided portion	155	187	635	473
Amounts provided in other provisions	1	1	2	2
Total financial guarantees	156	188	637	475
40.2 Other guarantees				
(a) Guarantees to SARS for customs duty				
Customs duty and import VAT are normally due upon declaration of imported goods at the port of entry (harbour or airport). The South African Revenue Service (SARS) allows Eskom up to a maximum of 37 days after declaration date before the customs duty and import VAT must be settled on the deferment account. SARS requires Eskom to provide a bank guarantee to secure the debt when it becomes due.				
All conditions of the deferral of the customs duty and import VAT have been met. The total amount disclosed as a contingent liability amounted to	183	183	183	183

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

	Group		Company	
	2011 Rm	2010 Rm	2011 Rm	2010 Rm
40. Guarantees and contingent liabilities <i>(continued)</i>				
40.2 Other guarantees <i>(continued)</i>				
(b) Eskom Pension and Provident Fund				
Eskom has indemnified the Eskom Pension and Provident Fund against any loss resulting from negligence, dishonesty or fraud by the fund's officers or trustees.				
(c) Eskom Enterprises performance bonds				
Eskom Enterprises (Pty) Limited has performance bonds totalling Rnil (2010: R43 million) with respect to various contracts. The probability of having to pay out in terms of the performance bonds is calculated after assessing the likelihood of meeting the contract deliverables. Probable future payments are then discounted and the amount raised as a liability.				
The project management processes in place confirm that all but one of the contracts should meet the project deliverables. As a result of this contractual dispute, the Rnil (2010: R27 million) performance bond for this contract has a high probability of being called up. The full amount has been raised as a provision in the current year and is included in <i>other provisions</i> (refer to note 25).				
Eskom Enterprises (Pty) Limited has not been required to make any previous performance bond payments.				
The total amount disclosed as a contingent liability amounted to	–	16	–	–
(d) Conflict of interest guarantee				
A subsidiary of Eskom Enterprises (Pty) Limited issued a conflict of interest guarantee to a customer, that restricts Eskom Enterprises from trading outside a specific area in Mali. There is currently no possibility of Eskom Enterprises trading outside the specified area. The total contingent liability amounts to	–	51	–	–
(e) Rental guarantees				
Some Eskom Enterprises group companies issued rental guarantees to various property owners to guarantee the rental on the properties they occupy. The guarantees have various dates of expiry. The total amount disclosed as a contingent liability amounted to	–	15	–	–
40.3 Other contingent liabilities				
(a) Legal claims				
Legal claims are in process against Eskom as a result of contractual disputes with various parties. On the basis of the evidence available it appears that no obligation is present. The claims are disclosed as a contingent liability and amounted to	350	71	337	152

	Group		Company	
	2011 Rm	2010 Rm	2011 Rm	2010 Rm
41. Commitments				
41.1 Capital expenditure				
Estimated capital expenditure	281 064	227 206	278 966	224 995
Contracted	102 881	113 061	102 848	112 520
Approved, not yet contracted for	178 183	114 145	176 118	112 475
The expenditure is expected to be incurred as follows:	281 064	227 206	278 966	224 995
Due within one year	78 972	65 594	78 421	64 489
Due between one and five years	182 145	159 005	180 728	157 899
Due after five years	19 947	2 607	19 817	2 607
This expenditure will be financed through shareholder support, debt (refer to funding strategy on page 83 for further information) and internally generated funds.				
41.2 Operating leases				
<i>Group as lessee</i>				
The future minimum lease payments payable under non-cancellable operating leases are:	237	199	164	182
Due within one year	117	95	97	87
Due between one and five years	109	103	67	94
Due after five years	11	1	–	1
<i>Group as lessor</i>				
The future minimum lease payments receivable under non-cancellable operating leases are:	124	589	124	589
Due within one year	63	59	63	59
Due between one and five years	61	261	61	261
Due after five years	–	269	–	269
41.3 Supply of water				
Eskom has entered into long-term agreements with the Department of Water Affairs to reimburse the department for the cost incurred in supplying water to Eskom. This cost is regarded as part of <i>primary energy</i> in profit or loss.				
41.4 Coal				
Eskom has entered into long-term agreements with suppliers for coal purchases. The annual cost of coal is regarded as part of <i>primary energy</i> in profit or loss.				

42. Related-party transactions

The group is 100% controlled by its shareholder, the government, represented by the Minister of Public Enterprises.

Eskom (and its subsidiaries) constitute a Schedule 2 public entity in terms of the Public Finance Management Act. The related-party disclosure is required in terms of IAS 24 *Related Party Disclosures* and the specific guidance given by the South African Institute of Chartered Accountants.

The related parties of Eskom consist mainly of government departments, state-owned enterprises, subsidiaries of Eskom and other public entities in the national sphere of government, as well as key management personnel of Eskom or its shareholder and close family members of these related parties. The list of public entities in the national sphere of government was provided by National Treasury on its website www.treasury.gov.za. It also provided the names of subsidiaries of public entities.

In addition, related parties comprise associates and joint ventures of the group and post-retirement benefit plans for the benefit of employees.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

	Note	Group		Company	
		2011 Rm	2010 Rm	2011 Rm	2010 Rm
42. Related-party transactions (continued)					
The following transactions were carried out with related parties:					
Sales of goods and services¹		5 123	3 452	5 820	4 237
Shareholder, including government departments		441	454	378	322
State-owned enterprises in the national government sphere		2 629	1 866	2 598	1 854
Eskom subsidiaries		–	–	792	929
Joint ventures in which Eskom is a partner		2 053	1 132	2 052	1 132
Government grant funding received for electrification					
Department of Energy	23	1 506	1 173	1 506	1 173
Purchases of goods and services²		2 362	2 145	7 768	9 500
Shareholder, including government departments		703	593	703	593
State-owned enterprises in the national government sphere		314	324	286	301
Eskom subsidiaries		–	–	5 519	7 449
Joint ventures in which Eskom is a partner		15	49	15	49
Eskom Pension and Provident Fund (contributions)	30	1 330	1 179	1 245	1 108
Finance income		589	262	795	428
Shareholder, including government departments		1	1	1	1
State-owned enterprises in the national government sphere		588	261	588	261
Eskom subsidiaries	36	–	–	206	166
Finance cost		6 845	6 319	6 964	6 494
Shareholder, including government departments		4 731	5 274	4 731	5 274
State-owned enterprises in the national government sphere		2 114	1 045	2 114	1 045
Eskom subsidiaries	37	–	–	119	175
Lease income		58	68	65	75
State-owned enterprises in the national government sphere		58	68	58	68
Eskom subsidiaries		–	–	7	7
Lease expenses		–	1	2	3
State-owned enterprises in the national government sphere		–	1	–	1
Eskom subsidiaries		–	–	2	2
Finance lease finance cost					
Eskom subsidiaries		–	–	61	45
Environmental levy					
South African Revenue Service		4 972	3 699	4 972	3 699
Receivables and amounts owed by related parties		7 283	4 959	7 363	5 395
Shareholder, including government departments		7 014	4 705	7 001	4 686
State-owned enterprises in the national government sphere		78	133	75	127
Eskom subsidiaries		–	–	96	461
Joint ventures in which Eskom is a partner		191	121	191	121
Allowance for impairment losses		–	171	–	170
Shareholder, including government departments		–	170	–	170
State-owned enterprises in the national government sphere		–	1	–	–

1. Goods and services are sold to related parties on an arm's length basis at market-related prices.

2. Goods and services are bought from related parties on an arm's length basis at market-related prices.

	Note	Group		Company	
		2011 Rm	2010 Rm	2011 Rm	2010 Rm
Guarantees received		350 006	175 975	350 006	175 975
Shareholder; including government departments		350 000	175 970	350 000	175 970
State-owned enterprises in the national government sphere ¹		6	5	6	5
Guarantees issued		339	371	819	657
Shareholder; including government departments	40.2	183	183	183	183
Eskom subsidiaries	40.1	–	–	480	286
Joint ventures in which Eskom is a partner	40.1	156	188	156	188
Payables and amounts owed to related parties²		61 507	40 828	62 611	42 520
Shareholder; including government departments		60 159	40 454	60 159	40 454
– Borrowings		159	454	159	454
– Subordinated loan from shareholder	13.6	60 000	40 000	60 000	40 000
State-owned enterprises in the national government sphere		1 305	370	1 303	370
Eskom subsidiaries		–	–	1 106	1 692
Eskom Pension and Provident Fund		43	4	43	4
Payments made in advance		–	–	117	–
Eskom subsidiaries		–	–	117	–
Payments received in advance		–	158	–	158
State-owned enterprises in the national government sphere		–	158	–	158
Indirect transactions – assets at nominal value		13 692	4 195	13 692	4 195
Government bonds		13 692	4 195	13 692	4 195
Indirect transactions – liabilities at nominal value		–	315	–	315
Short-sold government bonds		–	315	–	315
Loans to subsidiaries		–	–	3 806	2 461
Eskom subsidiaries	10	–	–	3 806	2 461
Debt securities issued³		34 499	21 875	34 499	21 875
State-owned enterprises in the national government sphere		34 499	21 875	34 499	21 875

43. Events after the reporting date

There were no significant events after the reporting date.

44. Restatement of comparatives and changes in accounting policies

The following restatements and reclassifications which had an impact on the financial statements, were made:

Eskom Energie Manantali (EEM)

During the current financial year, EEM signed a settlement agreement with SOGEM to resolve contractual difficulties in executing the contract. Under the settlement agreement, SOGEM will find a new operator for the concession, and EEM will exit the arrangement at the end of October 2011.

Based on the above, it is management's determination that the assets of EEM constitute non-current assets held-for-sale in terms of IFRS 5. Their operations have been classified as discontinued operations, and the comparatives in the income statement and statement of cash flows have been restated in terms of IFRS 5. IFRS 5 does not require the statement of financial position to be restated.

Reclassification of comparative figures

Comparative figures have been reclassified to enhance disclosure and to be consistent with restatements made at 30 September 2010. There was no impact on the statements of changes in equity.

The effect of the reclassification of comparative figures on the statements of financial position, statements of comprehensive income, statements of changes in equity and statements of cash flows is indicated below.

Statements of financial position at 31 March 2010

On the statements of financial position, the loan to Richards Bay Coal Terminal for the group and a deposit for the cross-border lease for the company were reclassified from *investments in securities* to *loans receivable*.

1. The guarantees from state-owned enterprises are for future or unpaid electricity consumption accounts.

2. Purchase transactions with related parties are at an arm's length basis with payment terms of 30 days from invoice date.

3. Bonds are bearer instruments and it is therefore unknown if the initial counterparty still holds the bonds.

Notes to the consolidated financial statements *continued*

for the year ended 31 March 2011

44. Restatement of comparatives and changes in accounting policies *(continued)*

	Group			Company		
	Previously reported Rm	Adjustments Rm	Restated Rm	Previously reported Rm	Adjustments Rm	Restated Rm
Statements of financial position at 31 March 2010						
Non-current assets	6 502	–	6 502	1 923	–	1 923
Investment in securities	2 392	(469)	1 923	1 923	–	1 923
Loans receivable	4 110	469	4 579	–	–	–
Current assets	2 803	–	2 803	1 584	–	1 584
Investment in securities	2 797	(649)	2 148	1 584	(549)	1 035
Loans receivable	6	649	655	–	549	549
Income statements for the year ended 31 March 2010						
Continuing operations						
Revenue	71 209	(79)	71 130	70 064	–	70 064
Primary energy	(29 100)	–	(29 100)	(29 100)	–	(29 100)
Employee benefit expense	(17 390)	2 696	(14 694)	(15 984)	2 659	(13 325)
Depreciation and amortisation	(5 726)	10	(5 716)	(5 953)	–	(5 953)
Net impairment loss	(652)	(8)	(660)	(654)	–	(654)
Other operating expenses	(8 148)	(2 501)	(10 649)	(10 022)	(2 659)	(12 681)
Operating profit before net fair value loss and net finance cost	10 193	118	10 311	8 351	–	8 351
Other income	557	(5)	552	1 589	–	1 589
Net fair value loss on financial instruments, excluding embedded derivatives	(5 945)	2	(5 943)	(6 097)	–	(6 097)
Net fair value gain on embedded derivatives	2 284	–	2 284	2 283	–	2 283
Operating profit before net finance cost	7 089	115	7 204	6 126	–	6 126
Net finance cost	(1 237)	3	(1 234)	(1 303)	–	(1 303)
Finance income	1 614	–	1 614	1 577	–	1 577
Finance cost	(2 851)	3	(2 848)	(2 880)	–	(2 880)
Share of profit of equity-accounted investees, net of tax	14	–	14	–	–	–
Profit before tax	5 866	118	5 984	4 823	–	4 823
Income tax	(2 080)	–	(2 080)	(1 636)	–	(1 636)
Profit for the year from continuing operations	3 786	118	3 904	3 187	–	3 187
Discontinued operations						
Profit for the year from discontinued operations	(166)	(118)	(284)	–	–	–
Profit for the year	3 620	–	3 620	3 187	–	3 187

Statements of comprehensive income for the year ended 31 March 2010

There have been no restatements to the statements of comprehensive income.

Statements of changes in equity for the year ended 31 March 2010

There have been no restatements to the statements of changes in equity.

	Group			Company		
	Previously reported Rm	Adjustments Rm	Restated Rm	Previously reported Rm	Adjustments Rm	Restated Rm
Statements of cash flows for the year ended 31 March 2010						
Cash flows from operating activities						
Cash generated from operations	18 416	(2 417)	15 999	17 604	(2 428)	15 176
Net cash flows from non-current assets held-for-sale	34	(111)	(77)	–	–	–
Cash flows from investing activities						
Acquisition of property, plant and equipment	(47 466)	3 282	(44 184)	(46 946)	3 282	(43 664)
Expenditure on future fuel supplies	(1 168)	41	(1 127)	(1 168)	41	(1 127)
Increase in deferred income	1 737	(1 444)	293	1 737	(1 444)	293
Increase in non-current loans receivable	(1 343)	(469)	(1 812)	–	–	–
Cash flows from financing activities						
Decrease in investment activities	2 806	1 118	3 924	3 051	549	3 600

45. Directors' remuneration¹

Eskom links management remuneration to the performance of the organisation and an individual's contribution. Market factors are also crucial as rewards and remuneration must be kept at levels that will assist us in retaining key leadership skills. Basic salary is augmented by short- and long-term incentives.

International and local benchmarks are considered to ensure executive packages are aligned with those offered by companies of similar stature to Eskom. We aim to remunerate in line with the median of the market to recruit and retain the best management team to lead our business.

The executive remuneration strategy is constantly reviewed to stay aligned with the Department of Public Enterprises remuneration guidelines and abreast with best practices.

People and governance committee

The people and governance committee helps the board to apply policy relating to the remuneration of directors and executives as set by the shareholder. The policy also covers the nomination of executives for senior positions and conditions of service.

The committee enhances business performance by:

- approving, guiding and influencing key human resources policies and strategies
- monitoring compliance with the Employment Equity Act
- guiding strategies to achieve equity in Eskom
- approving the principles governing reward and incentive schemes

Non-executive directors

Remuneration of non-executive directors is benchmarked against the norms for companies of similar size and is in line with guidelines issued by the shareholder. Remuneration proposals from the people and governance committee are forwarded to the board. The board then makes recommendations to the shareholder.

Non-executive directors receive a fixed monthly fee and are reimbursed for out-of-pocket expenses incurred in fulfilling their duties.

Executive management committee (Exco) members

The committee makes recommendations to the board concerning the remuneration of the chief executive, and approves the remuneration of the other Exco members. The remuneration is considered in accordance with a framework approved by the shareholder. The board recommendation on the remuneration of the chief executive has to be approved by the shareholder.

Factors influencing the remuneration of the Exco members include level of skill, experience, contribution to organisational performance and success of the group. Remuneration includes a basic package and short- and long-term incentives.

Every year, the people and governance committee reviews the structure of these packages to ensure an appropriate balance between fixed and variable remuneration and short- and long-term incentives and rewards.

The finance director, chief operating officers and divisional executives have permanent employment contracts based on Eskom's standard conditions of service. Six months' notice is required.

Guaranteed amount

They receive a guaranteed pay package with remuneration based on cost to company. This comprises a fixed cash portion and compulsory benefits (medical aid, life cover and pension). The guaranteed amount is reviewed annually to keep remuneration in line with the market.

1. Includes remuneration of Exco members (chief executive, finance director, chief operating officers and divisional executives) who are senior executives but not directors of Eskom.

45. Directors' remuneration *(continued)*

Remuneration structure

The remuneration of the Exco members includes the following components:

Short-term incentives

These reward the achievement of individual predetermined performance objectives and targets as set by the chief executive in performance contracts with each Exco member. The people and governance committee approves the targets set for the chief executive.

The short-term incentive scheme is calculated as a percentage of pensionable earnings.

Long-term incentives

These are designed to attract, retain and reward the Exco members for meeting the organisational objectives set by the shareholder. A market-benchmarked long-term incentive and deferred bonus scheme was approved effective from 1 April 2005.

Long-term incentive scheme

A number of performance shares (award performance shares) were awarded to the Exco members at 1 April 2007, 2008, 2009 and 2010. The 1 April 2009 and 1 April 2010 awards were retrospectively awarded on 31 May 2011.

The value of the performance shares is deemed to be R1 at grant date, and is escalated at a money-market rate to determine the value at reporting date.

The board has set performance conditions in line with the Eskom business plan and shareholder compact over a three-year performance period. Performance covers financial and non-financial targets in areas such as ensuring business sustainability of Eskom, ensuring reliability of supply to all South Africans, ensuring that future power needs for South Africa are adequately provided for and supporting the developmental objectives of South Africa, with an agreed weighting in each category.

Awards only vest if, and to the extent that, these targets are met. Potential vesting percentages range from 0% to 100%. A threshold and a stretch target are set for each measure, with an expected (on target) vesting of 50%.

Performance parameters are complemented by a set of gatekeeper conditions. If gatekeeper requirements are not met, the board at its discretion may adjust the vesting percentages even though targets have been met.

The following gatekeeper conditions trigger a review of vesting percentages:

- if the lost-time incident rate is greater than 0.45
- if the sustainability committee gives an unfavourable safety report
- if Eskom's audited annual financial statements show a financial loss
- if the auditors qualify Eskom's annual financial statements
- if a significant PFMA contravention occurs
- enhancement of Eskom's reputation

The vesting period for award performance shares is three years from the date of grant. At the end of that period, the people and governance committee decides the amounts to be paid in line with:

- the percentage of award performance shares that vest, based on the performance conditions achieved
- the value of the award performance shares based on the grant value, escalated at a money market rate

In addition to the performance conditions, vesting of award performance shares is dependent on the scheme participant remaining in Eskom's employment throughout the vesting period. The award lapses if employment ceases during the vesting period (other than for permitted reasons).

Deferred bonus scheme

Eskom offered bonus shares to the Exco members, non-Exco members and senior general managers participating in the scheme. Participants had the right to accept a certain number of bonus shares as a percentage of their annual bonus after tax. Eskom determined the value of the bonus shares at R1 escalated at a money market rate over the three-year performance period. Participants then receive a matching amount equal to the value of the bonus shares at the end of the performance period in addition to the value of the accepted bonus shares.

If employment ceases (other than for permitted reasons) during the performance period, only the value (without any matching award) of the bonus shares which were originally accepted by the participant will be paid. Payment is made on termination of employment.

Share awards – vested

Award performance shares awarded on 1 April 2008 vested on 31 March 2011 with an expected vesting rate, due to achievement of non-financial performance conditions over the three year period of 47.32%. The cash value of the vested shares is payable in June 2011 at R1.29 per share based on the money market rate.

Deferred bonus shares taken up on 1 April 2008 have become fully vested and have qualified for the one-for-one share match on 31 March 2011 in terms of the scheme. These shares are valued at R1.29 per share. The remuneration value of the bonus shares therefore adds up to R0.29 per share (related to the interest earned at a money market rate) plus R1.29 per share related to the matching share.

Shares vested on 31 March 2011:

Name	Award performance shares vested on 31 March 2011	Award performance shares vested on 31 March 2011 at a rate of 47.32%	Award performance shares payable at R1.29 per share	Deferred bonus shares vested on 31 March 2011	Deferred bonus shares at R1.58 per share
	Number	Number	R	Number	R
BA Dames	2 122 050	1 004 154	1 295 359	–	–
EL Johnson	1 642 200	777 089	1 002 445	–	–
SJ Lennon	1 715 834	811 933	1 047 394	150 000	237 000
Other ¹	12 514 542	5 921 881	7 639 227	339 007	535 631

Share awards – vesting

The current estimated vesting values of the award performance shares are R1.21 per share for the 1 April 2009 awards (vesting 31 March 2012) and R1.23 for the 1 April 2010 awards (vesting 31 March 2013). The value of the performance shares allocated does not take into account the impact of performance conditions over the applicable three-year performance periods. The respective values estimated for the 2009 and 2010 bonus shares are R1.21 and R1.23 per share respectively. The vesting percentage of 47.57% and 50.00% for the 2009 and 2010 bonus shares, respectively, are estimates.

Award performance shares and deferred bonus shares to be awarded as at 1 April 2009 and 1 April 2010 were deferred pending the outcome of an investigation into the remuneration policy of state-owned enterprises by the Department of Public Enterprises. The board awarded the 1 April 2009 and 1 April 2010 awards retrospectively on 31 May 2011.

Shares awarded on 1 April 2009

Name	Outstanding award performance shares vesting on 31 March 2012	Award performance shares vesting on 31 March 2012 at a rate of 47.57%	Award performance shares payable in June 2012 at R1.21 per share
	Number	Number	R
BA Dames	2 854 959	1 358 104	1 643 306
EL Johnson	2 477 147	1 178 379	1 425 839
SJ Lennon	1 999 876	951 341	1 151 122
BE Bulunga	311 850	148 347	179 500
DL Marokane	537 600	255 736	309 440
PS O'Flaherty	693 000	329 660	398 889
Other ¹	17 044 784	8 108 204	9 810 927

Shares awarded on 1 April 2010:

Name	Outstanding award performance shares vesting on 31 March 2013	Award performance shares vesting on 31 March 2013 at a rate of 50.00%	Award performance shares payable in June 2013 at R1.23 per share
	Number	Number	R
BA Dames	3 330 786	1 665 393	2 048 433
EL Johnson	2 064 290	1 032 145	1 269 538
SJ Lennon	1 333 251	666 625	819 949
BE Bulunga	1 247 400	623 700	767 151
DL Marokane	2 150 400	1 075 200	1 322 496
PS O'Flaherty	2 772 000	1 386 000	1 704 780
CAK Choeru	1 166 667	583 333	717 500
Other ¹	16 398 443	8 199 221	10 085 042

1. Non-Exco F-Band employees.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

45. Directors' remuneration *(continued)*

The details of the schemes are:

	Long-term incentive plan ²	Deferred bonus plan ³	Long-term incentive plan ²	Deferred bonus plan ³
Date of grant	1 April 2010	1 April 2010	1 April 2009	1 April 2009
Number of shares awarded	30 463 237	TBD	25 919 216	TBD
Contractual life	3 years	3 years	3 years	3 years
Vesting conditions	Variable vesting depending on the achievement of performance conditions	Three-year service period	Variable vesting depending on the achievement of performance conditions	Three-year service period
Method of settlement	Cash	Cash	Cash	Cash
Expected attrition of employee (%)	–	–	–	–
Expected outcome of performance conditions (%)	50.00	Not applicable	47.57	Not applicable

Reconciliation of performance share movements	Long-term incentive plan 2011 Number	Deferred bonus plan 2011 Number	Long-term incentive plan 2010 Number	Deferred bonus plan 2010 Number
Number of performance shares				
Outstanding at beginning of the year	31 516 360	952 142	56 260 002	1 192 508
Granted during the year	–	–	–	647 449
Forfeited during the year	(963 286)	(158 442)	(12 264 771)	–
Settled during the year	(12 558 448)	(304 693)	(12 478 871)	(887 815)
Outstanding at end of the year	17 994 626	489 007	31 516 360	952 142
Carrying amount of liability (R'000)	10 984	768	9 307	1 144
Intrinsic value of liabilities relating to vested rights (R'000)	10 984	768	9 307	1 144

Share awards – vested and paid

Shares awarded on 1 April 2007 and redeemed during the year are:

Name	Award performance shares redeemed in June 2010 R'000	Deferred bonus shares redeemed in June 2010 R'000	2011 Total ⁴ R'000	2010 Total R'000
BA Dames	821	–	821	756
EL Johnson	495	159	654	–
SJ Lennon	665	–	665	1 000
PJ Maroga	–	–	–	1 057
Other ¹	3 240	353	3 593	5 322
	5 221	512	5 733	8 135

Details of emoluments paid

The following schedule sets out the emoluments due to the directors of Eskom for the current year:

Name	Salaries/ fees ⁵	Short- term bonus ⁶	Long- term bonus ⁴ payment	Other payments ⁷	Total 2011	Total 2010
	R'000	R'000	R'000	R'000	R'000	R'000
Non-executive directors						
PM Makwana ⁸	2 478	–	–	148	2 626	1 366
R Godsell ⁹	–	–	–	–	–	982
LC Cele	478	–	–	–	478	478
D Dube	462	–	–	–	462	398
BL Fanaroff ¹⁰	398	–	–	–	398	–
LG Josefsson	491	–	–	–	491	542
HB Lee	313	–	–	–	313	313
WVB Lucas-Bull	449	–	–	–	449	449
GB Mehlomakulu ¹⁰	374	–	–	–	374	–
J Mirenge	427	–	–	–	427	427
JR Modise	495	–	–	–	495	495
AH Morgan ¹¹	–	–	–	–	–	535
U Zikalala	484	–	–	–	484	449
Executive directors						
BA Dames ¹²	3 399	1 309	821	212	5 741	5 690
PJ Maroga ¹³	–	–	–	–	–	4 767
PS O'Flaherty ¹⁴	3 512	1 407	–	67	4 986	1 114
Total directors	13 760	2 716	821	427	17 724	18 005
Exco members						
BE Bulunga	2 228	748	–	64	3 040	501
CAK Choeu ¹⁵	1 742	714	–	32	2 488	–
EL Johnson	3 060	1 097	654	27	4 838	4 615
SJ Lennon	2 381	816	665	76	3 938	3 707
DL Marokane ¹⁶	2 816	1 100	–	239	4 155	–
Total divisional executives	12 227	4 475	1 319	438	18 459	8 823

1. Non-Exco F-Band members.

2. Award performance shares to be awarded effective 1 April 2009 and 2010 were awarded on 31 May 2011.

3. As per the deferred bonus scheme rules, members are required to elect participation. As the short-term bonuses were only approved on 31 May 2011, this election has not yet taken place.

4. Long-term incentive bonus scheme and deferred bonus scheme – Grant 3, which vested on 31 March 2010, was paid in June 2010.

5. Includes medical aid and pension fund contributions.

6. Short-term incentive bonus awarded for the 2011 financial year.

7. Fees related to security services and operating vehicle expenditure.

8. Appointed as chairman in June 2010 (appointed acting chairman/chief executive in November 2009).

9. Resigned as chairman of the board in November 2009.

10. Appointed to the board in April 2010.

11. Resigned from the board in March 2010.

12. Appointed as chief executive in June 2010.

13. Resigned as chief executive and member of the board in October 2009.

14. This director was paid a two-year retention bonus of R1.3 million. Should the director leave the company in the year ending 31 December 2011, half of the bonus is repayable to the company.

15. Appointed as divisional executive corporate affairs in June 2010.

16. Appointed as divisional executive primary energy in January 2010 and as chief commercial officer in September 2010.

Notes to the consolidated financial statements continued

for the year ended 31 March 2011

45. Directors' remuneration (continued)

	2011 R'000	2010 R'000
<i>Housing loans to Exco members at 31 March</i>		
BA Dames	3 162	3 231
EL Johnson	–	542
DL Marokane	4 790	–
	7 952	3 773
<p>The interest rate on loans from Eskom Finance Company (Pty) Limited at 31 March 2011 was 7.25% (31 March 2010: 8.5%). The loans are repayable over a maximum period of 30 years.¹</p> <p>The following board and Exco members were directors of Eskom directly held subsidiary companies. Fees paid for attendance of meetings were all paid to Eskom Holdings.</p> <p><i>Eskom Enterprises (Pty) Limited²</i></p> <p>BA Dames³</p> <p>SJ Lennon</p> <p>PS O'Flaherty⁴</p> <p>EL Johnson</p> <p>DL Marokane⁴</p> <p><i>Escap Limited⁵</i></p> <p>PS O'Flaherty</p>		
	–	–
	–	–
	–	–
	–	–
	–	–
	40	10

1. On resignation the terms and conditions of the loan are renegotiated.

2. Paid by Eskom.

3. Appointed as chairman in July 2010.

4. Appointed to the board in July 2010.

5. Fees paid to Eskom.

46. Pro forma revaluation of property, plant and equipment (unaudited)

The group currently accounts for its property, plant and equipment using the cost model under IAS 16 *Property, plant and equipment*. The cost model requires that property, plant and equipment should be measured at cost (including borrowing cost in respect of qualifying assets), less accumulated depreciation and impairment. However, the cost model does not reflect the true economic value of the group's property, plant and equipment and the basis on which our tariff is calculated by the Regulator. Therefore, a summary has been provided below reflecting what the impact on the financial statements would be if the group's property, plant and equipment was measured using the depreciated replacement cost (DRC) model. Borrowing costs were not included in the carrying amount of property, plant and equipment when determining the increase or decrease in the revaluation surplus and have therefore been expensed. The fair values determined using the DRC model were reviewed for possible impairment loss in order to determine whether or not the net future cash inflows related to the use of property, plant and equipment are less than the calculated fair value of property, plant and equipment. The fair values disclosed below are net of the adjustment made for the tariff shortfall in the first few years. This shortfall is expected to disappear once the electricity tariff determined in terms of the regulatory methodology, which is based on the depreciated replacement values, is fully phased in by the National Energy Regulator of South Africa (NERSA).

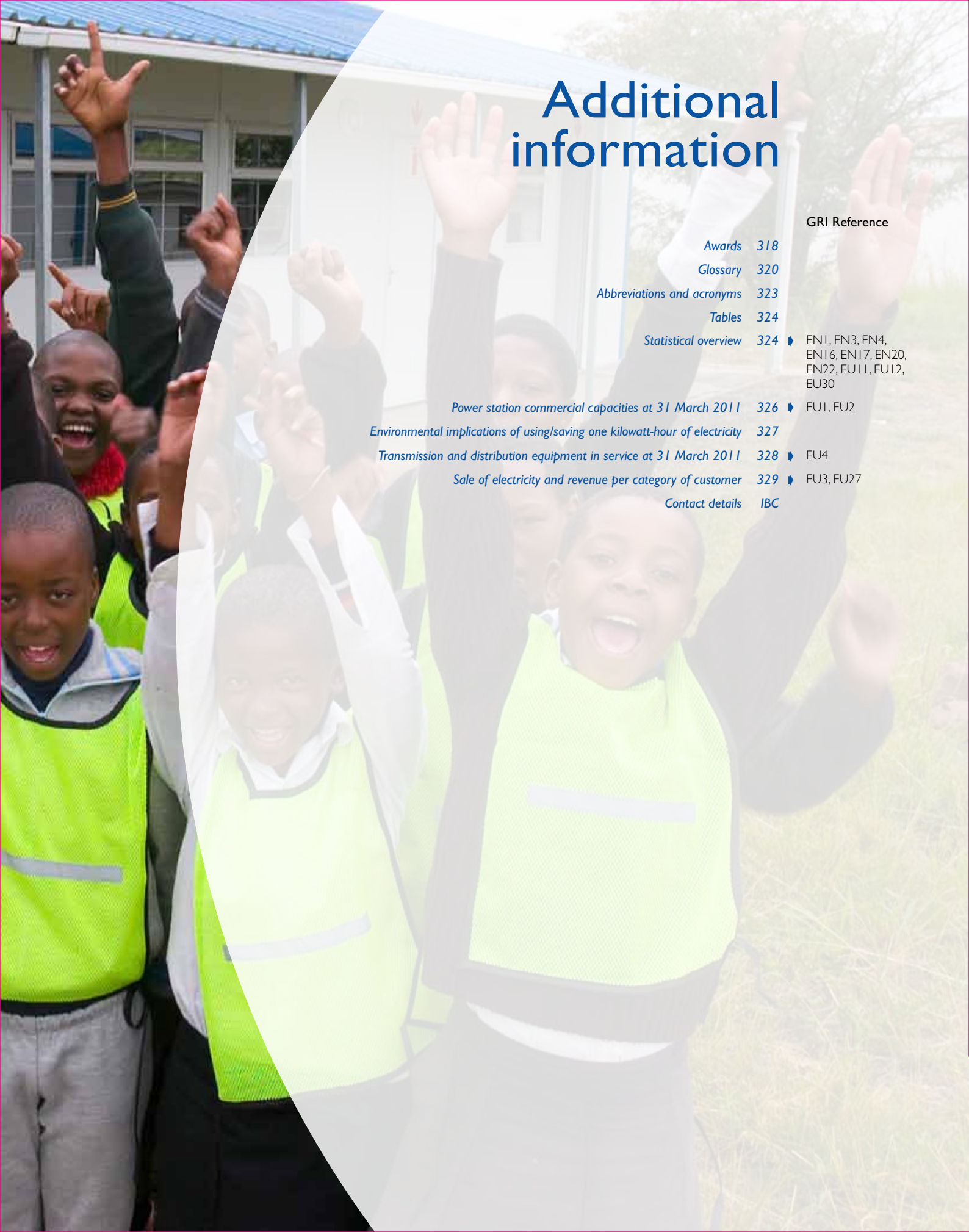
	Historical cost 2011 Rm	Adjustment 2011 Rm	After revaluation 2011 Rm	Historical cost 2010 Rm	Adjustment 2010 Rm	After revaluation 2010 Rm
Summarised group statements of financial position at 31 March 2011						
Assets	328 145	297 410	625 555	246 135	287 047	533 182
Property, plant and equipment	236 724	283 708	520 432	187 905	280 521	468 426
Deferred tax	59	13 702	13 761	79	6 526	6 605
Other assets	91 362	–	91 362	58 151	–	58 151
Equity and liabilities	328 145	297 410	625 555	246 135	287 047	533 182
Total equity	87 259	204 270	291 529	70 222	201 975	272 197
Deferred tax	7 931	93 140	101 071	5 262	85 072	90 334
Other liabilities	232 955	–	232 955	170 651	–	170 651
Summarised group income statements for the year ended 31 March 2011						
Operating profit before depreciation and amortisation expense, net impairment loss and other operating expenses	34 592	–	34 592	24 229	–	24 229
Depreciation and amortisation expense	(7 219)	(16 898)	(24 117)	(5 716)	(14 998)	(20 714)
Net impairment loss	(788)	114	(674)	(660)	48	(612)
Other operating expenses	(12 070)	(141)	(12 211)	(10 649)	(76)	(10 725)
Operating profit/(loss) before net finance cost	14 515	(16 925)	(2 410)	7 204	(15 026)	(7 822)
Net finance cost	(2 866)	(8 589)	(11 455)	(1 234)	(8 234)	(9 468)
Share of profit of equity-accounted investees, net of tax	24	–	24	14	–	14
Profit/(loss) before tax	11 673	(25 514)	(13 841)	5 984	(23 260)	(17 276)
Income tax	(3 261)	7 144	3 883	(2 080)	6 513	4 433
Profit/(loss) for the year from continuing operations	8 412	(18 370)	(9 958)	3 904	(16 747)	(12 843)
Loss for the year from discontinued operations	(56)	–	(56)	(284)	–	(284)
Profit/(loss) for the year	8 356	(18 370)	(10 014)	3 620	(16 747)	(13 127)



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Eskom ranks third in Ernst & Young's: Excellence in Sustainability Reporting Awards 2010

Eskom was named one of the top five companies in the Ernst & Young's Excellence in Sustainability Reporting Awards 2010. Eskom came in third place, after the Bidvest Group (1) and Sasol (2), as one of the companies that give progressively higher levels of meaningful disclosures in their concept of sustainability reporting.



Photo: Lindie Engelbrecht (Director for Climate Change and Sustainability Services at Ernst & Young), Dave Lucas (Corporate Specialist Environmental Management – Eskom) and Professor Ben Marx (Adjudicator – University of Johannesburg)

Lindie Engelbrecht, Director for Climate Change and Sustainability Services at Ernst & Young, said that it was good to see companies in other industries, apart from resources, are taking sustainability reporting seriously. *"It is particularly gratifying to note that we have a parastatal in the top five rankings. In the sustainability report Eskom was able to show a real understanding of sustainability aspects and how these impact on the business: there was excellent stakeholder engagement and good use of the GRI linkages and website reporting. Eskom was also one of the few public sector companies that obtained assurance over the sustainability report."*

Eskom was also a category winner for best sustainable reporting in the Chartered Secretaries' Annual Report Awards.

Eskom wins Top500: South Africa's Best Managed Companies Award in the Parastatal category

Eskom was announced the winner of the Top500: South Africa's Best Managed Companies in the parastatal category. The awards ceremony was held on Tuesday, 30 November 2010 at the Wanderers Club.

The awards bring together the sector winners from 100 leading business sectors to celebrate the best of the best in South African Business. The awards were then judged according to strict criteria for all 14 categories where one company within each category emerged as the leader.

"Business success is about creativity, seizing opportunities and being one step ahead of your competitors. All winners represent companies

that are smart enough to have the right to be called a Top500 company that truly signifies your status" said Richard Fletcher, publisher of Top500: South Africa's Best Managed Companies.

Eskom remains No 1 Most Ideal Employer in Engineering – 2010 Magnet Communication Awards

Eskom has, once again, been voted the No 1 Most Ideal Employer in Engineering by South African third year students. Bongsi Ntuli, Student Development Manager, accepted the award on behalf of Eskom at the Magnet Communication Award Ceremony which was held at Sandton, on Thursday, 2 December 2010.

More than 38 000 students took part in the annual Magnet Communications Student Survey in 2010. Once again, Eskom has held onto the position of the most desirable company to work for in South Africa, according to engineering students nationwide. Eskom, with a holistic approach of developing engineering skills, has again proved popular among the younger generation. The organisation has achieved this through its programmes that encourage female learners to study mathematics and science and those that develop female engineers within the organisation. Eskom is followed by Sasol in second place with mining giant Anglo Platinum being in third place, as ranked by engineering students at all 23 universities in South Africa.

The preferred employers in each sector:

Engineering:

1. Eskom
2. Sasol
3. Anglo Platinum

Business/Commerce:

1. KPMG
2. Absa
3. South African Reserve Bank (SARB)

Humanities/Liberal Arts/Law:

1. Department of Education
2. SABC
3. United Nations

Health Care/Health Sciences/Sciences:

1. Department of Health
2. CSIR
3. National Health Laboratory Service (NHLS)

The Magnet Communication Student Survey is independent and the company listing of 130 companies is generated by the students themselves. As companies continue to compete for scarce skills and develop recruitment strategies to appeal to fresh graduates, the survey gives employers an indication of the effectiveness of their recruitment strategies and the values which will also retain talent.

EPRI Generation 2010 Technology Transfer Award

EPRI annually recognises generation industry professionals who have led technology transfer efforts on behalf of their companies and the industry at large. This commitment to technical excellence and collaboration demonstrated is what enables the generation industry to drive continuous performance improvement.

After a rigorous review process, 12 Technology Transfer awards were selected, recognising 35 recipients across 10 member companies worldwide. Michael Barry, Callie Fabricius and Chris Gross were selected for the 2010 EPRI Generation Technology Transfer Award, given annually to EPRI members who have led technology transfer efforts on behalf of their companies and the industry at large.

Eskom used the Technical Assessment Guide (TAG) as a key reference document as input into the South Africa Integrated Resource Plan. With greater emphasis on renewable energy, it is essential to be able to develop a robust strategic plan for future generation technology built on an objective and high-quality knowledge base that will stand up to scrutiny.

International Renowned 2010 Claude De Tourreil Memorial Award Lifetime Achievement

Dr Wallace Vosloo from Sustainability and Innovation – Power System and Engineering (Insulator section) received the internationally renowned 2010 Claude de Tourreil Memorial Award Lifetime Achievement in the field of Electrical Insulators.

This award is given by *INMR*, the world's leading technical journal in the field of electrical insulators, surge arresters, bushings and related components.

Dr Vosloo has attended international conferences and has put his name to over 100 papers on topics related directly to the field of high-voltage insulators. He has co-authored two books and participated in the development of various products to assist insulator research and investigation. His latest development – an insulator pollution monitoring relay – has been patented and he has also supported research in an improved multi-spectrum camera for insulator diagnosis. His work in the pollution performance of insulators at the Koeberg Insulator Pollution Test Station (KIPTS) has become world famous.

Glossary

Base-load plant	Base-load power stations, largely coal-fired and nuclear, are designed to operate continuously
Clawback	The actual over-recovery against that allowed by NERSA in the multi-year price determination or even under-recovery whereby Eskom will claw back
Combined cycle	A technology for producing electricity from otherwise lost waste heat as it exits from one or more gas (combustion) turbines
Daily peak	The maximum amount of energy demanded in one day by electricity consumers
Decommissioning	Removing a facility (eg a reactor) from service, and subsequent actions of safe storage, dismantling and making the site available for unrestricted use
Demand-side management (DSM)	Planning, implementing and monitoring activities to encourage consumers to use electricity more efficiently, including both the timing and level of electricity demand
Embedded derivative	A financial instrument that causes some or all cash flows that would otherwise be required by a contract to be modified according to a specified variable such as a currency
Energy availability factor (EAF)	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 the services provided
Eskom sustainability performance index (ESPI)	Index covering technical, economic, environmental and social measures to score sustainable performance
Flashover	Electrical insulation breakdown
Forced outage	Shutdown of a generating unit, transmission line or other facility for emergency reasons or a condition in which generating equipment is unavailable for load due to unanticipated breakdown
Free basic electricity (FBE)	Amount of electricity deemed sufficient to provide basic electricity services to a poor household
Human resources sustainability index (HRSI)	A measure of Eskom's ability to achieve its human resources objectives
Independent non-executive director	A non-executive director who is not a full-time salaried employee of the company or its subsidiary: <ul style="list-style-type: none"> • Is not the representative of a shareholder • 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 • Is not a professional advisor to the company • Is not a significant supplier to, or customer of, the company
International financial reporting standards (IFRS)	Global accounting standards that require transparent and comparable information in general purpose financial statements issued by the International Accounting Standards Board
Independent power producer (IPP)	Any entity, other than Eskom, that owns or operates, in whole or in part, one or more independent power production facilities
Interruptible load	Load that can be interrupted in the event of capacity or energy deficiencies on the supply system
Interruptible power	Power whose delivery can be curtailed by the supplier, usually in agreement between Eskom and the customer
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 equals 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 electrical energy so demand conforms to the present supply situation, long-term objectives and constraints
Load profile	Information on a customer's electricity use over time, sometimes shown as a graph
Load shifting	The transfer of loads from peak to off-peak periods; eg in situations where a utility does not expect to meet demand during peak periods but has excess capacity in off-peak periods

Load shedding	Scheduled and controlled power cuts by rotating available capacity between all customers when demand is greater than supply to avoid total blackouts in the supply area
Lost-time incident rate	A proportional representation of the occurrence of lost-time injuries over 12 months
Maximum demand	Highest demand of load within a specified period
Megawatt	One million watts
Megawatt-hour (MWh)	One thousand kilowatt-hours or one million watt-hours
Mid-merit power generation	Installations that generate electricity when electricity demand is higher than average
Mothballed	Plant (ie power stations) placed in long-term storage
Non-technical losses	The difference between total losses and technical losses is referred to as non-technical losses.
Outage	The period in which a generating unit, transmission line, or other facility is out of service
Off-peak	Period of relatively low system demand
Peak demand	Maximum power used in a given period, traditionally between 07:00 – 10:00 and 18:00 – 21:00
Peaking capacity	Generating equipment normally operated only during hours of highest daily, weekly or seasonal loads
Peak-load plant	Usually gas turbines or a pumped-storage scheme used during peak-load periods
Power pool	An association of two or more interconnected electricity supply systems that agree to co-ordinate operations and seek improved reliability and efficiencies
Primary energy	Energy embodied in natural resources (eg coal, liquid fuels, sunlight, wind, uranium)
Pumped-storage scheme	A pumped-storage scheme consists of 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 is allowed to run back into the lower reservoir through the turbines thereby generating electricity
Reserve margin	Difference between net system capability and the system's maximum load requirements (peak load or peak demand)
Spent fuel	Nuclear fuel that has been irradiated in, and permanently removed from, a nuclear reactor. At Koeberg power station approximately 52 fuel assemblies (one third of the fuel assemblies) are removed from each of the two reactors on average every 16 months, and stored on site in the spent fuel pools in the respective fuel buildings next to the respective reactors
Supply-side management (SSM)	Planning, implementing and monitoring supply-side activities to create opportunities for cost-effective purchase, management, generation, transmission and distribution of electricity and all other associated activities
System minutes	The international 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
Technical losses	Technical losses are the naturally occurring losses that depend on the power systems used
Unplanned automatic grid separations (UAGS)	A measure of the reliability of the service provided to the electrical grid that logs the number of supply interruptions per operating period
Unit capability factor (UCF)	A measure of power station availability indicating how well plant is operated and maintained
Unplanned capability loss factor (UCLF)	All occasions when a power station unit has to be 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

Energy terms

Units of power

Power is generated per unit of time

Power is expressed in watts (W)

1kW (kilowatt) = 1 000W

1MW (megawatt) = 1 000kW

1GW (gigawatt) = 1 000 000kW or 1 000MW

Voltage

1kV (kilovolt) = 1 000V

Presentation currency

R1 million = R1 000 000

R1 billion = R1 000 000 000

Definitions of ratios

Arrear debts as a percentage of revenue: total arrear debts/total revenue multiplied by 100.

Debt:equity including long-term provisions: net financial assets and liabilities plus non-current retirement benefit obligations and non-current provisions divided by total equity.

Debt service cover ratio: cash generated from operations/(net interest paid plus debt repaid excluding repayments on commercial paper).

EBIT: earnings before interest and tax (before profit/loss on embedded derivatives).

EBITDA: Earnings before interest, tax, depreciation and amortisation.

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.

Funds from operations (FFO): cash generated from operations adjusted for working capital (excluding provisions) and net interest paid/received, dividends received and non-current assets held for risk management.

Funds from operations (FFO) as a percentage of gross debt: funds from operations/gross debt multiplied by 100.

Units of energy

Energy is power multiplied by time

1kWh (kilowatt hour) = 1kW expended over one hour

1MWh (megawatt hour) = 1 000kWh

1GWh (gigawatt hour) = 1 000 000kWh or 1 000MWh

Gross debt: debt securities issued, borrowings, finance lease liabilities and financial trading liabilities plus the after-tax effect of retirement benefit obligations and provisions for power station-related environmental restoration and mine-related closures.

Gross debt/EBITDA: gross debt/earnings before interest, tax, depreciation and amortisation.

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).

Return on average equity: profit/loss for the year after tax/average total equity.

Return on average total assets: profit/loss for the year after tax/average total assets.

Value created per employee: value created divided by number of employees.

Working capital ratio: (total current assets, less financial instruments with group companies, less investments in securities, less embedded derivative assets, less derivatives held for risk management, less financial trading assets, less cash and cash equivalents)/(total current liabilities, less financial instruments with group companies, less debt securities issued, less borrowings, less embedded derivative liabilities, less derivatives held for risk management, less financial trading liabilities).

Abbreviations and acronyms

BEE	Black economic empowerment, legislated in South Africa	MFMA	Municipal Finance Management Act
B-BBEE	under the Preferential Procurement Policy Framework Act (5 of 2000) and Broad-based Black Economic Empowerment Act (53 of 2003)	MMI	Monthly moving index
Besa	Bond Exchange of South Africa	MW	Megawatt
BWO	Black women-owned businesses	MWh	Megawatt-hour (1 000kWh)
C&I	Control and instrumentation	ML	Megalitre (1 000 000 litres)
CDM	Clean development mechanism	mSv	Millisievert
CFL	Compact fluorescent lamps	Mt	Mega tons
CO ₂	Carbon dioxide	MVA	Mega volt ampere
CPI	Consumer price index	MYPD	Multi-year price determination
CSDP	Competitive Supplier Development Programme	NEEA	National Energy Efficiency Agency
CSI	Corporate social investment	NECSA	Nuclear Energy Corporation of South Africa (RSA)
CSP	Concentrating solar plant	NERSA	National Energy Regulator of South Africa (RSA)
CV	Calorific value	NEMA	National Environmental Management Act
DEA	Department of Environmental Affairs	NGO	Non-governmental organisation
DoE	Department of Energy (RSA)	NGP	New growth path
DMP	Demand market participation	NNR	National Nuclear Regulator (RSA)
DPLG	Department of Provincial and Local Government	NO ₂	Nitrogen dioxide
DPE	Department of Public Enterprises (RSA)	NO _x	Nitrogen oxide
DSLII	Distribution supply loss index	N ₂ O	Nitrous oxide
DWA	Department of Water Affairs	OCGT	Open-cycle gas turbine
EAF	Energy Availability Factor – the ratio of the available energy generation over a given time period to the reference energy generation over the same time period	OCLF	Other capability loss factor – unplanned losses not under management control, ie weather
EAL	Eskom Academy of Learning	OEM	Original equipment manufacturer
EAP	Economically active population	OHSA	Occupational Health and Safety Act
EBITDA	Earnings before interest, tax, depreciation and amortisation	OMS	Outage management system
ECS	Energy conservation scheme	PCB	Polychlorinated biphenyls
EDI	Electricity distribution industry, currently being restructured in RSA	PBMR	Pebble bed modular reactor
EFC	Eskom Finance Company	PCP	Power conservation programme
EIA	Environmental impact assessment	PCLF	Planned capability loss factor – ratio of the energy not produced over a given time period, due to planned shutdowns, to the maximum amount of energy which could be produced over the same time period
EMPs	Environmental management plans	PFMA	Public Finance Management Act (RSA)
EMS	Environmental management system	RED	Regional electricity distributor
EWT	Endangered Wildlife Trust	RSLI	Reticulation supply loss index
Exco	Eskom executive management committee	SADC	Southern African Development Community
FBE	Free basic electricity of 50kWh/month to assist low-income households (RSA)	SAIDI	System average interruption duration index
FGD	Flue gas desulphurisation	SAIFI	System average interruption frequency index
FPM	Fine particulate matter	SAPP	Southern African Power Pool
GDP	Gross domestic product	SHEQ	Safety, health, environment and quality
GHG	Greenhouse gas	SMME	Small, medium and micro enterprises
GPS	Global positioning system	SME	Small and medium enterprises
GWh	Gigawatt hour (1 000MWh)	SOE	State-owned enterprise
HRSI	Human resources sustainability index	SO ₂	Sulphur dioxide
HVAC	Heating, ventilation and air conditioning optimisation	SO ₃	Sulphur trioxide
HVDC	High-voltage direct current	Sm ³	Standard cubic metre
IFRS	International Financial Reporting Standards	TOU	Time-of-use (tariff)
Inep	Integrated national electrification programme	UCF	Unit capability factor
INPO	Institute of Nuclear Power Operations (USA)	UCG	Underground coal gasification
IPCC	Intergovernmental Panel on Climate Change	UCLF	Unplanned capability loss factor – ratio of the unplanned energy losses over a given time period to the maximum amount of energy which could be produced over the same time period
IPP	Independent power producer	ULM	Utility load manager
IRM	Integrated risk management	UN	United Nations
KPI	Key performance indicator	UNFCCC	United Nations Framework Convention on Climate Change
kt	kilotons (1 000 tons)	VAT	Value added tax (RSA)
kWh	kilowatt-hour	VCT	Voluntary counselling and testing (HIV/Aids RSA)
kWh SO	kilowatt-hour sent out	WANO	World Association of Nuclear Operators
LME	London Metals Exchange	WBCCSD	World Business Council for Sustainable Development
LTIR	Lost-time incidence rate	ZLED	Zero liquid effluent discharge
m ³	Cubic metres		

I. Statistical overview

	2011	2010	2009	2008	2007
Sales					
Total sold (GWh) ^{1,2}	224 446	218 591	214 850	224 366	218 120
Growth/(reduction) in GWh sales (%)	2.7	1.7	(4.2)	2.9	4.9
Electricity output					
Total produced by Eskom stations (GWh (net))	237 430	232 812	228 944	239 109	232 445
Coal-fired stations (GWh (net))	220 219	215 940	211 941	222 908	215 211
Hydro-electric stations (GWh (net))	1 960	1 274	1 082	751	2 443
Pumped storage stations (GWh (net))	2 953	2 742	2 772	2 979	2 947
Gas turbine stations (GWh (net))	197	49	143	1 153	62
Wind energy (GWh (net))	2	1	2	1	2
Nuclear power station (GWh (net))	12 099	12 806	13 004	11 317	11 780
Total purchased for Eskom system (GWh)	15 446	13 754	12 189	11 510	11 483
Total electricity for Eskom system (Eskom stations and purchased) (GWh) ⁴	252 876	246 566	241 133	250 619	243 928
Total consumed by Eskom (GWh) ⁵	3 962	3 695	3 816	4 136	3 937
Total available for distribution (GWh) ²	248 914	242 871	237 317	246 483	239 991
Plant performance indicators					
Total power station nominal capacity (MW)	44 145	44 175	44 193	43 037	42 618
Total power station net maximum capacity (MW)	41 194	40 870	40 506	38 747	37 761
Peak demand on integrated Eskom system (MW)	36 664	35 850	35 959	36 513	34 807
Peak demand on integrated Eskom system, including load reductions (MW)	36 970	35 912	36 227	37 158	35 441
Reserve margin (including imports) (%)	14.9	16.4	10.6	5.6	7.8
Average energy availability – EAF (UCF) (%) ⁶	84.6 (85.9)	85.2 (85.9)	85.3 (86.1)	84.8 (86.2)	87.5 (88.6)
Generation load factor (%) ⁸	66.4	66.2	67.0	72.3	72.4
Integrated Eskom system load factor (EUF) (%)	78.5	77.7	78.6	85.2	82.7
Environmental indicators					
Specific water consumption (L/kWh sent out) ⁹	1.35^{RA}	1.34 ^{RA}	1.35 ^{RA}	1.32	1.35
Significant legal contraventions reported (number) ¹⁰	4	0	12	6	0
Customer satisfaction (Enhanced PreCare/MaxiCare) (ratio) ¹¹	98.20	99.65	99.84	97.21	100.80
Net raw water consumption (ML)	327 252	316 202	323 190	322 666	313 064
Liquid fuels (diesel and kerosene) (ML)	63.6^{RA}	16.1 ^{RA}	28.9 ^{LA}	345.9	11.3
Coal burnt (Mt)	124.7	122.7	121.2	125.3	119.1
Average calorific value (MJ/kg)	19.45	19.22	19.10	18.51	19.06
Average ash content (%)	29.03	29.56	29.70	29.09	29.70
Average sulphur content (%)	0.78	0.81	0.83	0.87	0.86
Overall thermal efficiency (%)	32.6	33.1	33.4	33.4	33.9
Line losses (%)	8.3	8.5	7.9	8.0	8.4
Nitrous oxide (N ₂ O) (t) ¹²	2 906	2 825	2 801	2 872	2 730
Carbon dioxide (CO ₂) (Mt) ¹²	230.3^{RA}	224.7 ^{RA}	221.7 ^{RA}	223.6	208.9
Sulphur dioxide (SO ₂) (kt) ¹²	1 810^{RA}	1 856 ^{RA}	1 874 ^{RA}	1 950	1 876
Nitrogen oxide (NO _x) as NO ₂ (kt) ¹²	977^{RA}	959 ^{RA}	957 ^{LA}	984	930
Relative particulate emissions (kg/MWh sent out) ¹³	0.33^{RA}	0.39 ^{RA}	0.27 ^{RA}	0.21	0.20
Particulate emissions (kt) ¹³	75.84^{RA}	88.27 ^{RA}	55.64 ^{RA}	50.84	46.08
Ash produced (Mt)	36.22^{RA}	36.01 ^{RA}	36.66 ^{LA}	36.04	34.16
Ash sold (Mt)	2.0^{RA}	2.0 ^{RA}	2.1	2.4	2.2
Asbestos disposed of (tons)	611.5^{RA}	321.4 ^{RA}	3 590.8 ^{LA}	321.0	6 060.0
PCB thermally destructed (tons)	422.9^{RA}	19.1 ^{RA}	505.6 ^{LA}	17.0	10.00
Calculated public effective radiation dose (mSv) ¹⁴	0.0043	0.0040	0.0045	0.0047	0.0034
Low-level radioactive waste generated (m ³) ¹⁵	165.3^{RA}	137.8	140.8	180.3	94.5
Intermediate-level radioactive waste generated (m ³) ¹⁵	39.4^{RA}	47.1	23.9	16.5	49.8
Low-level radioactive waste disposed of (m ³)	81.0^{RA}	216.0 ^{RA}	189.0	270.0	135.0
Intermediate-level radioactive waste disposed of (m ³)	0.0^{RA}	266.0 ^{RA}	473.6	418.0	436.0
Low-level nuclear waste – fuel racks (m ³) ¹⁶ (cumulative figure)	0 (697)	0 (697)	0 (697)	0 (697)	0 (697)
Spent nuclear fuel, number of elements discharged ¹⁷ (cumulative figure)	112 (1 897)	56 (1 785)	56 (1 729)	112 (1 673)	56 (1 561)

2006	2005 (15 months)	2004	2003	2002	2001
207 921 (18.9) ³	256 453 30.5	206 799 5.0	196 980 4.8	187 957 3.5	181 511 1.8
221 988	273 404	220 152	210 218	197 737	189 590
206 606	251 914	202 171	194 046	181 651	175 223
1 141	903	720	777	2 357	2 061
2 867	3 675	2 981	2 732	1 738	1 587
78	–	–	–	–	–
3	–	–	–	–	–
11 293	16 912	14 280	12 663	11 991	10 719
10 310	12 197	9 818	8 194	9 496	9 200
232 298	285 601	229 970	218 412	207 233	198 790
3 814	5 043	4 040	3 664	2 354	2 177
228 484	280 558	225 930	214 748	204 879	196 613
42 011	42 011	42 011	42 011	42 011	42 011
36 398	36 208	36 208	36 208	36 208	36 208
33 461	34 195	34 195	31 928	31 621	30 599
33 461	34 195	34 195	31 928	31 621	30 599
12.7	–	–	–	–	–
87.4 (88.7)	89.5 (89.9) ⁷	89.5 (90.0)	87.5 (88.7)	89.3 (91.7)	92.0 (92.5)
69.7	69.0	69.2	66.3	62.3	59.8
79.8	78.0	77.4	76.8	74.0	73.4
1.32	1.27 ⁷	1.26	1.29	1.27	1.26
1	3 ⁷	2	2	3	2
101.06	93.10	8.31	8.47	8.57	8.43
291 516	347 135	277 557	271 940	251 611	239 233
–	–	–	–	–	–
112.1	136.4	109.6	104.4	96.5	94.1
19.58	19.36	19.42	19.41	19.54	19.42
29.10	29.60	29.60	28.90	28.40	28.80
0.88	0.87	0.87	0.92	0.92	0.93
33.8	34.0	34.0	34.2	34.1	34.1
8.2	8.2 ⁷	7.8	8.3	8.2	7.2
3 134	3 552	2 924	2 580	2 246	2 154
203.7	247.0	197.7	190.1	175.2	169.3
1 763	2 236	1 779	1 728	1 494	1 500
877	994	797	760	702	684
0.21	0.26 ⁷	0.27	0.28	0.29	0.31
45.76	72.83	59.17	58.65	57.53	59.64
33.40	40.80	33.10	29.80	26.20	26.50
1.8	2.0	1.6	1.2	1.3	1.2
–	–	–	–	–	–
–	–	–	–	–	–
0.0049	0.0079 ⁷	0.0087	0.0123	0.0060	0.0192
90.2	80.3	81.4	100.5	111.9	82.6
52.7	47.2	36.8	30.1	45.8	22.1
91.0	–	–	–	–	–
52.0	–	–	–	–	–
0 (697)	0 (697)	697	–	–	–
52 (1 505)	104 (1 453)	56 (1 405)	104 (1 349)	48 (1 245)	104 (1 197)

1. Sales prior to 2005 include internal sales.
 2. Difference between electricity available for distribution and electricity sold is due to transmission and other losses.
 3. Actual sales growth was 0.8% when compared to the 12 months 1 April 2004 to 31 March 2005.
 4. Includes Eskom electricity produced and delivered to neighbouring countries.
 5. Used by Eskom for pumped storage facilities and synchronous condenser mode of operation.
 6. Capacity hours available, times 100, divided by total capacity hours in a year.
 7. Represents the 12-month moving average for 1 April 2004 to 31 March 2005.
 8. kWh produced, times 100, divided by average net maximum capacity times hours in a year.
 9. Volume of water consumed per unit of generated power sent out from coal fired power stations, excluding Komati and Grootvlei power stations.
 10. 2001 to 2002 reported in terms of the revised definition of the operational health dashboard. From 2008, repeat legal contraventions are included in the criteria.
 11. Reflects the environmental element of Enhanced MaxiCare. The Enhanced MaxiCare replaced the PreCare/MaxiCare from January 2005.
 12. Calculated figures are based on coal characteristics and the power station design parameters. SO₂, NO_x and CO₂ emissions are based on coal analysis and tonnages of coal burnt in 2010/11. From 2009 includes Camden, Grootvlei and the gas turbine power stations as well as oil consumed during power station start-ups. From 2010, total CO₂ includes the additional contribution from the Underground Coal Gasification pilot project (flaring) and Komati power station.
 13. The overall particulate performance figure is based on individual power station performance. For certain power stations, emission figures are based on best estimates.
 14. The limit set by the National Nuclear Regulator is ≤ 0,25mSv.
 15. These are the net volumes produced in a 12-month moving window.
 16. Waste as a result of re-racking of spent fuel pools at Koeberg power station.
 17. The gross mass of a nuclear fuel element is approximately 665kg, with UO₂ mass typically between 462 and 464kg.
- RA – Reasonable Assurance provided by the independent assurance provider (refer page 200).
- LA – Limited assurance provided by the independent assurance provider (refer page 200).

Tables continued

2. Power station commercial capacities at 31 March 2011

Name of station	Location	Number and current capacity of generator sets	Total nominal capacity	Total net maximum capacity	Generators in reserve storage		Other generation
			MW	MW	Nominal rating MW	Total rating MW ²	
			MW ¹	Number			
Coal-fired stations (13)			37 745	34 952	7	825	–
Amot ³	Middelburg, Mpumalanga	1 x 370; 1 x 390; 2 x 396; 2 x 400;	2 352	2 232	–	–	–
Camden ^{4,9}	Ermelo	2 x 200; 1 x 195; 2 x 190; 1 x 170; 1 x 180; 1 x 185	1 510	1 430	–	–	–
Duvha ³	Witbank	6 x 600	3 600	3 450	–	–	–
Grootvlei ^{4,10,11}	Balfour	6 x 200	1 200	950	1	200	–
Hendrina ³	Mpumalanga	8 x 200; 1 x 195; 1 x 170	1 965	1 865	–	–	–
Kendal ^{3,5}	Witbank	6 x 686	4 116	3 840	–	–	–
Komati ^{4,9,10}	Middelburg, Mpumalanga	5 x 100; 2 x 125; 2 x 95	940	284	6	625	–
Kriel ³	Bethal	6 x 500	3 000	2 850	–	–	–
Lethabo ³	Viljoensdrift	6 x 618	3 708	3 558	–	–	–
Majuba ^{3,5}	Volksrust	3 x 657; 3 x 713	4 110	3 843	–	–	–
Matimba ^{3,5}	Lephalale	6 x 665	3 990	3 690	–	–	–
Matla ³	Bethal	6 x 600	3 600	3 450	–	–	–
Tutuka ³	Standerton	6 x 609	3 654	3 510	–	–	–
Gas/liquid fuel turbine stations⁶ (4)			2 426	2 409	–	–	–
Acacia ⁶	Cape Town	3 x 57	171	171	–	–	–
Ankerlig ⁶	Atlantis	4 x 149,2; 5 x 148,3	1 338	1 327	–	–	–
Gourikwa ⁶	Mossel Bay	5 x 149,2	746	740	–	–	–
Port Rex ⁶	East London	3 x 57	171	171	–	–	–
Hydro-electric stations (6)			661	600	–	–	61
Colley Wobbles ²	Mbashe River	3 x 14	42	–	–	–	42
First Falls ²	Mthatha River	2 x 3	6	–	–	–	6
Gariep ⁷	Norvalspont	4 x 90	360	360	–	–	–
Ncora ²	Ncora River	2 x 0,4; 1 x 1,3	2	–	–	–	2
Second Falls ²	Mthatha River	2 x 5,5	11	–	–	–	11
Vanderkloof ⁷	Petrusville	2 x 120	240	240	–	–	–
Pumped storage schemes⁸ (2)			1 400	1 400	–	–	–
Drakensberg ⁸	Bergville	4 x 250	1 000	1 000	–	–	–
Palmiet ⁸	Grabouw	2 x 200	400	400	–	–	–
Wind Energy (1)							
Klipheuwel ²	Klipheuwel	1 x 1,75; 1 x 0,66; 1 x 0,75	3	3	–	–	–
Nuclear power station (1)							
Koeberg ^{3,12}	Cape Town	1 x 940; 1 x 970;	1 910	1 830	–	–	–
Total power station capacities (27)			44 145	41 194	7	825	61

1. Difference between nominal and net maximum capacity reflects auxiliary power consumption.

2. Operational but not included for capacity management purposes.

3. Base-load station.

4. Return-to-service station.

5. Dry-cooled unit specifications are based on design back-pressure and ambient air temperature.

6. Stations used for peaking or emergency supplies.

7. Use restricted to peaking, emergencies and availability of water in Gariep and Vanderkloof dams.

8. Pumped storage facilities are net users of electricity. Water is pumped during off-peak periods so that electricity can be generated during peak periods.

9. Due to technical constraints, some units at Camden and Komati have been de-rated.

10. Units commissioned for the first time at these RTS stations were running their 12-month performance confirmation period during the period under review.

11. Grootvlei unit 4's normal 12-month performance confirmation period was extended to 21 months due to technical constraints.

12. Due to technical constraints, Koeberg units were de-rated to a total nominal capacity of 1 880MW (1 800MW net maximum). During the period under review the output of unit 1 was increased by 30MW after a turbine retrofit, increasing the total nominal capacity.

3. Environmental implications of using or saving one kilowatt-hour of electricity¹

	Factor (total energy generated) ²	If electricity consumption is measured in:			
		kWh	MWh	GWh	TWh
Coal use	0.53	kilogram	ton	thousand tons (kt)	million tons (Mt)
Water use ³	1.40	litre	kilolitre	megalitre (ML)	thousand megalitres (GL)
Ash produced	155	gram	kilogram	ton (t)	thousand tons (kt)
Particulate emissions	0.33	gram	kilogram	ton (t)	thousand tons (kt)
CO ₂ emissions ⁴	0.99	kilogram	ton	thousand tons (kt)	million tons (Mt)
SO ₂ emissions ⁴	7.75	gram	kilogram	ton (t)	thousand tons (kt)
NO _x emissions ⁴	4.18	gram	kilogram	ton (t)	thousand tons (kt)

Use of table: Multiply electricity consumption or saving by the relevant factor to determine the environmental implication.

Example 1:

Used 90kWh of electricity

Water consumption: $90 \times 1.40 = 126$

Therefore 126 litres of water used

Example 2:

Used 90GWh of electricity

CO₂ emissions $90 \times 0.99 = 89.10$

Therefore 89.1 thousand tons emitted

1. Factor figures are calculated based on total energy generated by Eskom (but excluding electricity used for pumping water for the pumped-storage schemes). Further information can be obtained through the Eskom environmental helpline. Contact details appear on the inside back cover.

2. Figures represent the 12-month period from 1 April 2010 to 31 March 2011.

3. Volume of water used at all Eskom power stations.

4. Calculated figures are based on coal characteristics and the power station design parameters. SO₂, NO_x and CO₂ emissions are based on coal analysis and tonnages of coal burnt in 2010/11. Emissions include Camden, Grootvlei, Komati, the gas turbine power stations, oil consumed during power station start-ups, as well as the additional contribution from the underground coal gasification pilot project (flaring).

4. Transmission and distribution equipment in service at 31 March 2011

	2011	2010	2009
Power lines			
Transmission power lines (km)¹	28 790	28 482	28 243
765kV	1 153	1 153	1 153
533kV DC (monopolar)	1 035	1 035	1 035
400kV ²	16 913	16 582	16 343
275kV	7 476	7 390	7 390
220kV	1 217	1 333	1 333
132kV	996	989	989
Distribution power lines (km)	46 712	46 018	45 302
165 – 132kV	25 075	24 514	23 856
88 – 33kV	21 637	21 504	21 446
Reticulation power lines (km)			
22kV and lower	308 899	305 151	297 783
Underground cables (km)	11 018	10 687	10 379
165 – 132kV	230	197	179
22kV and lower	10 788	10 490	10 200
Total all power lines (km)	395 419	390 338	381 707
Total transformer capacity (MVA)	232 058	223 398	220 512
Transmission (MVA) ³	130 005	123 990	124 140
Distribution and reticulation (MVA)	102 053	99 408	96 372
Total transformers, number	351 297	344 369	333 949
Transmission, number	405	399	398
Distribution and reticulation (number)	350 892	343 970	333 551

1. Transmission power line lengths as per Geographic Information System (GIS) distances.

2. The Majuba-Umfolozi No 1 765kV line, even though constructed at 765kV, is currently still being operated at 400kV and thus, for now, is counted under the 400kV total.

3. Base of definition: transformers rated $\geq 30\text{MVA}$ and primary voltage $\geq 132\text{kV}$.

5. Sale of electricity and revenue per category of customer

Category	Customers		
	2011 Number	2010 Number	2009 Number
Local	4 653 740	4 463 291	4 360 997
Redistributors	784	773	769
Residential ^{1,2}	4 514 998	4 325 550	4 223 708
Commercial	49 090	47 984	47 603
Industrial	2 857	2 925	2 935
Mining	1 110	1 134	1 144
Agricultural	84 393	84 415	84 329
Traction	508	510	509
International	10	10	10
Utilities	7	7	7
End users across the border	3	3	3
	4 653 750	4 463 301	4 361 007

Category	Sold		
	2011 GWh	2010 GWh	2009 GWh
Local	211 150	205 364	202 202
Redistributors	91 564	90 712	88 345
Residential ¹	10 539	10 350	10 392
Commercial	9 020	8 889	8 642
Industrial	59 611	55 816	54 815
Mining	32 630	31 733	32 177
Agricultural	4 919	5 010	4 913
Traction	2 867	2 854	2 918
International	13 296	13 227	12 648
Utilities	3 974	4 109	3 525
End users across the border	9 322	9 118	9 123
	224 446	218 591	214 850

Sales to countries in southern Africa (GWh)

	13 296	13 227	12 648
Botswana	2 377	2 684	1 959
Mozambique	8 523	8 326	8 243
Namibia	1 559	1 459	1 573
Zimbabwe	0	6	0
Lesotho	247	121	107
Swaziland	564	597	756
Zambia	23	33	10
Short-term energy market ³	3	1	–

1. Prepayments and public lighting are included under residential.

2. The total number of disconnections within the reporting period is the amount of 79 771 and the total number of reconnections is 46 442.

3. The short-term energy market consists of all the utilities in the southern African countries that form part of the Southern African Power Pool. Energy is traded on a daily, weekly and monthly basis as there is no long-term bilateral contract.

5. Sale of electricity and revenue per category of customer *(continued)*

Category	Revenue		
	2011 Rm	2010 Rm	2009 Rm
Local	86 358	66 970	50 766
Redistributors	36 191	27 973	20 362
Residential ¹	7 003	6 622	5 493
Commercial	4 747	3 642	2 704
Industrial	20 469	15 089	11 762
Mining	12 979	9 599	7 360
Agricultural	3 577	2 954	2 225
Traction	1 392	1 091	860
International	4 127	2 972	2 334
Utilities	2 019	1 561	978
End users across the border	2 108	1 411	1 356
Gross electricity revenue	90 485	69 942	53 100
Less: revenue capitalised ²	(110)	(108)	(104)
Electricity revenue per note 29	90 375	69 834	52 996
Levies included in revenue:			
The EDI restructuring levy ³	n/a	n/a	594
The environmental levy ⁴	4 335	3 263	n/a

1. Prepayments and public lighting are included under residential.

2. Revenue from the sale of production while testing Generation plant not yet commissioned, capitalised to plant.

3. The EDI restructuring levy was paid over to EDI Holdings (Pty) Limited in 2009 in terms of MYPD 1.

4. The environmental levy is a 2c/kWh tax, effective from 1 July 2009, payable for electricity produced from non-renewable sources (coal, nuclear and petroleum). The levy is raised on the total electricity production volumes and is recovered through sales.

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