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## Agenda and presenters



**Executive summary** 

Performance on strategic objectives

**Ensuring Eskom's financial sustainability** 

**Concluding remarks** 

**Update on other Key Issues** 

- Eskom Financial Sustainability
- Municipal Debt
- New Build
- Procurement Transformation

Collin Matjila

Collin Matjila

**Tsholofelo Molefe** 

Collin Matjila

Tsholofelo Molefe Collin Matjila Collin Matjila Matshela Koko



# Executive summary and Performance on strategic objectives



Collin Matjila
Interim chief executive



## Context of Eskom's integrated results



#### **Current status**

## Financial health

Under pressure due to MYPD3¹
 low price increase, a flat
 demand and increasing
 operating costs (OCGTs and
 cost of maintenance)

#### Safety

 Employee safety performance has shown a positive trend for 2013/14, however contractor and public fatalities are still a concern to Eskom

## Capacity expansion

 Eskom's new build projects have experienced delays due to quality issues

## Keeping the lights on

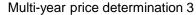
Eskom is managing tight electricity supply to ensure that electricity demand is being met in such a way that national power system integrity is protected

#### Mitigating action

- Eskom has initiated the business productivity programme (BPP)
- Eskom is working closely with Government to explore possible levers to close the funding gap
- Safety remains the foundation of Eskom's operations. Eskom is conducting investigations into safety incidents, and lessons learnt will assist in mitigating future incidents
- Contract placed with a second contractor for the engineering and manufacturing of the boilerprotection systems
- Eskom is aware of its responsibility to meet electricity demand but needs to do so within financial, operational and environmental constraints

#### **Highlights**

- Eskom has produced fair results, making a profit of R7 billion, taking into account a R2 billion fair value profit on embedded derivatives²
- Eskom employee
   LTIR target has
   been achieved
- to achieve first synchronisation of Medupi Unit 6 by second half of 2014, with full commercial operation expected six months thereafter



Profit will be used to cover repayments of the substantial borrowing for the capacity expansion programme



## Eskom's purpose, values and strategic objectives



#### Our purpose

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



Leading and partnering to keep the lights on



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



Securing future resource requirements



Implementing coal haulage and the roadto-rail migration plan



Pursuing private-sector participation



Transformation (including the business productivity programme)



Ensuring Eskom's financial sustainability



Becoming a highperformance organisation

**ZIISCE:** Zero harm, Integrity, Innovation, Sinobuntu, Customer satisfaction, Excellence

**Foundation**: Long-term nation-building – Electricity for all – Triple bottom line





Execute strategic pillars

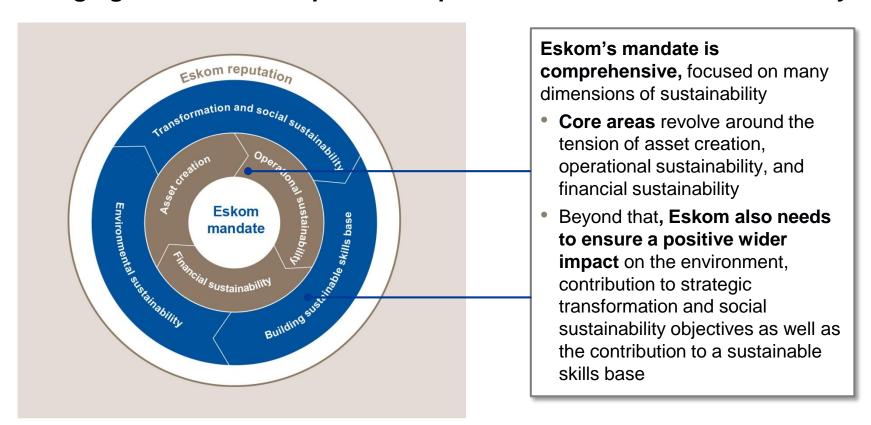




## Eskom's seven sustainability dimensions



#### The changing environment requires a response that will ensure sustainability



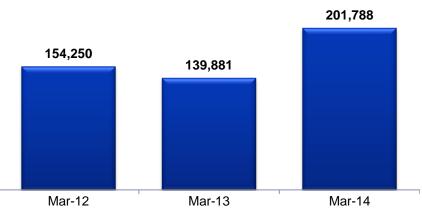
Safety will continue to be the foundation for all our operations and is key to Eskom's performance and sustainability

# Eskom has the advantages and challenges of all large-scale enterprises

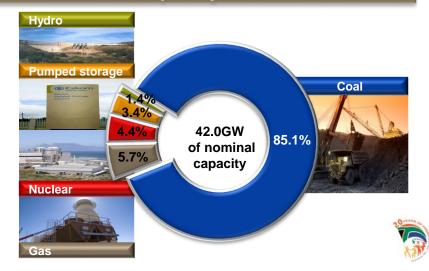


- Strategic 100% state-owned electricity utility, strongly supported by the government
- Supplies approximately 95% of South Africa's electricity
- Performed 201 788 household electrification connections during the year, the highest in a single year since 2002
- As at 31 March 2014:
  - 5.2 million customers (2013: 5.0 million)
  - Net maximum generating capacity of 42.0GW (2013: 41.9GW)
  - 17.4GW of new generation capacity being built, of which 6.1GW already commissioned
  - Approximately 359 337km of cables and power lines
  - 46 919 employees, inclusive of fixed-term contractors, in the group (2013: 47 295)
- Moody's and S&P stand-alone credit ratings: b1 and b- respectively with a negative outlook

# Number of electrification connections Number



#### **Generation capacity – 31 March 2014**







Employee and contractor fatalities

Fatalities	Year to 31 March 2014	Year to 31 March 2013	Year to 31 March 2012
Employees	5	3	13
Contractors	18	16	11





Employee lost-time incidence rate				
Index (Target: 0.36)	0.31	0.40 <sup>1</sup>	0.41	



Causes of fatalities

Causes of fatalities	Vehicle	Electrical contact	Other
Employees and contractors	7	2	14

Ingula incident

On 31 October 2013, an accident at Ingula power station construction site resulted in the tragic loss of six lives, while a further seven sustained injuries. Although work on the inclined high-pressure shaft was stopped in terms of the Mines Health and Safety Act (1996) pending review by the Mine Health and Safety Inspectorate, work on other parts of the site continues. The statutory processes regarding this accident are in progress



# Improve operations — Generation Becoming a high-performance organisation



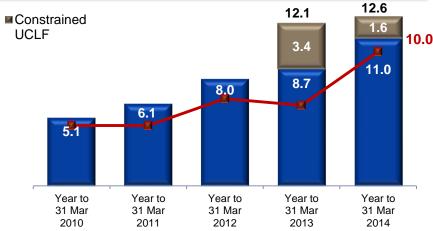
#### **Highlights**

 Koeberg unit 2 ended a record run of 484 days when it was shut down for scheduled refuelling on 24 March 2014, marking a continuous run from one refuelling to another

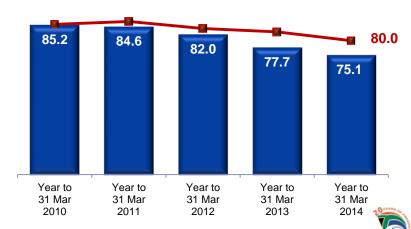
#### **Challenges**

- The increasing UCLF percentage is an indication of the deteriorating plant health and the high plant utilisation
- Balancing the need for adequate maintenance with the constrained system, asset creation, environmental requirements and available financial resources – not performing sufficient maintenance reduces plant reliability and increases the risk of load shedding over the longer term
- Duvha Unit 3 was taken out of service on 30 March 2014 due to an overpressurisation incident. The incident is still under investigation
- 1. UCLF measures the lost energy due to unplanned production interruptions resulting from equipment failures and other plant conditions
- 2. EAF measures plant availability, plus energy losses not under the control of plant management

## Unplanned capability loss factor (UCLF¹) %



### Energy availability factor (EAF<sup>2</sup>) %







## Improve operations – Transmission

Becoming a high-performance organisation



#### **Highlights**

 Good system technical performance achieved with zero major incidents, system minutes <1 performance at 3.05 compared to a target of 3.40, and a line fault performance of 1.73 compared to a target of 2.45 faults per 100km

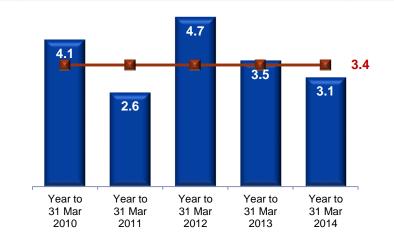
#### **Challenges**

- Performance vulnerabilities remain with ageing assets and unfirm networks
- Performance of Hydro Cahora Bassa<sup>3</sup> scheme energy imports remains a risk due to challenges regarding the reliability of high-voltage direct-current transmission lines

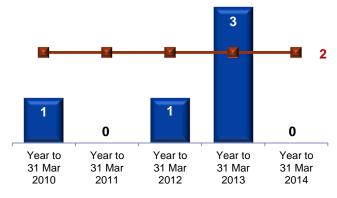
## System minutes is a measure of the extent of interruptions to customers. One system minute is equivalent to the loss of the entire system for one minute at annual peak

- 2. Major Incident is an interruption with a severity ≥ 1 system minute
- 3. Hidroelectrica de Cahora Bassa S.A.

## System minutes<sup>1</sup> lost < 1 system minute



#### Number of major incidents<sup>2</sup>









# Improve operations — Distribution Becoming a high-performance organisation



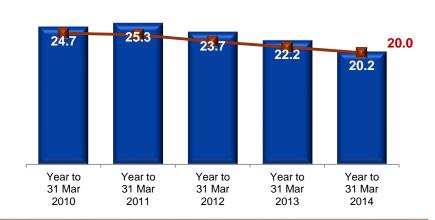
#### **Highlights**

- Significant improvement in the SAIFI and SAIDI interruption performance due to:
  - Additional customer network centres
  - Maximisation of live-line work for planned maintenance
  - Increased network visibility

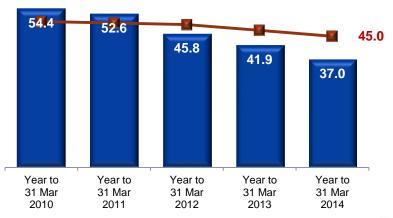
#### **Challenges**

- Managing the risk of increased exposure of employees and contractors to crime-related assault incidents
- Addressing the backlog in maintenance, refurbishment and reliability with particular focus on preventative maintenance for reticulation (low-voltage) networks
- Reducing the backlog in customer connections, by addressing material and contractor resource shortages
- 1. SAIFI: System average interruption frequency index
- 2. SAIDI: System average interruption duration index

### SAIFI (number/annum)<sup>1</sup>



### SAIDI (hours/annum)<sup>2</sup>









# Being customer-centric Becoming a high-performance organisation



#### **Highlights**

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

#### **Challenges**

- Debt collection, especially from municipalities, is a challenge with arrear debt increasing significantly. Eskom is working closely with the shareholder, the Cooperative Governance and Traditional Affairs (CoGTA) department and National Treasury at provincial and national level to address the systemic causes of municipal arrear debt
- Energy losses due to theft of equipment, illegal connections, meter tampering and illegal vending of pre-paid electricity remains a concern

#### Weighted customer service index<sup>1</sup> 86.8 86.6 85.6 85.1 84.4 Year to Year to Year to Year to Year to 31 Mar 31 Mar 31 Mar 31 Mar 31 Mar 2010 2011 2012 2013 2014

Energy losses <sup>2</sup>	Year to 31 March 2014	Year to 31 March 2013	Year to 31 March 2012
Distribution	7.13	7.12	6.32
Transmission <sup>3</sup>	2.34	2.80	3.08
Total Eskom	8.88	9.08	8.65

Annual year-end target

- Eskom uses a composite index to measure the service delivered to its residential, small and medium customers
- Non-technical losses are estimated to be between 1.78% and 2.85% for the year to 31 March 2014
- 3. Transmission losses are all technical losses

Actual



## Build strong skills

Becoming a high-performance organisation

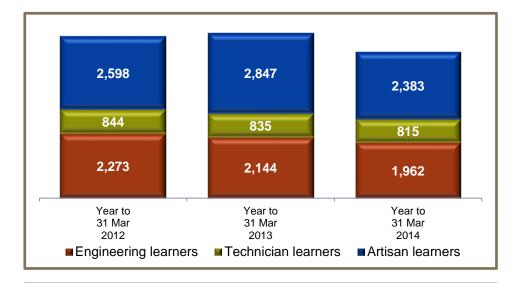




Skills

Eskom aims to grow human capital by retaining core, critical and scarce resources, and by effectively developing skills and talent

Eskom's engineering, technician and artisan learners





Youth programme

There are 4 325 learners in the youth programme as at 31 March 2014

**Training** 

7.87% of gross employee benefit costs spent on training in the year to 31 March 2014





Leading and partnering to keep the lights on





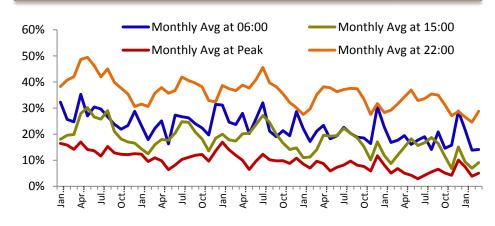
#### **Highlights**

More planned maintenance was done during the past winter than the same period in the three preceding years, in line with the Generation sustainability strategy

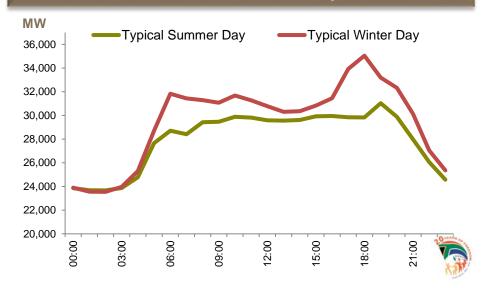
#### Challenges

- Adequate reserves available throughout the day to meet demand, but minimal reserves available at peak periods
- In order to keep the lights on, Eskom has had to run its generating plant at significantly higher load factors
- Four power system emergencies were declared during the year
- Increased costs due to the significant reliance placed on the open-cycle gas turbine (OCGT) fleet in the current year:
  - R10.6 billion spent to produce 3 621GWh (2013: R5.0 billion; 1 905GWh)
  - OCGT load factor of 17.16% (2013: 9.31%) against a budgeted load factor of 6.08%, based on the MYPD response budget

#### Average monthly % operating reserves



#### Summer and winter load profiles



## Integrated Demand Management

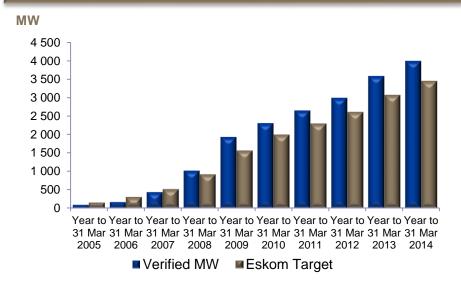
Leading and partnering to keep the lights on





- Achieved total evening peak demand savings of 410MW (2013: 595MW)
- The average weekday evening peak impact of the power alert and power bulletin for all colours (green, orange and red) is 224MW, while the average impact for the red flightings in the evening peak on the worst constrained day is 294MW
- Eskom continues to improve the internal energy-efficiency of its facilities. Annualised energy savings of 19GWh were achieved from new IDM projects for the year ended 31 March 2014, exceeding the target of 15GWh
- Going forward, it will be a challenge to utilise IDM as a key lever in managing demand, due to the reduction in funding allocated in the MYPD 3 determination

#### Cumulative verified demand savings















## Deliver capacity expansion

Leading and partnering to keep the lights on





#### **Highlights**

- Return-to-service programme of 23 units (3 741MW) has been completed at a cost of R26 billion
- Despite outage constraints, refurbishment projects have progressed well
- Established the Medupi leadership initiative to address the demobilisation of workers

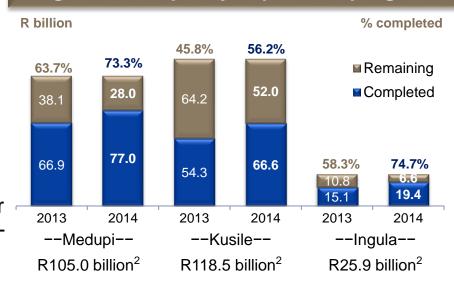
#### **Challenges**

- Contract placed with a second contractor for the engineering and manufacturing of boilerprotection systems, to mitigate against the continued failure of control and instrumentation factory acceptance tests at Medupi
- Acquisition of servitudes over state-owned and tribal land, causing delays to transmission projects

#### Synchronisation dates of first units

- Medupi in the second half of 2014 (794MW)
- Ingula in the second half of 2015<sup>1</sup> (333MW)
- Kusile in the second half of 2015 (800MW)

#### Progress on capacity expansion programme







# Deliver capacity expansion – progress on Medupi Leading and partnering to keep the lights on





#### Key milestones achieved at Medupi in the first **quarter of 2014/15**

- Welding challenges which resulted in extensive delays to Unit 6 are effectively resolved
- Hydrostatic pressure tests on the reheater and superheater circuits of the Unit 6 boiler were successfully conducted in April and May 2014
- The boiler is now mechanically complete and ready to continue with acid cleaning
- Factory acceptance tests have been successfully completed on both the control and instrumentation of the balance of plant and the boiler-protection system in April and May 2014
- This released a significant part of the plant to progress with critical commissioning activities
- Achieving these critical milestones ensure that Eskom remains on track for the targeted first synchronisation of Unit 6 by the second half of 2014 as previously reported





## Deliver capacity expansion (continued)

Leading and partnering to keep the lights on



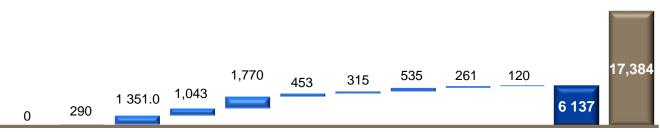


To date, the construction work that has been completed has added ~ 6 137MW of capacity, ~ 5 497km of transmission network and ~ 27 565 of MVAs

#### Megawatts



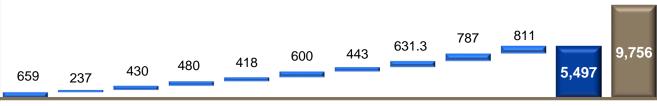
#### MW of capacity



#### **Transmission**



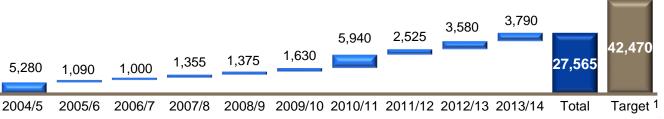
Km line



#### **Substations**



#### MVAs





## Environmental performance

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





Environmental performance

Key performance indicator	Year to 31 March 2014	Year to 31 March 2013	Year to 31 March 2012
Relative particulate emissions, kg/MWh sent out	0.35	0.35	0.31
Specific water consumption, L/kWh sent out	1.35	1.42	1.34
Environmental legal contraventions per the operational health dashboard, number	2	2 <sup>1</sup>	5

Renewable energy:
Sere wind farm

The installation of 10 of a total of 46 wind turbines was completed at 31 March 2014<sup>2</sup>, and a further 22 tower foundations laid. This 100MW renewable project is expected to be completed and commissioned in the 2014/15 financial year. This will assist in reducing Eskom's carbon footprint



- 1. Increased from previously reported figure (1) due to an additional legal contravention that was identified during the year for activities associated with the underground coal gasification (UCG) project, in October 2012
- 2. To date, the installation of a total of 25 of the 46 wind turbines has been completed. The transmission substation has been completed and the power evacuation line is being commissioned



## National emission standards

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





- Eskom believes in a balanced approach to ensure environmental sustainability whilst supporting economic growth and access to affordable electricity
- New atmospheric standards come into effect in 2015. Eskom has received new
  atmospheric emission licences for most of its power stations, except Kriel, where Eskom's
  request to increase the emissions limit and allow a grace period for when emissions
  exceed the limit of the new license, has been denied
- Eskom has embarked on an extensive retrofit programme to reduce emissions at the highest emitting power stations, but the execution of this programme will require long outages and a significant amount of capital (currently R72 billion in nominal terms)
- Despite the retrofit programme and Eskom's best efforts, there **remains a risk** that Eskom may not be able to fully comply with the new national emission standards, which come into effect in 2015 and 2020, for several reasons:
  - Certain of the required technologies requires additional water which is not yet available
  - Implementation of the required technologies requires plant outages of 120 to 150 days per unit; there is insufficient spare capacity to enable the required outages to be taken without impacting on the ability to meet national electricity demand
- Given the above, Eskom expects to achieve 57% compliance with the national emission standards by 2026
- Eskom submitted an application in February 2014 for a **five-year postponement** from compliance to the standards for cases where compliance within the legislated timeframe is not possible. A response from the authorities is expected within six to nine months



### Coal and water resources

Securing future resource requirements 🚕

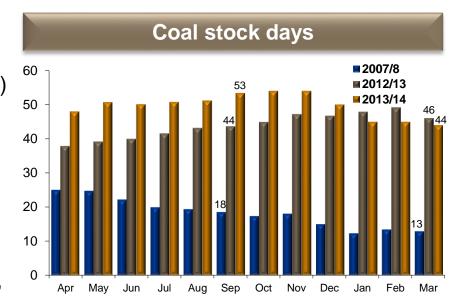


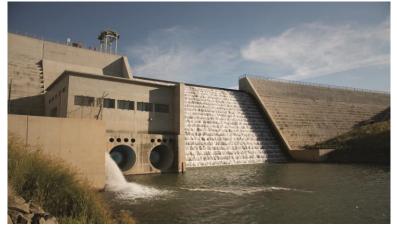
#### **Highlights**

- Coal stock days at 31 March 2014 remains above target of 42 days, but has decreased to 44 days from the previous year (2013: 46 days)
- Komati water scheme augmentation project was declared operational on 5 June 2013
- Mokolo Crocodile water augmentation project delivered water to Medupi for construction activities and commissioning of the first units

#### **Challenges**

- Despite the overall coal quality being on target, coal-related load losses were experienced at Arnot, Matla and Tutuka power stations
- Production performance of some cost-plus mines continue to be a challenge
- Eskom mixes coarse coal with finer coal to prevent wet coal from coagulating on conveyors
- Although four medium-term contracts were signed for coal supply to Kusile power station during the commissioning phase, the conclusion of long term coal and limestone supply agreements remains a focus area







## Coal road-to-rail migration

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





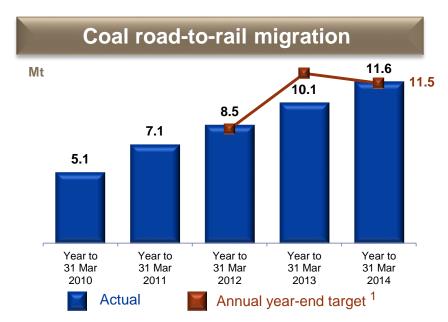
Eskom has been progressively migrating coal transport from road to rail over the past four years. Rail transport is safer, more environmentally friendly, less damaging to roads and more cost-effective than road transport by truck

#### **Highlights**

 Increase of 15% against previous year of coal transported by rail

#### **Challenges**

- Both Eskom and Transnet experienced operational challenges regarding the rail transport of coal
- In June 2013, rail deliveries were affected by a series of derailments on the Transnet Freight Rail Natcor rail line





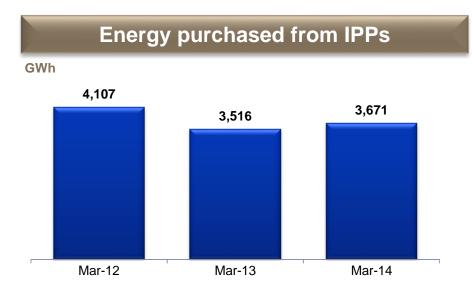
## Independent power producers (IPPs)





#### **Highlights**

- Total energy procured from short-term IPPs for the year is 3 671GWh at a cost of R3 266 million (average cost of 88c/kWh)
- The first project under the renewable energy independent power producers (RE-IPP) programme was commissioned on 15 November 2013, adding 7MW
- Eskom has successfully facilitated the connection of 21 RE-IPP projects (1 076MW) to the grid, of which 467.3MW is currently available to the system
- DoE approved an additional 1 457MW pursuant to the third bid submission, but no contracts have yet been signed
- Contracts were signed for 1 005MW under the DoE Peaker programme







# Maximise socio-economic contribution Transformation





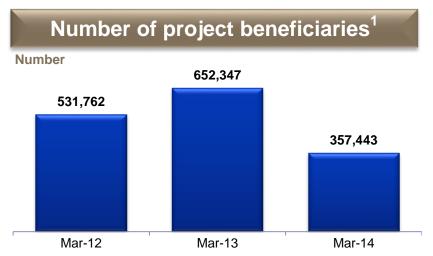
Electrification

A total of 201 788 homes were electrified during the year to 31 March 2014 (2013: 139 881)
Since inception of the electrification programme in 1991, more than 4.5 million homes have been electrified



Corporate social investment

Committed R132.9 million to corporate social initiatives during the year to March 2014 (2013: R194.3 million)







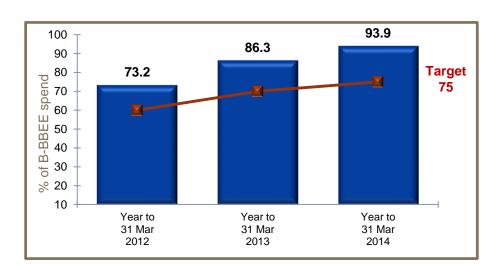
## Procurement equity and localisation



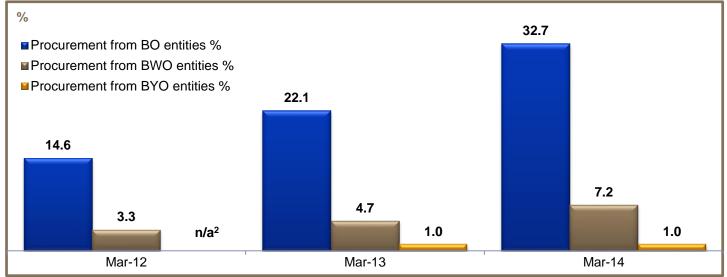


Procurement<sup>1</sup> from B-BBEE compliant entities

Total measured procurement spend for the year was R133.5 billion of which R125.4 billion or 93.9% was attributable to B-BBEE, exceeding the target of 75%



Procurement from black-owned (BO), black womenowned (BWO) and black youth-owned (BYO)<sup>2</sup> entities



- 1. Reflects the Eskom company's broad-based black economic empowerment (B-BBEE) expenditure
- 2. Measurement of the procurement from BYO entities only started in 2013



## Procurement equity and localisation (continued)



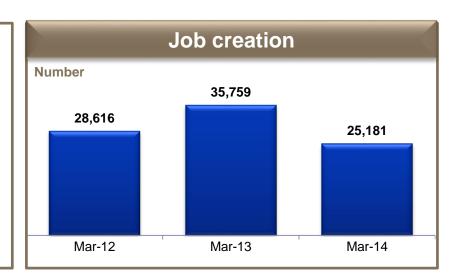


Local sourcing

54.6% local content in the new build contracts placed for the financial year (2013: 80.2%)

Job creation

As at 31 March 2014, the capacity expansion programme employs 25 181 people on new build project sites, down from 35 759 at the previous year end, due to the demobilisation of staff as work packages are completed



Local skills development

Since the inception of the capital expansion programme in 2005, a total of 8 930 (2013: 6 851) contractor employees have been trained in various trades



## **Employment equity**

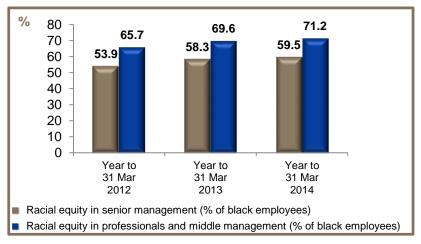




#### **Disability**

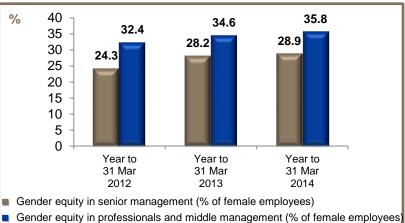
The Eskom group currently employs 1 305 (2013: 1 137) employees with recognised disabilities. Although the disability percentage of 2.77% is below the 3% target, it is above the government target of 2%

Racial equity<sup>1</sup>





Gender equity<sup>1</sup>







## Ensuring Eskom's financial sustainability



# Tsholofelo Molefe Finance director



## Income statement for the year ended 31 March 2014

Ensuring Eskom's financial sustainability



- Group revenue of R139.5 billion (2013: R128.8 billion), an increase of 8.3%
- Revenue growth has been offset by escalating primary energy and operating costs
- Effective tax rate of 23.3% (2013: 26.5%)
- Embedded derivative gain is mainly due to changes in the USD:ZAR exchange rate and changes in interest rates
- Finance costs of R13.3 billion were capitalised during the year to 31 March 2014 (2013: R3.7 billion)
- Assets are accounted for at historic cost. If assets were valued at depreciated replacement cost, the loss after tax would be R12.5 billion
- No dividend was recommended

Rm	Audited year to 31 March 2014	Reviewed half-year to 30 Sep 2013	Audited year to 31 March 2013 <sup>1</sup>	Audited year to 31 March 2012
Revenue	139 506	77 815	128 775	114 847
Other income	962	197	1 126	712
Primary energy	(69 812)	(31 266)	(60 748)	(46 314)
Operating expenses (including depreciation & amortisation)	(58 293)	(28 702)	(57 602)	(44 872)
Net fair value loss on financial instruments	(620)	(998)	(1 655)	(2 388)
Operating profit before embedded derivatives	11 743	17 046	9 896	21 985
Embedded derivative gain / (loss)	2 149	1 868	(5 942)	334
Operating profit	13 892	18 914	3 954	22 319
Net finance (cost) / income <sup>2</sup>	(4 772)	(1 853)	3 003	(3 956)
Share of profit of equity - accounted investees	43	26	35	41
Profit before tax	9 163	17 087	6 992	18 404
Income tax	(2 137)	(4 846)	(1 856)	(5 156)
Discontinued operations	63	-	47	-
Net profit for the period	7 089	12 241	5 183	13 248

<sup>1.</sup> Restated due to reclassification of Eskom Energie Manantali s.a as a discontinued operation



<sup>2.</sup> There was no remeasurement of the government loan during the year to 31 March 2014, as there was no change in the electricity tariff price path. In 2012/13 the effect of the remeasurement of the government loan was a R17.3 billion finance income for the year 31 March 2013

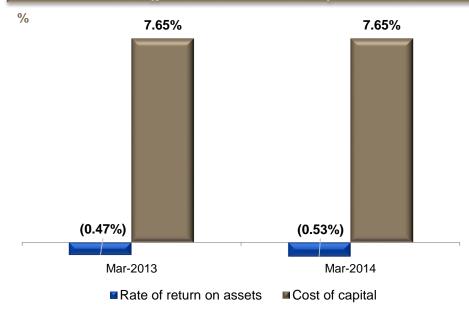
## Appropriate return on assets

Ensuring Eskom's financial sustainability



- Eskom requires a rate of return on assets that will enable it to maintain and replace the current asset base
- An appropriate rate of return on assets is a key building block towards costreflective tariffs
- Ideally, the rate of return on assets should at least equal the cost of capital
- The pre-tax real rate of return on assets was negative 0.53% compared to the pre-tax real cost of capital of 7.65%
- Continuing with inadequate returns will result in a further erosion of Eskom's financial position
- It is therefore imperative that the price of electricity is reflective of the cost to supply electricity.

## Rate of return on assets<sup>1</sup> vs cost of capital (pre-tax real rates)



 Rate of return on assets calculated on closing balance of assets (revalued using the depreciated replacement cost method) and liabilities, excluding financial assets and liabilities

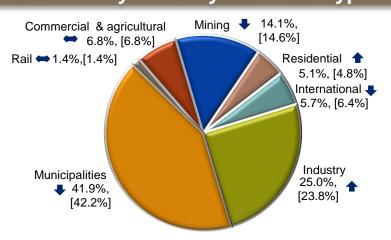


#### Sales and revenue Ensuring Eskom's financial sustainability

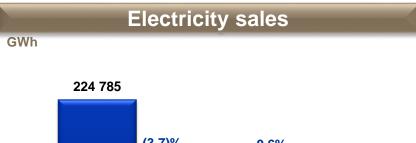


- Sales were 9 490 GWh lower than forecast in the NERSA tariff application
- Local sales of 205 525GWh (2013: 202 770GWh)
- International sales of 12 378GWh (2013: 13 791GWh)

### Electricity sales by customer type



Percentages reflected for the sales achieved in the year to 31 March 2014 Numbers in brackets are those for the year to 31 March 2013







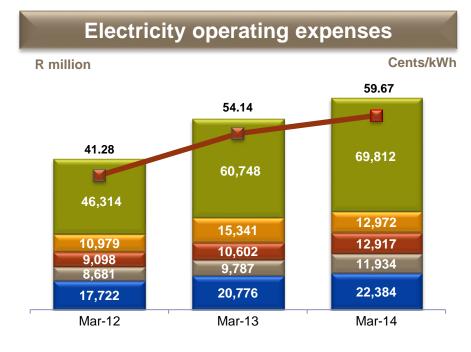


## Electricity operating expenses<sup>1</sup>





- The electricity operating cost per kWh sold is 59.67c/kWh<sup>2</sup> compared to the target of 52.67c/kWh
- The 13.2% variance on the cost per kwh is mainly attributed to the OCGT spend in the current year of R10.6 billion (originally budgeted at R3.6 billion), along with the increase in maintenance costs in line with the generation sustainability strategy
- The employee benefit cost includes direct and indirect expenditure for the 42 923 Eskom employees (group: 46 919)
- Included in other operating expenses is the impairment on arrear debt of 1.10% of revenue (2012/13: 0.82%)



- ■Primary energy costs
- ■Other operating expenses, including impairments
- Repairs and maintenance
- Depreciation and amortisation expense
- Employee benefit expense



Reflects only company expenses

<sup>2.</sup> Cents/kWh figures are calculated based on total electricity sales numbers for year

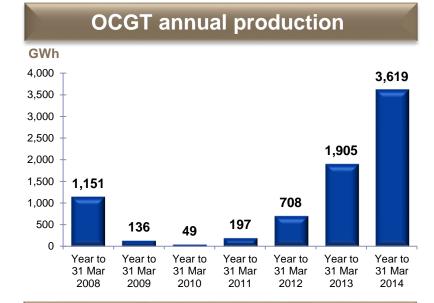
## Analysis of primary energy costs

Ensuring Eskom's financial sustainability



- Primary energy costs have increased by 14.2% year-on-year from 28.05c/kWh to 32.04c/kWh
- Given the tight reserve margin, more expensive OCGT stations were operated far above previous load factors to ensure continuity of supply

Rm	Year to 31 March 2014	Year to 31 March 2013	Year to 31 March 2012
Own generation costs, excluding OCGT costs <sup>1</sup>	43 625	39 371	30 997
Open-cycle gas turbine (OCGT) costs	10 561	5 009	1 490
Environmental levy	8 530	7 971	6 208
International electricity purchases	3 311	2 070	1 858
Independent power producers	3 266	2 956	3 250
Other <sup>2</sup>	519	3 371	2 510
Total cost of electricity generation	69 812	60 748	46 314





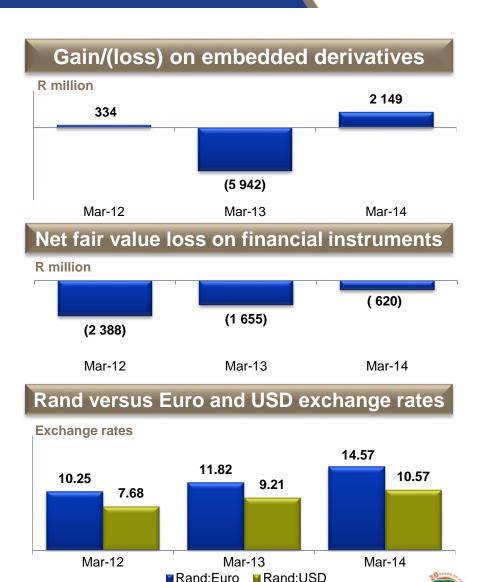
- 1. Includes the cost of coal, uranium, water and liquid fuels that are used in the generation of electricity
- 2. Includes demand market participation, co-generation and power buybacks



# Hedging policy Ensuring Eskom's financial sustainability

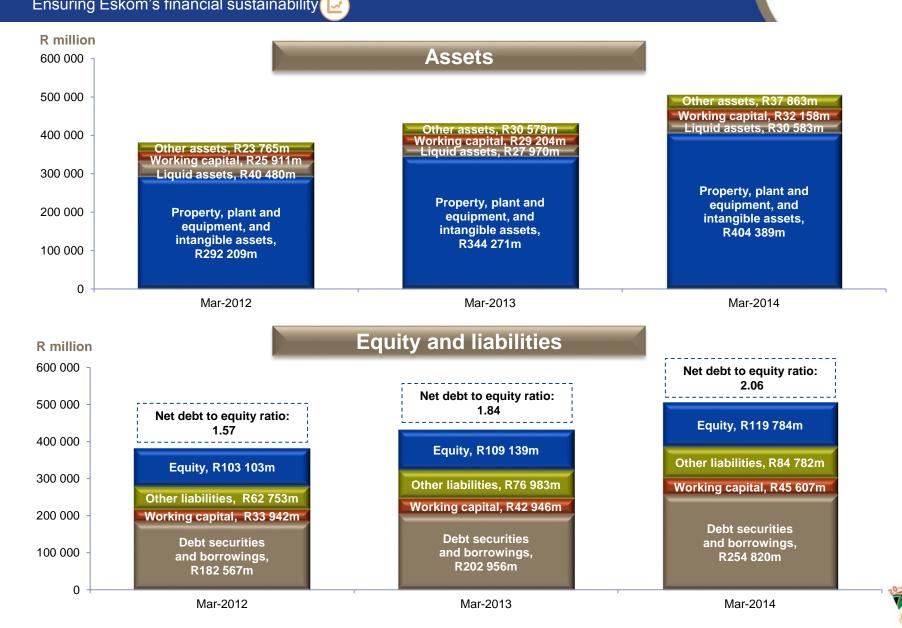


- Embedded derivatives
  - Loss in 2012/13 was mainly due to the decision at 31 March 2013 to account for the full term of the underlying negotiated pricing agreement contracts
  - Profit in the current year is mainly as a result of the changes in the USD/ZAR exchange rate and interest rates
  - Eskom submitted an application to NERSA to review the last remaining negotiated pricing agreement
- Foreign currency and commodity hedging
  - Foreign currency and commodity exposures are hedged
  - Uses forward exchange contracts with short maturities and roll-over at maturity as well as cross-currency swaps
  - 78% of total debt at 31 March 2014 has a fixed interest rate component
  - R110.2 billion exposure to foreign currency



# Group audited financial position – property, plant and equipment growth through debt raised Ensuring Eskom's financial sustainability





### Funding plan from 1 April 2010 to 31 March 2017

Ensuring Eskom's financial sustainability



This plan was based on the assumption of a 16% MYPD 3 increase and will need to be extended

Source of funds	Funding sourced R billion	Currently secured R billion	Draw-downs to date R billion	Supported by government R billion
Bonds	90.0	65.4	65.4	42.6
Commercial paper <sup>1</sup>	70.0	70.0	40.0	0.0
Export Credit Agencies	32.9	32.9	21.7	0.0
World Bank	27.8	27.8	12.0	27.8
African Development Bank	20.9	20.9	16.2	20.9
Development Bank of Southern Africa	15.0	15.0	9.0	0.0
Shareholder loan	20.0	20.0	20.0	20.0
Other / new sources	23.4	19.6	4.5	5.0
Totals	300.0	271.6	188.7	116.2
Percentages		90.5% <sup>2</sup>	69.5% <sup>3</sup>	42.8% <sup>3</sup>

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



<sup>2.</sup> As a percentage of the R300 billion funding sourced

<sup>3.</sup> As a percentage of the currently secured total

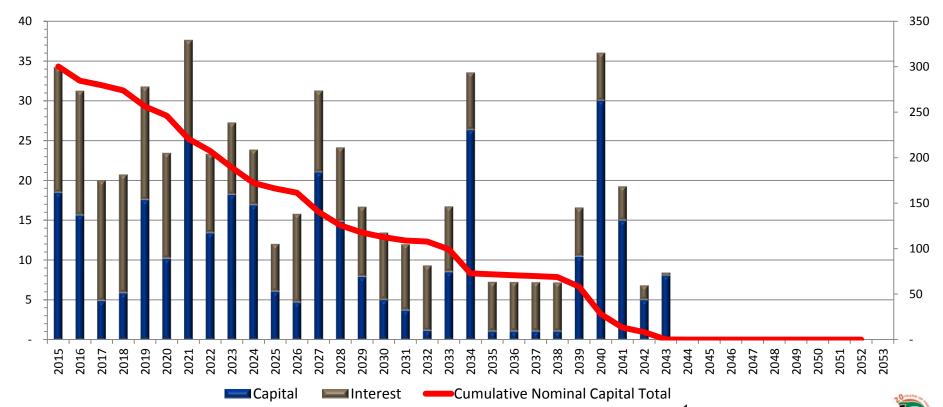
## Debt maturity profile Ensuring Eskom's financial sustainability



- Eskom has to be responsible in managing its debt profile
- The R255 billion of borrowings at 31 March 2014 will be repaid by 2052

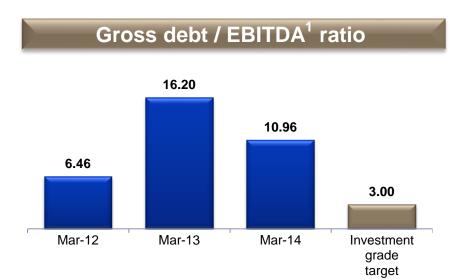
### Strategic and trading portfolio nominal and interest cashflows as at 31 March 2014

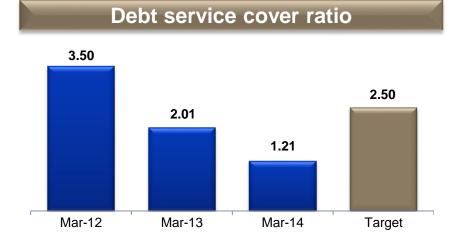
#### R billion



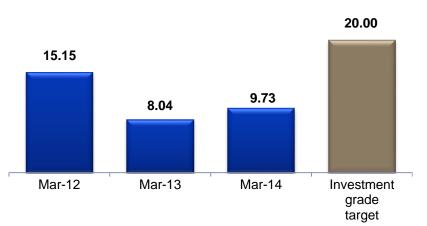
## Debt maturity and leverage Ensuring Eskom's financial sustainability

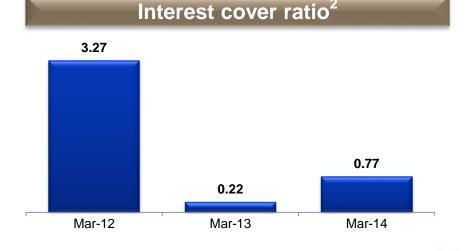












- Earnings before interest, taxation, depreciation and amoritisation
- In 2012/13 the effect of the remeasurement of the government loan (income of R17.3 billion) impacted the interest cover ratio

### Eskom credit ratings as at 31 March 2014





As a significant portion of Eskom's debt is guaranteed by government, its headline credit rating has been uplifted, but remains closely linked to that of the sovereign

Rating	Standard & Poor's	Moody's	Fitch				
RSA government							
Foreign currency	BBB <sup>1</sup>	Baa1	BBB				
Local currency	A- <sup>1</sup>	Baa1	BBB+				
Outlook	Negative	Negative	Stable <sup>2</sup>				
Eskom Holdings SOC Limited							
Foreign currency	BBB <sup>4</sup>	Baa3	-				
Local currency	BBB <sup>4</sup>	Baa3	BBB+				
Standalone	b-	b1	В				
Outlook	Negative <sup>4</sup>	Negative	Stable <sup>3</sup>				
Action date	14 Oct 2013	19 Jul 2013	11 Jan 2013				
Affirmation date	14 Oct 2013	19 Jul 2013	12 Dec 2013				

<sup>1.</sup> On 13 June 2014, Standard & Poor's downgraded the sovereign foreign currency and local currency ratings (from BBB to BBB- and from A- to BBB+ respectively). This is expected to result in an adjustment to the Eskom headline and standalone credit ratings



On 12 June 2014, Fitch revised the sovereign outlook to "negative", which is expected to result in an adjustment to the Eskom headline and standalone credit ratings

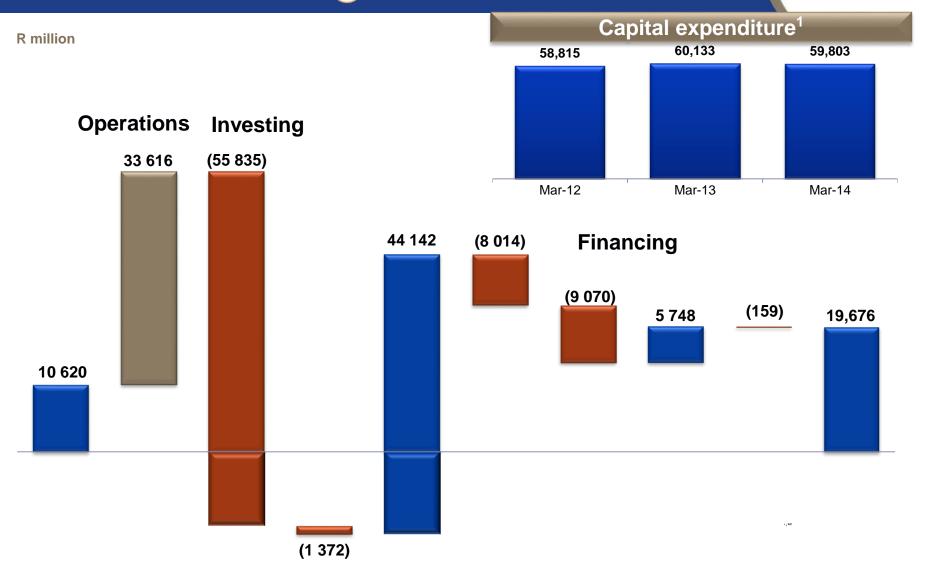
On 18 June 2014, Fitch affirmed Eskom's BBB+ rating, but revised the outlook to "negative"

<sup>4.</sup> On 20 June 2014, Standard & Poor's downgraded the foreign and local currency ratings from BBB to BBB-, and also put Eskom on CreditWatch

## Summary of cash flows and Capital Expenditure Ensuring Eskom's financial sustainability









future fuel)

## Financial sustainability Ensuring Eskom's financial sustainability



- Critical for Eskom is ensuring a balance between security of supply, asset creation, financial sustainability and environmental compliance and to responsibly manage the trade-offs that are required
- Revenue shortfall of R225 billion created by the MYPD 3 determination has serious consequences for Eskom's business and future sustainability
- Key to success is to ensure an appropriate return on assets in the long term and to obtain adequate funding to address liquidity in the short term
- Eskom's response to the liquidity challenges and long-term financial sustainability includes:
  - Investigating alternative sources of funding, including possible equity or quasi-equity instruments
  - Exploring additional borrowing options, although the ability to borrow sufficient funds at affordable levels is constrained by credit ratings. Given the recent sovereign ratings downgrade, Eskom is at risk of a further downgrade
  - Reprioritisation of capital expenditure within the R251 billion budget. However, this
    could negatively affect operational sustainability and impact security of supply
  - Applied to NERSA for a regulatory clearing account (RCA) adjustment, to claw back prudently incurred expenditure and lost revenue due to lower demand than forecast in the MYPD 2 application
  - Business productivity programme launched to reduce cost, increase productivity and enhance efficiencies
- Financial sustainability cannot be achieved through efficiencies and savings alone –
   cost-reflective tariffs remain a key imperative



## Concluding remarks



Collin Matjila
Interim chief executive



### Concluding remarks



Eskom strategic objectives

**Safety** will continue to be the **foundation** for all Eskom's operations and is key to Eskom's performance, with focus on the following **key principles:** 

- The capacity expansion strategy which addresses priorities within the limits of available capital
- The Generation sustainability strategy which focuses on the plant, people and processes
- Pursuing cost-reflective tariffs, the RCA and alternative funding options
- Continued focus on skills building, transformation and environmental sustainability
- Adapt the Eskom business model

Eskom Emergency Task Team (EETT)

The **objective** is to develop levers and solutions to **deliver on**:

- Financial sustainability by achieving business productivity targets and driving internal efficiencies
- Operational sustainability by ensuring improved generating plant performance and implementing supply-side measures
- Asset creation by ensuring the on time completion of the capacity expansion programme

It is critical for Eskom to **ensure a balance** between security of supply, asset creation, financial sustainability and environmental compliance and to responsibly manage the trade-offs that are required



## Description of Acronyms



Description	Acronyms
LTIR	Lost Time Incident
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
OCGT	Open Cycle Gas Turbine
CCGT	Combined Cycle Gas Turbine
UCLF	Unplanned Capability Loss Factor
PCLF	Plant Capability Loss Factor
EAF	Energy Availability Factor
EUF	Energy Utilisation Factor
EETT	Eskom Emergency Task Team
FFO	Free Funds from Operations
EBIDTA	Earnings before Interest Depreciation Tax & Amortisation
MYPD	Multi-Year Price Determination
GWh	Giga-Watt hours



## Update on other Key Issues



- Eskom Financial Sustainability
- Municipal Debt
- New Build
- Procurement Transformation

Tsholofelo Molefe Collin Matjila Collin Matjila Matshela Koko



## Financial Update



## Tsholofelo Molefe Financial Director



## Income statement



July 2014	Year to date			Year end			March
Rm	Actual	Budget	Variance	Q1 forecast	Budget	Variance	2014
Revenue	52 527	53 682	(1 154)	147 010	148 838	(1 828)	138 313
Primary Energy	23 891	24 971	1 080	78 732	75 196 <sup>°</sup>	(3 536)	69 811
Operating Expenditure	20 275	20 491	217	63 938	64 312	( 374)	60 206
Employee Benefit Expense Depreciation and Amortisation	7 673	7 748	75	23 833	23 984	150	22 384
Expense	4 411	4 620	209	14 891	15 570	679	11 932
Net Impairment (Reversal)/Loss	415	362	(52)	1 104	1 106	2	1 549
Other Operating Expenses	7 777	7 761	(16)	24 110	23 652	( 458)	24 340
Operating Profit /(Loss) Before Net Fair Value and Net Finance							
Cost	8 362	8 219	142	4 339	9 568	(5 229)	8 296
Other Income Net Fair Value Gain/(Loss) Financial Instruments, Excluding	494	230	264	673	719	(46)	1 873
Embedded Derivatives Net Fair Value Gain/(Loss) on	(1 615)	( 934)	(681)	(2 490)	(3 366)	877	( 753)
Embedded derivatives	1 860	-	1 860	2 220	-	2 220	2 149
Operating Profit /(Loss) Before Net Finance Cost	9 101	7 515	1 586	4 743	6 921	(2 178)	11 564
Net Finance Income/(Cost)	(2 324)	(1 630)	(694)	(6 911)	(6 272)	(639)	(4 618)
Profit/(Loss) Before Tax	6 777	5 885	892	(2 169)	649	(2 818)	6 947
Income Tax Expense	1 898	1 648	( 250)	(607)	185	(793)	1 521
Profit/(Loss) for the year from Continuing Operations	4 880	4 237	642	(1 562)	464	(2 025)	5 426

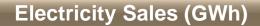
## Sales variance



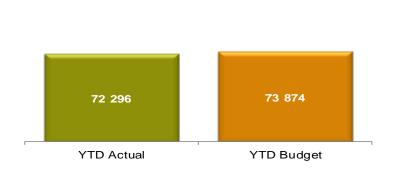
July 2014	Year to date				Prior	YoY	YoY %
GWh	Actual	Budget	Variance	% Variance	Year Actual	GWh Variance	Variance
Industrial	17 872	17 583	290	1.6%	17 482	391	2.2%
Mining	9 420	10 852	(1 432)	(13.2)%	10 739	(1 319)	(12.3)%
Distributors	31 666	32 025	(359)	(1.1)%	31 456	210	0.7%
Remaining categories	9 701	9 744	(43)	(0.4)%	9 481	221	2.3%
Total GCS	68 660	70 204	(1 544)	(2.2)%	69 157	(498)	(0.7)%
International	3 636	3 671	(34)	(0.9)%	4 132	(496)	(12.0)%
Total Eskom	72 296	73 874	(1 578)	(2.1)%	73 289	(993)	(1.4)%

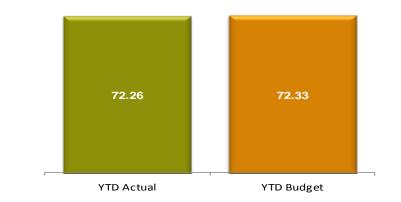
### Sales and revenue





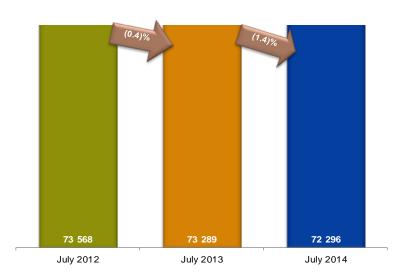
### **Electricity revenue (c/kWh)**

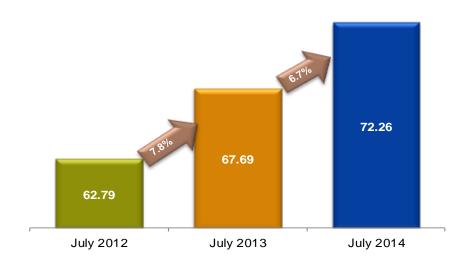




### **Electricity sales trend (GWh)**

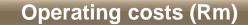
Electricity revenue trend (c/kWh)

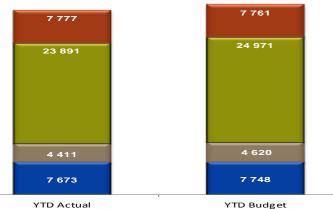




## Operating expenses







YID Actual

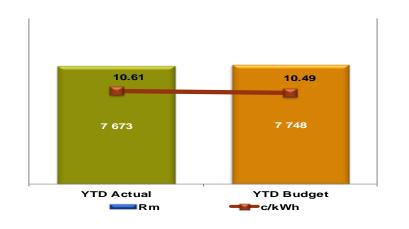
Other Operating Expenses

■Primary Energy

■Depreciation and Amortisation Expense

■Employee Benefit Expense

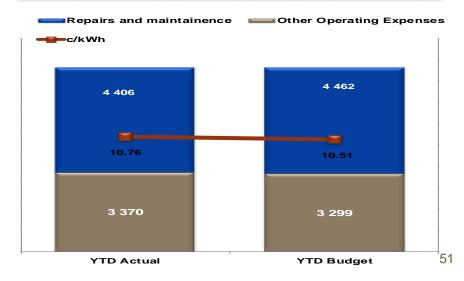
### **Employee benefit cost**



### **Primary energy**



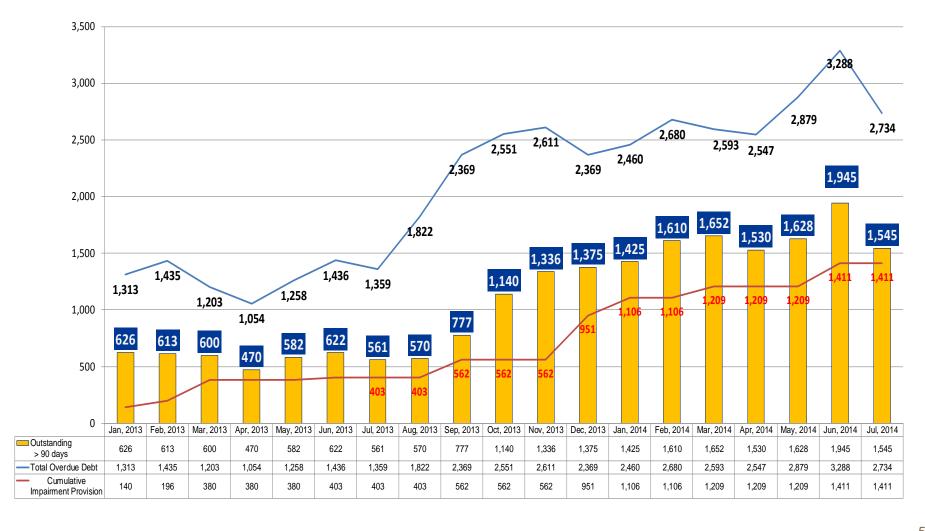
### Other operating expenses



## Municipal debt analysis



#### Rm



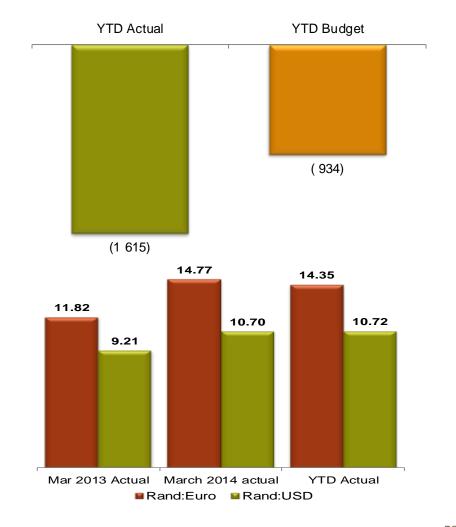
### Finance cost and fair values



Net finance cost Rm	YTD Actual	YTD Budget	Mar-14
Finance cost	7 604	7 061	17 648
Finance income	(764)	(419)	(2 622)
Borrowing capitalised to PPE	(5 526)	(5 893)	(13 290)
Unwinding of discount	1 009	881	2 882
Net interdivisional interest	-	-	_
Net finance cost	2 324	1 630	4 618

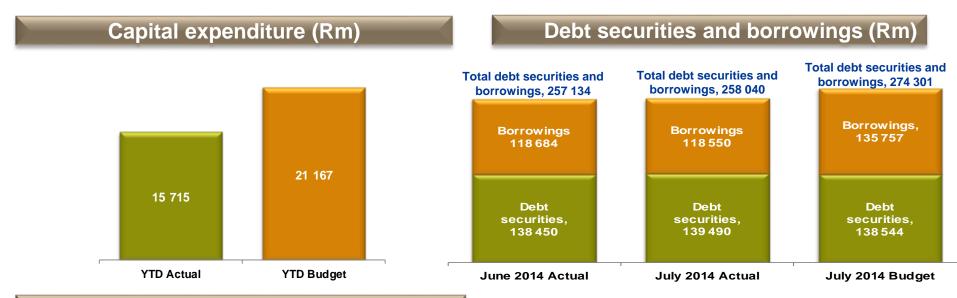
Embedded derivative analysis	Rm
Change in Aluminium Price Curve	783
Change in projected SA PPI	(190)
Change in USD/ZAR (Exchange Rate)	183
Change in Interest Rates	(207)
Change in US Interest rates	(18)
Change in SA Interest rates	(189)
Change in time and Volume	1,181
Other	110
Total gain	1,860

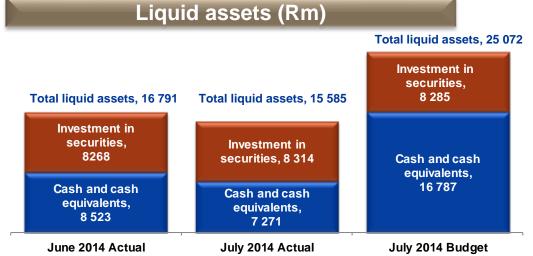
## Net Fair Value Gain/(Loss) Financial Instruments, excluding embedded derivatives



### Statement of financial position unpacked



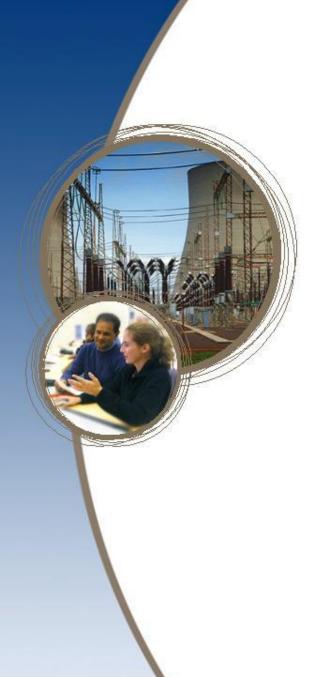




## Key company KPI's









## Thank you



## Municipal Debt



Collin Matjila
Interim chief executive







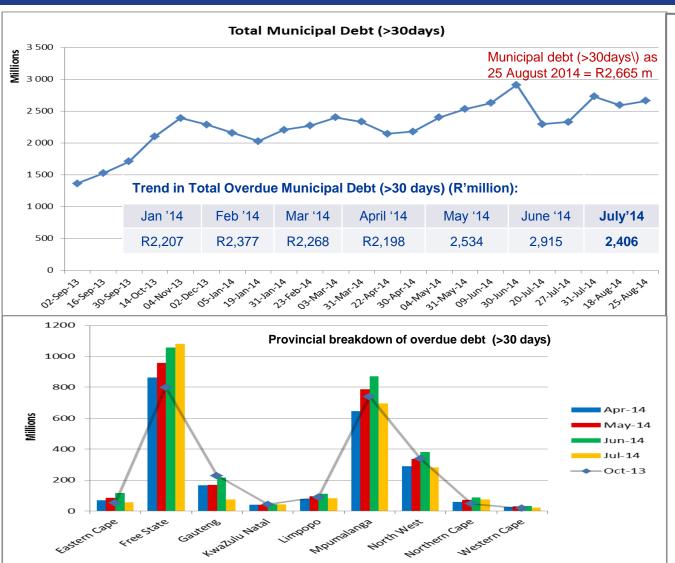
## **Municipality Outstanding Debt**

As at 29 August 2014



## Eskom is experiencing high overdue debt due to non payment by municipalities





- Municipalities make up about 42% of electricity sales
- Outstanding municipal debt remains significantly high despite structures being put in place to address the issue
- Total municipal arrear debt reduced in July 2014 due to payments made with equitable share income, but has since started the increasing trend.
- The outstanding municipal debt situation will not improve without all the role players taking hands to deal with the systemic issues causing non-payment.
- The trend is for overdue munic debt to double to a new base following the 'winter' period.
- Defaulting munics are primarily situated in the Free State,
   Mpumalanga, & North West provinces

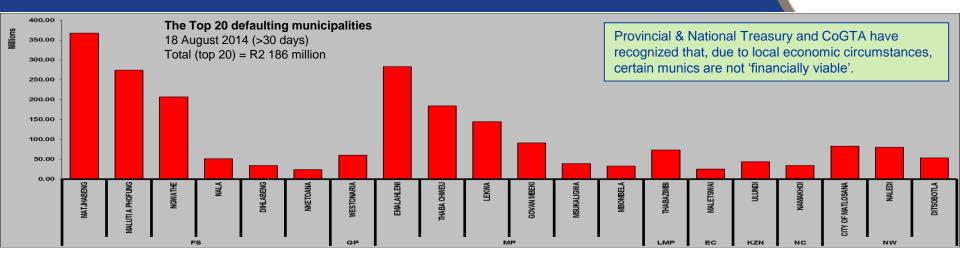


<sup>\*\*</sup> Eskom's payment terms is 15 days; however, the focus is on managing arrear debt >30 days as many municipalities have collection periods of 30 days.; also 'free basic electricity' accounts are payable in 30 days.

### The Challenge

### Various drivers are understood but out of Eskom's direct control





#### Factors underlying the municipal debt situation:

Main issues/ drivers (from an Eskom perspective)

Revenue
Municipal
Arrear Debt

Cash Flow

Funding

Tariffs

- Inadequate skills/ resources in Municipalities
- Separation of financial and technical duties within Municipalities,
- High turnover in management and key staff and prolonged acting positions in Municipalities
- Municipal Billing system not always functional
- Losses and ineffective revenue collection
- Penalties when exceeding NMD due to bad load management
- Municipality electricity revenue not ring-fenced
- Ineffective sales forecasting and budgeting processes
- Eskom billing dates vs Municipal billing dates to their customers
- •Municipal equitable share payments to municipalities have reduced and are no longer able to cover municipal arrear debt
- Dependency on funding to settle outstanding municipal debt
- Municipality tariff structure not always cost reflective
- Inadequate capacity within municipalities regarding electricity tariffs practises and philosophies

These root causes cannot be tackled directly by Eskom and need to embrace indirect ways of reducing municipal debt

2014-08-29 60

## **Progress Update** (with munics and Provincial Structures) Eskom has experienced different levels of success in dealing with defaulting municipalities in the MP, FS, NW & GP



#### **Province**

### **Progress with defaulting Municipalities**

1- number of municipalities that are in the top 30 of defaulting munics

Mpumalanga (7 munics<sup>1</sup>)

- Munic debt to be settled by end Oct 2014 agreement with MEC CoGTA (Oct 2013)
- Some munics are defaulting on the payment agreements finalised with Eskom.
- Letter sent to Premier to cancel existing agreement with the Province with Thaba Chweu, Emalahleni and Lekwa.
- Met with MP MEC CoGTA on 08/08/2014. Request for payment arrangements to be reviewed is to be declined by Eskom.

North West (6 munics<sup>1</sup>)

- Munic debt to be settled by end March 2015 agreement with MEC CoGTA (March 2013). Discussions ongoing to finalise agreements with defaulting munics.
- Delays experienced in municipality's signing payment plan agreements and interventions to be put in place to address thisby end August 2014.

Free State (7 munics1)

- Disconnections to Ngwathe, Maluti-a-Phofung and Dihlabeng munics suspended following high level meeting with Eskom CE and MECs. Process of developing payment plans envisaged to be concluded 31/8/2014 however the payment plans that were submitted so far were rejected.
- Matjhabeng municipality Eskom court application was heard 31/7/2014. Full
  payment of current account was not received as expected and munic has
  raised a number of disputes. Further meeting scheduled for 19/08/2014 where the
  payment plan for the outstanding debt will be discussed.

Gauteng (3 munics<sup>1</sup>)

- Provincial Treasury and the MEC CogTA are involved in discussions with the defaulting munics and to oversee the process.
- Randfontein has settled its outstanding debt in full and Mogale City has almost.
- Payment plan agreement with Westonaria to be finalised.



## New Build Programme



Collin Matjila
Interim chief executive







**New-Build Programme Update** 

## **New Generation Capacity and Transmission**

Lines

development

construction

Leading and partnering to keep the lights on



#### Return-to-service (RTS)



None

#### Base load



- **Nuclear New Build** Programme
- Next Coal (Coal 3)
- Biomass
- Majuba Underground Coal Gasification Demo Plant (UCG)
- Primary Energy projects (Road and Rail)
- Komati (1 000 MW)
- Camden (1 520 MW)

3 700 MW



- Open Cycle Gas Turbine Conversion Project conversion of Ankerlig and Gourikwa OCGT power plants to a Combined Cycle Gas Turbine (CCGT)
- Photovoltaic (own use)

Pilot Concentrated

Solar Power (100 MW)

Peaking and

renewable

- Ankerlig (1 338.3MW)
- Gourikwa (746 MW)
- Ingula (1 332 MW)
- Sere (100 MW)
- Acacia relocation
- Solar PV installations: MWP, Lethabo, Kendal (1.62 MW)

3 517.92 MW

#### Mpumalanga refurbishment



Refurbishment and air quality projects

#### **Transmission**



>60 Grid strengthening projects

- Grootvlei (1 180 MW)
- Medupi (4 764 MW)
- Kusile (4 800 MW)

9 564 MW

Arnot capacity increase (300 MW)

- Matla refurbishment
- Kriel refurbishment
- Duvha refurbishment
- Grootylei Fabric Filter Plant (FFP)

300 MW

Kriel Retrofit

- 765kV projects
- Central projects
- Northern projects

9 756 km

Cape projects

Synchronisation of the first units are expected as follows:

- Medupi in the second half of 2014
- Kusile in the second half of 2015
- Ingula in the second half of 20151

- ~ 17.4GW of new capacity (6 137MW installed and commissioned)
- ~ 9 756 km of new transmission network (5 524km installed)
- ~ 42 470 MVA of new transmission strengthening (27 565MVA installed)

Medupi is the first coal-generating plant in Africa to use supercritical power generation technology

# Medupi Power Station Project Description: Supercritical, coal-fired power station Location: Lephalale, Limpopo Capacity: 4,800MW (6 x 800MW)







## Medupi: Executive Summary



## Industrial Action Impact

- Construction progress in critical areas was hindered due to the industrial action of July 2014, with labour attendance of 40% - 70% during the period
- The workforce is back on site
- Through risk mitigation plans and re-assignment of available resources, the target for First Unit (Unit 6) synchronization remains December 2014

## First Unit Synch

- Boiler Chemical Clean is currently ongoing and is targeted for completion by the end of August 2014
- First Fires are targeted for September 2014
- First Unit (Unit 6) Synchronization is targeted for December 2014
- Coal has been received on the Coal Stockyard
- Other activities continue to support the First Unit synchronization date.

# Mitigation to achieve First Synch in Dec 2014

- Additional resources have been mobilised to Unit 6 by both the boiler contractor and control and instrumentation (C&I) contractor to mitigate any resource-driven delays
- Similarly, additional shifts have been introduced 24 hours a day, 7 days a week to accelerate progress on site
- Eskom is working with contractors to resolve any issues which could affect the schedule.



## Medupi Unit 6 – Key Milestones in support of First Unit Synchronization



Activity Name	Current Target	Forecast
Boiler Chemical Clean Start	7-Aug-14	7-Aug-14
Turbine on Barring (with Distributed Control System)	26-Aug-14	31-Aug-14
Chemical Clean Complete	2-Sep-14	25-Aug-14
Draught Group Test Run	13-Sep-14	5-Sep-14
First Oil Fire and Burner commissioning	29-Sep-14	30-Sep-14
First Coal Fires Start	6-Oct-14	8-Oct-14
Blow Through Start	6-Oct-14	8-Oct-14
Steam to Set (Turn on Steam)	1-Dec-14	3-Dec-14
1st Synchronization	24-Dec-14	26-Dec-14



### Medupi: Pictorial Progress





# Kusile Power Station Project Description: Supercritical, coal-fired power station Location: Witbank, Mpumalanga Capacity: 4,800MW (6 x 800MW)





## **Kusile: Executive Summary**



## Industrial Action Impact

- In addition to the protected strikes from Metal and Engineering contractors, Eskom experienced unprotected industrial action from Civil contractors during July 2014
- Disciplinary action, against Civil contractors whose workers caused disruptions, has been taken
- Resources were transferred to Project Medupi in order to support Medupi's recovery plan
- The workforce is back on site

## First Unit Synch

- Priority areas were defined for 2014 in order to support the First Unit (Unit 1)synchronization target date of December 2015
- However, the latest forecast indicates First Unit Synchronization by January 2016
- Stringent tracking process and recovery plans have been established by Eskom, together
  with contractors, to recover the schedule and achieve the target date of December 2015
- A commercial strategy has been defined to increase contractors' resources and improve their performance

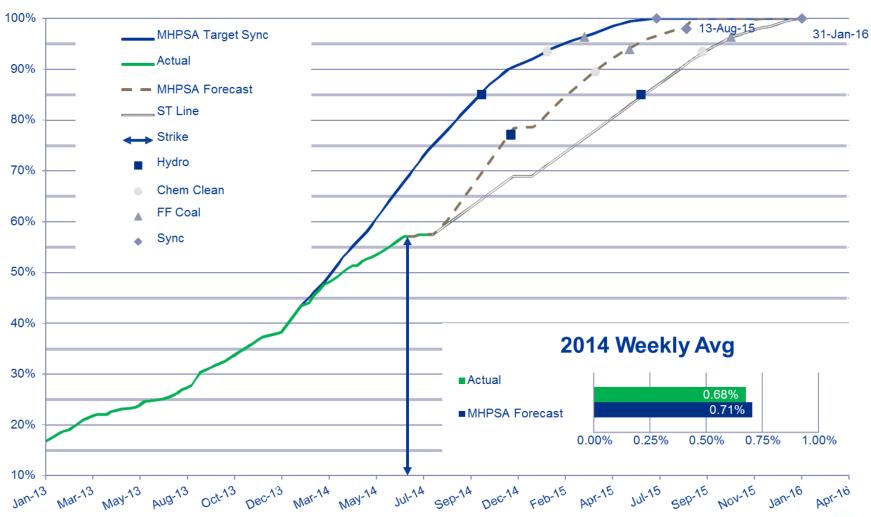
## Productivity Challenges

- The boiler contractor **improved boiler construction progress** from 0.48%/week (March 2014) to 0.68%/week
- Further improvement by the boiler contractor is required to achieve the target date of December 2015 and Eskom is addressing this
- Eskom continues to work with the control and instrumentation (C&I) contractor to ensure the contractor supports the December 2015 synchronization date
- Eskom has also implemented additional measures to mitigate schedule risk associated to C&I.



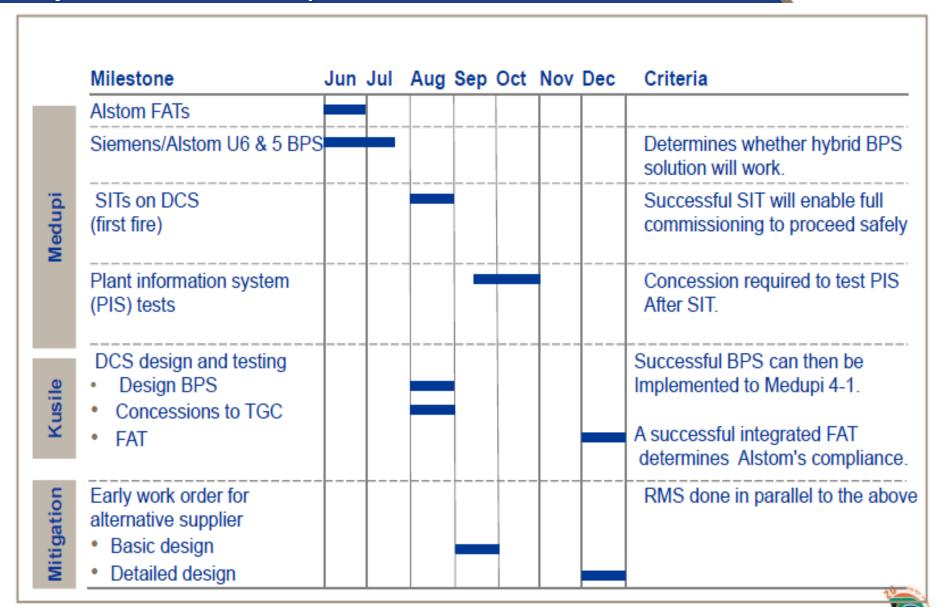
## **Current Target Schedule/Forecast**





To mitigate the schedule risk relating to Control and Instrumentation (C&I), an Early Works Order (EWO) has been placed in parallel to the current C&I contractor work at both Projects Kusile and Medupi





## Ingula: Executive summary



#### First Unit Sync

- First Unit Synchronization (Unit 3) is targeted for October 2015
- Two critical areas to support the First Unit Synchronization target date have been identified: i) The completion of Upstream Waterways and ii) The completion of Downstream Waterways as well as Surge Chambers

# October 2013 Fatalities Update

- Work in the two Inclined High Pressure Shafts (IHPS) was placed on hold after the 6 fatalities in October 2013
- A plan has been established to re-initiate work on the shafts
- Approval has been received to remove equipment and start equipping the shafts (in progress)
- Dedicated teams have been staffed to fast track reviews in preparation of re-starting work on the IHPS
- The enquiry by the Department of Mineral Resources, relating to the fatal incident of October 2013 is underway at site



# First Synchronisation and Commercial Operation Forecast Dates for Ingula units

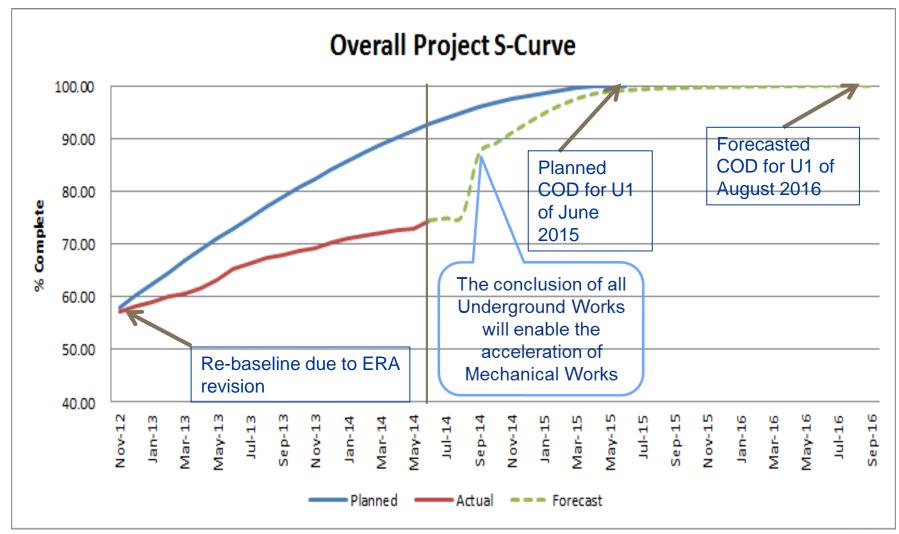






## Ingula: Overall Project Progress







# Transmission Projects







# Transmission: On target to meet the Shareholder Compact of Lines Built



KM LINE BUILT	Jun-14	YTD Plan	YTD Actual	YE Plan	YE Projection	
NW LINE BOIL!	Plan	Actual	11D1 Ian	TID Flair TID Actual TE Flair TE		12 i Tojection
Northern Grid Projects:	36.4	33.7	100.1	113.5	208.8	204.9
HPM: 132kV interconnecting line, 400kV line	8.0	0.0	8.0	7.7	57.2	58.3
Kusile: Vulcan bypass, loop 1 and 2	0.0	0.0	0.0	0.0	2.0	2.0
Anglo deviation	0.0	0.0	0.0	0.0	1.5	1.5
Medupi: Section E, F, G and Medupi Masa	28.4	33.7	92.1	105.8	148.1	143.1
765kV Projects:	5.0	8.7	10.0	13.9	70.0	73.9
Kappa Turn ins	5.0	8.7	10.0	13.9	10.0	13.9
Kappa Sterrekus	0.0	0.0	0.0	0.0	60.0	60.0
Cape Grid Projects:	0.0	0.0	0.0	0.0	6.0	6.0
Mercury Mookodi 400kV line	0.0	0.0	0.0	0.0	6.0	6.0
Central Grid Projects	0.0	0.0	0.0	0.0	30.3	30.3
Eros-Vuyani 400kV line Section A and B	0.0	0.0	0.0	0.0	25.9	25.9
Verwoerdburg Loop-in Loop-out	0.0	0.0	0.0	0.0	4.4	4.4
Power Delivery Projects	41.4	42.4	110.1	127.4	315.1	315.1



# Transmission: On target to meet the Shareholder Compact of MVA Installed







## Key Issues - Projects



Item	Description	Resolution
Welding Defects	<ul> <li>Inadequate and/or failed Weld Procedure         Qualification Records (WPQRs) and Post Weld         Heat Treatment (PWHT) on the boilers</li> <li>Welds for which there was no evidence of PWHT</li> <li>Misalignment of the Super-Heater that resulted in         design changes</li> </ul>	<ul> <li>Defective and sub-standard welds needed to be re-treated or redone</li> <li>Contractors had to revisit and correct their quality data books to ensure compliant and adequate quality control.</li> <li>All boiler repair work has since been completed.</li> </ul>
Control and Instrumentati on (C&I)	<ul> <li>The contractor was not able to meet some of its contractual requirements relating to C&amp;I</li> <li>This posed a risk to both Projects Medupi and Kusile and could have delayed the projects further</li> </ul>	<ul> <li>Eskom has worked- and continues to work with the contractor to resolve identified issues within the required timelines.</li> <li>However, an alternative supplier was contracted on the Boiler Protection System (BPS) component for the 1<sup>st</sup> two units of Medupi and an Early Works Order (EWO) has been placed in parallel to the current C&amp;I work to further mitigate schedule delays</li> </ul>
Safety Performance	- Poor safety performance on sites, including the 6 fatalities at Project Ingula in October 2013	<ul> <li>Eskom and its contractors have implemented safety interventions, appointed additional resources, removed non-performing resources and changed work methods</li> <li>Safety performance and behaviour has improved significantly</li> <li>Eskom and its contractors will continue with efforts to further improve performance</li> </ul>

## **Procurement Transformation**



Matshela Koko
Acting Group Executive - Technology and
Commercial



# Eskom enables and supports economic growth in South Africa



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



Zero Harm, Integrity, Innovation, Sinobuntu, Customer Satisfaction, Excellence

# **Eskom is expanding to provide sustainable electricity to all South Africans**



#### Generation



- Top 20 utility in the world by generating capacity
- Net generation capacity of 41,7GW with 237 291 GWh of electricity produced in 2012
- New build programme will add a total of 17GW of capacity by 2018/19
- Kusile and Medupi will be the world's 3rd and 4th largest coal-fired plants

#### **Transmission**



- Our transmission grid spans an area similar to Western Europe, reaching across South Africa with 28 995 km of transmission lines and 153 substations
- New build programme will add 9 004km of new high voltage transmission lines
- 41 645 MVA of installed capacity in substations by 2018/19

#### **Distribution**



- Connected over 4,2m
   households since 1991
- The largest power line system in Africa with 343 014 km of distribution lines
- We plan to reach universal access by 2020 in support of government's objective of advancing electrification

# Through the procurement spend, Eskom will accelerate the development of competitive local suppliers









Energy supply mandate



Sizeable long-term procurement spend



Opportunity to <u>localise</u> the energy supply chain

- We will continue to supply South Africa's electricity requirements
- We will continue to enable and support economic growth
- We also acknowledge that by the virtue of the size of our operations and expansion programmes, we have an opportunity to actively drive the development of a local supplier industry, which can be globally competitive

### A strong and capable localised energy supply chain will benefit Eskom, benefit local industry and benefit South Africa as a whole



### Driving economic development... Will benefit....

**Enhanced** 



### The South African economy:

- Reduced cost of doing business
- Investment in plant and technology
- Greater export potential
- Reduced unemployment and poverty
- Larger and more skilled workforce
- Increased diversity in work
- Improved quality of life



## **Greater local** skills base

energy

industry

Localised

Accelerated job creation

Investment in building local communities



### **Eskom operations:**

- Reduced supply chain costs
- Greater security of supply
- Shorter lead times
- Improved efficiencies and quality
- Co-development of solutions for operation specific problems wh manufacturers



# We proactively drive local development through Group Technology and Commercial



Identifies *opportunities to design for local* to drive development of local industry

ocalisation and Transformation **Project** Sourcing **Supplier Development**, **Technology Strategic** Sourcing **Tactical** Sourcing

- Capital procurement excellence
- Incorporates technology and SD&L to drive local industry development while maintaining the project life cycle

Enhances long-term view by *pooling the*demand of project and strategic commodities

 Drives TCO, risk & local development through long-term sustainable spend

*Elevates tactical commodities* through standardisation and aggregation of demand

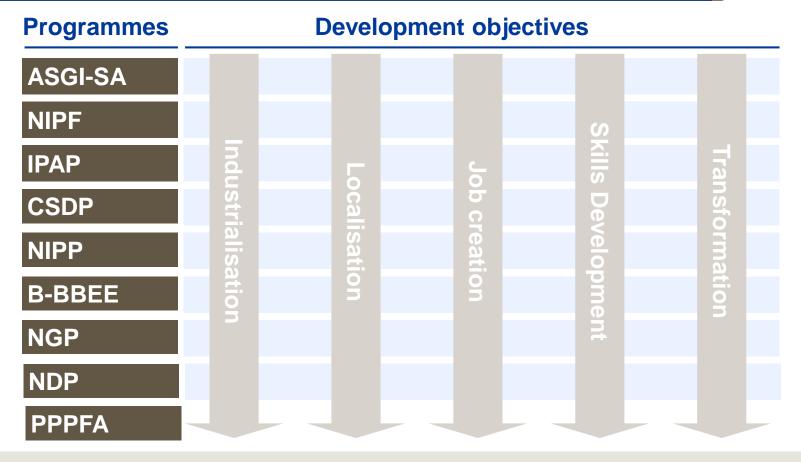
 Looks for opportunities to maximise value from transactional (once-off) procurement activities

Identifies and integrates local development opportunities into once-off, strategic commodity and project contracts



# We have distilled five main development objectives from different government programmes





- We have aligned ourselves along development objectives rather than individual policy and government programmes
- All of this is underpinned by an Enterprise Development focus that will see participation of Black people in mainstream Eskom supply

# We are implementing our developmental objectives through a number of key activities



- a Embedding SD&L into our organisation
- Ensuring SD&L becomes an integral part of our operations
- b Enhancing our Strategic Sourcing process
- Integrating technology and SD&L into the process
- Creating our SD&L Plan
- Following a strategy to drive development through our spend
- Making transformation a key focus
- Accelerating the development of black industrialists

- Including SD&L and collaboration in all our transactions
- Implementing our SD&L plan through our strategic sourcing activities
- Changing the way we strategically work with our suppliers - Developing collaborative, long-term relationships



## **Local development impact from Kusile (1/3)**



#### **Bulk Earthworks - Khulani Trading Enterprise**

- A tender for Kusile bulk earthworks was issued to the market with a condition of partnering with a black owned entity from Mpumalanga Province. The market analysis revealed that Mpumalanga had no capacity as the scope required a Grade 9CE contractor and within the province there was no company with such credentials.
- The joint venturing strategy was adopted with the aim of ensuring enhancing the local capacity. Khulani Trading Enterprise black women owned entity and Sanyati entered into joint venture and were the successful tenderer.
- Unfortunately Sanyati got liquidated immediately after contract award. Khulani undertook to execute the contract and they appointed Esor Civils to assist them.
- The value of this contract is R 175 million.
- Khulani Trading currently employs 89 people mostly from Mpumalanga Province. Through this contract they managed to improve their CIDB level to 8CE from grade 5CE.



## Local development impact from Kusile (1/3)



### **INCUBATION:** Bulk Earthworks - Khulani Trading Enterprise

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### Local development impact from Kusile (2/3)



### **INCUBATION:** Rock Crushing Contract - Masibuyisane

- Masibuyisane enters into a Joint venture agreement with Esorfrankie to tender for Rock Crushing at Kusile Power Station. The enquiry required large experienced entities to form a joint venture with local black owned entities. The purpose was to give local entities an opportunity to participate in tenders whose scope of work needed a higher CIDB grading.
- The joint venture ratio is Masibuyisane: 51% and Esorfrankie: 49%.
- The table below shows how Masibuyisane improved its business operations as results of the Joint venture.



## Local development impact from Kusile (3/3)



#### **INCUBATION:** Construction of 336 units contract

- The joint venture was formed between Masibuyisane and Liviero to construct flats at Wilge. The required CIDB grading was high hence the requirement to form joint ventures with local entities became a pre-requisite for the tender. The JV participation ratio was 50:50.
- Masibuyisane experience challenges after contract award.
- Expectations were that the lead partner was going to be responsible for 100% performance bond.
- Lead partner was not interested in carrying the risk alone therefore Masibuyisane was expected to make contributions towards bond performance which is equivalent to their participation.
  - Masibuyisane manage to raise 20%
  - Participation level decreases from 50% to 20%
  - Not enough visibility of local partner and their staff in the JV
  - Confidence and capability to execute project of this magnitude is low.



# With the creation of SD&L within Group Technology and Commercial, we were able to create a comprehensive plan to guide our development efforts



- 1 Centre-led procurement function
- 2 Dedicated local development department with clear focus areas
- Integration of development and engineering into sourcing processes
- Long-term, sustainable demand view
- Packaging of high impact, high value spend

# Supplier Development and Localisation Plan

A strategy for how we will leverage and optimise our procurement spend to proactively drive economic development

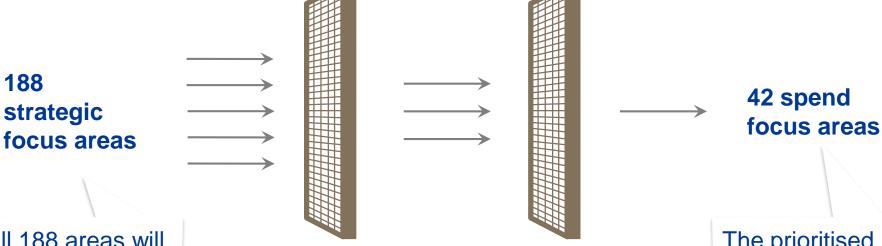
Maps our strategic spend areas against our development focus areas:

- Industrialisation
- Localisation
- Job creation
- Skills development
- Supplier development
- Transformation



# We prioritised our list further based on the strategic importance to SD&L, the value and contract duration





All 188 areas will include opportunities for development which will be identified in the sourcing process

Strategic importance and level of opportunity:

- Industrialisation
- Localisation
- Job creation
- Skills development
- Enterprise development

Prioritise based on:

- Value
- Timelines(project startdate andcontract expirydate)

The prioritised list is our immediate focus due to the strong opportunity for industrialisation and localisation



# This process resulted in a list of 42 operational and project spend focus areas making up ~89% of our procurement spend



Total forecasted 5 year spend, R'billion

Total

**Spend** 

42 Focus Areas

Other

Priority focus areas

Provide a **platform for sustained demand** through our operational and project spend

- Boiler Maintenance
- Primary Energy
- Cables and Conductors
- Metering
- Valves
- Protection Schemes
- Grinding Elements
- Pumps
- ICT
- Vessel (Containers)
- Generators
- Switchgear
- Generation Spares
- Fabric Filter Bags
- Tx Line Construction
- Biomass
- Network Strengthening
- Substation construction and refurbishing
- Koeberg Nuclear
- Electrification of homes

- Transformers
- Turbines
- Control systems
- Ash & Stockpile Handling
- Pipes
- Rotors
- Conveyor
- Tubes
- Air Heater Pack
- Economiser
- Capacitor Bank
- DC Equipment
- MV Motors
- Civil Construction
- Fabric Filter Plant Retrofit
- Steel
- Building and Build maintenance
- Gas CCGT
- Nuclear New Build



Projects and New Build



IR P2010



- CSP
- Solar PV
- Wind

Source: Eskom SD&L Plan and Analysis

# Supplier Development's role is to increase the capacity and capability of local suppliers across Eskom's value chain



#### **Strategic imperatives**

#### **Description**

Create an enabling environment for new suppliers

 Identification of priority and high impact commodities with no local supplier (BO) presence

 Creation of an enabling environment for the development of new suppliers to do business with Eskom

Develop and grow existing emerging suppliers

Source EMEs and QSEs (BOs)
from the data base and through
industry analysis for development to
increase capacity and capability to
contract with Eskom in high impact
areas

Grow emerging suppliers into sustainable LMEs

 Ensure QSEs (BOs) are developed and provided with sufficient,
 sustainable business to become established LMEs

#### How will this be achieved

- Clear linkage to priority/high impact spend areas with a focus on Primary Energy, Primary and Secondary Plant and Capex
- Thorough understanding of supplier types, their growth trajectories and related needs
- Strong integration and collaboration with internal Eskom departments
- Establishment of strategic external partnerships
- Range of suitable intervention mechanisms



## Challenges posed by PPPFA (1/2)



#### **HIGH IMPACT AREAS**

Utilisation of the **70:30 evaluation framework** created to embed SD&L into Eskom's procurement activities

**Shifting procurement spend** to enable the emergence of black owned supplier industries in the critical areas of primary energy, primary plant and secondary plant

Development of **SD&L targets** per commodity aligned with the 42 SD&L Plan priority spend focus areas, **outside of the DTI designated sectors** 

**B-BBEE levels** used as a **gatekeeper** 

**70:30 Framework** incorporates the concept of **objective criteria** 

### PREVIOUS ...

## ... CURRENT

Preference Point System (90/10; 80/20)
All contracts greater than R30 000 are subject to 90:10 and 80:20

Preferential allocation is limited to the B-BBEE scorecard allocation in the 90:10/80:20 evaluation Set asides not allowed

Application of local content thresholds limited only to "designated sectors"

Minimum **B-BBEE levels** cannot be used as a **threshold**, **pre-qualification** criteria or **weighted evaluation criteria** 

Contract must be awarded to the tenderer who scores the highest points **unless** the **objective criteria in addition to** those specific goals justify the award to another tenderer



## Challenges posed by PPPFA (2/2)



#### **Mechanism**

#### **Conflict with PPPFA Framework**

Spend shift & Set asides

- Preferential allocation is limited to the B-BBEE scorecard allocation
- Set asides not allowed

Qualification Criteria

- Only designated sectors can include local content obligations
- B-BBEE scorecard status is measured in the 90:10/80:20
- Suppliers cannot be excluded for not having a B-BBEE scorecard

Contractual conditions

- Sub-contracting
  - PPPFA provides a 25% allowance of sub-contracting
  - However, it remains unclear whether forced subcontracting contractual conditions to *Eskom preferred* (BO; BWO: BYO) suppliers is permitted

Price Matching

Price matching is not permitted under the PPPFA framework

**Award criteria** 

- The 70:30 evaluation framework was created to embed SD&L into Eskom's procurement activities
- All contracts greater than R30 000 will be subject to 90:10 and 80:20 where evaluation is based on Functionality, Price and B-BBEE

 There appears to be limited practical methodology for embedding socio-economic development objectives.



# A summary of these previous mechanisms used contrasted against the requirements of the PPPFA illustrates the constraints to achieve targets



Success against SD&L targets was made possible by the exemption from the PPPFA -However, this is no longer possible **Key drivers of transformation and development** SD SD&L Local Spend shift & **B-BBEE** Sub-**Price Evaluation Threshold** Content **Set-asides** threshold contracting **Matching** of 60% criteria threshold 32:1034 & SD PPPFA-imitations



# Embedding SD&L objectives in the PPPFA regime under objective criteria



#### The Eskom PPPFA Practice note has been issued

### Rules of Application General

- For transactions below R30k (including VAT and all applicable taxes) Supplier list that is derived from Eskom Supplier Database for identified list of supply /services, as part of a minimum 1 quote system may be used;
- For transactions from R30k (including all applicable taxes) but not exceeding R1million (including all applicable taxes) – Eskom Supplier Database to support a closed minimum three quote system
- For transactions greater than R1 million, open or closed formal competitive tendering may be applied, based on an approved strategy;
- For all transaction above R10mil: have a front-end planning conducted and a sourcing strategy to be approved at various governance committees as indicated in the Eskom approved DOA.

### Front End Planning - enabler for SD&L implementation

- Analysis on Demand, Commodity and Industry / Sector
- Front End Planning will inform your objective criteria targets







# Thank you

