



# ESKOM FINANCIALS SUMMARY REPORT

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# Table of Contents

<b>1. INTRODUCTION</b>	3
<b>2. DEBT AND CREDIT WORTHINESS</b>	3
<b>3. REVENUE</b>	4
3.1 PROFITABILITY	4
3.2 REVENUE AND SALES	5
<b>4. EXPENDITURE</b>	8
4.1 OPERATING EXPENSES	8
4.2 EMPLOYEE BENEFIT EXPENSE	9
4.3 PRIMARY ENERGY	12
<b>5. SUSTAINABILITY</b>	13
<b>6. CONCLUSION</b>	15

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*The following report presents a summary of an analysis undertaken by The Eton Group (Pty) Ltd of Eskom's Financial Statements published in July 2017.*





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# 1 Introduction

The following report presents a summary of an analysis undertaken by The Eton Group (Pty) Ltd of Eskom's Financial Statements published in July 2017.

The findings of the analysis of the following areas is discussed; these are identified as key contributors to Eskom's current financial situation, as well as areas of key risk or concern for the future financial sustainability:

-  Debt and Credit Worthiness;
-  Revenue- Profitability and Sales;
-  Expenditure – Operating Expenses, Employment and Primary Energy; and
-  Sustainability



## 2 Debt and Credit Worthiness

An analysis of Eskom's recently released financial statements indicate that the utility finds itself having to service debt, but with reduced financial space to do so. Eskom may have to divert borrowing to fund operating costs, and may struggle to service its debt due to liquidity issues.

Diverting funds may also breach some loan conditions, risking a call on government guarantees and a run on cross-default clauses written into other bond and loan agreements. The 2016 credit rating downgrades by S&P and Moody's are, in part, due to these concerns.

The possibility remains that government will have to provide future equity investments into Eskom, and provide further guarantees on Eskom's debt. This reality lies in stark contrast with Eskom's statements that it will seek to release government guarantees. These statements further defy understanding of Eskom's present situation and short-to-medium term challenges.

These risks require proactive monitoring and evaluation of Eskom's operational, technical and financial activities.

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# 3 Revenue

## 3.1 PROFITABILITY

Since 2007, Eskom's profits have declined (*Figure 1*), its net profit margin has averaged 4% (including losses in 2007/08 and 2008/09).

### Eskom Net Profit Margin

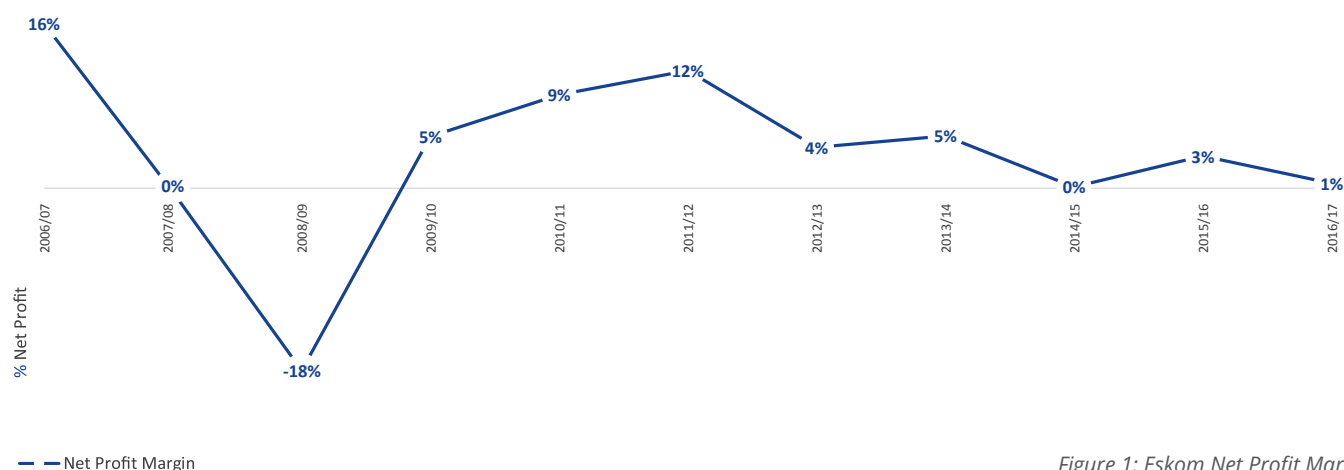


Figure 1: Eskom Net Profit Margin

The decline in Eskom's profitability since 2006/07 has occurred despite the significant and sustained increase in revenue (*Figure 2*), attributed to the NERSA approved average tariff adjustments.

### Net profit (nominal) vs. Revenue (nominal)



Figure 2: Net Profit vs. Revenue

### 3.2 PROFITABILITY CONTINUED

Between 2006/07 and 2016/17, Eskom's revenues grew by an annual average of 16.4%, while profits fell by an annual average of 15.5%. The annual average tariff adjustment granted by NERSA is calculated at 15.9%.

Analysing the results of this scenario in a profitability model shows the following warning signs.

- The demand for electricity has eroded; and
- Eskom is not fully in control of its operational expenses.

#### Profitability Model

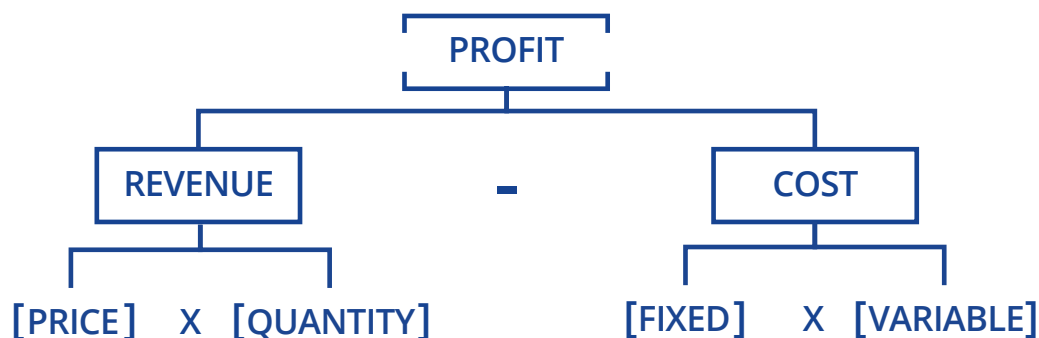
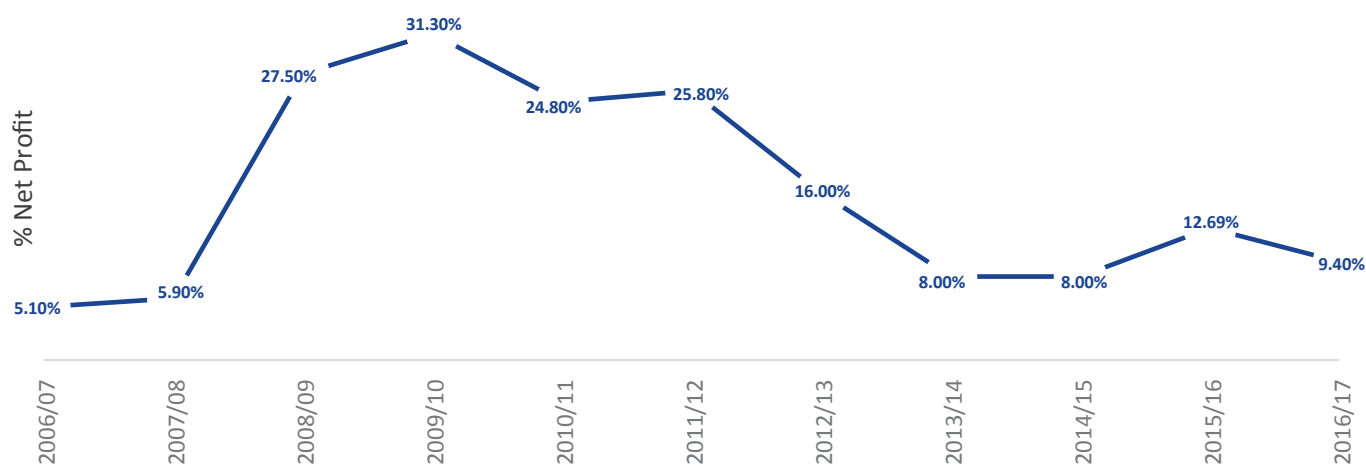


Figure 3: Profitability Model

Logically, if Eskom is granted a tariff increase of 9.4% by NERSA, one would expect a concurrent increase in revenue for the utility. However, this has not been the case; revenue increases have consistently been less than the tariff adjustment. This under recovery can be attributed, in part, to the declining sales experienced by Eskom.

#### Nersa approved average tariff adjustment



— Nersa approved average tariff adjustment

Figure 4: NERSA Approved Average Tariff Adjustment

However, even the decline in sales cannot fully explain the drastic deterioration in profits. Even though revenue is not fully appreciated by the increase in tariff granted by NERSA, it is still positive. The resultant conclusion is that increased operating expenses coupled with an aggressive build programme are further contributors to decreased profits.

## 3.2 REVENUE AND SALES

Total electricity sales declined after 2007/08 in response to the effects of the global financial crisis, country-wide load-shedding, as well as sustained lower economic growth. Global structural changes in commodities, greater efficiencies and decreasing international electricity price competitiveness; these indicate that lost demand is unlikely to return, or indeed to return to historic levels.

Between 2007/8 and 2015/6 the industrial and mining sectors, which account for 37% of direct Eskom sales, decreased their demand by 20.4 % and 5.5 % respectively.

Between 2010 and 2012, electricity sales recovered to the 2007 levels, but have been in decline since (*Figure 5*).

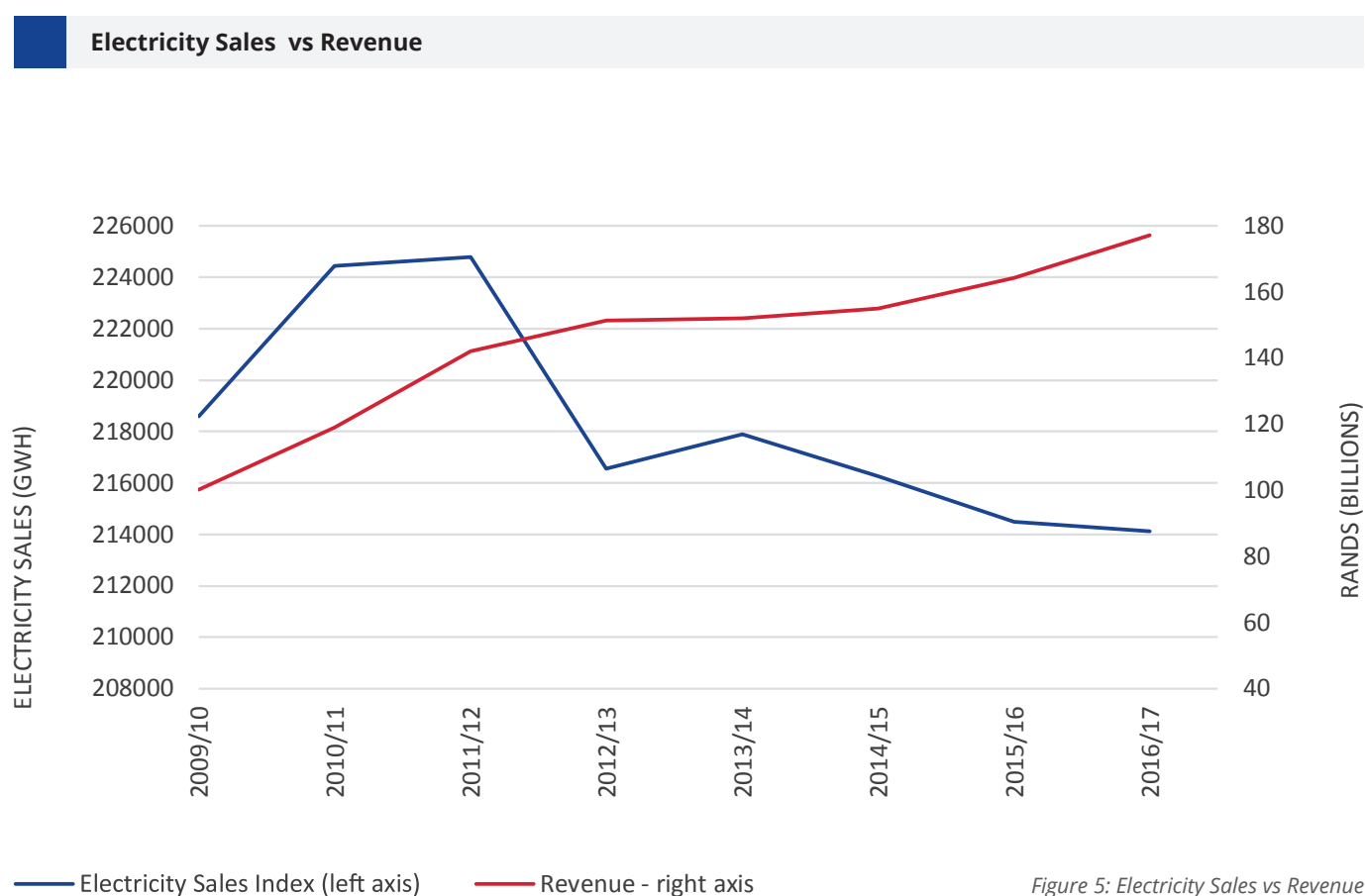


Figure 5: Electricity Sales vs Revenue

The rate of deterioration of the industrial and mining sectors in South Africa is alarming. This is evidenced by the steady decline in Eskom's sales to these sectors which, combined for 2017, are more than 14% below 2011 levels (*Figure 6*).

This is due mainly to industrial and mining capacity shutting either permanently or temporarily, or moving offshore. Unfortunately, without immediate and sustainable intervention, it is unlikely this downward trend will change.



### 3.2 REVENUE AND SALES *CONTINUED*

#### Eskom sales growth by category - 2011 to 2017

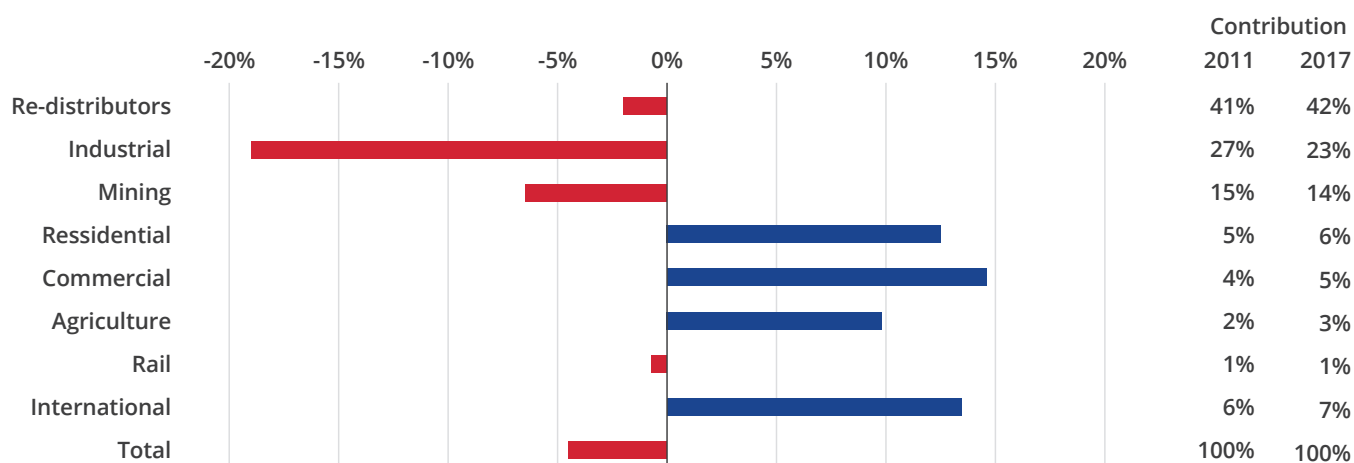


Figure 6: Electricity Volumes % Growth / (Decline) & Contribution

Inaction now will result in further sales declines to industrial and mining customers. If this trend cannot be arrested and reversed, it will lead to a “death spiral” scenario where falling demand triggers steep price increases, which result in further demand destruction, and so on (*Figure 7*). In such a scenario, all customers will have to pay more for electricity, which will trigger further unintended outcomes, such as lower GDP growth, less job creation, job losses and additional non-technical losses.

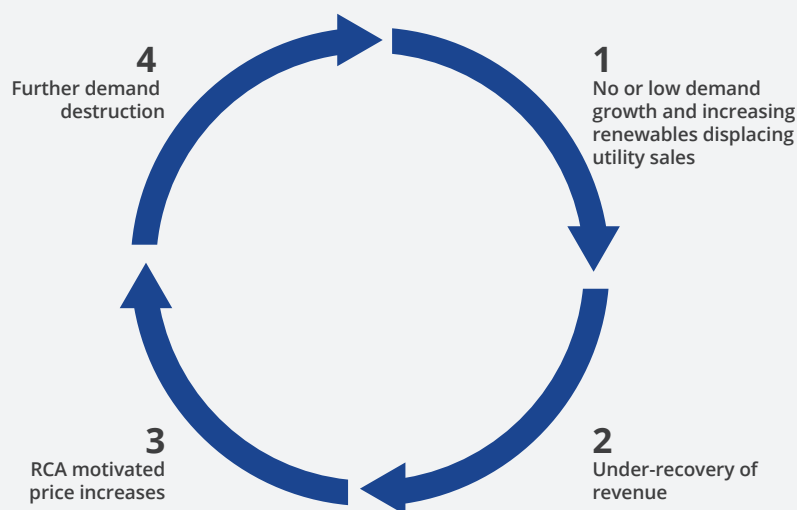


Figure 7: Utility Death Spiral

Short-term tariff deviations for vulnerable entities, a move to internationally competitive industrial tariffs, and changes to the industry structure into the long-term, may halt or slow the so-called “death spiral” phenomenon.

The success of such interventions depends on the characteristics of such changes, the urgency with which they are implemented, and the rate of such tariffs.

## | 4 Expenditure

### 4.1 OPERATING EXPENSES

Figure 8 illustrates a breakdown of Eskom's operating expenses in comparison to previous years.

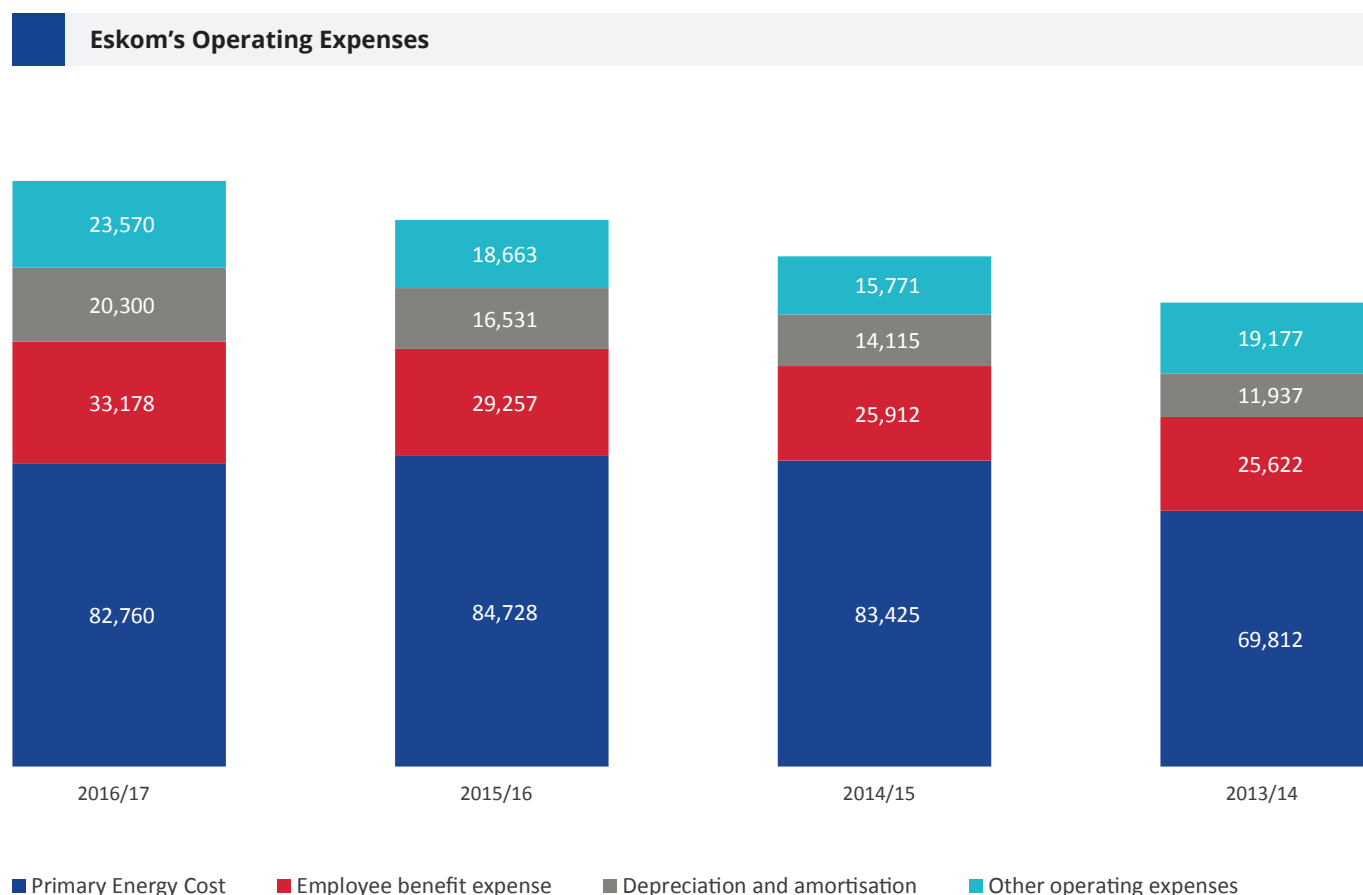


Figure 8: Operating Expenses

The largest contributor to the increase in Eskom's operating expenses is attributed to "Repairs and Maintenance" which increased by R 4.4 billion.

The aggregated category of "Other Operating Expenses", where the bulk of expenditure (R 1.4 billion) is ascribed to "Managerial, Technical and Other Fees", increased 140%.

Along with many other irregular expenditures, this amount can be attributed to consulting fees paid to McKinsey and Trillian. These two consultancies were compensated R 900 million and R 495 million respectively for their services without proper contracts in place. The relationship and contractual concerns regarding McKinsey and Trillian speak to governance and compliance issues in terms of contract management, procurement and accountability.



## 4.2 EMPLOYEE BENEFIT EXPENSE

Employee benefits, which constitutes the 2nd largest category of operating expenses, increased by 13%. Headcount decreased marginally (2016: 47 978 – 2017: 47 658).

The increase in employee benefit expenses can be largely credited to the R 4.2 billion set aside for annual and performance bonuses, which increased by 98% from last year. This translates to an annual and performance bonus of almost R 89 000 per employee.

### Employee Count vs Total Energy Available for Distribution

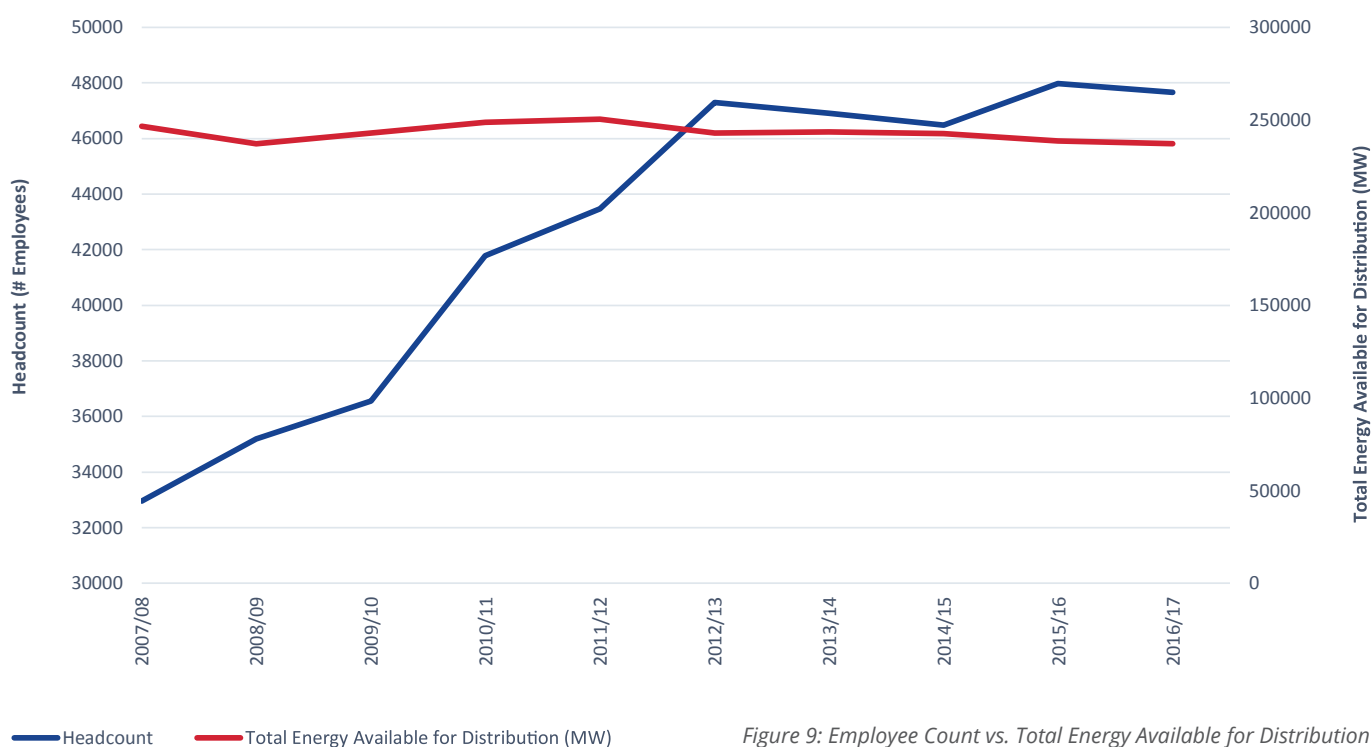


Figure 9: Employee Count vs. Total Energy Available for Distribution

Examination of the Eskom's employee count versus total energy available for distribution (Figure 9), shows that headcount has increased by 45% since 2007/08, and has remained between 47 000 – 48 000 for the last four years.

In contrast, energy available for distribution has remained flat (decreasing by 2%). The total energy available for distribution, coupled with the decline in sales, raises concerns regarding the level of overstaffing at the utility. This issue has been highlighted in the World Bank Study for Utilities in Africa.



## 4.2 EMPLOYEE BENEFIT EXPENSE *CONTINUED*

The World Bank Study of Utilities in Africa considered the staffing data for 36 countries. Staff costs represent a significant portion of operating costs for a utility: on average US\$27,000 per employee, per year in constant 2014 US dollars. This result is heavily skewed by the South African utility staff costs, at an average of US\$61,000 per employee.

Excluding South Africa, staff costs are on average US\$13,000 per employee (*Figure 10*).

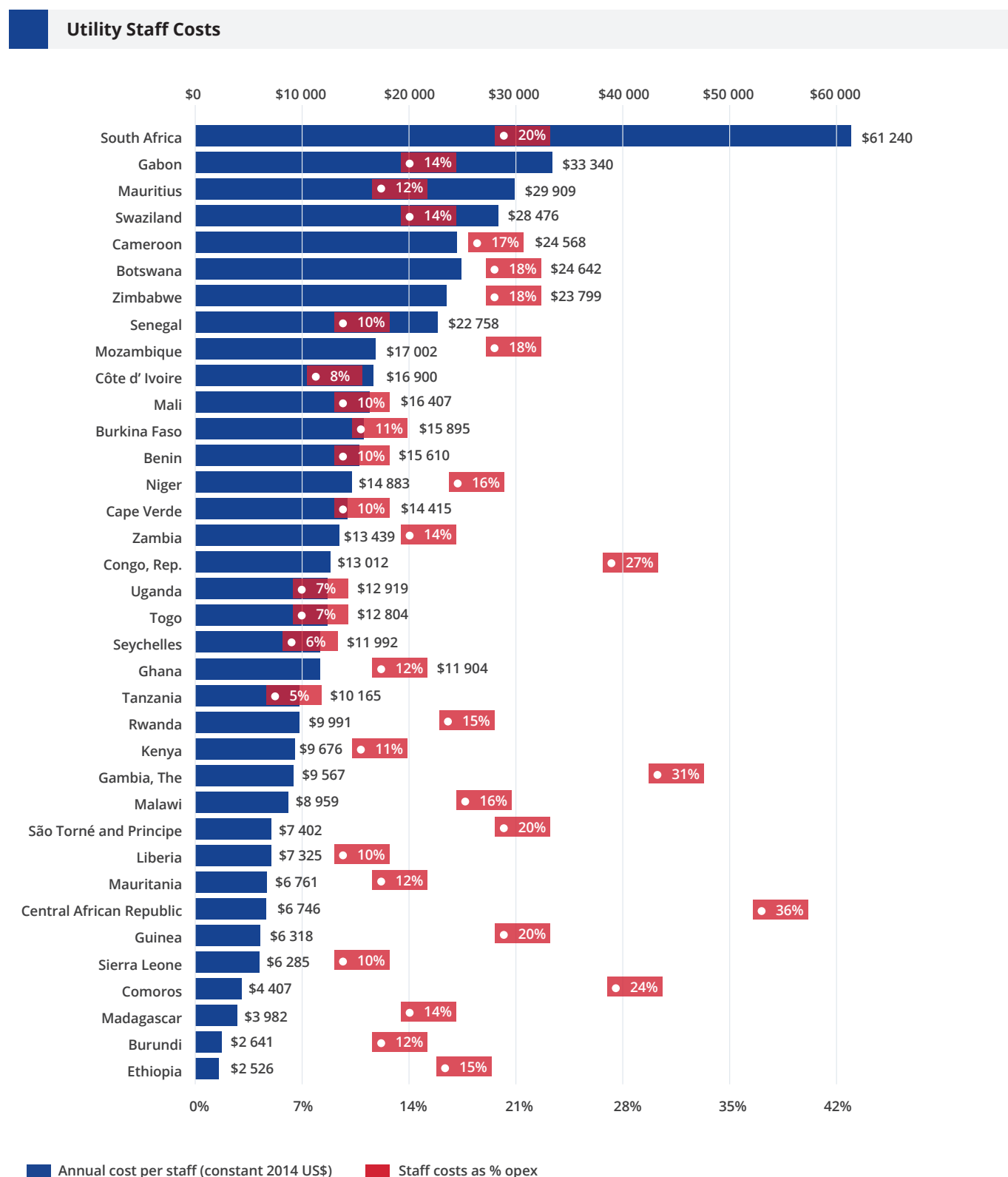


Figure 10: Utility Staff Costs  
Source: World Bank staff calculations based on utility financial statements and annual reports

## 4.2 EMPLOYEE BENEFIT EXPENSE *CONTINUED*

According to the World Bank, Eskom stands out for overstaffing in absolute terms, reporting 41,800 employees against the estimated benchmark of 14,200. This suggests overstaffing of 27,500 (*Figure 11*)<sup>1</sup>.

Country	#Customers	ACTUAL NUMBER OF STAFF			"OPTIMAL" BENCHMARK STAFF SIZE			OVERSTAFFING	
		Genration	T&D	Total	Genration	T&D	Total	Difference	%Over
Cape Verde	133,481			634	496	449	945	-311	-49%
Gabon	280,639			1,430	753	638	1,391	40	3%
Benin	484,486		1,412	1,412	262	1,101	1,363	49	4%
Burkin Faso	508,499			1,885	646	1,156	1,802	83	4%
Swaziland	150,668			680	135	507	642	38	6%
Senegal	998,423			2,583	662	1,749	2,411	172	7%
Sierra Leone	80,894			663	268	272	539	124	19%
Mauritius	435,311			1,902	531	989	1,520	382	20%
Mali	346,978	214	1,347	1,561	415	789	1,203	358	23%
Togo	233,036		1,161	1,161	101	784	885	276	24%
Mozambique	1,377,003			3,763	425	2,412	2,837	926	25%
Niger	238,548		1,328	1,328	169	802	971	357	27%
Rwanda	366,106			1,345	145	832	977	368	27%
São Torné and Principe	35,169			317	111	118	229	88	28%
Uganda	667,483		2,047	2,047	178	1,169	1,347	700	34%
Cameroon	951,496			3,587	643	1,667	2,310	1,277	36%
Ghana	2,612,007		7,350	7,350	325	4,576	4,901	2,774	38%
Seychelles	35,234			513	186	118	304	209	41%
Côte d' Ivoire	1,315,837			4,260	216	2,305	2,521	1,739	41%
Tanzania	1,473,217			6,328	1,053	2,581	3,634	2,694	43%
Botswana	343,050	471	1,451	1,922	300	780	1,079	843	44%
Mauritania	177,806			1,976	492	598	1,090	886	45%
Kenya	3,611,904	2,407	10,845	13,252	831	6,328	7,158	6,094	46%
Burundi	86,446			892	189	291	480	412	46%
Central African Rep	23,550			531	205	79	284	247	46%
Guinea	270,249			1,792	307	614	921	871	49%
Liberia	25,993			309	68	87	155	154	50%
Comoros	44,400	109	467	576	130	149	279	297	52%
Madagascar	480,369			5,691	1,483	1,092	2,575	3,116	55%
Gambia, The	131,368	340	1,126	1,466	181	442	623	843	58%
Congo, Rep	205,000			2,279	155	689	844	1,435	63%
Ethiopia	1,936,244			11,839	885	3,392	4,277	7,562	64%
Malawi	274,005	592	1,881	2,473	232	623	855	1,618	65%
South Africa	5,477,602			41,787	4,648	9,596	14,244	27,543	66%
Zimbabwe	601,609	1,593	4,477	6,070	629	1,367	1,996	4,074	67%
Zambia	662,526			6,771	432	1,506	1,937	4,834	71%

Figure 11: World Bank Analysis of staffing levels  
World Bank staff calculations based on utility financial statements and annual reports

Analysis by Fractal Value Advisors concluded that assuming no other changes other than the number of employees and a fixed cost per employee, Eskom would achieve an acceptable CFROI when the number of employees drops below 30 000. 30 000, is however still well in excess of the World Bank benchmark for Electric Utilities<sup>2</sup>.

<sup>1</sup>World Bank Group Trimble C, Kojima M, Arroyo IP, Mohammadzadeh F, "Financial Viability of Electricity Sectors in Sub-Saharan Africa Quasi-Fiscal Deficits and Hidden Costs" August 2016

<sup>2</sup>Fractal Value Advisors "Eskom Limited – Financial Benchmarking Exercise for the Energy Intensive Users Group" February 2017

## 4.3 PRIMARY ENERGY

Primary Energy is the largest component, contributing 52% of operating expenditure.

Expenditure on primary energy decreased 2% (2016: R 84.7 billion | 2017: R 82.7 billion) almost solely due to the open-cycle gas turbines (OCGT's) no longer being used to the extent they were in the past during load-shedding (*Figure 12*).

This also speaks to the surplus in electricity generation due to new generation assets coming online and a lower demand for electricity.

If the "savings" experienced from the lack of OCGT usage are stripped out of the equation, the cost of primary energy has increased by 6.42%, which is in line with an inflationary increase, and not due to saving measures claimed by Eskom.

### Primary Energy

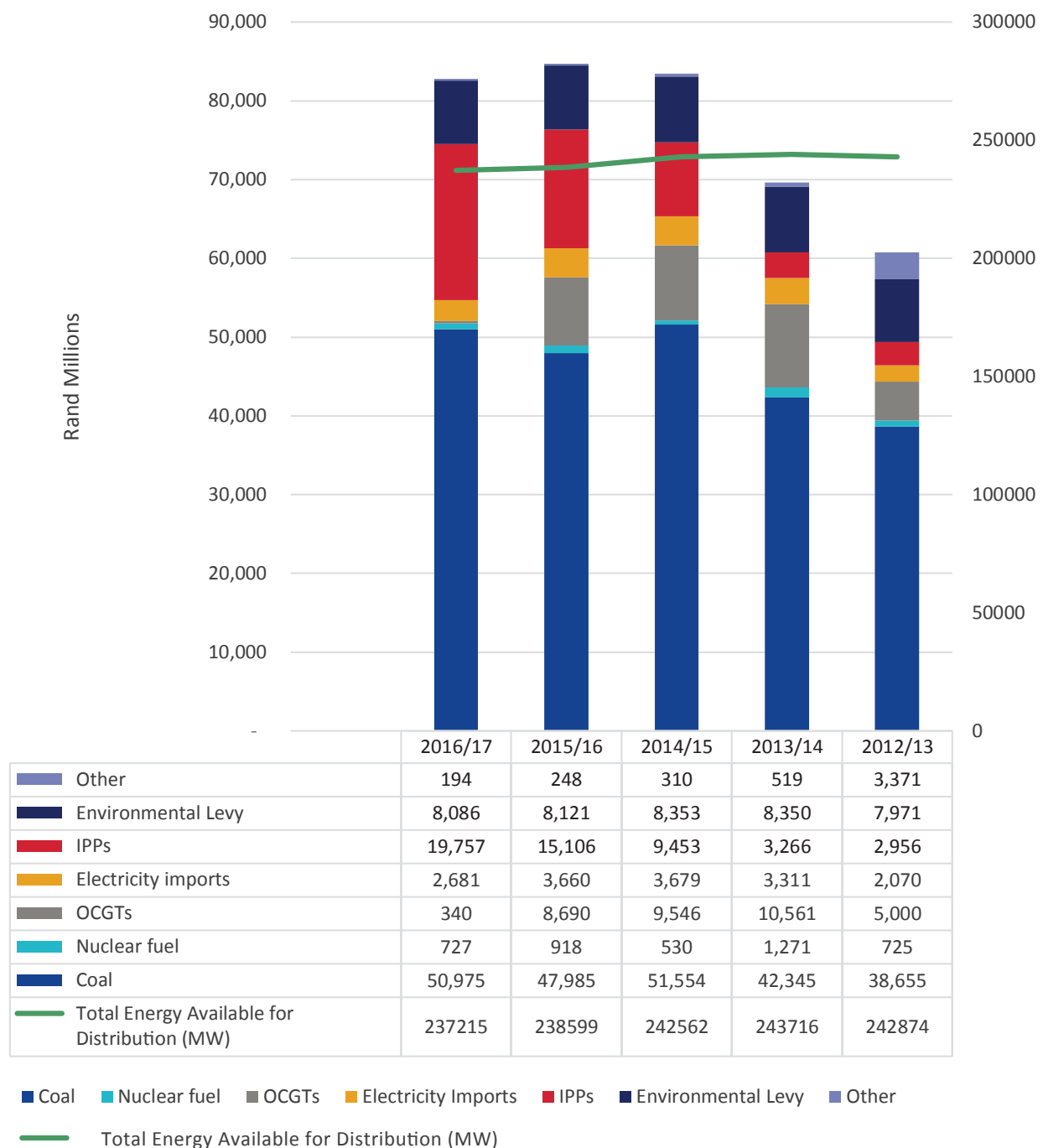


Figure 12: Primary Energy Costs

# | 5 Sustainability

Eskom's 2016/17 results show a negative cash flow, set out in summarised form below:

Net operational incoming cash flow	R 45.84bn
Cash used in investment activities (mainly for capital expenditure)	(R 62.29bn)
Cash raised from borrowings, less borrowings repaid and interest paid	R 7.86bn
<b>Net result</b>	<b>(R 8.59bn)</b>

Source: <http://www.politicsweb.co.za/opinion/digging-eskom-out-of-its-financial-hole>

Eskom ended the year with a positive cash balance of R 19.9 billion, after considering the decrease in its cash of R 8.59 billion. In analysing the above calculation, note should be taken that the financing activities include new borrowing of R51 billion, a cash inflow, and a substantial interest bill of R 29 billion. Without this level of new borrowing, the net result of the cash flow statement would have been much worse.

The Board has approved a borrowing programme of R 338 billion for the period 1 April 2017 to 31 March 2022, with the funding requirements outlined on the right.

Annual Funding Requirement	R billion
2017/18	71.7
2018/19	69.8
2019/20	69.3
2020/21	64.2
2021/22	62.7
<b>Total</b>	<b>337.7</b>

The utility's debt is likely to peak at approximately R500 billion in borrowings after three years. However, when analysed against the anticipated outflows for capital and interest repayments, the repayment profile becomes massively pressurised. Providing that Eskom continues with its capital expansion, and that its free cash flow (operating cash flow less capital expenditure), continues to stay negative, it is expected that its debt and resultant finance charges will continue to increase rapidly (figure 13).

## Anticipated capital and interest cash flows of the strategic and trading portfolio at 31 March 2017, R billion

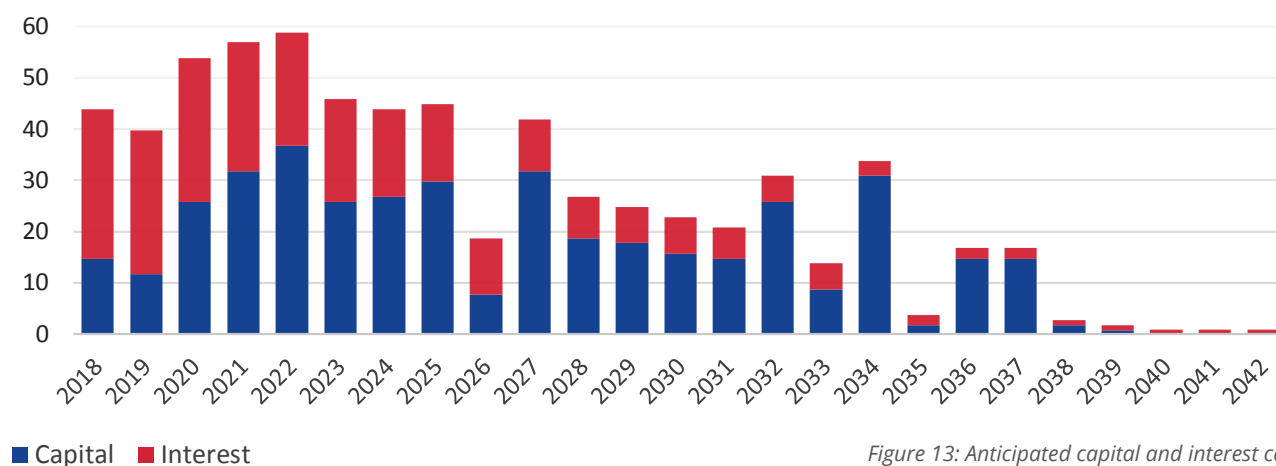


Figure 13: Anticipated capital and interest cash flows

## 5. SUSTAINABILITY *CONTINUED*

The majority of Eskom's current debt is fixed. Thus, the downgrades by S&P, Fitch and Moody's, will likely have little effect on Eskom's current borrowings. However, according to Fitch, the following for total debt maturities by year, as at end 2015/16 fiscal year<sup>3</sup>:

Debt Maturities	R billion
2017	16 354
2018	19 217
2019	38 227
2020	40 683
>2020	212 105
<b>Total Debt</b>	<b>326 586</b>

Typically, these maturities would be rolled over. Considering the rating agencies downgrades, rolling these maturities over would be more expensive than previously anticipated. In addition, the downgrades may limit sources of funding, as well as lead to requests for guarantees on previously unsecured debt.

However, the perception in the bond market is that Eskom could be in a position where it is "too big to fail". The perception is that Government will continue to support Eskom and provide equity injections in much the same fashion as it has done with other state-owned entities such as SAA and Transnet.

*Yellend C., "Power Struggles: The answers on Eskom debt – but not from Eskom"*  
<https://www.dailymaverick.co.za/article/2017-05-26-power-struggles-the-answers-on-eskom-debt-but-not-from-eskom/>

Eskom bonds are therefore seen to have a higher yield with a similar risk to the SA 2023 government bond. Simply put, there is therefore still an appetite for Eskom bonds because of their yield, and the tacit agreement of Government to offer Eskom support (*Figure 14*).

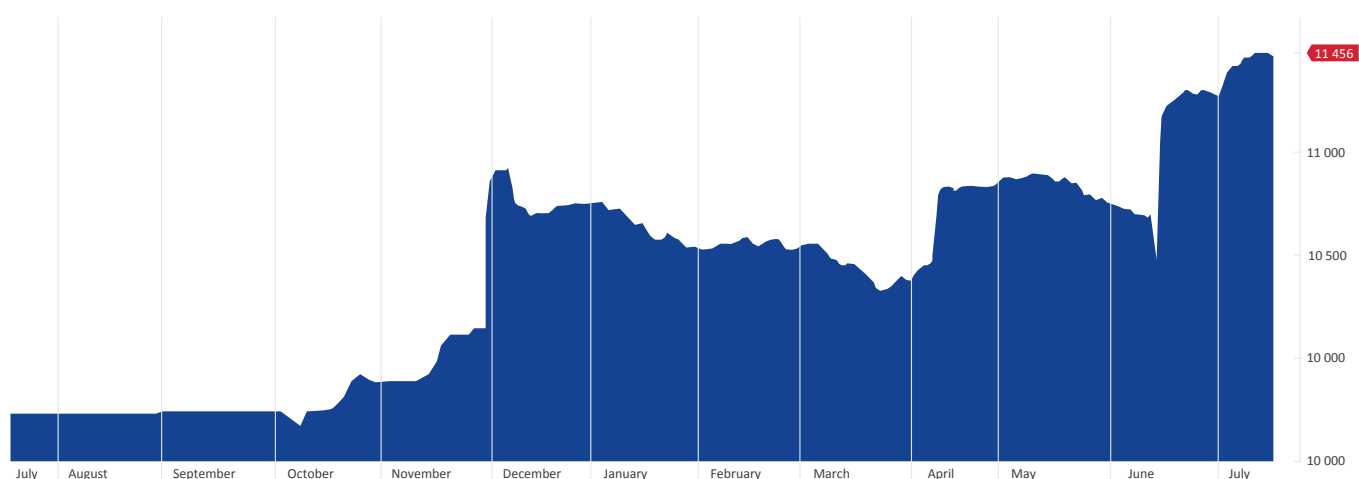


Figure 14: ZAR 2022 bond (Eskom Bond) – not explicitly guaranteed by SA govt

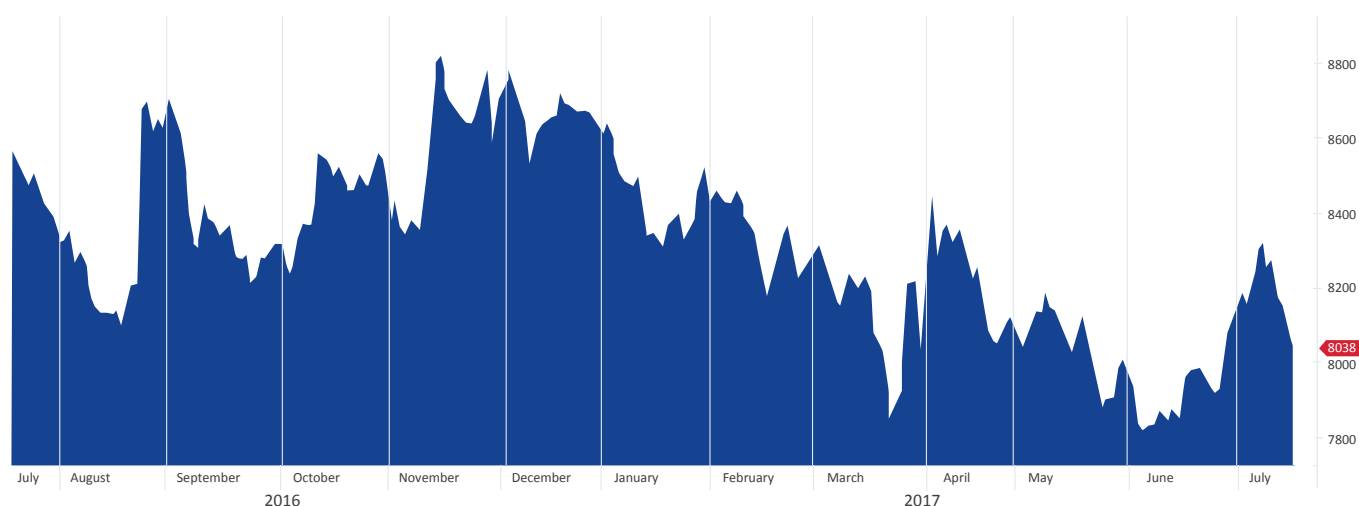


Figure 15: SA 2023 government bond – similar tenure to No. 2, the Eskom 2022 ZAR bond, but much lower yield. The spread between the govt and Eskom bonds can be viewed as the risk premium you get paid for owning Eskom, and has widened considerably over the past

## 6 Conclusion

Eskom is not generating enough cash through operations and electricity sales revenue to cover the interest on its borrowings. It equates to using one credit card to pay off another. The financial consequences of poor planning and management in Eskom are now plain to see.

Unnecessary expenditure and the implementation of political agendas have caused massive inefficiencies for a company that does not have the luxury of largesse. Eskom has had 10 years to recognise the inefficiencies in its operations and to rectify them through sound cost control, good governance and forward planning. Regrettably, instead of addressing these issues, financial engineering has been used to spin a better-looking picture of an embattled company.

The 19.9% tariff application for 2018/19 is already widely contested, even before the public consultation process has started. Further uncertainty regarding 4 outstanding Regulatory Clearing Account (RCA) applications and the next Multi-Year Price Determination (MYPD) makes for nervous investors and lenders.

With the tariff increase of 2.2% for 2017/18, and optimistic growth forecasts of 2.1%, Eskom is going to be hard pressed to continue to turn a blind eye to issues that are crippling the institution.

