


Eskom submission to the Standing Committee on Appropriations (SCOA)

Date: 2 September 2020



- How allocated funds were used
 - Progress on recommendations from oversight visit
 - Review of all contracts
 - Clarity on overpaid contracts
 - Kusile and Medupi cost overruns
 - Contracts that have increased in value
 - Update on illegal contracts
 - Clarity on loadshedding
 - Eskom contribution to B-BBEE
- 

Government Support Summary from 2008/9 to 2020/21

(1/3)

Timeline of Government Support to Eskom

Year	Support Type	R' bn	Notes
2008/09	Loan	60	
2009/10			
2010/11			
2011/12			
2012/13			
2013/14			
2014/15			Sept 2014 Government Support Agreement with Eskom signed. External audit report alludes to Going Concern for first time.
2015/16	Equity	23	R60bn loan converted to equity
2016/17			
2017/18			
2018/19			
2019/20	Equity	49	Nersa tariff decision deducts R23bn from allowable revenue. (R23+23+3=49)
2020/21	Equity	56	Nersa tariff decision deducts R23bn from allowable revenue. Government announces R23bn p.a for 3 years, later possibly for 10 years. (R23b+23+10=56)
	Total to Date	188	

Report on how allocated funds through Special Appropriations Bill [B10-2019 (Reprint)] have been used

(2/3)

- As at the end of March 2019. Eskom had net debt of R424 billion.
- For the financial year ending 31 March 2020, Government made R49 billion available to Eskom to ensure that its contractual interest and capital payments were timeously made.
- The conditions imposed on Eskom under the Special Appropriation Act require the recapitalisation be used to settle debt and interest payments and nothing else.
- The disbursement is to be made according to Eskom's operational cash requirements, but the total recapitalisation may not exceed Eskom's total redemptions and interest for the financial year.
 - The timing of the recapitalisation disbursements is agreed upon in weekly meetings between Eskom, National Treasury and the Department of Public Enterprises.



Cash-flow statement showing payment by Eskom as at 31 March 2020

Cash-flow statement

Draft & pre-audit: Summarised cash flow for FY 2019/20 (R'bn)		Movement in cash	
		Inflows	Outflows
Opening balance	2.0		
Operational cash surplus	36.2	36.2	
Government equity support	49.0	49.0	
Debt servicing, made up of	-70.6		-70.6
- Principle	-31.5		-31.5
- Interest	-39.1		-39.1
Balance pre-investing	16.6		
Cash used in investing (capital)	-27.0		-27.0
Balance pre-funding	-10.4		
Debt raised	32.0	32.0	
Other financing activities	1.3	1.3	
Closing cash balance	23.0		
Movement totals		118.6	-97.6
		21.0	

Eskom's Payment

- In the year ending **31 March 2020**, Eskom paid **R31.5 billion** towards principal and **R39.1 billion** towards servicing interest. The bulk of these payments were made using the **R49 billion** received from Government. It should be noted that Eskom generated a **positive operating cash flow of R36.2 billion** for the year. As at 31 March 2020, gross debt was R488 billion an increase from the R440 billion from March 2019.
- As per the cash flow statement, it is evident that without Government's recapitalisation, Eskom would not have been in position to meet its obligations as they fell due. The **R56 billion** appropriated for the 2020/21 financial year will be used to assist in servicing the estimated **R95 billion** interest and capital repayments falling due in the 2020/21 financial year.

- How allocated funds were used
- **Progress on recommendations from oversight visit**
- Review of all contracts
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Provide progress made regarding the **Committee's findings and recommendations** contained the oversight report

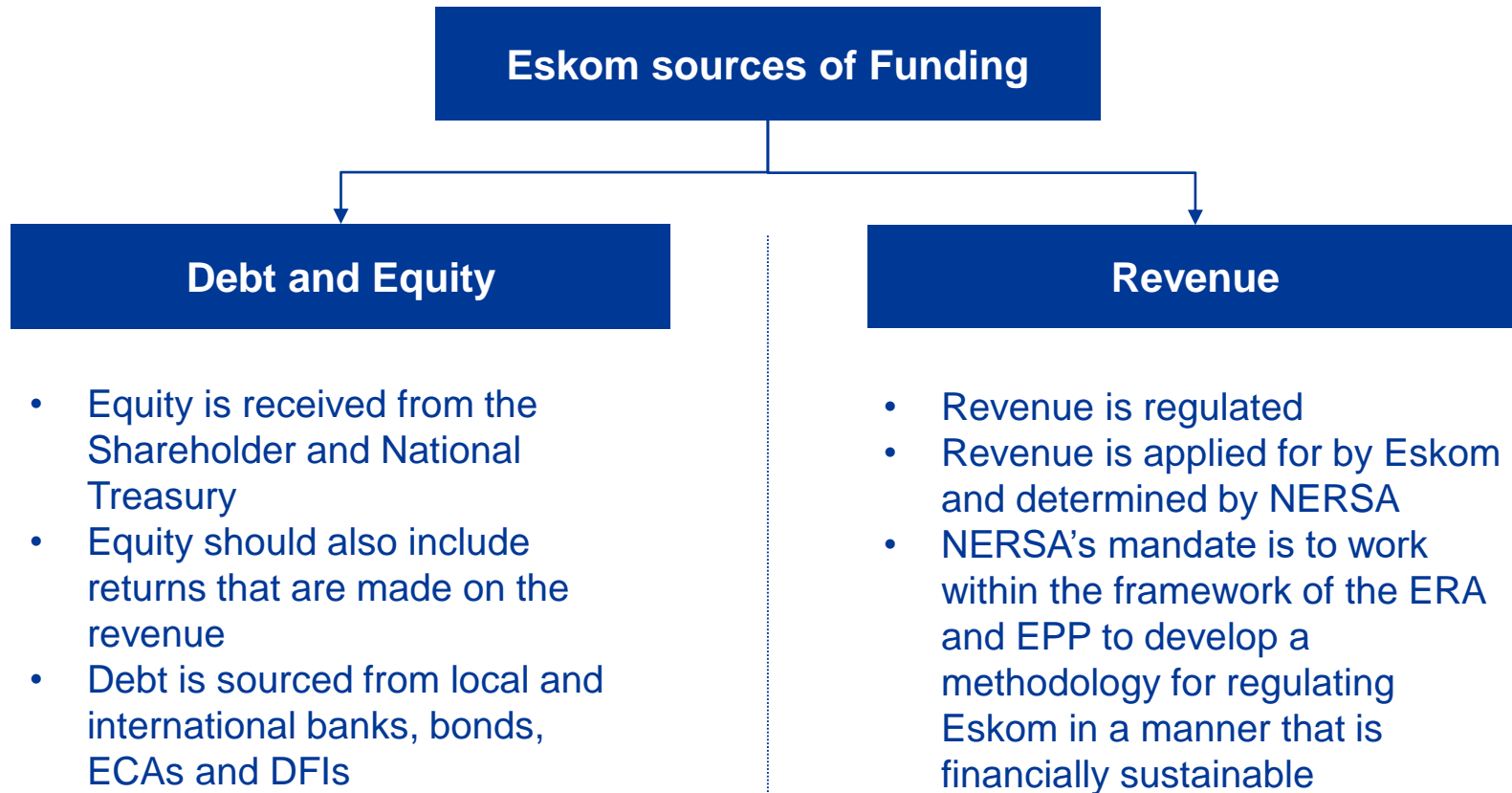
Recommendation 9.1.1

*Eskom ensures that there are **adequate socio-economic benefits** derived from the contracts entered into with Independent Power Producers.*

- The procurement for the **Renewable IPP Programme (REIPPP)** resides with government through the IPP Office, an implementation agent for the Department of Mineral Resources and Energy (DMRE).
- Eskom is **designated as the buyer for the energy produced under the REIPPP** but does not have jurisdiction in oversight over the socio-economic benefits.
- The **DMRE and IPP Office are responsible for monitoring** these benefits and are the counter-party for the Implementation Agreement, in which the IPP commits to these investments and reports directly to the DMRE and the IPP Office on execution of these commitments.

Recommendation 9.1.2

(1/22)



In longer term there is only one source namely revenue

Revenue is the only source to meet the cost of the capital (i.e. to provide a return on the unredeemed portion of the capital), and revenue is the only source to enable redemption of the principal of the capital (i.e. the cost of depreciation is recovered through revenue, which is the mechanism that enables redemption of the principal of the capital)

Policy and legislation guides sustainability – however has not been properly implemented

(2/22)

- **Electricity Pricing Policy (EPP):** Tariffs should be cost reflective within 5 years of December 2008

Presently will not meet that requirement even by 2023 (15 years)

- **EPP:** NERSA to annually provide a 10 year electricity price path

Last indicative 5 year price path published was around 2009

- **Electricity Regulation Act: NERSA must:** Enable an efficient licensee to recover the full cost of its licensed activities, including a reasonable margin or return

Have shown that this is not been done for many years

- **Multi-Year Price Determination (MYPD) Methodology seeks to :** Ensure Eskom's sustainability as a business is balanced with the impact on the economy where objectives include:-
 - to ensure Eskom's sustainability as a business and limit the risk of excess or inadequate returns, while providing incentives for new investment;
 - to appropriately allocate risk between Eskom and its customers;
 - to provide efficiency incentives without leading to unintended consequences of regulation on performance;
 - to provide a systematic basis for revenue/tariff setting; and
 - To ensure consistency between price control periods

Recent decisions have not considered Eskom's sustainability

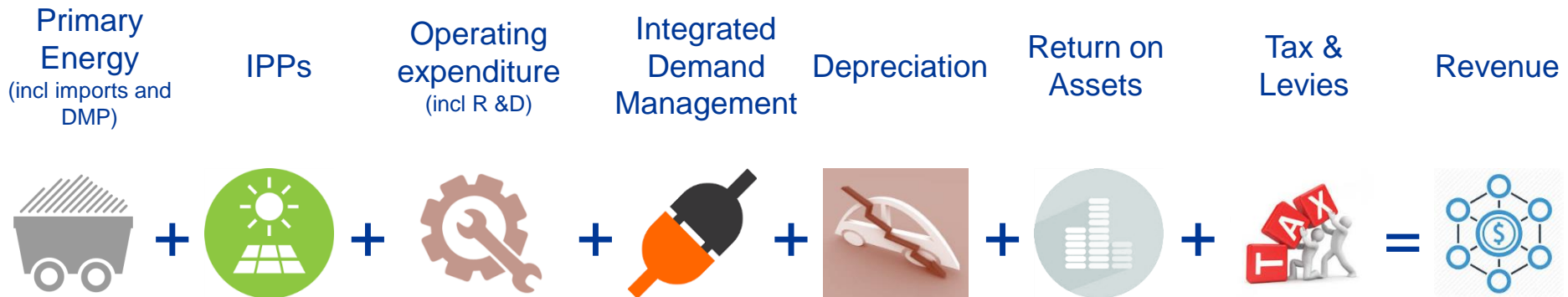


- **Integrated Resource plan (IRP) 2019: Rapid increase in tariffs** to support further investment in industry needed

Latest NERSA decision does not facilitate such a transition

The MYPD methodology through the allowable revenue (AR) formula forms the basis for revenue applications

$$AR = (RAB \times WACC) + E + PE + D + R\&D + IDM \pm SQI + L\&T \pm RCA$$



Return on assets = % cost of capital allowed X depreciated replacement asset value

NB: Regulatory Clearing Account (RCA) and Service Quality Incentive (SQI) are not generally included in a revenue applications

Robust methodology, if implemented (even in a phased manner) would allow for recovery of efficient costs and a fair return

Eskom does not recover revenue as anticipated in Government Support Package of 2015 - R60bn conversion to equity (as shared in Parliament's SCOA) and R23bn equity (4/22)

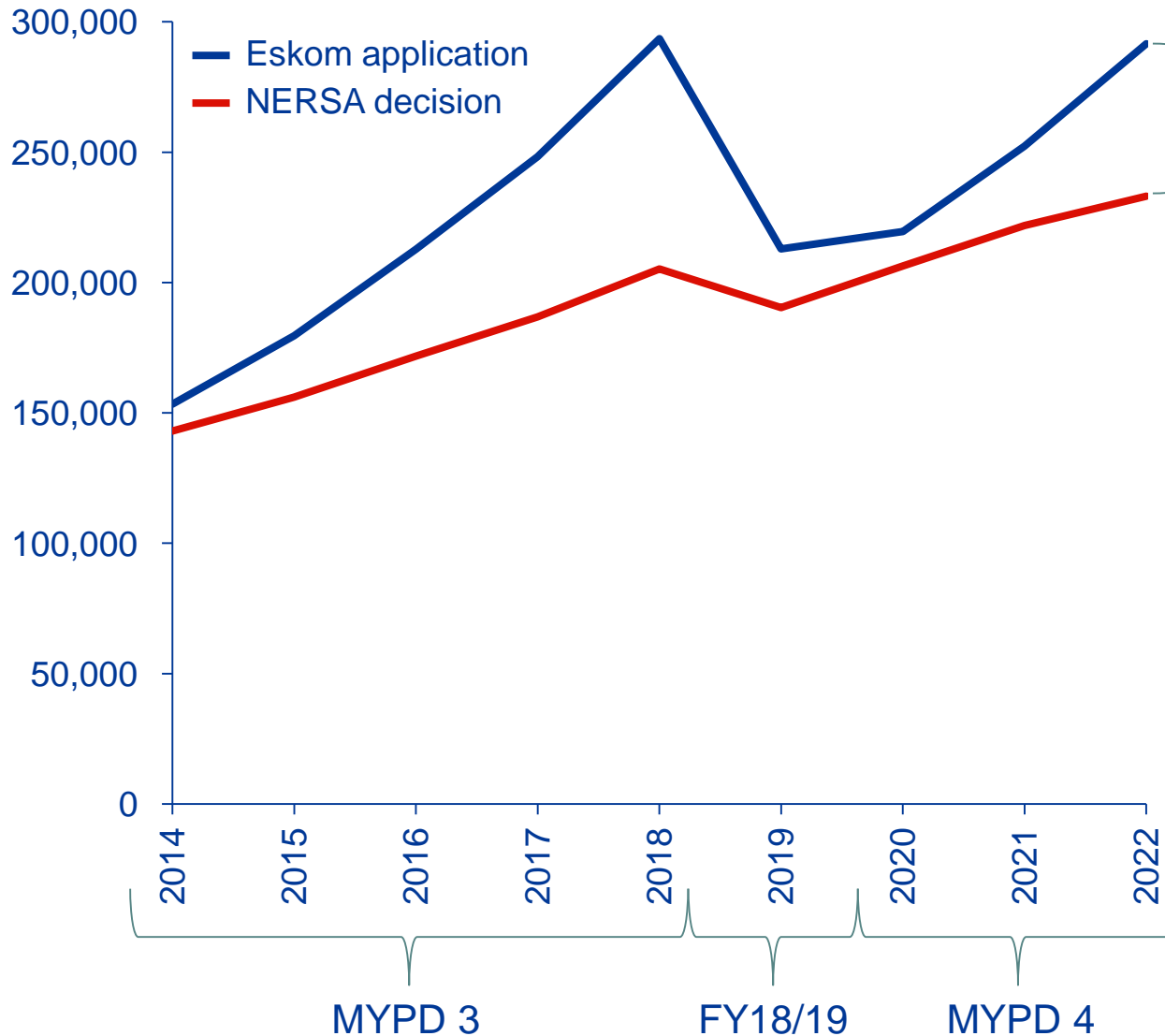


	Unit	FY2014	FY2015	FY2016	FY2017	FY2018
MYPD 3 decision allowed revenue	R'mill	143 101	156 057	171 769	186 794	205 213
Actual recovered revenue	R'mill	136 926	147 270	156 132	166 777	
RCA Decision	R'mill	-	-	7 818	11 242	-
MYPD 3 decision price increase	%	8%	8%	8%	8%	8%
MYPD 3 decision average standard tariff price	c/kWh	65.51	70.75	76.41	82.53	89.13
Actual average standard tariff price increase	%	8%	8%	12.69%	9.4%	2.2%
Actual average standard tariff price	c/kWh	65.51	70.75	79.73	87.23	89.13
Expected % price increase in accordance with Government Support Package (GSP)	%	8%	8%	13%	13%	13%
Expected price in accordance with Government Support Package (GSP)	c/kWh	65.51	70.75	79.94	90.34	102.08

GSP anticipated price of 102c/kWh by FY 2018 however, MYPD 3 NERSA decision reached only 89c/kWh by FY2018 and 94c/kWh by FY 2019

NERSA's decisions from MYPD 3 to MYPD 4 have resulted in a revenue shortfall of ~R350 billion

(5/22)



R350 bn shortfall

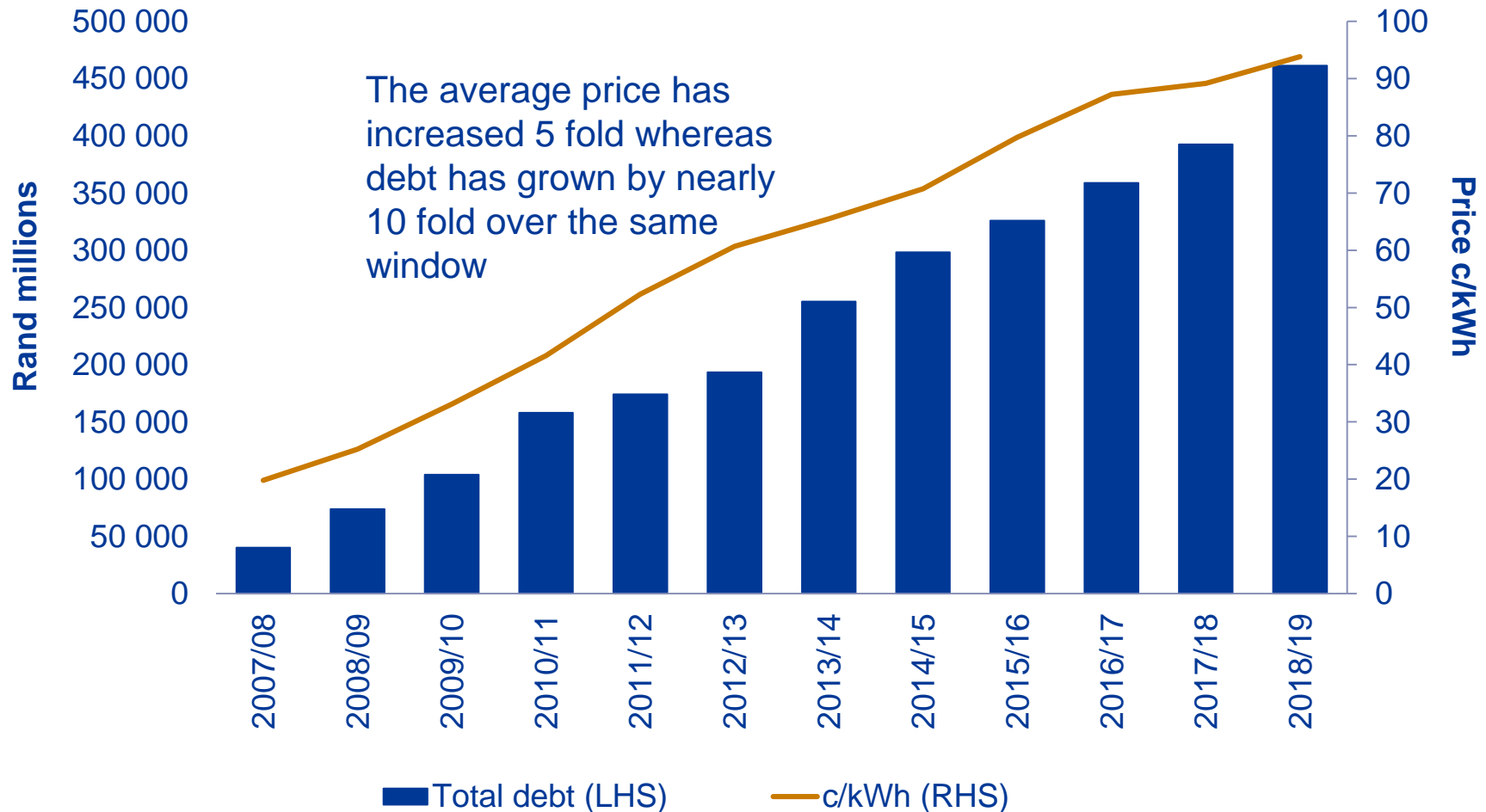
The shortfall between Eskom's application and NERSA's decision is R350 billion. This difference can be equated to the debt value on the balance sheet

The tariff did not allow Eskom to build cash reserves for the New Build programme

Debt continues to increase even though price levels are increased – indicating too low prices

(6/22)

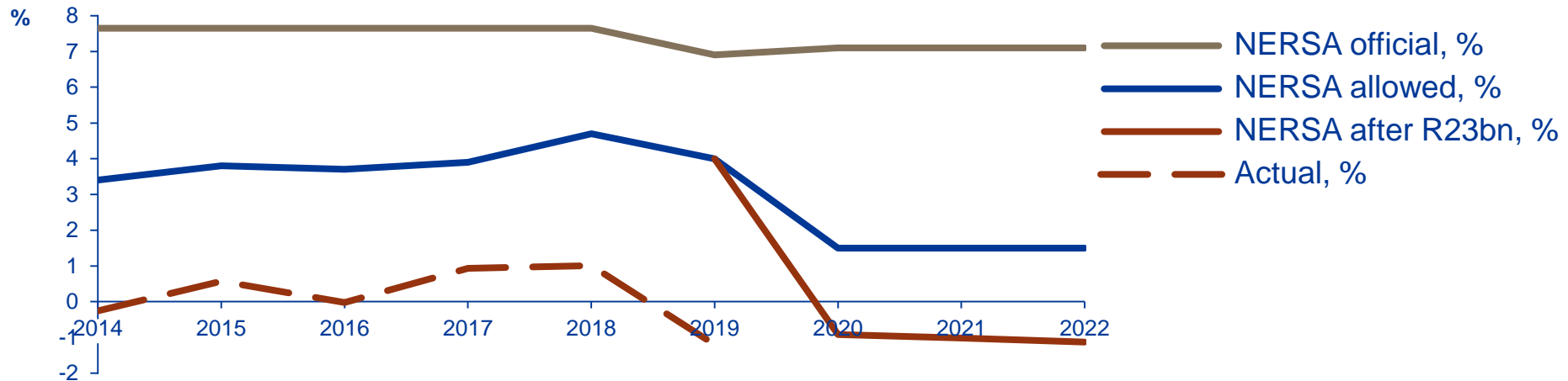
Price levels and Debt increasing



Even the phased ROA would have contributed significantly to migration to efficient cost reflectivity

(7/22)

NERSA determined return on assets

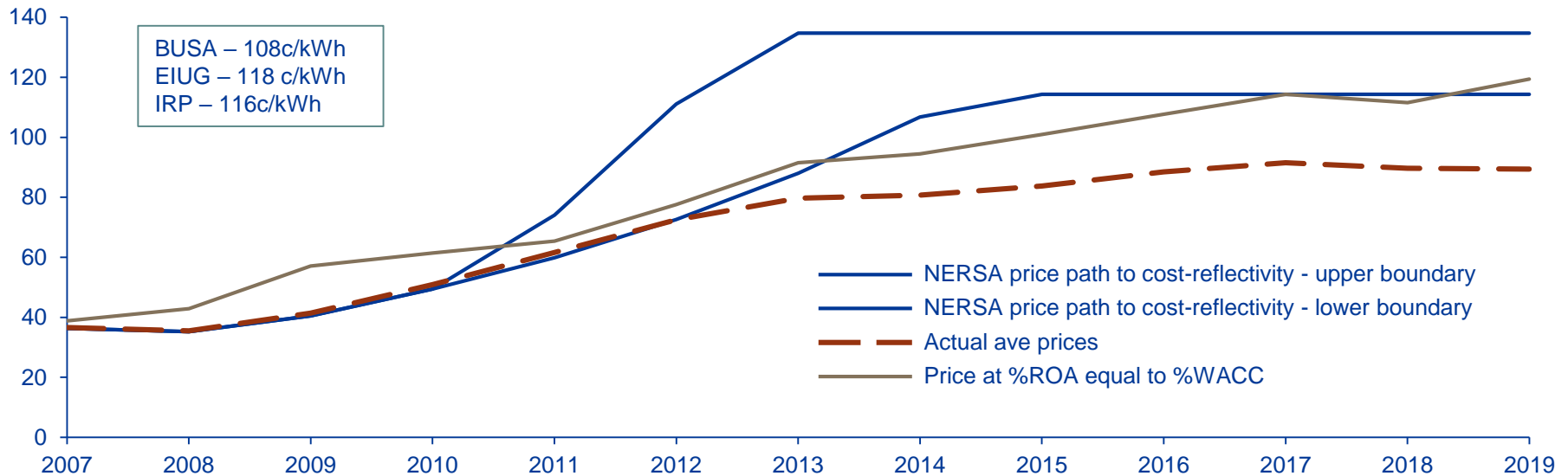


- To have an apple to apple comparison to NERSA decisions, the actual ROA is calculated by the actual profit after depreciation and before interest and tax being divided the restated actual depreciated replacement cost (DRC) of the Eskom asset base
- The graph above indicates that Eskom has in essence not been recovering any ROA (number hovers around zero)
- The situation worsens in the MYPD 4 period where the decision is already below zero – with an approximate negative 1% ROA
- Thus the assumptions that NERSA makes on Eskom being in a position to cover its interest and debt commitments does not materialise as actuals
- The result is further burdening Eskom's balance sheet to continue to provide electricity in this unsustainable situation – if not arrested

Attempts by Eskom to reach NERSA efficient price level were not supported by reasonable price increase decisions

(8/22)

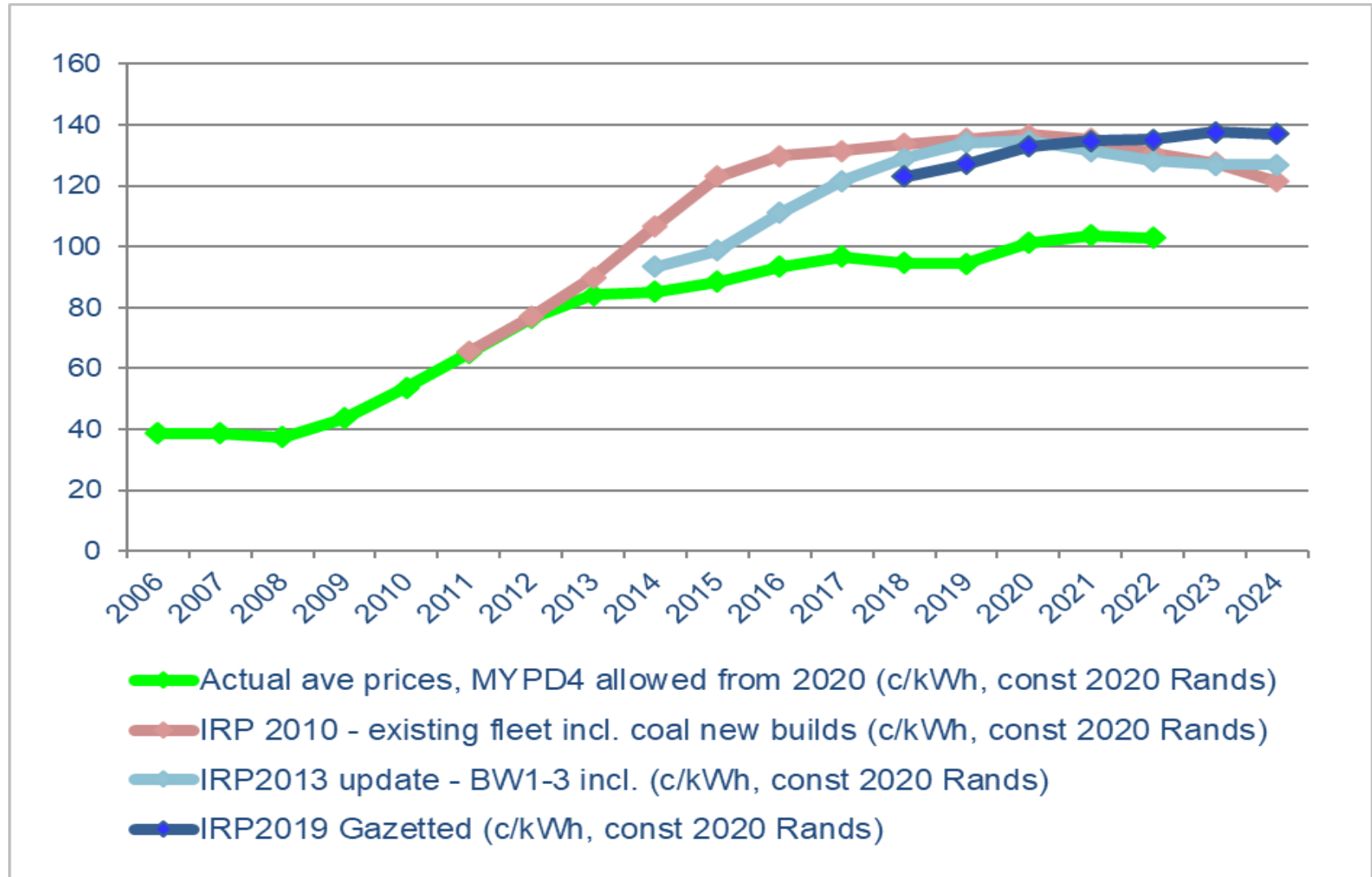
Price comparison – c/kWh (constant 2019)



- Various studies confirm Eskom's price is below efficient & prudent cost reflectiveness
- Up to this point Eskom's balance sheet has subsidised consumers – worsens in MYPD 4
- Eskom's MYPD3 to MYPD 4 **applications** attempted to get towards NERSA's lower boundary – but **NERSA decisions** reversed trend
- Any estimation of recovery of corruption losses, Municipal debt recovery, Soweto debt recovery – will not provide a sustainable path for Eskom to be self sufficient
- Continual Government support is not economically viable – require an adjustment to the base price to reflect efficient cost
- Price path to be provided by NERSA to cost reflectivity – EPP (2008) – assumed cost reflectivity by 2013. But will not occur even by 2023
- Namibia made the tough decision between Nampower and Regulator to reach cost reflectivity – took 10 years.
- Acceleration to efficient & prudent cost reflectiveness indicates self sufficiency

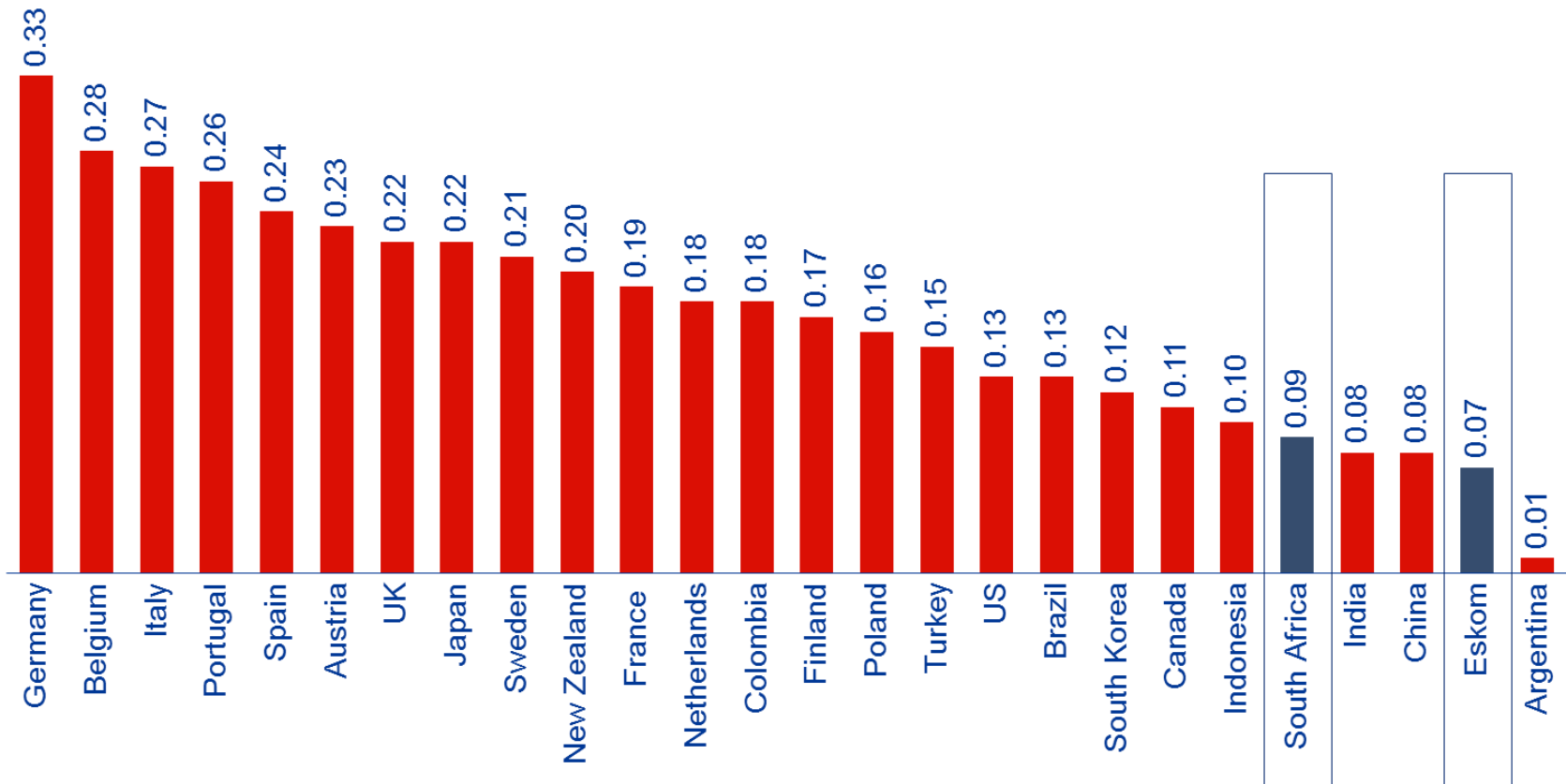
The IRP 2019 indicates increasing electricity prices even with renewables in the mix

(9/22)



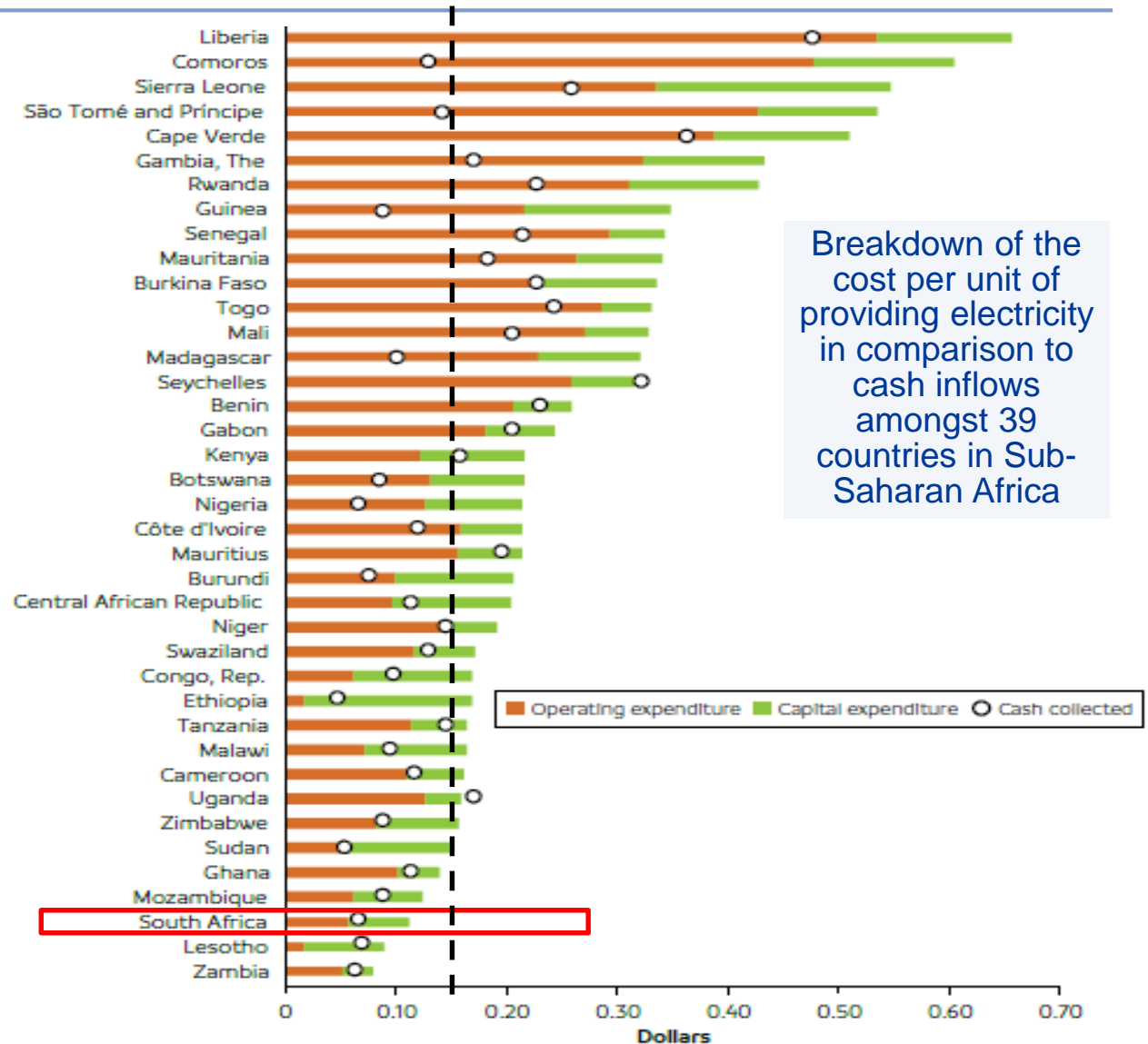
A recent electricity tariff benchmark indicated that Eskom's price of electricity is one of the lowest in the world

(10/22)



High-level cost and price benchmarking (World Bank's 2016 report)

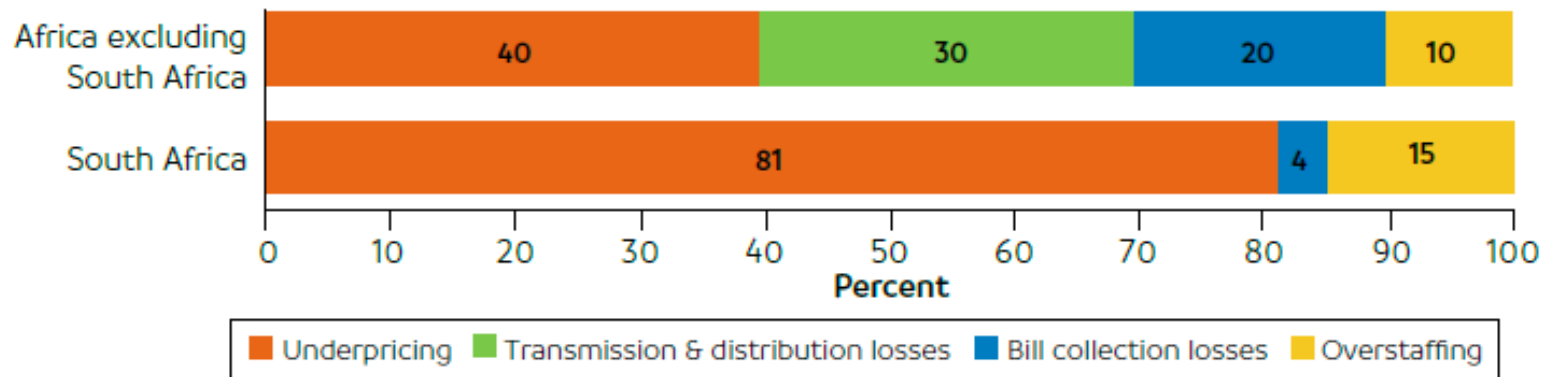
- The World Bank undertook an analysis of electricity utilities in 39 countries in Sub-Saharan Africa, which included an assessment of their opex and capex.
- The analysis concluded that Eskom's unit **costs** are very low relative to other SSA utilities (3rd lowest).
- Similarly, Eskom's average **price** is very low relative to other SSA utilities – but they are all pricing their electricity at unsustainably low levels thus are in (or heading to) significant financial difficulties.



World Bank Report 2016 – ‘hidden costs’ (hidden from consumers by not being reflected in price) (12/22)

- The World bank study defined certain parameters that reflect efficient operations. Any deviation from these norms are seen to be inefficient
- The norms are
 - Transmission & distribution losses (both technical and commercial) should be <10% of dispatched electricity
 - 100% bill collection
 - Same staffing level as in well-performing, comparable utilities in Latin America
- The graph below illustrates the factors that contribute to hidden costs

Breakdown of hidden costs in Africa



Source: Trimble et al. 2016.

- As illustrated above, under-pricing is the main contributor to Eskom’s hidden costs
- This is different from other African countries
- Eskom technical losses are not reflected in the graph as they are within the norm

International experience: Overall average price increase with incentives for sensitive sectors

(13/22)

- Nearly all countries have a goal to move towards cost-reflective tariffs based on prudent and efficient cost:
 - The pace of movement is based on **fiscal strength**, need to **protect vulnerable sectors** and relative sector **competitiveness**
 - Industries in countries are **subsidized** in different manners, dependent on the historical development, level of government involvement and socio-economic issues.
 - Subsidies towards the poor: Various initiatives exist, depending on the focus and developmental phase the country is in.
 - The common thread is that the **State is significantly involved in determining vulnerable sectors and type of support** that is needed with short and long term incentives (including tax breaks; consumption subsidies, direct subsidies, etc.)
- However, currently in SA, the protection of most vulnerable sectors are carried within the electricity tariff through cross-subsidies to a limited number of customer categories.
 - Large municipalities, industrial and mining customers contribute to the cross-subsidies while residential and rural consumers receive the cross-subsidies
 - Large customers and the state cannot continue to carry the burden.

Through the MYPD process NERSA approves the prudent and efficient revenue that must be recovered by Eskom to remain financially sustainable. Eskom must therefore recover the full revenue as approved by NERSA.

- **If one customer group pays less** (are subsidised) within the tariff base, **another customer group must pay more** (to pay for the subsidies) as costs do not go away and Eskom must still recover approved revenue.
- **Eskom does not have the mandate** to determine which customers should be subsidised – government should develop and integrated policy.
 - International regulatory practices clearly make a distinction between role players in the industry
 - **Government:** Policy
 - **Regulator:** Implementation rules and ensuring implementation of policy
 - **Utility:** Implementation of policy according to regulatory rules
- The Eskom Retail Tariff and Structural Adjustment (ERTSA) methodology, however, provides for “.....**the Energy Regulator to.....allow cross-subsidies between various customer groups**”.
- In the past **NERSA has made a decision to limit the increase to the 2 blocks** of the Eskom lifeline tariff (Homelight 20A) to protect the poor. Regulators typically do not have policy powers which are normally reserved for Governments.

Industry Pressure Points are more than just energy requirements

Energy:

- Annual Price Increases [above inflation]
- No clear long term price indication – 10 year plus required to increase investment (ito refurbishment, new capacity)
- Cross-Subsidisation through tariffs
- Availability & Reliability of Electricity
- Increasing Fuel costs

Manpower:

- Manpower costs
- Unrest and strikes

Logistics:

- Rising prices due to fuel costs
- High cost of rail (one example quoted - it cost more to transport internally to our ports than to ship overseas)
- Large distance of transport – international

Economy/Growth:

- Low commodity prices
- Rising raw material costs
- Forex exchange rate
- Low economic growth
- Excess productive capacity in many countries

Technology:

- Companies are not upgrading to newer technologies and processes due to uncertainty in SA

Environment:

- Carbon Tax
- Emissions compliance costs

- MYPD Revenue Applications are usually made for a three year period, after which an Allowed Revenue Determination is made by NERSA for each of the years
- Thereafter, on a yearly basis, a Regulatory Clearing Account (RCA) Application is made to NERSA, to deal with variances between what was determined by NERSA for purposes of its revenue determination, and what actually materialised
- Is seen as a backward looking reconciliation
- The variances are mainly as a result of two key reasons:-
 - *Change in assumptions made during the MYPD Revenue decision*
 - *Poor decisions made by NERSA*
- The application is based on Eskom's Audited Financial Statements and is for efficient and prudent costs incurred by Eskom
- The RCA Balance could be either in the favour of Eskom or in the favour of the consumer similar to the slate mechanism in the petrol price only over longer periods
- Nersa decides the period over which under or over recoveries are collected.

NERSA RCA decisions based on incorrect application of MYPD methodology resulted in R41.2bn shortfall

(17/22)



- Eskom made RCA application in accordance with MYPD methodology and precedents of FY 2014 and MYPD 2 period
- Eskom did not review the 2014 RCA decision as it was based on sound principles in terms of the methodology

Financial year	Eskom application	NERSA decision	Court applied Shortfall	Efficient cost incurred	Timing of liquidation	Delay in recovery
2014	R22.8bn	R11.2bn	None	2014	2017	3 Years
2015	R19.1bn	R12.6bn	R4.9bn	2015	2020 and 2021	5 years
2016	R23.6bn	R12.1bn	R8.4bn	2016	2021 and 2022	5 years
2017	R23.9bn	R8.1bn	R13.6bn	2017	2023	6 years
2018	R20.6bn	R3.9bn	R14.3bn	2018	2021 and 2022	4 years
Total	R110.0bn	R47.9bn	R41.2bn			

NERSA disallowed total of R62bn however Eskom is only reviewing R41.2bn

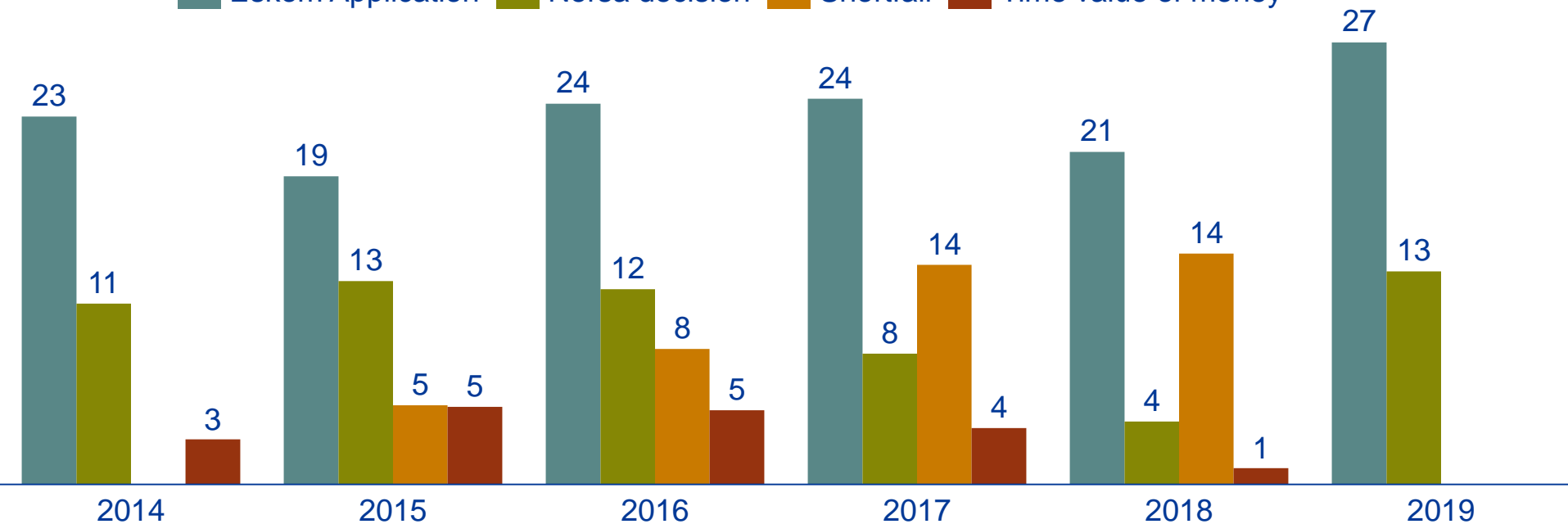
This values of R26.9bn relate to recent court judgement on RCA's for years FY15-17

Eskom incurs irrecoverable carrying costs (TVM) of R18bn for delay in implementing approved RCAs

(18/22)



■ Eskom Application ■ Nersa decision ■ Shortfall ■ Time value of money



Assumptions and notes made for the determination of these values

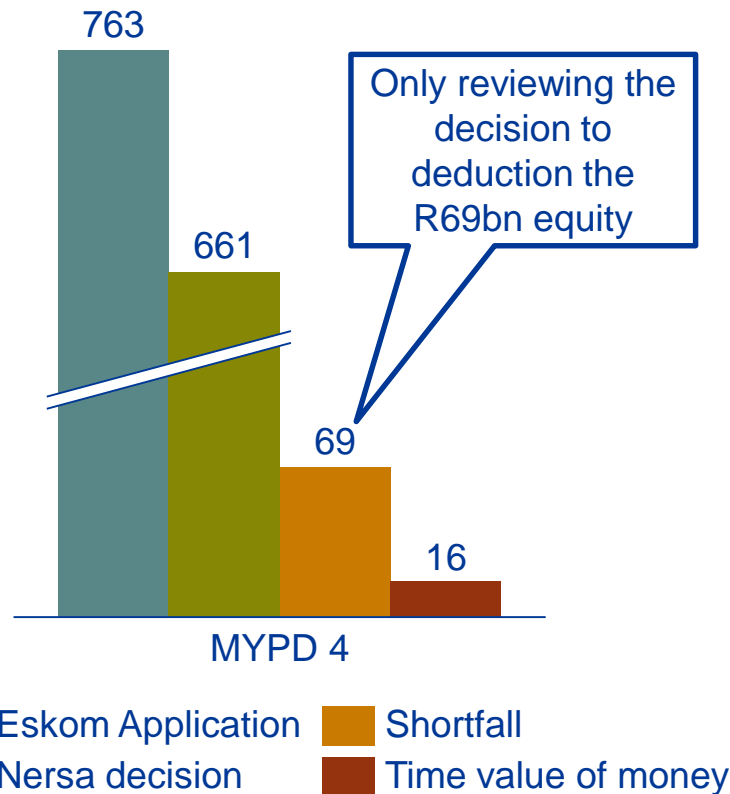
- Shortfalls refer to court applications made by Eskom Board due to MYPD methodology and previous precedents not being applied by NERSA
- Court review applications are successful and remitted to NERSA to make further adjustments
- The MYPD methodology does not allow for time value of money (TVM)
- The TVM indications are shown (calculated at a rate of 10%). These do not translate into any recovery
- Estimated TVM calculated only for RCA balances determined by NERSA

- Fundamental factual errors and decisions were not rational:
 - In respect of sales, NERSA deducted primary costs relating to lower sales volume. The judgment specifically states that while there is logic in how NERSA approached its decision on sales it overlooked that Eskom already deducted the primary energy costs and therefore it was impermissible for NERSA to deduct the primary energy costs again
 - With regards to coal costs, NERSA disallowed costs on the basis that Eskom should have purchased coal under cost plus contracts rather than short to medium term contracts. However Eskom was unable to procure this coal from cost plus contracts due to underinvestment in these mines as a result of a government request.* Therefore this decision was found to be not rational
- The Judgement accepts that Eskom had put forward a proper case for relief in those key areas where NERSA did not implement its methodology and precedents
- The areas specifically dealt with are the treatment of revenue variances, coal costs, Independent Power Producer Costs and the capital expenditure clearing account

Way forward:

- Decisions are remitted to NERSA
- NERSA will make revenue and liquidation decisions

NB: * Government request refers to Eskom not investing in any new cost plus mines when the 2015 equity support was provided.



Misappropriation of equity support through MYPD 4 Decision

- By the date of the hearing (24 June 2020) NERSA had already conceded that its decision be reviewed and set aside. The only issue which remained to be adjudicated was an appropriate remedy (Extract from NERSA heads of argument)
- The Judgment requires the recovery of R23bn per annum from FY 2022 to FY 2024
- NERSA has requested leave to appeal
- Process is underway

- Striving for **‘User Pay’ principle as alluded to by the President and Minister of Finance**
- Currently Eskom’s **average price** is <US\$ 0.07/kWh (at R15.75: US\$1), which is extremely low by any credible international benchmark. Is significantly below cost-reflectivity and main cause of Eskom’s financial unsustainability. Once cost-reflectivity is achieved around US\$ 0.09, price will still be very low and competitive. Eskom price is still inelastic
- In the short term Eskom, similar to any other company, has three sources of funding namely revenue, debt and equity. In the longer term there is only one source namely revenue.
- Eskom has been **dependent on further and further borrowings and shareholder support** in the recent past ; this avenue has been exhausted and is not sustainable
- **Missing link has been tariff that reflects efficient costs** – this is where further progress is needed
- Economy is better served by increasing tariffs
- Once-off additional 10% increase in FY 2022 – equivalent to continuous annual R23bn injections
- **IRP refers to competitive electricity price at least 25% more than Eskom’s price**
- **IPPs are in sustainable situation** – their efficient and prudent costs and a competitive return is recovered through the Eskom tariff. **However, the same does not apply to Eskom business.**
- It is **accepted that a migratory path needs to be followed** for the average price of electricity
- **Significant effort to fast-track long-term framework to support vulnerable sectors** for implementation as soon as possible (see next slide)
- **Electricity price is not only determinant for economic growth** – other factors include policy, labour costs, logistical costs

Tariff support for large industrial customers in SA

- Eskom/electricity price is the wrong instrument for delivering subsidies to deserving customers because:
 - Electricity price is not the only determinant of their competitiveness
 - It's a government policy decision. Not an electric utility decision.
 - Using Eskom to deliver subsidies camouflages the subsidies and confuses Eskom's financial picture
- To the degree that certain consumers and industries might be vulnerable to the cost-reflective price, the mechanism of direct, targeted subsidies could be used and would cost the central fiscus very much less than the cost of subsidising the current annual shortfall between Eskom's regulated revenue and its prudent and efficient costs.
- Internationally utilities and governments are retaining large industrial (baseload) customers through tax rebates, tariff discounts or similar financial mechanisms.
- The baseload customers in South Africa are competing internationally with these 'subsidised' customers, so they need support to be competitive and sustainable. These customers are a large contributor to the SA GDP, jobs and Eskom's revenue.
- The country needs to urgently assist industry to remain sustainable, as retaining these operations is critical from an economic perspective. Also, the loss of baseload customers sales and revenue results in additional upward price pressure on all customers than would otherwise be the case, placing further sales at risk.
- Relevant Government Departments together with Eskom have finalised proposals
- NERSA urgently requires Minister of DMRE to approve and provide the necessary long-term and short-term NPA frameworks against which any proposed negotiated pricing agreements (NPAs) would be adjudicated.

To contribute to the easing of Eskom's financial challenges by cutting coal costs the entire portfolio of Eskom coal contracts were reviewed

Recommendation 9.1.3

(1/4)



- ❑ **Eskom undertook a bottom-up cost of mining exercise** on all existing Short/Medium Term coal contracts. **The exercise was based** on information available to Eskom and the knowledge of internal coal mining subject matter experts.
- ❑ **Due to the low stock days experienced in FY19**, a number of short to medium term coal contracts were **concluded through urgent and emergency procurement activities**. The desperate situation that was known to coal suppliers, Eskom had very limited negotiation leverage and some of the contracts were sub optimally priced
- ❑ **Engagements were held with seven suppliers** (i.e. suppliers with high profit margins) to explore opportunities to reduce the contracted prices
- ❑ **Eskom approached suppliers on individual contracts**; however, it soon became apparent that most of the **suppliers were only willing to engage on a portfolio basis**. This meant that the lower priced contracts would be included for re-opening on price discussions. **This resulted in higher overall costs to Eskom**
- ❑ **Suppliers saw this as an opportunity to increase their overall supply to Eskom** by either offering additional **volumes or new resources** as a condition for price reductions. **This approach did not present a cash savings** for Eskom as the additional coal offered is not the cheapest option and **given the current low demand and high stock days this is not a viable solution**

While most suppliers were amenable to engage with Eskom, unfortunately, the majority of these engagements did not achieve the intended result of cash savings for Eskom (2/4)

- ❑ **One of Eskom's cost reduction levers** was the optimization of the coal inventory by **reducing coal deliveries to minimum contractual levels** for all contracts, without compromising the station grid code levels. In addition, **due to the low demand experienced in the first half of 2020**, force majeure letters were issued to **suppliers and engagements are underway** to reduce coal deliveries to below the minimum contractual levels.
- ❑ **These operational requirements posed challenges** to the re-negotiation process as some suppliers wanted the resolution of operational issues as a **pre-requisite for any engagements on cost reduction initiatives**. Given the current high stock levels, an increase in their monthly volumes **back to nominal levels is not feasible**.
- ❑ Out of the negotiations with identified **seven (7) suppliers**, only **one (1) supplier negotiation has yielded a viable and beneficial offer for Eskom**. The offer is currently going through the governance processes for approval
- ❑ **The high-level savings potential** identified for the renegotiation initiative is **approximately R127M**.

Feedback on negotiations per supplier

SUPPLIER	No. Of Contracts	SUPPLIER OFFER	OUTCOME
Supplier 1	6	<ul style="list-style-type: none"> • Not willing to consider specific contracts but rather a portfolio review and a price increase on their lower priced contract • The supplier has also requested a response from Eskom on an offer from an associate company first prior to the supplier responding back to Eskom on this engagement. The associate company's coal offer was expensive for Eskom. 	<ul style="list-style-type: none"> • Analysis shows increasing the price of the lower priced contract and decreasing the expensive contracts will be net negative for Eskom. • Eskom's position is that the offer tabled is unaffordable • No savings have been achieved and related engagements have been terminated
Supplier 2	4	<ul style="list-style-type: none"> • The supplier offered a tiered discount based on monthly volumes with the effective discount being ~10.3% subject to a 3 year contract tenure increase and monthly volumes increase • This would have resulted in an approximately 211% contract value increase. 	<ul style="list-style-type: none"> • The suppliers offer does not reduce the current price to an acceptable level to justify a 3 year tenure • Based on the current low demand, additional coal is not required and hence the conditions for savings offered cannot be considered
Supplier 3	1	<ul style="list-style-type: none"> • Supplier has offered to double their monthly contractual supply schedule and to be allowed to supplement ~25% of the supply from alternate sources for a period of 24 months. • The price reduction offered is 2% on the ~25% alternate supply for 24 months. This proposal results is a small saving to Eskom 	<ul style="list-style-type: none"> • Based on the current low demand, high stock days and associated minimum offtake profile, any consideration of an increase in monthly offtake volumes are not feasible at moment. • No savings achieved, however the offer is being analysed to quantify the impact of the small savings offered against the offer to double the monthly contractual supply to ensure it is a feasible option for consideration.

Feedback on negotiations per supplier

(4/4)

SUPPLIER	No. Of Contracts	SUPPLIER OFFER	OUTCOME
Supplier 4	4	<ul style="list-style-type: none"> • An offer was received offering a 4% reduction on 2 of the current contracts subject to the following • Enter into a new contract from the identified contract resource at a higher price and quality (for approximately 6Mt). • Enter into new contracts from 2 additional resources (approximately 40Mt) 	<ul style="list-style-type: none"> • All Eskom's new coal contracts have to come through a tendering process and the proposal to sign new CSAs outside of a tender process will result in unfair procurement practices and is thus not supported. • No savings achieved
Supplier 5	4	<ul style="list-style-type: none"> • Offer based on other negotiations in portfolio • Savings opportunities offered are being explored as part of negotiations on the Kusile RFP and changing the coal loading point on an existing contract 	<ul style="list-style-type: none"> • Savings opportunity implementation stage based on changing loading point thereby reducing logistics costs. • The option to collapse an existing high price CSA and conclude a new CSA under the Kusile RFP at a lower price is being negotiated
Supplier 6	1	<ul style="list-style-type: none"> • Operational issues (low monthly offtake) to be resolved before price engagements can commence. • However, they have offered coal from an alternative resource that is not part of this contract with an associated price reduction to an alternate Power Station. • This resource is currently under business rescue, which they have been selected as a preferred bidder, however this process is not yet finalised. 	<ul style="list-style-type: none"> • Based on the current low demand, high stock days and associated minimum offtake profile, any consideration of an increase in monthly offtake volumes are not feasible at moment • The proposal for the alternate resource for another Power Station is not viable as this station is fully contracted. • This option is also not preferred as a contracted resource being replaced by an alternate one with associated legal implications. • No savings have been achieved
Supplier 7	1	<ul style="list-style-type: none"> • Supplier requires that the contracts monthly nominal values to be maintained (without any possibility of a reduction) prior to any price reduction discussions 	<ul style="list-style-type: none"> • Based on the current low demand, high stock days and associated minimum offtake profile, any consideration of an increase in monthly offtake volumes are not feasible at moment. • No savings have been achieved

Rate of completion

Board	- 100%
Exco	- 100%
Employees	- 90%
Some employees could not connect from home due to 3G or not having access to eForms	

Quality of information

A & F department conducted a review of the interest disclosed by the Board and Exco members

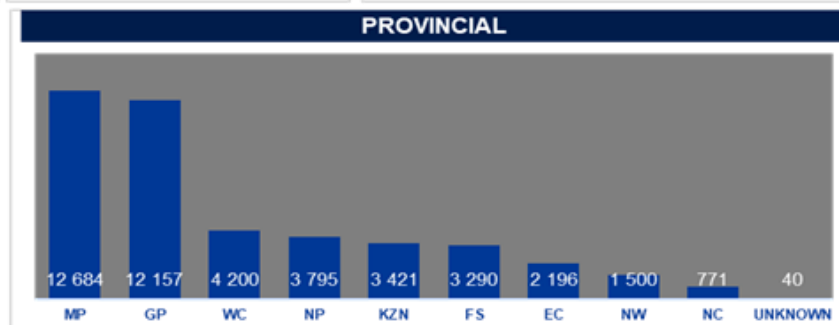
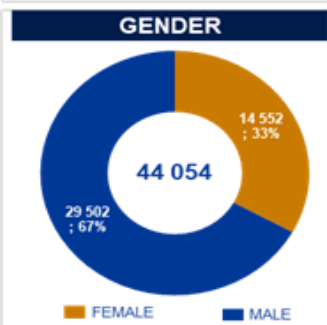
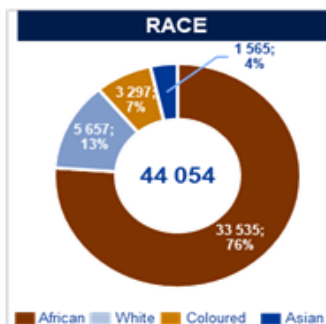
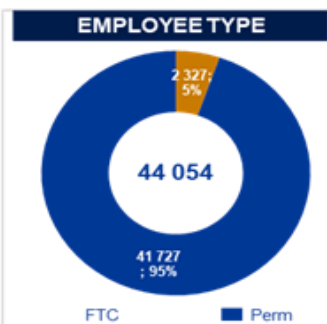
Non-disclosed interests identified in the reviews have been addressed

The filling of critical vacancies is to be expedited within a reasonable time at Eskom Recommendation 9.1.5

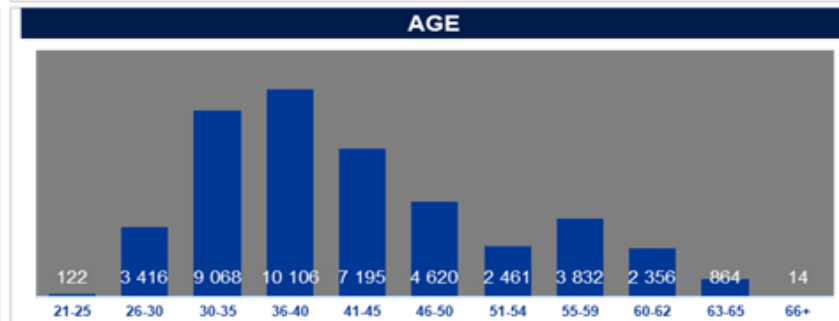
- **The Eskom workforce profile** (below) at a glance indicates that Eskom has enough resources to deliver on its mandate.
 - Some areas we will continue to source critical resources internally and externally to address attrition. Apply sentence case at all times (i.e. only the first letter of a sentence has a capital letter)
- **In the last 12 months, Eskom implemented two levers.**
 - One is the relinking of resources from Head Office to Operations
 - Two a special dispensation was provided for Transmission, Generation, Eskom Rotek Industries, Distribution and Group Capital to fill critical resources through either an internal sourcing process or external recruitment.
- **These processes** contributed a great deal to closing the critical vacancies

ESKOM	ERI	GROUP
37 421	6 813	44 054

BUSINESS AREA	COUNT
ESKOM	37 421
DISTRIBUTION	17 820
GENERATION	12 395
TRANSMISSION	2 878
GROUP CAPITAL	1 117
FINANCE & SERVICES	925
INFORMATION TECHNOLOGY	604
RISK & SUSTAINABILITY	469
HUMAN RESOURCES	379
PROCUREMENT & SCM	375
ASSURANCE & FORENSIC	92
CORPORATE AFFAIRS	71
TOP CONSULTING GROUP	33
LEGAL & COMPLIANCE	29
STRATEGY & PLANNING	23
COMPANY SECRETARY	14
OFFICE OF THE GCE	12
ESKOM ENTERPRISES	2
OFFICE OF THE COO	2
TRANSF MNGMNT OFFICE	1
ROTEK INDUSTRIES	6 813
ESKOM GROUP	44 054



YR START	ATTRITION
44 772	- 718
VSPs	NET ATTRITION
- 185	- 533
GROSS EXITS	ATTR %
- 798	3.6%
HIRES	PROMOTON
70	93



Annualised attrition of 3.6% exclude the 185 VSPs

Eskom undertook a process to relink staff to Operations in 2019.

- **The aim of the relinking process** is in order to strengthen operations, maximise decision-making, improve levels of accountability at the right levels of business, improve operational and financial efficiencies, maximise execution of strategy.
- **A total of 8904 employees** were relinked from service and support functions back to line (incl. Customer Services move to Dx).
- **This includes the integration of 2371.** Customer Services personnel into Distribution and **1511 employees** from Group Technology back to line divisions.
- **This process has yielded positive results** in dealing with **shortages of engineers in the line divisions.** Distribution received **4154 employees**, with Transmission receiving **1017 employees** and Generation received **3023 employees.**
- **Since the commencement of this process, Group Technology** that is comprised of highly experienced technicians and engineers, Revenue Services, and Fleet Services were migrated to Operations.

Breakdown of relinked employees from various departments back to operations

(4/7)

Customer Services integration into Distribution	(2379 employees)
Group Technology	(1511 employees)
Security	(1072 employees)
Human Resources	(784 employees)
Finance	(772 employees)
Procurement and Supply Chain	(732 employees)
Telecommunication	(331 employees)
Facilities	(294 employees)
Information Technology	(144 employees)
Corporate Affairs	(92 employees)
Primary Energy	(71 employees)

BREAKDOWN OF PERSONNEL BY ROLE











(5/7)


ESKOM HOLDINGS	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	APR 2020	MAY 2020	JUN 2020	JUL 2020
TECHNICAL OFFICIAL	7 229	7 047	7 108	7 832	7 635	7 492	7 163	6 678	6 668	6 645	6 626	6 607
OFFICER	5 691	5 771	6 275	6 364	6 279	6 242	5 936	5 777	5 761	5 762	5 743	5 723
TECHNICIAN	4 094	4 059	4 088	4 503	4 440	4 383	4 268	4 119	4 110	4 099	4 095	4 087
MANAGER	3 589	3 713	3 740	3 645	3 774	3 830	3 607	3 577	3 465	3 446	3 442	3 435
OPERATOR	1 692	1 952	2 061	2 151	2 110	2 418	2 497	2 493	2 485	2 480	2 484	2 480
ADVISOR	2 396	2 345	2 390	2 292	2 290	2 424	2 289	2 267	2 221	2 219	2 218	2 214
SUPERVISOR	1 605	1 694	1 853	1 949	2 108	2 268	2 143	2 192	2 184	2 181	2 175	2 168
ARTISAN	1 809	1 832	1 796	2 182	2 257	2 217	2 132	1 924	1 917	1 914	1 912	1 906
CLERK	2 515	2 432	2 233	2 189	2 148	2 056	1 921	1 759	1 752	1 748	1 739	1 730
ENGINEER	2 610	2 505	2 259	2 140	1 980	1 835	1 726	1 619	1 607	1 600	1 598	1 592
SERVICE AGENT	1 345	1 319	1 278	1 221	1 222	1 403	1 348	1 322	1 321	1 318	1 312	1 310
UTILITYMAN	773	830	1 209	1 231	1 247	1 626	1 582	1 414	1 379	1 372	1 370	1 364
OFFICIAL	340	519	278	205	201	826	1 015	943	911	895	884	883
CONTROLLER	959	966	1 034	943	1 043	1 032	991	967	965	962	960	956
COORDINATOR	800	818	793	856	872	876	908	878	877	876	877	876
OFFICIAL TECH	1 459	1 416	1 348	1 508	1 368	1 074	967	861	854	851	849	843
STOREMAN	804	800	715	734	698	690	712	662	658	655	652	646
INSPECTOR	208	201	871	857	834	810	810	770	770	770	768	762
TECHNOLOGIST	276	291	325	344	346	381	372	351	350	349	349	347
SHIFT SUPERVISOR	679	695	715	696	642	595	428	447	443	443	443	440
ENGINEERING ASST	521	504	495	514	524	544	516	563	565	564	564	563
DRIVER	313	357	351	364	389	471	453	437	433	430	428	428
SECRETARY	466	460	476	469	445	436	414	373	373	371	370	369
PLANNER	188	253	234	262	270	288	277	283	283	282	282	281
DISPATCHER	161	170	191	184	177	179	177	180	180	180	179	179
OTHER	4 085	4 155	2 545	2 373	2 359	2 233	2 013	1 916	1 877	1 868	1 871	1 865
TOTAL	46 607	47 104	46 661	48 008	47 658	48 629	46 665	44 772	44 409	44 280	44 190	44 054

- Parallel to this process of moving resources to beef up operations was a process to fill the rest of the **critical vacancies through a recruitment process.**
- In May 2019, the **People and Governance Committee subcommittee of the Eskom Board** supported a special dispensation for the acquisition of 3 638 skills to fill critical positions in Operations in support of the Eskom turnaround.
- **The special dispensation was a once-off decision** intended to be completed within five months from the approval date. Most appointments were through internal recruitment, followed by fixed-term contractors.
- **In settling the top leadership,** Eskom set out to fill ten vacant executive positions at the beginning of the financial year. **Seven appointments** were made to date.

Breakdown of personnel by role

(7/7)

Role	Status	Recruitment stage	Next actions
Transformation Management Office (Group Executive F-Band)		Concluded	Appointment concluded. Candidate started on 1 June 2020
Corporate Affairs (General Manager E-Band)		Internal movements (optimisation)	Decision was taken to optimise the structures. The role will be filled from internal
Company Secretary		Concluded	Appointment concluded. Candidate started on 1 June 2020
Treasury (General Manager E-Band)		Concluded	Appointment concluded. Candidate started on 15 May 2020
Information Technology (General Manager E-Band)		Concluded	Appointment concluded. Candidate started on 15 May 2020
Project Engineering (General Manager E-Band)		Concluded	Appointment concluded – candidate started on 1 March 2020
Government and Regulatory Affairs (Group Executive F-Band)		Concluded	Appointment concluded. Candidate starting on 1 October
Strategy and Planning (General Manager E-Band)		Offer	Sourcing concluded. Offer made to a candidate with anticipated start date of 1 September 2020
Legal and Compliance (Group Executive F-Band)		Sourcing/Candidate search	In the process to source/search for suitable candidates – anticipate offer by 30 September 2020
Audit and Forensic (General Manager – E Band)		Sourcing/Candidate search	In the process to source/search for suitable candidates – anticipate offer by 30 September 2020

- How allocated funds were used
 - Progress on recommendations from oversight visit
 - **Review of all contracts**
 - Clarity on overpaid contracts
 - Kusile and Medupi cost overruns
 - Contracts that have increased in value
 - Update on illegal contracts
 - Clarity on loadshedding
 - Eskom contribution to B-BBEE
- 


“During the 2019 oversight visit by the Committee, Eskom reported that they are reviewing all contracts in order to ascertain whether the entity receives value for money. Kindly provide progress in this regard and realised savings if any”

Contract review

Contracts with major suppliers were **identified** and **renegotiated** and the following were the responses from suppliers

Outcome of reviews

- In the absence of confirmed volume/demand no discounts could be provided.
- Suppliers proposed sliding scale discounts linked to confirmed volumes.
- Some suppliers were introducing the renegotiation of other contract conditions including the contract price adjustment formula.
- Savings achieved were mainly in new contracts


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- 

Contracts implicated by R4bn Overpayment

(1/9)

1	ABB South Africa (Package 21A)	R1bn
2	Tenova Mining and Minerals SA (Pty) Ltd (Package 24B, 24C and 24E)	R735m
3	Tubular Construction Projects (PTY) Ltd (Package 11A &17A)	R1bn
4	Stefanutti Stocks Basil Read JV (Package 16) and Stefanutti Stocks Izazi JV (Package 28)	R1bn
5	Various site service contracts (Not in SIU scope)	R180m


ABB – Estimated overpayment - >R1billion.

- 
- ❑ During the tender between Siemens and ABB, the ABB price was higher than the price submitted by Siemens, however due to technical price adjustments made to the Siemens tender, ABB emerged as the cheaper option.
 - ❑ The adjustment on Siemens was due to the fact that Siemens could not meet the synchronisation date for Kusile Unit 1
 - ❑ It is suspected that the dates used by Eskom during tender stage were never realistically achievable but this criterion was used to award the contract to ABB
 - ❑ ABB was issued with four (4) major variation orders (VO)) with no substantiation documentation or records. These variation orders include:
 - ❖ Kusile Unit 1 - Acceleration – R251m – VO was issued in February 2016
 - ❖ Kusile Unit 1 - Demobilisation Claim- R179m – VO was issued in October 2017
 - ❖ Kusile Unit 2 - Cabling – R311m – VO was issued in October 2016
 - ❖ Kusile Unit 2 - Acceleration – R290m – VO was issued on February 2017

Tenova Mining and Minerals SA (Pty) Ltd – estimated overpayment - R735m.

- ❑ Tenova had claims for extension to the Time for Completion due to the delayed access to site and disruptions
- ❑ In 2015 the Contractor and the Employer engaged in a series of negotiations and both parties settled at R700m in 2016.
- ❑ Due to cash flow constraints from the Contractor, the Employer confirmed entitlement of R400m on 4 March 2016, R300m on 18 March 2016 and R35m in January 2017
 - This settlement agreement does not have all the requisite particulars to assess or verify the delays or costs claimed.
- ❑ On 23 August 2019 the SIU informed Eskom that they were investigating the Tenova contract for potential overpayment.
- ❑ The SIU further confirmed that on 1 October 2019, evidence in support of criminal charges against the relevant role players was referred to the NPA.

Tubular Construction Projects (Pty) Ltd estimated overpayment of R450m and R163m. General Electric (GE) estimated overpayment of R400m.

- 
- ❑ The Contractor submitted a value engineering proposal, which when evaluated led to Modification # 1
 - ❑ The modification was approved through Eskom governance structures including National Treasury
 - ❑ As part of National Treasury's approval they requested that an independent audit be conducted and was duly undertaken by Harvest.
 - Items included in the modification remain questionable as to whether they provided Eskom any value and/or if the Contractor was really entitled to the additional monies
 - ❑ Tubular contract was also an outcome of a de-scoping exercise concluded through a settlement agreement in February 2017 with Alstom (now GE), the main contractor originally appointed for the execution of the air cooled condenser scope of work.

Tubular Construction Projects (Pty) Ltd estimated overpayment of R450m and R163m. General Electric (GE) estimated overpayment of R400m.

- ❑ The employer's representative and contracts manager at the time did not recover the advance payment made to the contractor due to there being a **R495m claim lodged by the contractor**.
- ❑ The advance payment would have been offset against this claim if the adjudication went against Eskom. Eskom was successful in defending this claim and the advance payment bond for a value of **R163 701 263,00** was encashed in April 2020.
- ❑ An investigation into the settlements reached and paid to GE in the de-scoping exercise has also been initiated. The amount under investigation is **R400m**.
- ❑ Tubular was also awarded a contract (P17A) for the Waste Water Treatment Plant in December 2012 after a de-scoping exercise from the contract originally awarded to Mott McDonald/PDNA
 - This contract and the circumstances around the de-scoping are also being investigated.

Stefanutti Stocks Basil Read (SSBR) - (P16) & Stefanutti Stocks Izazi JV (SSIJV) - (P28) – estimated overpayment of R1bn.


- ❑ SSBR (P16) put in claims for additional preliminaries and general (P&G) due to prolongation and stacking - working in multiple areas at the same time. These claims were not substantiated as required by the contract
- ❑ The employer's representative and contracts manager at the time (2015 to 2018) made interim payments to the contractor without the requisite substantiation.
 - This was done on the basis that they would conclude an overall "settlement agreement". There was no consistency or verification of the actual P&Gs being paid on a monthly basis. The monthly payments varied between **R15m to R50m per month**
- ❑ No settlement agreement was reached and in early 2018 the new project director stopped the interim payments that were being made. SSBR referred this action (non-payment) to the dispute adjudication board (DAB).

Stefanutti Stocks Basil Read (SSBR) - (P16) & Stefanutti Stocks Izazi JV (SSIJV) - (P28) – estimated overpayment of R1bn.



- ❑ Eskom successfully defended this adjudication and is now in mutually agreed discussions with SSBR and the standing DAB about the process to determine the actual claim entitlement
- ❑ Progress has recently been made in relation to the delay analysis between the contractor and Eskom experts. The quantum analysis will begin once adequate progress is made to the delay analysis
- ❑ SSIJV (P28) - during the execution of the contract, certain compensation events (CE's) were agreed and paid without the final measurements being done
- ❑ The contractor has also submitted various other deemed accepted CEs claiming that the work was done and needs to be paid for at the contractor's CE values.
 - These disputes are currently in adjudication.

General – (> R180m)

- 
- ❑ There are numerous other services, CSI and Panel contracts that have been “**red flagged**” in multiple audits and reviews done on the project.
 - ❑ Although these findings do not fall within the ambit of overpayment, these findings have been referred to Eskom Assurance and Forensic, Eskom Legal or possibly the SIU for further investigation.
 - ❑ The project experienced problems in extending contracts to conclude the forensic, delay and quantum investigations. These problems are now mostly resolved and progress is evident.

For the purpose of clarification, it must be noted that once an Eskom employee resigns, he or she is outside Eskom’s scope, and the law enforcement agencies then need to take over the process. Additionally, Eskom is supporting the law enforcement agencies to pursue civil claims against former employees involved in all the contracts mentioned above



- ❑ The **R5 billion** is the total value of Eskom's claim against Tegeta Resources & Exploration, which is in business rescue.
- ❑ **Tegeta contract** was concluded years ago, and was set aside by the high court earlier this year, 2020.
- ❑ In a joint presentation to parliament's Standing Committee on Appropriations (SCOA) on 27 May 2020, Eskom was asked by the Chairperson of SCOA, Mr Sfiso Buthelezi who the contractor was that it had **allegedly erroneously paid R5 billion** to, what were the circumstances that led to this overpayment, and what progress had Eskom made in recovering the funds
- ❑ The response was that Eskom had awarded a coal supply contract to Tegeta Resources & Exploration. The contract was originally valued at R3 billion
- ❑ Eskom levied some penalties on the supplier, for various performance failures, that inflated the value of its claim against Tegeta at R5 billion
- ❑ Tegeta has been in business rescue process since 2018, and Eskom's claim against Tegeta has since been reduced to R1.24 billion

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Reasons for Kusile and Medupi power plants cost overruns

Various issues at differing times resulted in delays of the programme and cost movements. The time buckets below highlights occurrence of key events since inception.

- 2004: **Government gives Eskom approval** to build power plans – A decision take **“too late”**
- Needs necessitated by power insufficiency sees Eskom needing **to commence the New Build Programme urgently**
- Eskom’s **planning is inadequate** due to the rush

2004-2007

- Eskom experienced unforeseen circumstances
- Eskom **plagued by strike action**, which in total accumulated to **18 months of down time**
- **Failure of Factory Acceptance Tests (FATs)** resulted in further delays
- **Welding issues** also led to delays of a minimum of 8 months
- **Inclement weather** delayed certain activities on site

2009-Present

2007-2009

- Issues around technical designs surfaced
- Due to inadequate planning **scoping was done incorrectly, costs estimates were inaccurate and designs were incomplete**
- Furthermore, due to **market related issues**, the **costs that the equipment** came at when orders were placed far **exceeded Eskom’s estimates**

Reasons for Kusile and Medupi power plants cost overruns

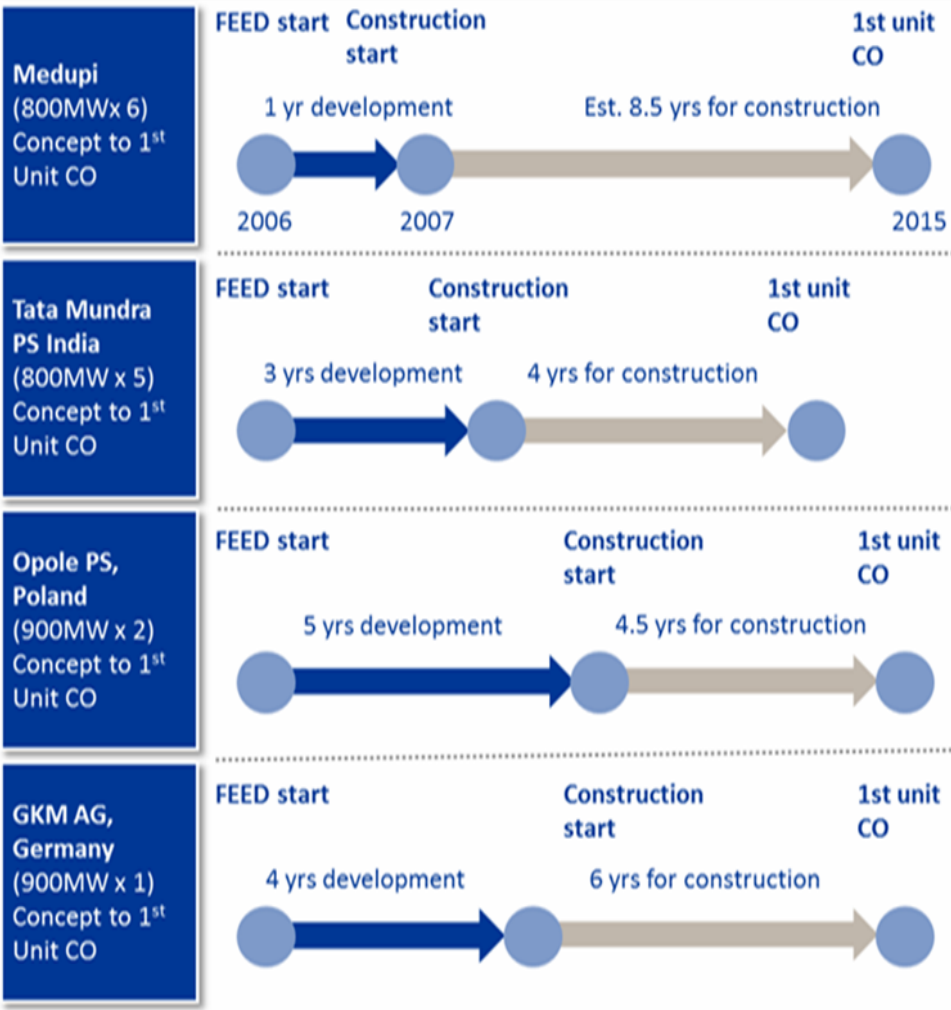
- ❑ **Given the inadequate time** to plan, **absence of suitable resources** in the country (in quantum and skill) and other consequential issues, Eskom, in an overly optimistic way, endeavoured to manage a programme of this magnitude for the benefit of the country.
- ❑ Eskom **intended to partner** with the best in the world to assist with engineering and integration issues.
- ❑ The **governance process within Eskom** as an organ of state was seen to be onerous and inhibiting from the point of view of these contractors.
- ❑ This left many of the engineering and integration processes wanting. It is clear, that the contractors and partners did not deliver against expectation
- ❑ Eskom had to make an impact on the local economy through its contracting approach.
- ❑ The timing and placement of the contracts e.g. the placement and finalisation of the boiler, turbine and civil contracts made integration difficult
 - This together with the nature of the contracts left Eskom exposed to many claims from contractors

- ❑ For the key contracts placed, the choice of suppliers was limited; although processes were fair, Eskom was at times left with one supplier with which to negotiate
- ❑ Contractors provided prices based on the fast tracked schedules against which they were asked to deliver
 - As the schedules moved out and the designs completed, the costs increased.
- ❑ To re-iterate the designs were not complete at the time of contracting and the project managers/developers were designing and managing risks after contracting
- ❑ In the end, Eskom decided to move decisively along a certain path for the benefit of the country, and there were mistakes made

Reasons for Kusile and Medupi power plants cost overruns

(4/15)

Schedule and Cost benchmarking: Medupi



- Medupi has more units than the other power stations in this comparison
- Medupi had only 1 year allocated to FEED, the shortest of all the projects profiled. 8.5 years were dedicated to construction
- Medupi's timeline between project development and the commissioning of the first unit is 9.5 years. It is still shorter than the Germany's GKM AG 10 years for a 900MW x 1 plant
- Medupi's timeline is equivalent to Poland's Opole 900MW x 2 plant, which also took 9.5 years. However Poland had 5 years dedicated to FEED
- Tata Mundra (800MW x 5) commissioned the first unit after 7 years, with 3 years allocated to project development. This was only 1.5 years shorter than Medupi's commissioning timeline.

Reasons for Kusile and Medupi power plants cost overruns

- ❑ **Globally projects are not built the way Eskom approached Medupi** but are built one unit a time. Ideally in the South African context, a comprehensively defined green field project should take approximately 5 years in development.
- ❑ **The results of poor pre-planning due to late start decisions** are detrimental to project execution. Repeatability and forward planning can produce better cost and schedule certainty

Study	Overnight cost comparison (USD/kW)		Levelised cost (LCOE) comparison (USD/MWh)	
	Kusile Pulverised coal with FGD	Medupi Pulverised coal without FGD	Kusile Pulverised coal with FGD	Medupi Pulverised coal without FGD
Electric Power Research Institute (EPRI):				
• EPRI range :	• 2,693 – 3,103	• 2,187 – 2,519	• 86 - 95	• 71 - 78
• Eskom estimate P50	• 2,397	• 2,432	• 50	• 38
• Eskom estimate P80	• 2,451	• 2,492	• 50	• 37
• Conclusion:	• Below range	• In range	• Below range	• Below range
Lazard:				
• Lazard range:	• 3,000 – 8,400	• 3,000 – 8,400	• 65 – 150	• 65 -150
• Eskom estimate P50	• 3,589	• 3,430	• 50	• 38
• Eskom estimate P80	• 3,611	• 3,548	• 50	• 37
• Conclusion:	• In range	• In range	• Below range	• Below range
International Energy Agency (IEA):				
• IEA range :	• 1,218 – 3,067	• 1,218 – 3,067	• 76 - 107	• 76 – 107
• Eskom estimate P50	• 2,792	• 2,748	• 50	• 38
• Eskom estimate P80	• 2,845	• 2,815	• 50	• 37
• Conclusion:	• In range	• In range	• Below range	• Below range

Key issues that lead to cost movements/cost/escalations/under estimations

- ❑ **Set up and development:** Due to the time constraints, insufficient upfront work was done on the projects leading to incomplete scoping before contract awards
 - When the decision was made **pressure to bring new capacity online** placed time constraints on project teams.
 - **Additional work that was not part of the plan** as well as additional engineering information **led to delays and cost movements.**
 - **Changes in environmental standards and requirements**, the geotechnical and environmental conditions at the location of the projects and the lack of updated and current engineering standards during the early days of the projects further resulted in cost escalations and time delays later in the projects' life (through variation and claims).

Key issues that lead to cost movements/cost/escalations/under estimations

- ❑ **Execution:** This phase **started without a firm design** to meet a fast tracked schedule
 - Eskom should accept responsibility for not internally aggressively pushing back on the expectation to meet an unrealistic schedule
 - The **lack of upfront integrated schedule** covering all project development, engineering, procurement and construction management activities and timelines meant that all activities were out of phase and this resulted rework, delays and subsequent (both local and international) claims.
 - Projects were also **stalled after starting** due to funding availability.
- ❑ **Contractor expertise:** The initial assumption that the contractors have the necessary knowledge and skills to execute mega projects in the South African environment to supplement Eskom did not prove to be valid
 - Supplementing the Eskom knowledge and experience with that of the Execution Partners was also only partially successful.

Key issues that lead to cost movements/cost/escalations/under estimations

- ❑ **Project Integration:** This was also **another major contributor** to cost overrun
 - Eskom was aware from the beginning that **not having a firm design**, but rather **using the Majuba design** as a proxy for the project, was not optimal (but a necessary requirement to fast track the project)
 - The **linkages between packages were not properly understood**. Eskom should have contracted to overcome this challenge; also a truly turnkey approach was not an option at that time
- ❑ **Force majeure (strikes):** led to >24 month delay with associated cost movements.
- ❑ **Contractor performance and productivity:** specialized welding on the boiler was of **poor quality**, the control and instrumentation factory acceptance test (FAT) and substantially lower than anticipated productivity resulted in both cost and schedule delays

Key issues that lead to cost movements/cost/escalations/under estimations

- ❑ **Resources constraints:** Eskom recognised from the beginning of the new build programme that there were **insufficient competent engineering practitioners** to execute **Medupi, Kusile, Return to Service Units** and **Gas projects** at the same time
 - A strategy was formulated to contract-in large and multinational Engineering Companies (e.g. Black & Veatch, PB Power, ESBi, etc.) to assist Eskom. However, the roles and responsibilities were not ideally defined.
 - As a result, the decision making and processes to be followed sometimes **took too long, and in some cases resulted in the duplication of effort.**
 - The **design assurance accountability and requirements for compliance** with the South African Engineering Profession Act was not dealt with early enough
 - The Panel members had limitations in this regard and Eskom had to close the gap.
 - **In the end**, the context in which Eskom operated in proved to be something that the contractors were unable to cope with; these **included some of the commercial / procurement processes and requirements**, the public finance management act requirements of a state owned company. Eskom had to insist that these be followed

Key issues that lead to cost movements/cost/escalations/under estimations

- ❑ **Investigations into corruption:** Delays caused as a result of modifications to critical contracts not being possible due to these contractors being investigated for alleged corruption.
- ❑ **Business Rescue & Financial Stability:** The impact of various contractors that have gone into business rescue has significantly affected the schedule including (Clyde Bergerman (CBZ), who were contracted to construct the dust handling plant in Kusile, Unit 4, 5 & 6 not started. Contractors' financial stability and poor cash flow resulting in reduced resources and slow progress. Contractors that are terminating their contracts have also impacted negatively on the schedule
- ❑ **Claims:** Delayed claims settlements between Eskom and Contractors resulting in low productivity.
- ❑ **Unrecoverable delays due to:**
 - low productivity; contractors not achieving contractual completion dates which impact the works of the follow-on contractors (access delays – Chemical Clean and Steam Blow),
 - demobilization of critical resources (Boiler package, balance of plant mechanical and miscellaneous structures),
 - Rework, design changes and construction integration challenges have also caused significant delays.

Eskom has **taken critical steps to change the current modus operandi** at Medupi and Kusile. These interventions include:

- ❖ **Signed a modified Partnership Agreement (PA)** between Eskom, contractors, and labour
- ❖ **Reviewed and optimized** the model according to which contractors are managed
- ❖ **Removed C&I scope** from Alstom at Kusile due to underperformance
- ❖ **Signed Memorandum of understanding** with boiler contractor to turnaround boiler contractor performance
- ❖ Eskom now **taking a lead to pro-actively manage the contractors**. Panel members now provide support to Eskom teams
- ❖ **Co-location of key technical experts** from Eskom and Contractors at sites to provide quick turn around on key decisions in support of fast tracked schedules

In addition to this, **Medupi and Kusile have identified risks** which could further exacerbate the cost overrun situation, and associated mitigation actions. This is aimed at controlling the cost movements so as to limit the financial impact on Eskom

Identified Risks at Medupi

Medupi Risk	Description	Mitigating action
Claims	<ul style="list-style-type: none"> • Disruption and cost risk due to large volume of claims raised by contractors 	<ul style="list-style-type: none"> • Robust management of claims in accordance with FIDIC procedures and processes • Fit-for-purpose commercial function including dedicated DAB team
Labour unrest	<ul style="list-style-type: none"> • Volatile labour relations • Uncertainty around strikes • Complex set of stakeholders 	<ul style="list-style-type: none"> • Proactive engagement with contractors • Communication with stakeholders regarding PLA • Implementation of centralised wage bureau
Productivity	<ul style="list-style-type: none"> • Low resource productivity levels • Construction supervision model not working effectively 	<ul style="list-style-type: none"> • Reorganisation of site management structure to include dedicated unit managers and FIDIC teams • Micro management of the integrated schedule • Capability building
Defects	<ul style="list-style-type: none"> • Defects not timeously rectified 	<ul style="list-style-type: none"> • Robust tracking and monitoring of critical factors • Incorporation of quality team in Employers organization • Move from quality assurance to quality control • Joint data book reviews
Schedule integration & commissioning	<ul style="list-style-type: none"> • Access and schedule integration is not sufficient between contractors and commissioning is poorly coordinated, leading to delays 	<ul style="list-style-type: none"> • Schedule integration workshops with all relevant stakeholders • Robust management and intervention at daily MPIC meetings to ensure requirements
Variations and design changes	<ul style="list-style-type: none"> • Volume of design changes and variations due to poor design integration and rework 	<ul style="list-style-type: none"> • Enforce design freeze and limit design changes to environmental, safety and constructional issues • Detailed review of design status for each package to determine potential design anomalies

Identified Risks at Kusile

Main risks	Details	Mitigation measures
Poor productivity	<ul style="list-style-type: none"> • Low productivity levels (~50% of target) • Construction supervision model not working effectively 	<ul style="list-style-type: none"> • KET supporting contractor's work front planning and quality assurance • KET supervisors integrated with contractors
Failure of Alstom C&I	<ul style="list-style-type: none"> • Delays due to issues with the Alstom BPS and Alstom DCS system 	<ul style="list-style-type: none"> • Alternate vendors working on design and ready to take over, if required, to change the vendor
Commissioning delays	<ul style="list-style-type: none"> • Current commissioning team structure does not support 7 day workweek 	<ul style="list-style-type: none"> • Ramping up the commissioning team • Reviewing commissioning plan of sub-systems
Labour instability	<ul style="list-style-type: none"> • Poor IR management by contractors, leading to volatile labour relations • Uncertainty around national strikes 	<ul style="list-style-type: none"> • Drive for contractors to fully implement PA/SSA • Plan to complete unit 1 critical civil works before 2015 Civil National strike
Inclement weather	<ul style="list-style-type: none"> • Rain, high wind and lighting affecting access and productivity of outdoor activities 	<ul style="list-style-type: none"> • Acceleration of unit 1 critical civil works, boiler cladding and building enclosure • Shelter set up for risk areas e.g., boiler
Quality	<ul style="list-style-type: none"> • Defects requiring rework • Delays in commissioning due to data books not produced on time 	<ul style="list-style-type: none"> • Added more quality hold points for poor performing contractors • Increased number of KET quality personnel¹
Sub-contractor financial difficulty	<ul style="list-style-type: none"> • Sub-contractors unable to complete work due to financial constraints 	<ul style="list-style-type: none"> • Package teams and Eskom Business Intelligence conducting review and surveillance of contractor and sub-contractor financial status

Reasons for Kusile and Medupi power plants cost overruns



Current Status: Budget and Expenditure, as at April 2020

	Current ERA Budget: P80 (EPC)	Current ERA Budget: P50 (EPC)	Inception to date expenditure (EPC)	Remaining ERA Budget (P50)	Overall Budget Expenditure (P50)	Overall Completion	
						Construction	EPC
Medupi	R145.0bn	R135.0bn	R118.4bn	R16.6bn	87.7%	99.9%	98%
Kusile	R161.4bn	R156.0bn	R137.7bn	R18.3bn	88.2%	87%	94%

Reasons for Kusile and Medupi power plants cost overruns




□ Current Status: Latest Schedule, Actual and Forecast, as at June 2020

● Commercial Operation Achieved
 ● Commercial Operation Forecast
 ■ First Synchronisation Achieved

		Unit 6	Unit 5	Unit 4	Unit 3	Unit 2	Unit 1
Medupi (P50)	Unit Completion	100%	100%	100%	99.99%	99.97%	99.49%
	Commercial Operation	Aug 2015 ●	Apr 2017 ●	Nov 2017 ●	July 2019 ●	Nov 2019 ●	Feb 2021 ■ ●


		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Kusile (P50)	Unit Completion	100%	99.50%	97.60%	91.96%	82.98%	74.15%
	Commercial Operation	Aug 2017 ●	Oct 2020 ■ ●	Dec 2020 ■ ●	Jun 2022 ●	Jun 2023 ●	Dec 2023 ●

- How allocated funds were used
 - Progress on recommendations from oversight visit
 - Review of all contracts
 - Clarity on overpaid contracts
 - Kusile and Medupi cost overruns
 - **Contracts that have increased in value**
 - Update on illegal contracts
 - Clarity on loadshedding
 - Eskom contribution to B-BBEE
- 

Contracts that have increased in value over time when compared to their original contract value and specify whether these contracts were legally sound”



- ❑ There are contracts with significant increase in value over time when compared to the original contract value. However, they cannot be regarded as contracts with irregularities until they’ve been reviewed.
- ❑ Due to voluminous contract dataset, a “**billion rand open contract value threshold and an increase in excess of 200%**” was used to determine a population of contracts that have increased in value over time when compared to their original contract value.
- ❑ A total of **thirty nine** (39) live contracts that fell under the criteria were identified. In view of the abnormality of the percentage (%) these contracts will be referred to the Eskom Audit and Forensic department to investigate whether they are legally sound or not.

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- 
- A close-up, slightly blurred image of a spiral-bound notebook with several pages visible, positioned on the right side of the slide.



In its efforts to recover financial losses against suppliers and former employees, Eskom is working closely with the South African Revenue Service (SARS), the Special Investigating Unit (SIU), the Directorate for Priority Crimes (Hawks), and the Head of Investigations at the Office of the National Director of Public Prosecutions

1. Trillian Management Consulting (Pty) Ltd (“Trillian”)

- ❖ Eskom is recovering R600m that was unlawfully paid to Trillian on the pretext that Trillian was the B-BBEE partner of McKinsey & Company. Eskom did not have any contractual relationship with Trillian and the latter was not registered as a supplier to Eskom.
- ❖ Liquidation proceedings against Trillian are under way and Eskom is joined by the South African Revenue Service in this matter



2. Tegeta Exploration and Resources (Pty) Ltd (“Tegeta”)

- ❖ Tegeta is currently under business rescue and Eskom has submitted a claim of R5bn against the business rescue practitioners for the pre and post business rescue penalties.
- ❖ Given the fact that Tegeta has other creditors, it is apparent the full R5bn may not be realised and Eskom could end up receiving only R1.24bn.
- ❖ Eskom recently issued summons against its former executive, former board members and the Gupta Brothers their associate, Salim Essa claiming R3.8bn.

3. Deloitte Consulting (Pty) Ltd (“Deloitte”)

- ❖ Eskom launched court proceedings against Deloitte in October 2019 to recover the sum of R207m arising from task orders that were awarded irregularly without an open and competitive tender process.
- ❖ Pursuant to a settlement agreement concluded between Eskom and Deloitte on 20 March 2020, Deloitte paid Eskom the sum of R171m (incl VAT) on 12 May 2020.



4. PriceWaterhouseCoopers (“PWC”)

- ❖ Eskom and PWC concluded a risk-based contract without National Treasury approval. PWC was paid the sum of R95m with no value add to Eskom. Senior Counsel is working on papers to set aside this award and to recover the sum of R95m

5. Wilge Housing Project

- ❖ Eskom suffered financial losses of approximately R75 839 738.50 due to the negligence of its former General Manager: Facilities. Eskom dismissed the employee after a disciplinary hearing process and instructed Attorneys to recover the sum of R75 839 738.50 from the former employee



6. Meagra Transport CC (“Meagra”)

- ❖ Meagra submitted fraudulent invoices with the assistance of a former Eskom employee to the tune of R35m to Eskom for coal transport between 2016 and 2018. Eskom recouped R3m of the R35m from Meagra and we are pursuing the balance of R32m.
- ❖ The owner of Meagra and a former Eskom employee are facing 53 counts of fraud before the Specialised Commercial Crimes Court in Johannesburg


7. Africawide Consulting (Pty) Ltd (“Africawide”)

- ❖ Africawide was awarded a contract by Eskom without an open and competitive tender process. The original contract value was R9m and was modified without National Treasury approval to R17m. Eskom is recovering the R17m from Africawide.



8. Impulse International (Pty) Ltd (“Impulse”)

- ❖ Impulse was awarded contracts worth billions of Rands by Eskom. It was later discovered that a stepdaughter of a former Eskom Executive was a shareholder in Impulse, which was a conflict of interest that was not disclosed by the former Executive.
- ❖ Eskom has instructed Attorneys to set aside the unlawful contracts and recover the full values of all the contracts that were awarded to Impulse. The SIU, SARS and the DPCI are also involved in this matter.

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 - **Clarity on loadshedding**
 - Eskom contribution to B-BBEE
- 

- The primary cause of the Jul/Aug 2020 load shedding was the high levels of unplanned losses throughout the Generation fleet (the winter plan assumed 11 000 MW unplanned losses)
 - Trips, other units forced off and late return of units (up to ~4 000 MW)
 - Camden not available due to ash dam constraints (~1 300 MW)
 - Koeberg unit 2 on cold reserve/outage (~700/920 MW)
 - Unavailability of non-commercial units at Medupi and Kusile (~1 700 MW)
- Need to manage diesel and water resources at the OCGTs and pump storage stations respectively
 - OCGT usage typically only 4 hours over peak in winter, but now required for significantly longer periods than catered for in the plan
- However:
 - Partial load losses have reduced since focus on short-term maintenance during lockdown (around 2 000 MW)
 - Koeberg has returned from cold reserve but now on refueling outage

Load shedding is as a result of an accumulation of unanticipated events, aggravated by a severe weather event, and the unplanned losses have already returned to below 11 000 MW. However, the impact on water and diesel resources requires further load shedding.

Although the base case scenario (P80) after initial lockdown maintenance resulted in an envisaged **improvement from 31 days of Stage 1 load shedding to a possible 3 days** – it is important to recognise that due to the current unreliability and unpredictability of the system, the risk for load shedding remains. This will be the **reality until after the 18 months of reliability maintenance**

- Four critical components make up the Plan and determine the need for OCGT generation usage and load shedding:



Installed generation capacity: This includes new build non-commercial generators and dispatchable IPP OCGTs but excludes self-dispatch renewable generation.



Demand forecast: The residual demand forecast (total demand less demand supplied by renewable generation) is used.



PCLF: Planned generation outages for maintenance.



UCLF + OCLF (Unplanned unavailability): Unplanned generation outages.

Summary of the Summer Plan and 18-Month Outlook



All reliability maintenance required in the 18-month planning period has been accommodated in the plan. This has resulted in a “full” plan with little room to move, extend or add outages.



Maintenance outage planning was done using a UCLF assumption of 10 000 MW for all months considered. This outage plan was stress tested with 3 scenarios by the System Operator to estimate the OCGT usage and level of load shedding. For the remaining winter months (August) of FY 2020/21, 11 000 MW, 12 000 MW & 13 000 MW of UCLF were used to stress test the Plan. For the summer months of FY 2020/21, 12 000 MW, 13 000 MW & 14 000 MW of UCLF were used to stress test the Plan. For FY 2021/2022, 11 000 MW, 12 000 MW & 13 000 MW was used for both seasons.



For the most part the System Operator will need to source operating reserves from Demand Response (DR) products as well as from emergency reserve sources such as Interruptible Load Shedding (ILS) and OCGTs.



Even at relatively low (< 11 000 MW) levels of UCLF, the Plan requires extensive OCGT usage over weekdays, and low diesel usage most weekends.



For the remainder of the 2020-2021 FY, it is envisaged that load shedding will be required in August – December and in February - March 2021 for UCLF at 11 000 MW. In the following FY, at 11 000 MW of UCLF, it is envisaged that load shedding will be required in June - July 2021.

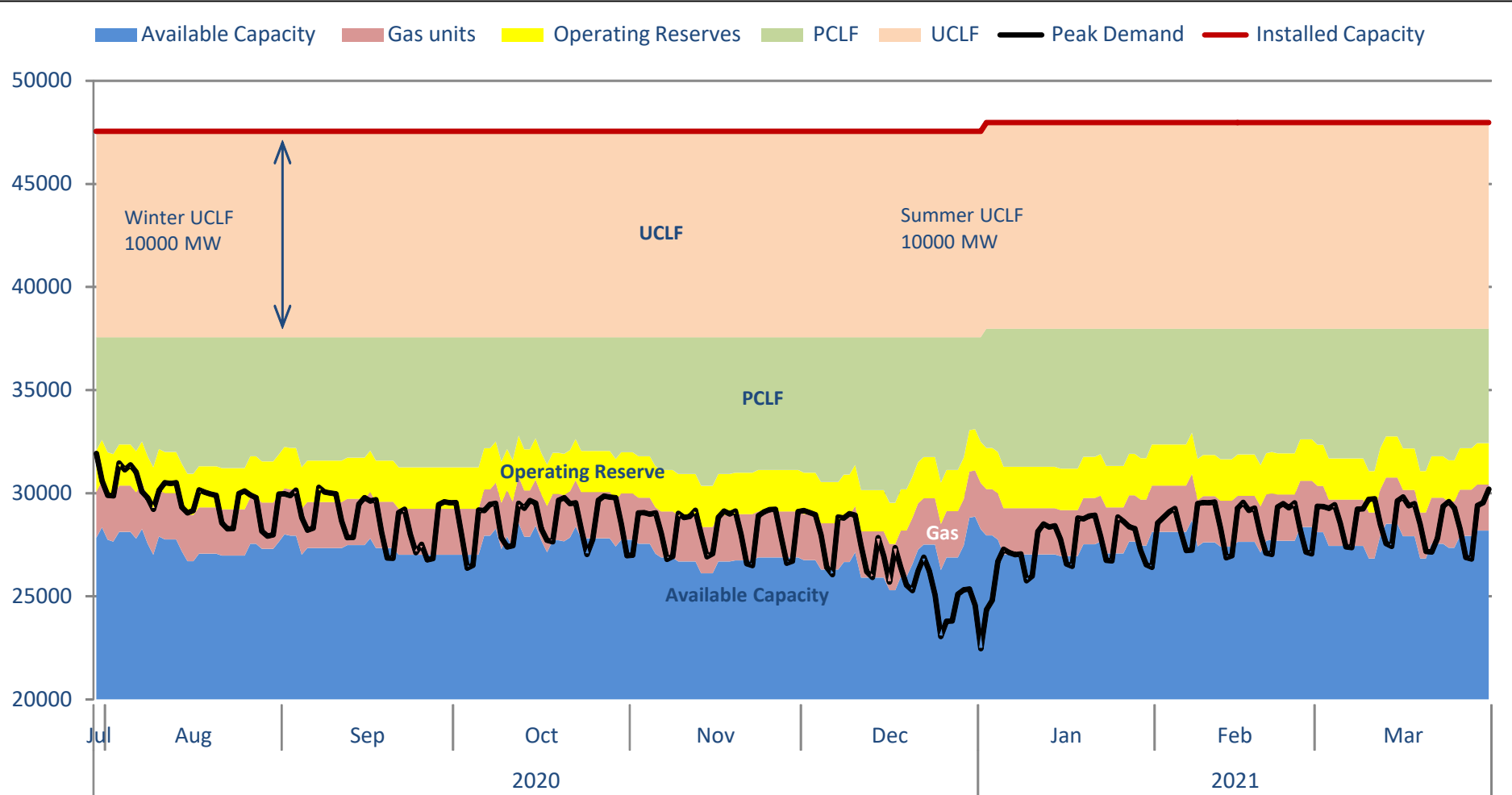


For UCLF greater than 13 000 MW, load shedding up to stage 3 will be required every month until March 2022

Capacity Outlook Summary: July 2020 – March 2021

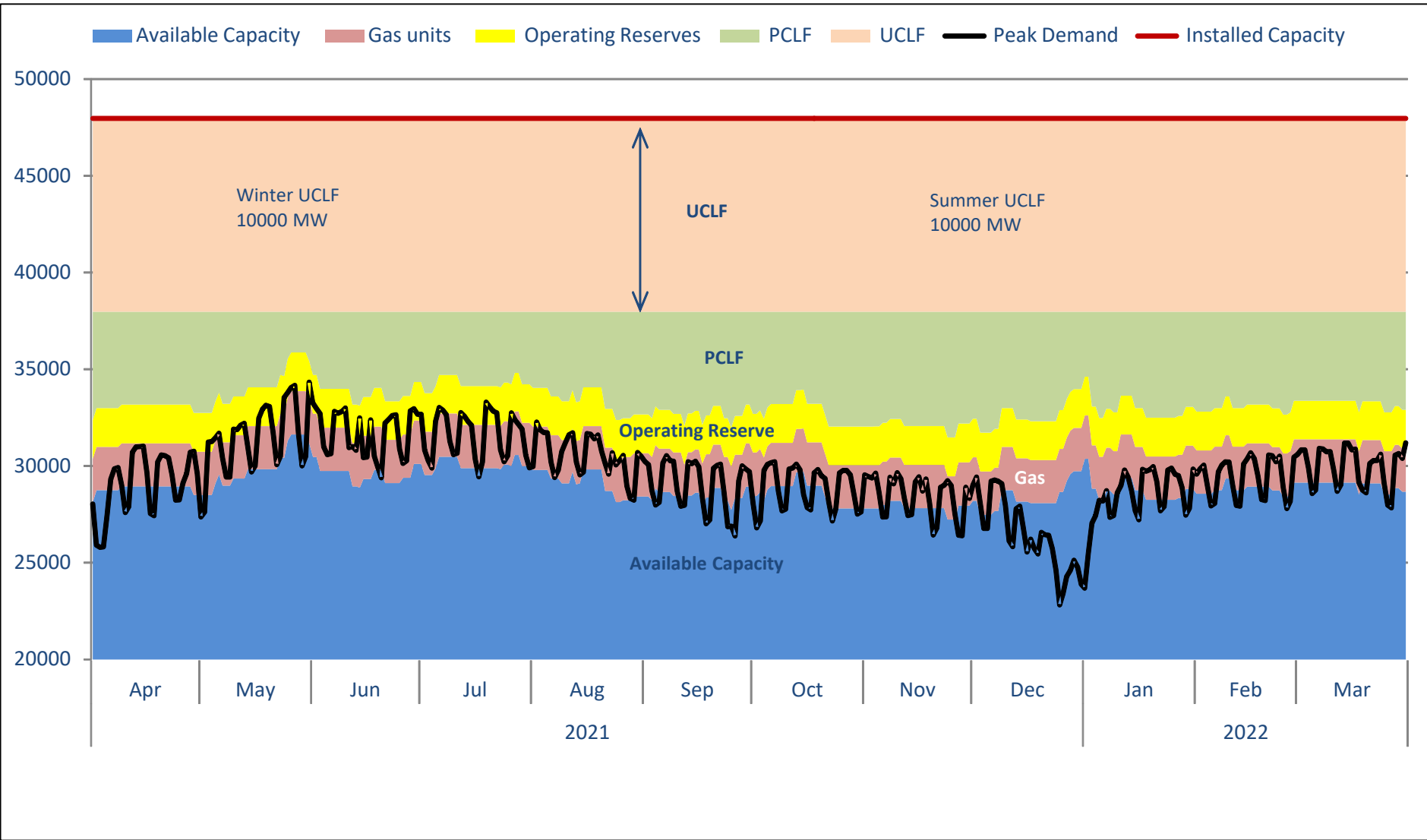


(4/6)



To execute this plan OCGT usage is anticipated. The unplanned allowance is projected at 10000 MW from April 2020 – March 2021.

Capacity Outlook Summary: April 2021 – March 2022



In order to avoid / minimise future load shedding, it is imperative that:

- Unplanned load losses are maintained under 11 000 MW
- OCGT diesel levels are maintained at healthy levels through deliveries and adequate funding
- The current hard work to ensure the safety of the Camden ash dams continues to expedite the return of the Camden units
- The work to bring in the non-commercial units at Medupi and Kusile continues
- Also note that the reduced demand due to COVID restrictions gave Eskom the opportunity to execute additional short-term maintenance to address mostly partial load losses but that these restrictions also meant the postponement of some reliability maintenance which will have to be caught up later

Eskom is committed to avoiding or minimising load shedding and its negative impact on the country but load shedding is an essential, last resort, lever to protect the system.

Until the defects at Medupi and Kusile have been addressed and until most of the reliability maintenance on the fleet has been executed, the Generation fleet remains unreliable and unpredictable with the risk of load shedding.

Although the base case scenario (P80) reflects envisaged days of load shedding – it is important to recognise that due to the current unreliability and unpredictability of the system, the risk for load shedding remains. This will be the **reality until after the 18 months of reliability maintenance**

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- ❑ Eskom drives five overall priorities for the purpose of transformation and local socio-economic development, namely, Localisation, Skills development, Job Creation, Enterprise/Supplier Development, and Industrialisation.
- ❑ With a focus on the empowerment of women, youth, people living with disabilities and black professional, Eskom has contributed significantly in terms of advancing Broad-Based Black Economic Empowerment over the past five (5) years.

Overall contribution made thus far:

(2/12)

Preferential Procurement In the past 5 year (FY16-FY20)



Total Measurable Spend
R718bn



B-BBEE complaint suppliers
R520bn (72% of TMPS)



Black Owned businesses
R247bn (34% of TMPS)



Black Women Owned companies
R96bn (13% of TMPS)



Black Youth Owned suppliers
R13bn (2% of TMPS)



Small and Medium Enterprises
(QSE & EMEs)
R106bn (15% of TMPS)

Eskom Contractors in New Build Projects (FY07-FY20)



Total Contracted Value
R227bn



Local Content Contracted
R146bn (64% of contract value)



Local Content Spend
R169bn (74% of contract value)



Large Black companies
R85bn



Black Women Owned suppliers
R18bn



Small and Medium Enterprises
(QSE & EMEs)
R16bn



Local to site companies
R12bn



Jobs created
~189 000



Skills Developed
~11400



Industrialisation
R1.12bn

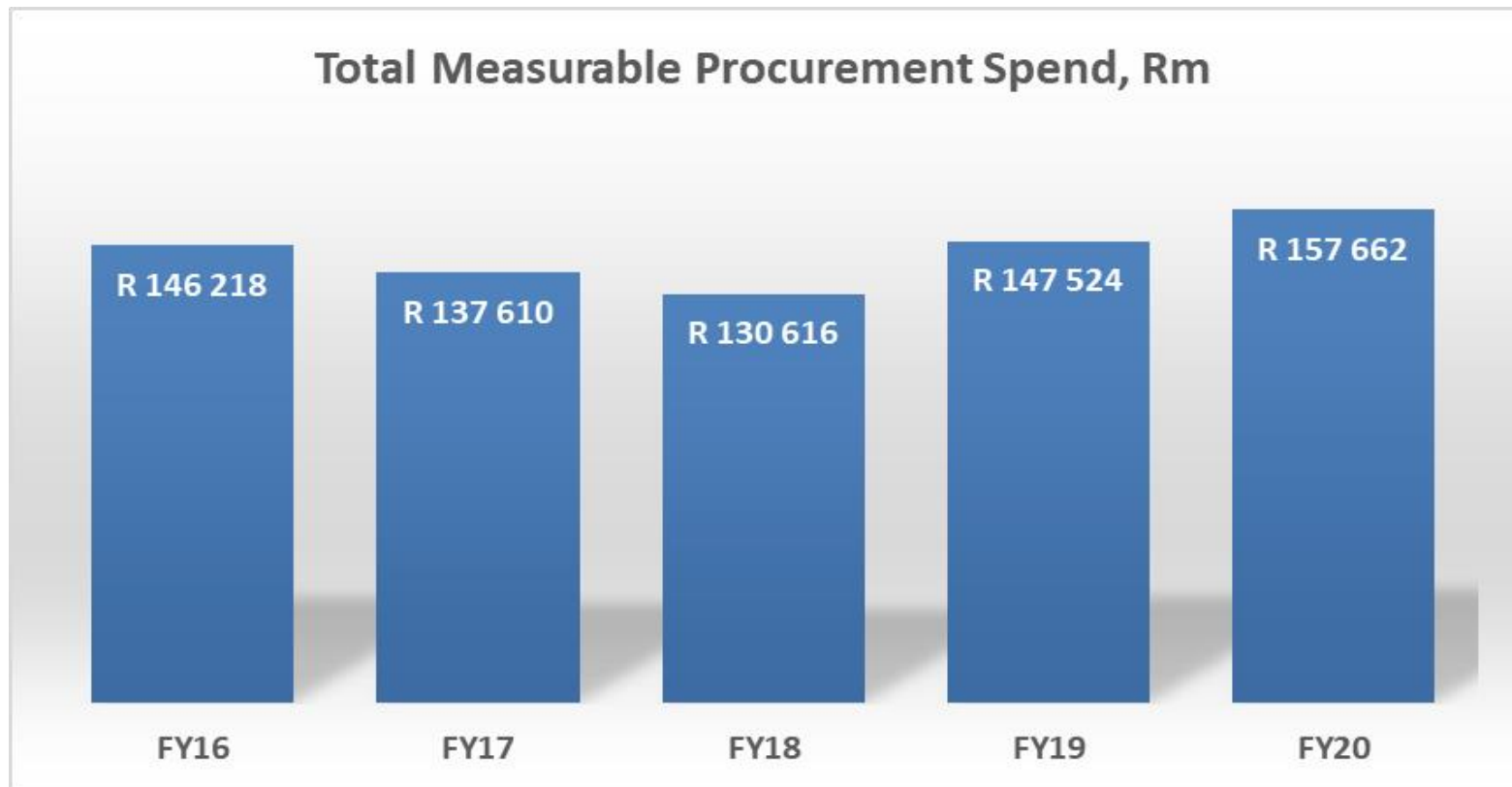


Infrastructure dev.
~R3bn



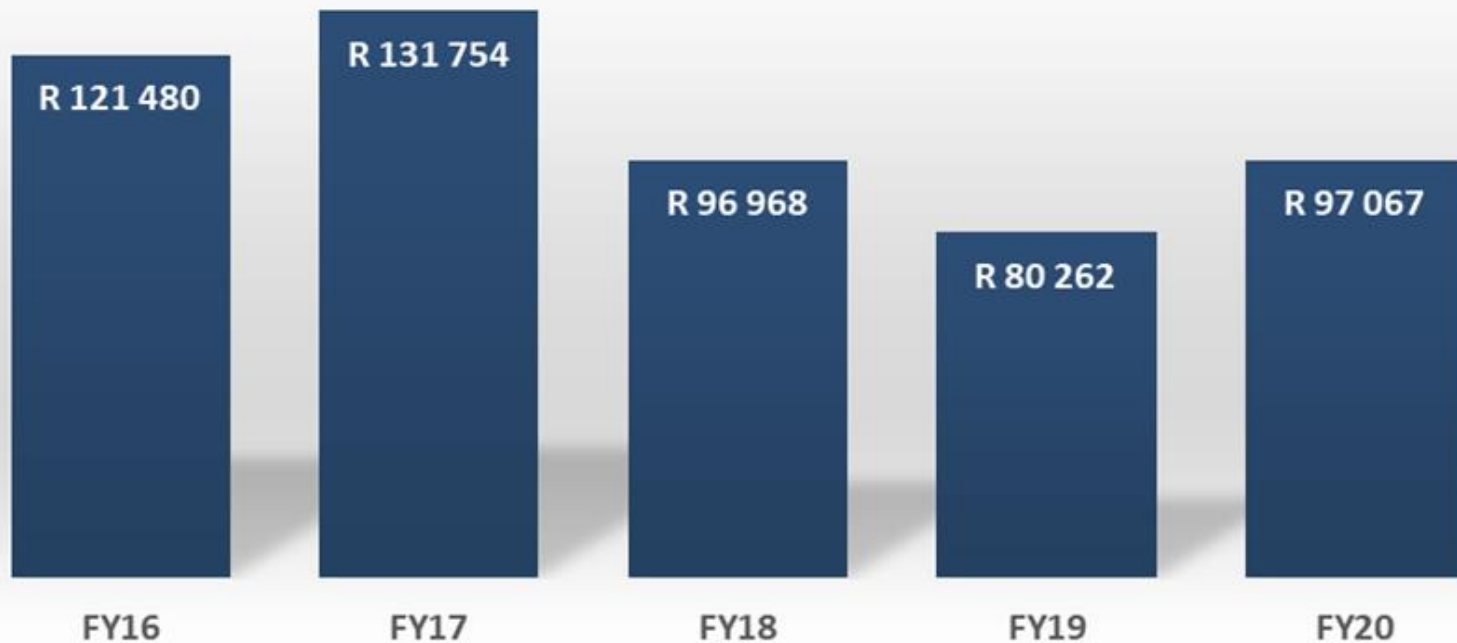
Enterprise Development
~R1bn

- In the past 5 financial years (1 April 2015 to 31 March 2020), Eskom total measurable procurement spend is R718 billion:



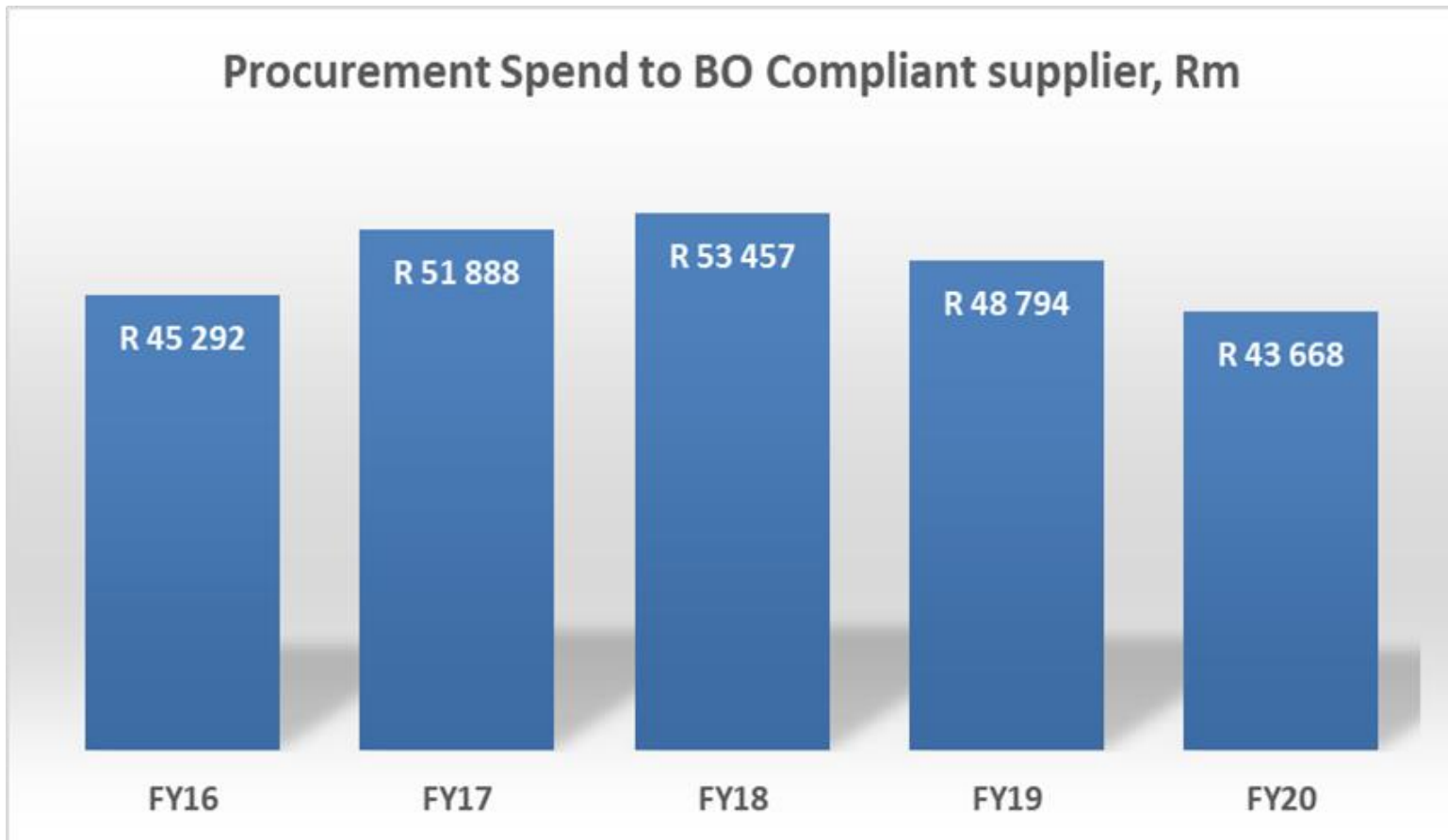
- ❑ In the past 5 financial years R528 billion was spent with B-BBEE compliant suppliers.

Procurement Spend to B-BBEE Compliant supplier, Rm



The role of Eskom in advancing Broad-Based Black Economic Empowerment in South Africa (5/12)

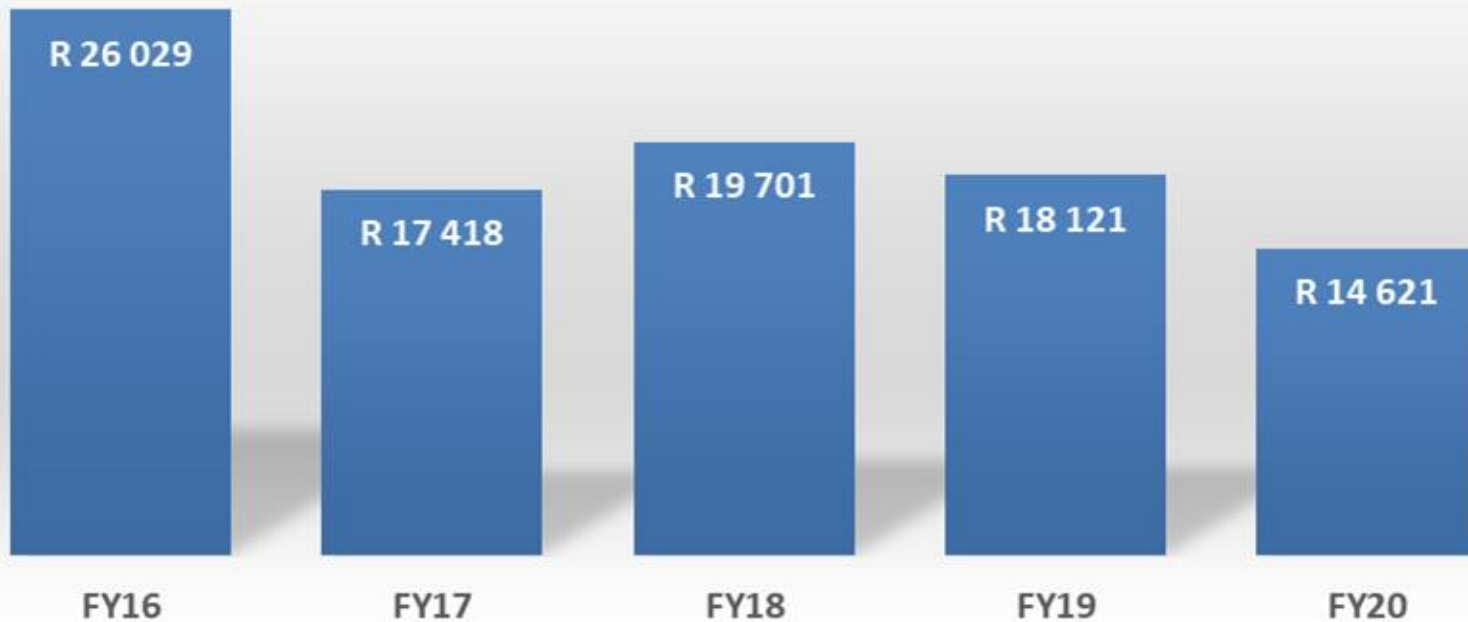
- In the past 5 financial years, R243 billion was spend with Black Owned suppliers.



The role of Eskom in advancing Broad-Based Black Economic Empowerment in South Africa (6/12)

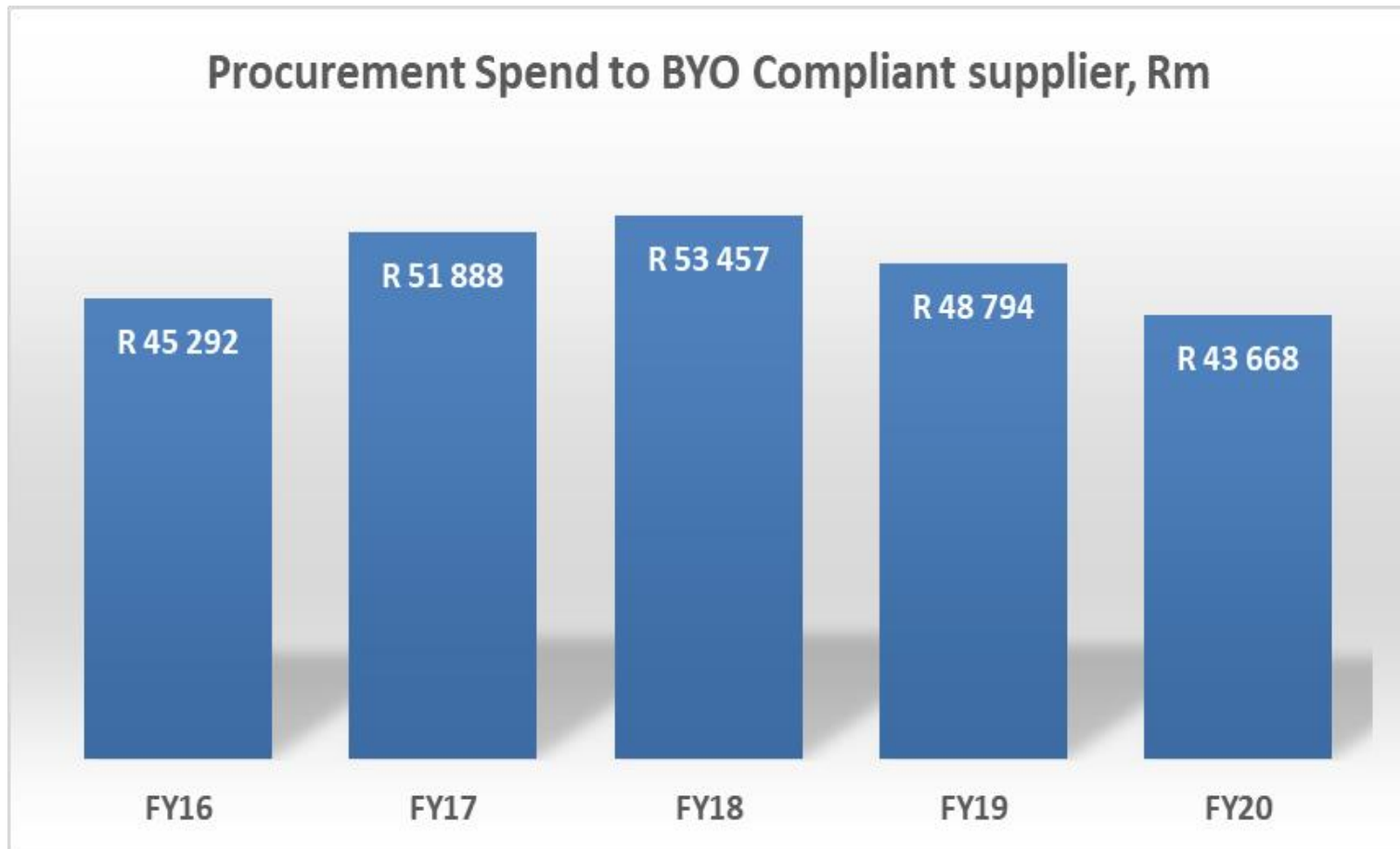
- ❑ In the past 5 financial years, R96 billion was spend with Black Women Owned suppliers.

Procurement Spend to BWO Compliant supplier, Rm



The role of Eskom in advancing Broad-Based Black Economic Empowerment in South Africa (7/12)

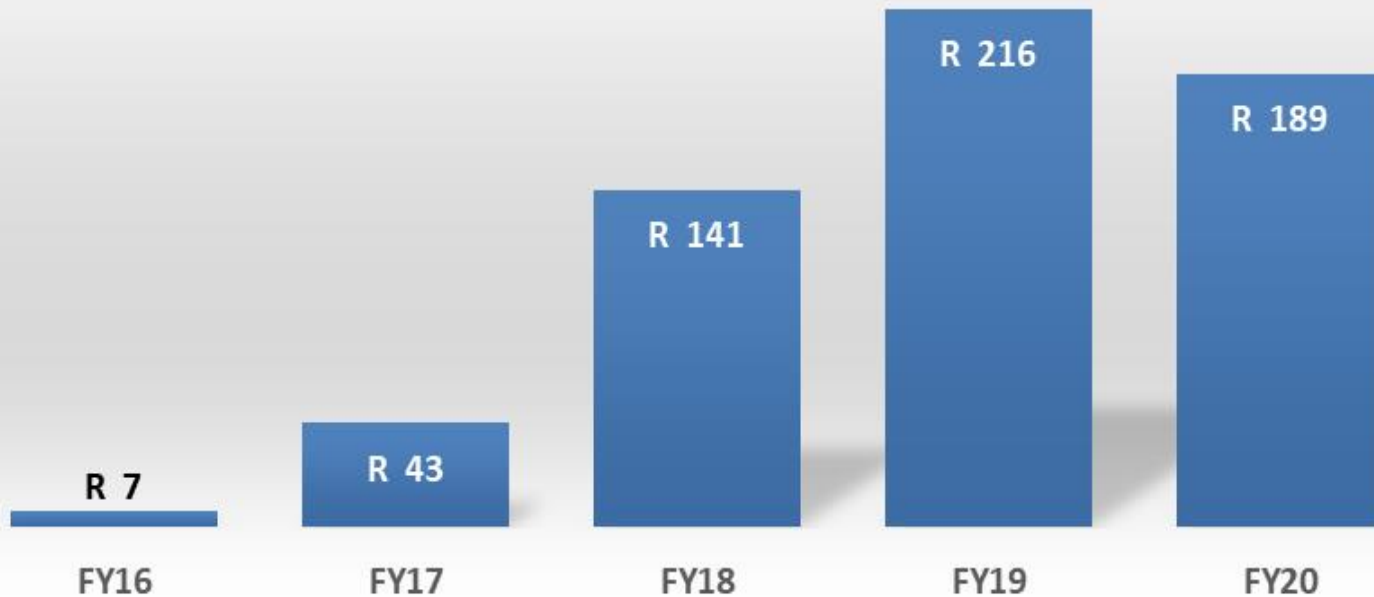
- In the past 5 financial years, R13 billion was spend with Black Youth Owned suppliers.



The role of Eskom in advancing Broad-Based Black Economic Empowerment in South Africa (8/12)

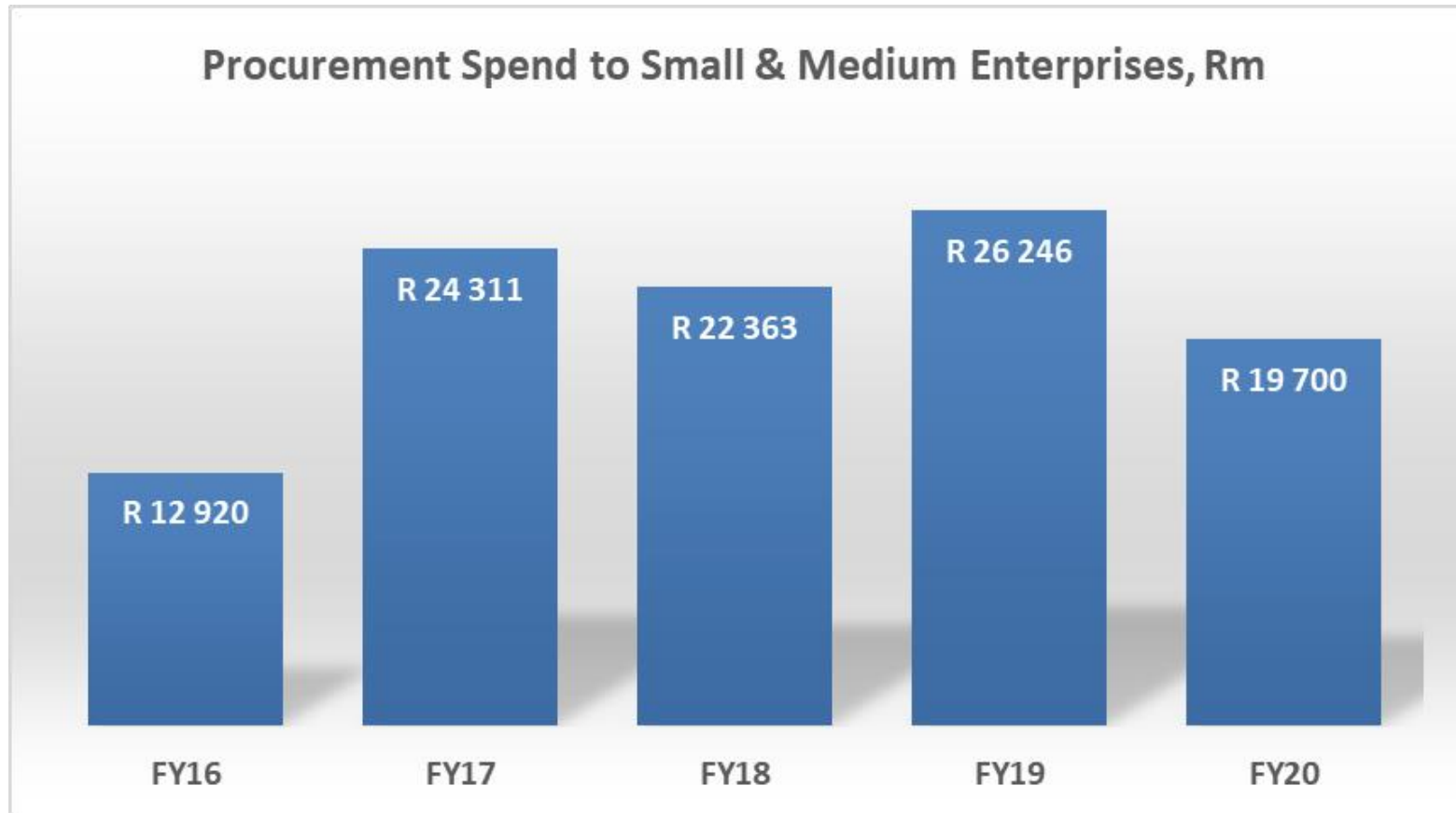
- ❑ In the past 5 financial years, R595 million was spend with companies owned by Black people with disability'

Procurement with companies owned by Black People with Disability, Rm



The role of Eskom in advancing Broad-Based Black Economic Empowerment in South Africa

- ❑ In the past 5 financial years, R106 billion was spend with Small and Medium enterprises.





- ❑ Since inception of the build programme, **there has been considerable contribution by the 1st tier suppliers** to the support of emerging enterprises.
- ❑ During the period under review, the spend to **subcontracting in new build amount to R2.7 billion**.
- ❑ Eskom Suppliers were contracted **to contribute to a skills development target of 11006 learners** from the inception of the programme through to the end of March 2020, aimed at people recruited for trade skill development and excluding supplier employees.
- ❑ **A total of 2 553 learners are currently being trained** and at the end of March 2020, **a total of 11 415 learners have completed** their training at various training sites throughout the country.



- ❑ The **poor performance** is as a result of an increase in procurement spend with **non-compliant suppliers** due to expired B-BBEE certificates.
- ❑ Furthermore, the **calculation of Eskom's TMPS includes procurement spend on IPP contracts** that are not B-BBEE compliant.
- ❑ These **IPP contracts were concluded in terms of DMRE's (formerly DoE's) RE-IPP programme**, and Eskom has no control over the awarding of those contracts.
- ❑ The overall performance on the procurement equity measures would have improved if the IPP expenditure were excluded from TMPS – in particular, **preferential procurement would have improved to approximately 73%**.
- ❑ The **inclusion of the procurement spend to coal suppliers** in the TMPS also contributed to the poor performance of the preferential procurement KPI.
- ❑ The **majority of the coal suppliers are non-compliant** because they follow the mining charter and the generic gazetted B-BBEE Coded of Good Practice from the Department of Trade and Industry



- ❑ The effort to partner with Small Enterprise Development Agency (SEDA) for SMME development through incubation programme remains unsuccessful due to non-availability of funds from the Eskom side.
- ❑ SEDA's model of partnership with any party, on SME development, is on a 50/50 funding basis.
- ❑ In the exercise conducted during the FY2019/20 SEDA had estimated the cost of setting up incubation hubs, in all nine provinces, at R65m.
- ❑ The approach was to have the main hub with nine other small or satellite ones countrywide.

Conclusion

