# Affidavit

# &

# Annexures

# of

# Andre Pillay

1.

I am Andre Frank Pillay, ID 6908195116080, currently I am the General Manager, responsible for the Treasury of Eskom. I have over 20 years' experience in the Capital Markets. I joined Eskom in 2011 as Senior Manager Funding Execution. In 2016, I was promoted to Group Treasurer, I report directly to the Chief Financial Officer.

2.

During 2015, we Eskom Treasury met with Tribus representative, Rajeev Thomas and their partners from Mazi Capital, Malusi Cele and Siviwe Mazwana, I was in the meeting with a few of my colleagues, Nomhle Mnguni and Siyabonga Nxaba, **see Annexure AP1**. Generally, entities with proposals would either via the investor relations office or directly submit either to myself or someone in Eskom, unsolicited proposals. Tribus approached Eskom with an unsolicited proposal to assist it with its capital expansion (capex) programme. Eskom indicated that the issue at the time was not necessarily a lack of projects but rather an issue of funding of the required capital expansion projects. The Tribus team returned to Eskom under a new banner called Huarong Energy Africa (HEA). This was following a number of engagements between Eskom and the Tribus on how a combination of funding and execution of capex would address Eskom requirements.

3.

The Tribus also met with Minister of the Department of Public Enterprises, Lynne Brown, in Cape Town. I can recall that Eskom was represented by Freddy Ndou. The verbal feedback I received from him was that Tribus presented their proposal and they were told by the Minister to engage Eskom on the matter. In a subsequent meeting I attended between the Minister and her officials and Eskom officials, the Minister mentioned in passing that she met with Tribus, that she said that she suggested that they must follow the Eskom processes on the matter. The Tribus team also did indicate that they have someone that know the Minister well and they will approach her with the proposal.

4.

There was nothing in the engagements with the Tribus and subsequently HEA that raised concerns or any suspicious. However, as the engagement with HEA continued I was concerned by the direct engagements between the HEA representatives and Sean Maritz and Zethembe Khoza, I will also elaborate on this at a later stage. There were a few meetings between HEA and Sean Maritz and Zethembe Khoza with parallel meetings with the Eskom Treasury representatives where indications were given that such meetings are taking place and instances where I notice them in the building. I have raised objection in meetings with HEA regarding this matter and indicated that I will suspend any form of contact with them.

5.

Eskom Treasury received an unsolicited proposal from HEA on 01 June 2016. Eskom Treasury made it clear to the HEA that it would have to follow commercial and governance processes to pursue any proposal. Rajeev Thomas indicated that prior to the meeting between Eskom and HEA; an engagement had already taken place between the General Manager for Special Projects (Poobie Govender) and HEA to discuss the asset development solution presented by HEA. This was based on HEA comments, to test the structure with GM for Special Projects (Poobie Govender). Rajeev Thomas also indicated that he and his colleague Wim Terblanche either worked for or with Eskom as suppliers on certain projects previously, so they know various people within Eskom. The GM for Special Projects denies that he met

HEA prior to the issue of the RFI by ET and that he only got involved with the transaction subsequent to a request to provide technical advice on the transaction.

6.

On 29 September 2016 an RFI was issued to the Market. The RFI was issued under the Treasury Funding Commercial Process, which is part of the Eskom Commercial Process so therefore the emphasis was on funding proposals that do not require a Government Guarantee and not on project specific issues. The RFI was also intended to determine if possible solutions existed, similar to the HEA proposal. The invitation was to submit a proposal that will provide Eskom with innovative financing solutions that meet the following requirements:

6.1 Innovative financing solutions that do not require sovereign guarantee or securitization of Eskom existing assets.

6.2 Funding is equal to or greater than R15bn.

6.3 Financing solution does not contravene any loan covenants of Eskom.

6.4 Financing solution does not require equity in Eskom.

6.5 Financing option is in line with the Eskom's current cost of funding or better.

6.6 Financing solutions involve reputed organisation with funding track records.

6.7 Funding term is attractive to Eskom.

6.8 Funding solution can be implemented within a reasonable shorter period.

7.

The Funding Plan for 2016/17 – 2020/21 was based on five year funding requirement of R326,9 billion, with a funding requirement of R68,5 billion for 2016/17, see Table 1 below.

The various funding sources can also be seen in Table 1.

**Table 1: Funding Plan for the period FY2016/17 - FY2020/21**

| Sources (R' million) | FY16/17 | FY17/18 | FY18/19 | FY19/20 | FY20/21 | Total |
|---|---|---|---|---|---|---|
| Domestic Bonds | 17 000 | 8 000 | 8 000 | 8 500 | 10 000 | 51 500 |
| International Bonds and Loans | - | 5 500 | 7 000 | 12 000 | - | 24 500 |
| Commercial Paper Bills | 6 000 | 6 000 | 7 500 | 8 500 | 10 000 | 38 000 |
| Development Finance institutions [1] | 33 439 | 41 438 | 34 930 | 32 603 | - | 142 410 |
| Export Credit Agencies [2] | 10 277 | 5 528 | 7 774 | 3 275 | - | 26 854 |
| Structured Products [3] | 1 750 | 2 214 | 2 930 | 3 472 | 33 312 | 43 678 |
| **Total** | **68 466** | **68 680** | **68 134** | **68 350** | **53 312** | **326 942** |

*Source: Eskom*

[1] *Development Financing Institutions – KfW IPEX-Bank, World Bank, Development Bank of Southern Africa (DBSA), European Investment Bank (EIB), African Development Bank (AfDB), Agence Française de Développement (AFD) and KfW*

[2] *Export Credit Agencies - Euler Hermes, Coface. SACE. Japanese Bank for International Corporation, United States Export-Import Bank*

[3] *Structured Products – Bank loans, Sukuks, Refinancing structures and Swap restructuring*

Eskom does from time to time issue RFPs to seek proposals for possible funding proposals that will complement or displace the funding sources as listed above. The funding proposal of HEA was not listed in the funding plan of the period. Therefore, following the issuance of the RFI to test the market following the receipt of the HEA proposal Eskom issued an RFP for innovate funding solutions.

8.

RFI (Corp 3626) closed with 12 Responses received including the HEA proposal

Details of the responses received:

| # | Name | Date received by Eskom |
|---|---|---|
| 1 | ABSA | 21 October 2016 |
| 2 | Deloitte Capital | 21 October 2016 |
| 3 | Huarong Energy Africa (Pty) Ltd | 20 October 2016 |
| 4 | Huawei Technologies Africa (Pty) Ltd | 20 October 2016 |
| 5 | JP Morgan | 21 October 2016 |
| 6 | Nedbank | 21 October 2016 |
| 7 | Peu Capital Partners and Total Utilities Management Services | 21 October 2016 |
| 8 | Regiments | 21 October 2016 |
| 9 | Rand Merchant Bank and Identity Advisory (Pty) Ltd | 21 October 2016 |
| 10 | Standard Chartered | 21 October 2016 |
| 11 | Superstars Group | 07 October 2016 |
| 12 | Afrisat Investments Ltd | Requested extension for 2 weeks. |

9.

During December 2016, Anoj Singh indicated that he had a call from Rajeev Thomas and they discussed the signing of the Term Sheet. I discussed the matter with him and he indicated that this was just merely an indication to HEA that Eskom is considering this proposal and this will give Rajeev Thomas the ability to maintain the support from his Chinese partners. I reviewed the term sheet it was clear that this was a non-binding Term Sheet. When I reviewed the Term Sheet I wanted to ensure that it was not binding, therefore, I included the non- binding clause, as per paragraph 18(5), see **Annexure AP2.** This Term Sheet was signed on 20 December 2016 by Anoj Singh and by Rajeev Thomas 21 December 2016.

10.

Anoj Singh requested that Eskom Treasury a Board Investment and Finance Committee (IFC) submission to inform it of the HEA proposal and also requested the Board IFC approved mandate to negotiate with and conclude a financing agreement with HEA amounting to $1.5bn and $6bn, see **Annexure AP3**. Anoj Singh was well aware of the fact that Eskom cannot conclude and sign any transaction based on a RFI. This IFC Board was following our meeting on 8-13 January 2017 with HEA in China where Anoj Singh (accompanied by Andre Pillay, Poobie Govender and Prish Govender) was introduced to HEA (Rajeev Thomas, Rex Madida and Wim Terblanche) and their Chinese partners (Chen Jianbao, Chairman of HEA). What was interesting during the introductory meeting was that Rex Madida introduced himself as a political deployee of the ANC in KZN.

11.

During the abovementioned meeting in China, the Huarong group presented their proposal, Anoj Singh was not supportive of the proposal and he raised a number of questions to the point of disapproving of it. Upon reflection, it seemed at the time that the Huarong Group was not taken aback by this and the meeting continued. It now appears that this was all staged to not raise suspicions on my side. I would have engaged him if I thought that he was meeting with the HEA team. I was also aware of the fact the he (Anoj Singh) would meet with bankers, investors and financial institutions and in particular where he has his own agenda.

12.

The submission to the IFC was to share with the committee the nature of this proposal and if it appropriately would address a number of the Eskom concerns and challenges such as, liquidity, capex and not utilising Government Guarantees, see **Annexure AP3** This proposal also included a significant commercial element that would require the approval of the Board Tender Committee (BTC). The Chair of this committee was Zethembe Khoza and he was also present at the IFC Board meeting of which was a member. Zethembe Khoza was very interested in the proposal and he was eager for us to table it at the next BTC. In hindsight given the developments that led to the signing of the facility it was clear that he (Zethembe Khoza) was closer to this transaction and HEA than what I thought.

13.

Importantly, during the period January – February 2017, Eskom was in the process of preparing its Corporate Plan (CP) and it was decided by Anoj Singh to include the Private Sector Participation (PSP), in the CP of this specific year. R65 billion was allocated to PSP and it was communicated that the HEA proposal or facility will be part of the PSP, see **Annexure AP4**. The Mckinsey and Trillian teams assisted Eskom with this CP and the issue of the PSP was mentioned in a preparatory meeting which was largely attended by the Mckinsey representatives and a number of Eskom representatives including myself.

14.

The PSP programme would also not managed out of the Eskom Treasury but would be managed by Prish Govender. Anoj Singh instructed that Prish Govender to start the PSP process and copy this largely from the Transnet PSP programme. This Policy document on PSP was drafted by Poobie Govender, I reviewed the document with no inputs. The fact the Eskom Treasury was not primarily responsible for the PSP was a concern that I discussed with Anoj Singh, and he gave a very superficial reason, that Eskom Treasury already has a huge responsibility of raising the funding for Eskom.

15.

A few days prior to the signing of the Term Sheet (TS), see **Annexure AP5** on 14 March 2019, Anoj Singh informed me that he was contacted by the HEA representatives with a request to sign the Term Sheet, also following the request letter from HEA 22 February 2017, see **Annexure AP6**. He indicated that a senior member of the Huarong Group was visiting and the signing of the Term Sheet was purely to demonstrate the Eskom and HEA co-operation. The commercial terms of Term Sheet were in-principle agreed to, however subject to Board approval, and it will be superseded by the signing of the ALFA terms, see clause 2(3). In addition, following our visit to China as stated in paragraph 9, I received a letter from Rajeev



A

Thomas, see **Annexure AP7**. From my response letter see **Annexure AP8**, it is clear that Eskom does not have the mandate to engage HEA formally and that what is contained in Term Sheet does require Board approval.

16.

Given these developments Eskom Treasury contacted White & Case on this planned signing. On 10 March 2017, White & Case advised Eskom not to sign the Term Sheet in its current form but negotiate with HEA and consider amending it. As per White & Case, the Term Sheet included onerous binding terms for Eskom and was ambiguous as to what was being offered by HEA and who the parties were. On 12 March 2017, White & Case provided written thoughts on the Term Sheet, repeating the advice not to sign it in the current form, see **Annexure AP9**. I advised Anoj Singh of the issues raised by White & Case and his view was that this is not a binding Term Sheet and just a ceremonial signing. Anoj Singh signed the Term Sheet together with the HEA Chairman. This appeared as if Anoj Singh and the IGCE, Mr. Koko wanted to demonstrate positive developments at Eskom under their leadership.

17.

Eskom Treasury also maintained that it cannot contract from an RFI process and that the proposal had to be subjected to a RFP process. I engaged Anoj Singh on this matter and we issued an RFP issued to the Market (Corp 4085) on 13 March 2017. ET indicated they established that the appointment of a supplier for the innovative finance solution could not be made on the RFI issued, hence the RFP was issued.

18.

A memorandum from Calib Cassim the Acting Chief Financial Officer informing that Johnny Dladla, the Interim Group Chief Executive of a possible signing of a non-binding co-operation agreement with HEA on 28 July 2017, at the BRICS summit in Xiamen was prepared, see **Annexure AP10**. Again, this was an initiative used by HEA and many of their Chinese counterparts to demonstrate continuing and good working relationship with Eskom. This was not signed by Mr Dladla during his visit to China, based on the advice from Eskom Treasury.

19.

Eskom applied for Exchange Control Approval from SARB on 31 July 2017, see **Annexure AP11**. The application was to seek permission to enter into an Asset Financing Arrangement with resident and non-resident financial institutions. This was one of the number of approvals that Eskom required to proceed with this transaction. However, HEA was under the impression that this is all that was required to proceed. The Eskom Treasury was deliberate in only raising this issue with the HEA team, as HEA will not contact the SARB to try and expedient the approval process. It became clear that HEA would use this approval to push Eskom to sign this facility, as they were under the impression that this was the only approval require that would enable the signing of the agreement.

20.

On 04 August 2017, the SARB approved the Eskom Exchange Control Application subject to the following conditions relating to the Currency and Exchange Manual for Authorized Dealers.

20.1. Amongst other conditions from the Currency and Exchange Manual for Authorized Dealers was that, no upfront payment of commitment fees, raising fees and/or any other administration fees are payable by the borrower;

20.2. The above mentioned fees may be paid from South Africa once the proceeds of the loan funds have been received and converted into Rand locally provided that such fees do not exceed 5% of the principal sum. Based on the SARB approval which had conditions for inflow of funds into the country (Eskom), it was evident that, at this stage, the transaction was never going to succeed as the structure of the financing was such that there is no inflow of funds to Eskom.

20.3. The financing was based on a turn-key principle whereby Huarong engineers, construct and provide financing to the Special Purpose Vehicle (SPV), that is set up to build the asset required by Eskom. Therefore funds will flow from the lenders to the investors as arranged by Huarong into the SPV.

21.

On 14 August 2017, the Legal Corporate Specialist (Gabriela Palacios) sent a memo, see **Annexure AP12** to the Legal Group Executive (Suzanne Daniels) requesting that:

21.1. The GE opposes any approval to the asset funding project if such are against legal advice provided.

21.2. Request reasons from the relevant signatories and senior officials as to why the binding term sheet was signed without following proper legal and governance processes.

21.3. Request reasons from Group Capital and Treasury on why they are persisting with the Huarong Asset Funding Project despite the legal advice regarding the terms of the ADFA and the fee letter.

This was prompted by the engagements between, Eskom Treasury with W&C and the Legal team, as this was very crucial in the governance process to enable the signing of such an agreement. This was also part Conditions Precedent, therefore the agreement could not be signed or effective.

22.

The Eskom Treasury submission to Board IFC of 15 August 2017 was a matter arising from the meeting of 3 February 2017, requesting a mandate to conclude the financing arrangement with HEA, see **Annexure AP13**. The Board IFC noted the submission and requested that a list be compiled, including information on the SARB's approval and all other pertinent documentation that is required for the agreement to be approved and signed. At this stage, the SARB approval was secured, however, the Eskom Governance processes were not completed. This included legal sign –offs of both internal and external legal counsel, PFMA approval, capital project and commercial approvals. The Board IFC members where under the impression that the SARB approval was the only outstanding item required to complete the approval process and give effect to the transactions. The Board IFC member Zethembe Khoza, was very preoccupied with this transaction and he may have communicated the fact that the SARB approval was the only outstanding matter to his fellow board members. I had to engage Zethembe Khoza regularly, during some of these instances he would enquire regarding the status of the transaction.

23.

A summary of discussions relating to HEA was sent to the Legal and Compliance Group Executive (Suzanne Daniels) by White & Case on 18 August 2017, see **Annexure AP14**. The document provided a brief summary of discussions that White & Case have been involved in with regards to the HEA Asset Funding Program.

24.

On 22 August 2017, the Legal Corporate Specialist (Gabriela Palacios) sent a memo to Legal and Compliance Group Executive requesting that the matters mentioned below be approved by the Legal and Compliance Group Executive. The Legal and Compliance Group Executive opposed any approval to the asset funding project if such are against legal advice provided. The Legal and Compliance Group Executive requested reasons from the relevant signatories and senior officials as to why the binding term sheet was signed without following proper legal and governance processes, see **Annexure AP15**.

25.

On 13 September 2017, the Corporate Finance GM (Mohamed Khan) sent a memo to the Acting Programme Director PDD (Poobie Govender) and copied the Acting GFCO (Calib Cassim) and I, on the HEA transaction financial impact, see **Annexure AP16** The memo indicated that the Huarong transaction was expensive in relation to Eskom's traditional sources of funding. The memo further recommended that all traditional funding sources be exhausted before the Huarong funding option is considered. This intervention was also supported by the ET given that this is an independent assessment of this transaction. This analysis was not considered by Eskom prior to the sign off of the fee letter and the ADFA, even though it formed part of the motivation (emailed) to the Sean Maritz not to sign the ADFA, see **Annexure AP17**.

26.

The IGCE, Sean Maritz took office on 6 October 2017. Sean Maritz, Calib Cassim and I met with HEA representatives on 20 October 2017, and I indicated that given Eskom's liquidity constraints, the signing of the ADFA was not a solution as this structure does not imply immediate liquidity to Eskom. It appeared that Sean Maritz had interactions with HEA prior to the abovementioned meeting and they convinced him that HEA would be able to provide short term funding.

27.

Following the meeting with HEA, Sean Maritz requested me to write and propose a short term facility, see **Annexure AP18**. A letter was drafted and sent to HEA (Rajeev Thomas) with a proposal to consider. HEA responded verbally that this would not be possible but suggested that HEA undertake a Due Diligence (DD) process to consider the viability of the proposal.

The DD was initiated and the HEA representative was clear throughout the process that this was not achievable. It was also very clear that the HEA representatives also had regular engagements with Zethembe Khoza and Sean Maritz. The Eskom Chairman, Zethembe Khoza, travelled to China on 6-8 October 2017, to negotiate the short term facility with Huarong. Sean Maritz verbally requested that I accompany Zethembe Khoza, but this request I declined. I was concerned that Zethembe Khoza was now operational and did not have the authority to negotiate agreements on behalf of Eskom. This was an initiative I did not want to participate in, and I also suggested that my colleague Sincedile Shweni must decline if requested to travel by Sean Maritz.

28.

On 26 October 2017, a round-robin IFC Board proposed to consider and approve the HEA short facility as indicated on the resolution, see **Annexure AP19**. Prior to this, Eskom Treasury prepared the submission based on short term facility. It was indicated that some of the IFC members were uncomfortable with the round robin process and agreed to participate in a formal meeting that was held on 27 October 2017. Sean Maritz and Zethembe Khoza were scheduled to attend this meeting, but it was indicated that Sean Maritz and Zethembe Khoza, were meeting with the Minister of the Department of Public Enterprises on the same day, in Cape Town. Following the discussions at the meeting the Board IFC approved the following:

28.1. Huarong Asset Financing for Short Term facility for liquidity, subject to Eskom internal governance approvals, Government approval and an assessment of the risk by the chairman of the Audit and Risk Committee.

28.2. Negotiation with HEA for the short Term facility with conditions.

28.3. The ADFA in principle, based on the signed Term sheet, and subject to a due diligence, and all legal, technical, financial and other governance issues being addressed.

28.4. Facility fee in relation to the short term facility to be paid once confirmation and drawdown of the short term facility as noted above is agreed by HEA and subject to the agreement that the fees would only be paid once the money is in the Eskom's bank account.

28.5. Management to approach HEA to consider setting off the facility fee from the payment drawdown into Eskom's account.

28.6. Interim Group Chief executive was delegated with the power and authority to give effect to the above.

29.

Based on the IFC Board resolution the HEA (ADFA) transaction was not approved. However, prior to this meeting Sean Maritz confirmed to Calib Cassim, in an email, that he was comfortable to sign this transaction. This was his position despite Calib Cassim's recommendation not to sign this agreement. Following the signing, an informal meeting in the Chairman's office took place, with the Company Secretary (Nazir Ebrahim), Zethembe Khoza (Chairman), Sean Maritz (IGCE), Calib Cassim (Acting GCFO), Simphiwe Dingaan (Chairman of IFC), Sathiaseelan Gouden (Chairman of Audit and Risk Committee) and myself. This meeting was initiated by the Company Secretary when I indicated to him that the HEA agreement was signed. The outcome of the IFC meeting was discussed and it was agreed that the HEA transaction was not approved. Sean Maritz, indicated that the Minister of the Department of Public Enterprises, approved the transaction for him to sign. I responded that the Delegation of Authority does not allow for this and that he does not have the authority to unilaterally, sign the agreement. In addition, I highlighted the fact that this would result in further Reportable Irregularities for Eskom as its financials are already qualified. I recommended in the meeting, that Sean Maritz issue a letter to HEA to indicate that he was not duly authorised to sign the agreement and that Eskom still has to follow due process, to which he did not respond.

30.

A few days after the signing of the HEA agreement, Eskom received an invoice from HEA for the fees to be paid, **Annexure AP20**. Given that the agreement was not valid, I instructed my colleagues not to process any invoice from HEA. The HEA representatives towards the end of December 2017, approached Sean Maritz with an updated ADFA for signing, which he signed and it was followed by an invoice to be paid. It was very clear that there was a deliberate effort made to have this ADFA signed. I asked Sean Maritz why he was going out of his way to sign this transaction and he indicated that Zethembe Khoza was putting pressure on him to get it signed. Zethembe Khoza, also had regular interactions with Rex Madida of HEA (Tribus). At one stage, I was next to Zethembe Khoza and I noticed Rex Madida was calling him to discuss the HEA transaction, they had a conversation in vernacular. This happened either during the World Bank/IMF meetings 12-15 October 2017 or 7-10 November 2017 meetings in the USA. Following the call, Zethembe Khoza immediately enquired regarding the signing and process of the HEA facility.

31.

I am convinced that they viewed me as a 'problem' or a stumbling block in not getting the agreement signed, and there were clear signs of intimidation to frustrate or scare me. Zethembe Khoza, called me to his office at one stage and shared with me that Sean Maritz does not want work with me. I viewed this as a signal that I must be careful and that I was not co-operating with them (Sean Maritz and Zethembe Khoza). On another occasion, Sean Maritz summonsed me to his office where he presented me with a whistle-blower report suggesting that I took a bribe from some Russian company and that they built me a house in Plettenberg Bay (for R5 million). I indicated that I am willing to cooperate with his investigation into the matter, as I was convinced this was merely a threat. Eskom has not done any business with the Russians. They, like other investors, were looking at funding the nuclear project, at the time. I sought private legal advice on this matter and was advised not to agitate Sean Maritz, but to co-operate and not be confrontational. To date, nothing has transpired from this whistle-blower allegations. I also participated in a Bowman's Inquiry on the HEA matter. This process was established to determine the involvement of Sean Maritz in the process and signing of the HEA facility.

32.

SARB suspended exchange control approval granted to Eskom on 04 August 2018, see **Annexure AP21.** Eskom had failed to meet the conditions attached to the approval. The terms of the Currency and Exchange Manual for Authorized dealers was not complied with, specifically that no upfront payment of commitment fees, raising fees and/or any other



A

administration fees was payable by the borrower. The above mentioned fees may be paid from South Africa once the loan funds have been received and converted into Rands locally, provided that such fees do no exceed 5% of the principal sum. As at 25 January 2018, no funds had been received by Eskom from HEA due to the manner in which the ADFA was structured. As a result, SARB suspended the approval granted on 04 August 2018, pending a response from Eskom.

33.

On 02 February 2018 Eskom responded to SARB suspension the Exchange Control approval granted to Eskom on 4 August 2017 and indicated that:

33.1. Based on the structure of financing, funds will flow from the lenders and investors as arranged by Huarong into the SPV.

33.2. No funds have been received by Eskom.

33.3. The signed Term Sheet, Fee letter, and addendum to the Asset Development Framework, see **Annexure AP22**.

34.

On 14 February 2018, National Treasury responded to the letter received from Eskom on 11 January 2018, see **Annexure AP23.** National Treasury raised a number of issues that Eskom had to clarify and requested that the transaction be put on hold until the SARB conditions are complied with, feedback is received from the NT and after Eskom has responded to all issues raised by DPE.

35.

Eskom responded to the HEA letter received on 24 January 2018, National Treasury, see **Annexure AP24**

35.1. In the letter, Eskom declined to meet and indicated that investigation on the transaction are ongoing and the Program Development Fee has not been, and will not be, paid at that time, if at all.

36.

**Governance and Legal Processes**

It was clear that a number of Governance processes were not followed;

36.1. Both IFC and BTC recommendation as mentioned above did not constitute an official board resolution therefore, no recommendation from IFC or BTC is sufficient for execution by the company

36.2. The ALFA and ADFA are distinct documents, the term sheet that was signed does not refer to the ADFA.

36.3. There was no legal transition from ALFA to ADFA

36.4. The list of fees in the ALFA and ADFA are defined or labelled differently.

Some additional important matters to note

37.

At a quarterly meeting, held in October 2017 at the Department of Public Enterprises' offices, Calib Cassim and I were requested to join a meeting between the Director-General (DG) Richard Seleke of the Department and Sean Maritz. I was not aware of the meeting. It was clear from the tone of the meeting that Richard Seleke and Sean Maritz had prior discussions and Richard Seleke said in the meeting to Sean Maritz that the problem with Eskom is the people that work there, implying that we are the problem. He proceeded and basically told us that the way we raise funding is wrong and that we should move from the West (Europe and USA) and look to the East for funding. I interpreted this as a signal that we should look at the HEA transaction.

38.

The signing of the ADFA was always the trigger for the upfront fees. Sean Maritz asked why we do not want sign the facility and we responded via Calib Cassim with reasons but he indicated that he will sign nonetheless, which he did. See attached emails, see **Annexure AP17**

39.

Once ADFA and the fee letters were signed, see **Annexure AP20**, the invoice was received from HEA and Eskom Treasury did not pay. The time to pay as per contract elapsed and the ADFA had to be resigned with a new date of 28 December 2017. HEA then reissued another invoice. I also informed the ET not to process the invoice if asked by anyone to do so. The invoice thus remained unpaid.

40.

Prior to Sean Maritz signing the ADFA and fee letters, I realized that there was a push to sign this facility, I went to meet the DG of National Treasury, Dondo Mogajane, and I indicated to him that Sean Maritz was planning to sign the facility and that he seemed desperate to do so. The DG of National Treasury wrote to the Acting DG of DPE, Makgololo Makololo informing her that Eskom must not sign the ADFA (HEA facility). The Acting DG of DPE contacted Sean Maritz and indicated that he should not sign the facility. Sean Maritz was very upset and wanted to know who was engaging DPE on this matter as he was instructed not to sign the facility. Still he proceeded to sign, as mentioned above.

41.

I have raised my concerns with Rajeev Thomas regarding the approach taken by HEA on engaging directly with the Sean Maritz and Zethembe Khoza, telephonically. I did indicate to him that this compromises the governance processes of Eskom and my and the Eskom Treasury involvement in the HEA matter. His response was that he cannot control this and we continued having a fairly heated conversation and I mentioned the comment made in paragraph 46 below, regarding Trillian. In the conversation he also blamed me for HEA not being able to progress on concluding the transaction and he made a statement that he would come to Eskom and "sort me out". I took this comment as a threat and reported it to Calib Cassim. I suspended all communication with Rajeev Thomas and HEA. The only engagement I had was when Sean Maritz arranged a meeting with the HEA representatives as mentioned in paragraphs 26 and 27. Rex



R

Madida attempted to intervene between Rajeev Thomas and I. Rex Madida also engaged my colleague Sincedile Shweni to assist him with the intervention.

42.

I met Rex Madida when he came to the ET to meet Sincedile Shweni, and he tried to speak to me regarding my last conversation with Rajeev Thomas. He indicated that HEA has asked Rajeev Thomas not to engage with me or Eskom going forward.

43.

Calib Cassim removed his name from the ADFA signatory list, he knew that there was no authorization to sign this ADFA.

44.

It was very clear that the intention was that HEA wanted to obtain the approximately 400 million fee of which R240 million was payable upon signing. During the discussion with HEA, I made it clear that I do not support this as Eskom would have to demonstrate value derived from this fee and there was no evidence of any value to Eskom.

45.

The approach from HEA was also different, as if they want to guide the correspondence between them and Eskom. They would present us with wording or drafting on communication that we have to transfer onto Eskom letterheads and we have to sign and return to them.

46.

I was also told (by Ven Zibanda of Zambezi Capital) that Anoj Singh mentioned to him that he introduced Trillian to HEA. I raised this matter with Rajeev Thomas in one of our meetings. This discussion clearly annoyed him. I did indicate to him that this would make it very difficult to proceed with the discussions or engagements with HEA. Rajeev Thomas responded that he has never met anyone from Trillian.

47.

Zethembe Khoza appeared very protective of Anoj Singh, when he (as Chairman) had to suspend him in 26 July 2017, it was opted to place him on special leave, instead.

48.

Before the arrival of Brian Molefe and Anoj Singh, Eskom did not do any work with Trillian or Regiments. Shortly, after their arrival the Trillian representatives were always in the Eskom Building. I have met with Eric Wood a number of times during this period and it was clear that he wanted to create some form of professional relationship with me.

49.

Eskom was working on a funding initiative (transaction: R30 billion loan facility) with Goldman Sachs. In a meeting with the Goldman Sachs Team, Eric Wood was also present. Eskom Treasury team and Goldman Sachs were told by Anoj Singh that Trillian will assist with the transaction. This was odd given that there was no formal process followed to appoint them as a service provider. The Trillian representatives were very proactive and wanted to show control of the transaction. I did indicate to Anoj Singh that the participation of Trillian will not work. Eskom had to seek approval



A

from National Treasury for this transaction and the involvement of Trillian and the bad media coverage on them will not achieve the approval. Anoj Singh requested that I prepare a Board submission to seek approval for the Goldman Sachs transaction. A submission was prepared and when it was due to be submitted he requested that I withdraw the submission. This was based on my advice, as previously mentioned, and at this stage it was clear that Goldman Sachs was not going to approve a partnership with Trillian.

50.

Goldman Sachs later in a formal meeting indicated that they are not going to collaborate with Eskom in a transaction if Trillian is involved. Anoj Singh took a very grim view of Goldman Sachs. What was peculiar was that Anoj Singh, was more concerned about the Trillian. This all made sense given that Eric Wood mentioned to me that I can give him anything to do in Eskom Treasury even if they had to sweep the floors of the Treasury, Anoj Singh would find a way to pay him. This comment made me very worried and I deliberately avoided Trillain, and Eric Wood. When Trillian opened their new offices I declined the invite to the opening ceremony. When Trillian was about to announce the appointment of Tokyo Sexwale as Trillian chairman, Eric Wood informed me and it was done in way that created the impression that I was important to be almost consulted on something so significant.

51.

During the preparation of the 2017 Corporate Plan, Eskom Treasury was responsible for the drafting of the Funding Plan in the Corporate Plan. A group of Trillian representatives arrived at the Treasury and they indicated that they are assisting Anoj Singh with the Corporate Plan and more specific the Funding Plan. They requested information and copies of the previous Funding Plans. I suggested to the Eskom Treasury team to assist them and provide them with all the information.

52.

Anoj Singh never formally informed me of this arrangement and I did not enquire regarding this matter. When the Funding Plan was due for submission, Anoj Singh called and requested the Funding Plan. I did not ask if Trillian was not supposed to submit it, I indicated that I would have it ready the following day (it was Friday). I requested a few colleagues to assist and we worked until the Saturday evening to finalise and submit the plan. When Anoj Singh reviewed the plan he called myself and Eric Wood to discuss the plan. Anoj Singh had some frivolous comments on the plan to which Eric Wood proposed certain wording. I rejected this wording and maintained my original drafting. I was shocked to learn that Trillian was paid almost R30 million for working on this plan, basically for no work done or value to Eskom.

53.

There was also an issue around the negotiations for funding from China Development Bank. We experienced problems with a particular clause in the loan agreement and we arrived at a solution to this problem and Anoj Singh was aware of it. Anoj Singh asked me to forward this wording to him. He then sent it to Trillian (Eric Wood) to comment on, Trillian basically repackaged our original wording and sent this back to Eskom. For this Trillian was paid approximately R4 million.

**Declaration**

**I know and understand the contents of this declaration.**

**I have no objection to taking the prescribed oath.**

**I consider the prescribed oath to be binding on my conscience.**

**Signature of deponent**

**54.**

I certify that the deponent has acknowledged that he knows and understands the contents of this statement. This statement was sworn to before me and the deponent's signature was placed thereon in my presence at JOHANNESBURG on 18 FEBRUARY 2019 at 15h30.

**Commissioner of Oaths**

**COMMISSIONER OF OATHS**
**TREVOR LEON MYBURGH CA (SA)**
**SAICA No. 00202239**
**Commissioner of Oaths (RSA)**
**Megawatt Park, Maxwell Drive, Sunninghill**

# Annexure "AP1"

iFund (Proprietary) Limited

# MINUTES OF THE ESKOM MEETING HELD ON THE 12 MAY 2015 (11H30) AT THE OFFICES OF ESKOM (MWP) TREASURY BOARDROOM

MINUTES OF MEETING

**Attendees of this meeting:**

| **MISTER** | **TITLE** | **COMPANY** |
|---|---|---|
| ANDRE PILLAY (AP) | SENIOR EXECUTIVE TREASURY | ESKOM |
| NOMHLE MNGUNI (NM) | FUNDING & PORTFOLIO MNGMT | ESKOM |
| SIYABONGA NXABA (SN) | FUNDING EXECUTION | ESKOM |
| RAJEEV THOMAS (RT) | MANAGING DIRECTOR | TRIBUS |
| SIVIWE MAZWANA (SM) | SENIOR EXECUTIVE | MAZI CAPITAL |
| MALUSI CELE (MC) | RESEARCH ANALYST | MAZI CAPITAL |

## 1. Agenda

a. Objective: To Engage and Introduce the iFund to Eskom Treasury and demonstrate the iFund solution so that a formal engagement can be setup.

b. iFund Presentation and Open Discussion.

c. Discussion on the way forward.

d. Meeting is closed.

## 2. Minutes of the Meeting

The meeting was opened and introductions were made as to the people in the meeting and their various roles.

RT explained that the objective of the meeting was to engage with Eskom and present the credentials of the iFund. Furthermore the iFund had developed a solution for Eskom that took into consideration the financial and technical realities of Eskom.

SM gave the full presentation as attached. The key points made in the presentation are as follows:

1) The iFund consists of partners that are well established and have a significant track record.
2) The iFund has junior funds that will attract and unlock senior funding that can be used directly in South Africa and Southern Africa for infrastructure projects.
3) The iFund has been successful in rising close to US$5bn from Chinese investors with a mandate to invest the funds in power projects.
4) The iFund has a blend of Vendor Financing and Pure funders that enable more junior funds but also come with a mandate from vendors on projects.
5) The iFund has patient money with long repayment periods.
6) Further points made were that 55% of the iFund is earmarked for Energy projects in Africa, the rest is within other sectors such as agriculture, mining, beneficiation etc.

7) A funding package specific to Eskom was briefly discussed with the following key components:
    a. Cash injection – R10bn
    b. DSM projects – R10bn
    c. Gas power Projects – R30bn
    d. Power station Refurbishment projects – R100bn

AP of Eskom then responded to the presentation. The key points are as follows:

1) The presentation was given by credible parties and hence it is worth noting and considering.
2) Eskom will certainly like to engage further once an approval process is followed.
3) Eskom will present our proposal to their ALCO (Asset and Liability Committee?) to get a mandate to work with the iFund and understand the funding package better.
4) Once Eskom Treasury has received approval and a mandate to deal with the iFund, an NDA will be signed and information flow can take place between the two parties.
5) AP will seek this mandate at the next ALCO meeting (?)
6) SN has been nominated from the Eskom side to deal with the iFund and will liaise with SM for any information and coordination from iFund side
7) Eskom is keen to engage and work with the iFund to ensure a win-win funding package is approved and executed, subject to the necessary approvals.

The meeting was closed and SN and SM will coordinate any further information requirements.

MEETING CLOSED AT 12:30.

# MINUTES OF THE ESKOM MEETING HELD ON THE 12 MAY 2015 (11H30) AT THE OFFICES OF ESKOM (MWP) TREASURY BOARDROOM

MINUTES OF MEETING

**Attendees of this meeting:**

| MISTER | TITLE | COMPANY |
|---|---|---|
| ANDRE PILLAY (AP) | SENIOR EXECUTIVE TREASURY | ESKOM |
| NOMHLE MNGUNI (NM) | FUNDING & PORTFOLIO MNGMT | ESKOM |
| SIYABONGA NXABA (SN) | FUNDING EXECUTION | ESKOM |
| RAJEEV THOMAS (RT) | MANAGING DIRECTOR | TRIBUS |
| SIVIWE MAZWANA (SM) | SENIOR EXECUTIVE | MAZI CAPITAL |
| MALUSI CELE (MC) | RESEARCH ANALYST | MAZI CAPITAL |

**1. Agenda**

a. Objective: To Engage and Introduce the iFund to Eskom Treasury and demonstrate the iFund solution so that a formal engagement can be setup.
b. iFund Presentation and Open Discussion.
c. Discussion on the way forward.
d. Meeting is closed.

**2. Minutes of the Meeting**

The meeting was opened and introductions were made as to the people in the meeting and their various roles.

RT explained that the objective of the meeting was to engage with Eskom and present the credentials of the iFund. Furthermore the iFund had developed a solution for Eskom that took into consideration the financial and technical realities of Eskom.

SM gave the full presentation as attached. The key points made in the presentation are as follows:

1) The iFund consists of partners that are well established and have a significant track record.
2) The iFund has junior funds that will attract and unlock senior funding that can be used directly in South Africa and Southern Africa for infrastructure projects.
3) The iFund has been successful in rising close to US$5bn from Chinese investors with a mandate to invest the funds in power projects.
4) The iFund has a blend of Vendor Financing and Pure funders that enable more junior funds but also come with a mandate from vendors on projects.
5) The iFund has patient money with long repayment periods.
6) Further points made were that 55% of the iFund is earmarked for Energy projects in Africa, the rest is within other sectors such as agriculture, mining, beneficiation etc.

7) A funding package specific to Eskom was briefly discussed with the following key components:
   a. Cash injection – R10bn
   b. DSM projects – R10bn
   c. Gas power Projects – R30bn
   d. Power station Refurbishment projects – R100bn

AP of Eskom then responded to the presentation. The key points are as follows:

1) The presentation was given by credible parties and hence it is worth noting and considering.
2) Eskom will certainly like to engage further once an approval process is followed.
3) Eskom will present our proposal to their ALCO (Asset and Liability Committee?) to get a mandate to work with the iFund and understand the funding package better.
4) Once Eskom Treasury has received approval and a mandate to deal with the iFund, an NDA will be signed and information flow can take place between the two parties.
5) AP will seek this mandate at the next ALCO meeting (?)
6) SN has been nominated from the Eskom side to deal with the iFund and will liaise with SM for any information and coordination from iFund side
7) Eskom is keen to engage and work with the iFund to ensure a win-win funding package is approved and executed, subject to the necessary approvals.

The meeting was closed and SN and SM will coordinate any further information requirements.

MEETING CLOSED AT 12:30.

# MINUTES OF THE ESKOM MEETING HELD ON THE 12 MAY 2015 (11H30) AT THE OFFICES OF ESKOM (MWP) TREASURY BOARDROOM

MINUTES OF MEETING

**Attendees of this meeting:**

| MISTER | TITLE | COMPANY |
|---|---|---|
| ANDRE PILLAY (AP) | SENIOR EXECUTIVE TREASURY | ESKOM |
| NOMHLE MNGUNI (NM) | FUNDING & PORTFOLIO MNGMT | ESKOM |
| SIYABONGA NXABA (SN) | FUNDING EXECUTION | ESKOM |
| RAJEEV THOMAS (RT) | MANAGING DIRECTOR | TRIBUS |
| SIVIWE MAZWANA (SM) | SENIOR EXECUTIVE | MAZI CAPITAL |
| MALUSI CELE (MC) | RESEARCH ANALYST | MAZI CAPITAL |

## 1. Agenda

a. Objective: To Engage and Introduce the iFund to Eskom Treasury and demonstrate the iFund solution so that a formal engagement can be setup.

b. iFund Presentation and Open Discussion.

c. Discussion on the way forward.

d. Meeting is closed.

## 2. Minutes of the Meeting

The meeting was opened and introductions were made as to the people in the meeting and their various roles.
RT explained that the objective of the meeting was to engage with Eskom and present the credentials of the iFund. Furthermore the iFund had developed a solution for Eskom that took into consideration the financial and technical realities of Eskom.
SM gave the full presentation as attached. The key points made in the presentation are as follows:

1) The iFund consists of partners that are well established and have a significant track record.
2) The iFund has junior funds that will attract and unlock senior funding that can be used directly in South Africa and Southern Africa for infrastructure projects.
3) The iFund has been successful in rising close to US$5bn from Chinese investors with a mandate to invest the funds in power projects.
4) The iFund has a blend of Vendor Financing and Pure funders that enable more junior funds but also come with a mandate from vendors on projects.
5) The iFund has patient money with long repayment periods.
6) Further points made were that 55% of the iFund is earmarked for Energy projects in Africa, the rest is within other sectors such as agriculture, mining, beneficiation etc.

7) A funding package specific to Eskom was briefly discussed with the following key components:
    a. Cash injection – R10bn
    b. DSM projects – R10bn
    c. Gas power Projects – R30bn
    d. Power station Refurbishment projects – R100bn

AP of Eskom then responded to the presentation. The key points are as follows:

1) The presentation was given by credible parties and hence it is worth noting and considering.
2) Eskom will certainly like to engage further once an approval process is followed.
3) Eskom will present our proposal to their ALCO (Asset and Liability Committee?) to get a mandate to work with the iFund and understand the funding package better.
4) Once Eskom Treasury has received approval and a mandate to deal with the iFund, an NDA will be signed and information flow can take place between the two parties.
5) AP will seek this mandate at the next ALCO meeting (?)
6) SN has been nominated from the Eskom side to deal with the iFund and will liaise with SM for any information and coordination from iFund side
7) Eskom is keen to engage and work with the iFund to ensure a win-win funding package is approved and executed, subject to the necessary approvals.

The meeting was closed and SN and SM will coordinate any further information requirements.

MEETING CLOSED AT 12:30.

# Africa Energy Infrastructure Fund (iFund): Our Proposed Offering to Eskom, South Africa.

iFUND

12 May 2015

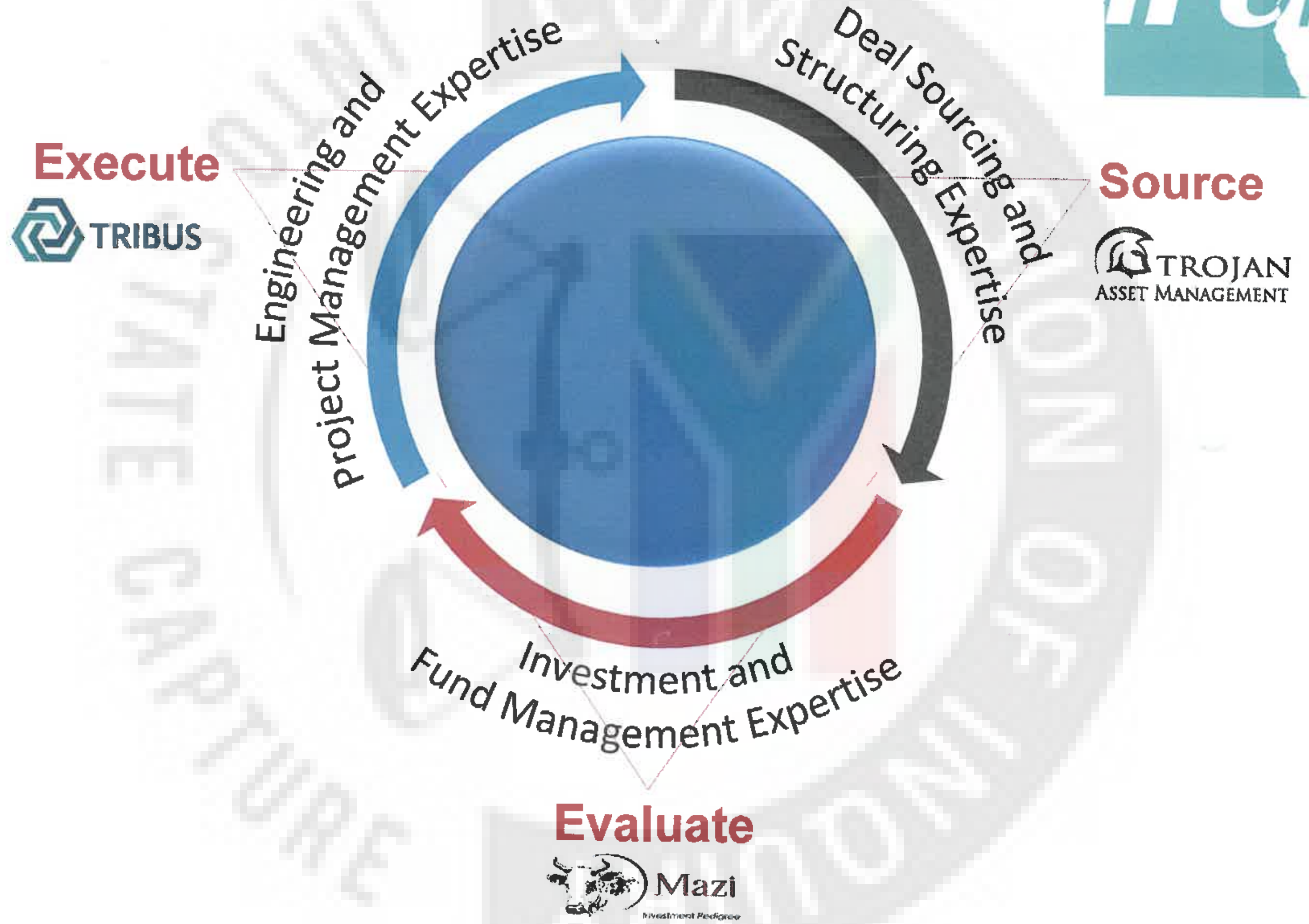
# Who are we ?

Private equity fund.

- Established between three leading SA black niche companies.
- Offering a unique collaboration aimed at attracting, sourcing and managing FDI to the African continent.
- Focusing on Infrastructure Investment – a catalyst to unlocking the potential of the African continent.
- Applying a PPP model solution between Government – Private sector to deliver the NDP.
- Offering global thinking with distinctive local savvy.

# A MULTI-DISCIPLINARY team

iFUND



# *iFund* is an Ideal Partner for Eskom

- Seek to improve ESKOM's
  - Cash flow position;
  - Utilisation Efficiency; and
  - Generation Capacity
- Cashflow Position:
  - Long term capital - iFund has a 15 year Investment horizon
  - Balance sheet risk removed from ESKOM to the ***iFund***
  - Repayment model BOT =>No strain ESKOM cashflows
- Utilisation Efficiency:
  - Demand Side Management (DSM)
  - Speed of delivery of power projects vs. current experience
- Generation Capacity:
  - Building of new capacity (Equity in 250 MW Walvisbay Gas Power, 1,000 MW potential by July 2016)
  - Refurbishment of existing power plants

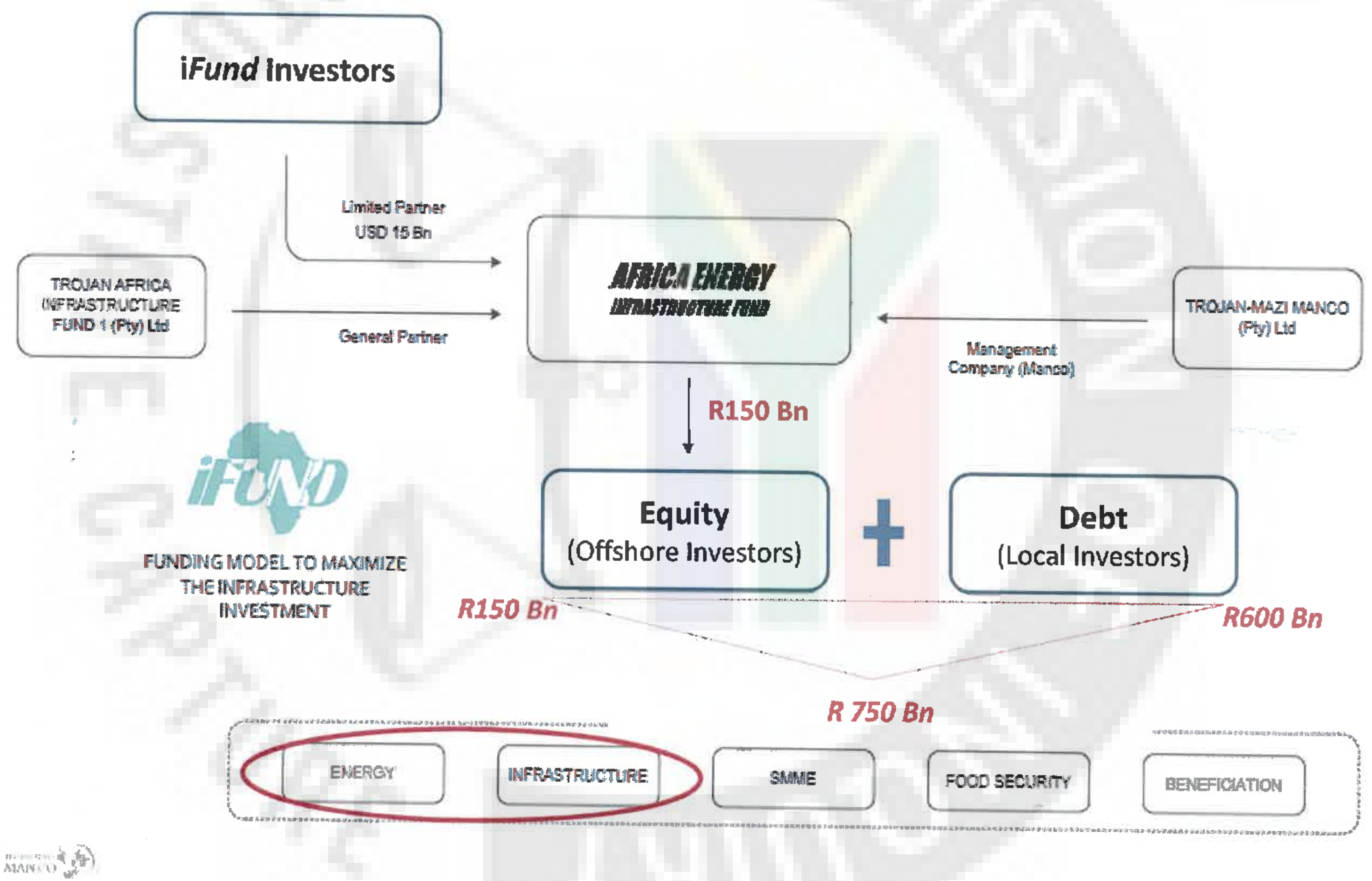
# Our Proposed Integrated Funding Package

iFUND

| | | | |
|---|---|---|---|
| Cash Injection<br>R10bn<br>Short Term | Demand Side Program<br>R10bn<br>500MW EE<br>500 MW Load Limiting | Supply Side Power<br>R30bn<br>300MW to 1000MW over 6 to 18 months | Turnkey Refurbish and Joint Operation<br>R100bn<br>10,000 MW |

# *iFund* Financial Model / Structure

Attract FDI to South Africa and unlock local bank and pension fund investments



# THANK YOU

# Q&A

# Annexure "AP2"

**19 DECEMBER 2016**

**STRICTLY PRIVATE & CONFIDENTIAL**

**TERM SHEET**

**ASSET FINANCING**

**FOR**

**THE PURPOSES OF PROVIDING A SOLUTION FOR THE VARIOUS CAPITAL PROJECTS AT ESKOM HOLDINGS LIMITED**

**SUMMARY TERMS AND CONDITIONS**

**APPROXIMATELY USD 1.5 BILLION**

This term sheet is for discussion purposes only and does not intend to and shall not be implied to create any legally binding obligations on Huarong Energy Africa Proprietary Limited ("**HEA**"), and may be subject to change. It does not constitute a commitment by **HEA**, nor does it contain any representation or warranty of any kind on the part of HEA. HEA's participation is conditional upon a proper appraisal of the contemplated transaction and the facts surrounding it, negotiation of mutually satisfactory terms and conditions, internal approvals, the completion of all necessary technical, legal, financial, tax and other due diligence and execution of satisfactory documentation. For these reasons, among others, there may be changes to this term sheet.

| | | |
|---|---|---|
| **1.** | **Introduction** | 1. Huarong Energy Africa Proprietary Limited (**HEA**) has been created for the purposes of providing an innovative Asset Finance solution for the capital projects at Eskom Holdings Limited, (registration number: 2002/015527/06) ("**Eskom**").<br>2. Subject to the terms set out in this Term Sheet, HEA wishes to explore the feasibility of providing a fully funded "turnkey" type asset creation solution to Eskom on an asset finance basis by way of an Asset Finance loan. The objective is to demonstrate commercial benefits for Eskom in supporting Eskom's infrastructure and the capabilities it requires to enable Eskom to continue meeting its energy production and transmission requirements.<br>3. HEA has the interest of international funders and investors. China Huarong Asset Management Company is the parent company of HEA and is the largest Asset Management Company in China and has assets under management in excess of R2 Trillion. Further to this, the China Development Bank (**CDB**) has also expressed their interest to fund the HEA asset finance structure. At least four globally recognized, reputable, listed, multi-billion-dollar Engineering Procurement and Construction (**EPC**) companies have expressed their commitment to providing funding to the HEA asset finance structure. HEA utilizes the services of globally recognized professional firms in the setup and management of this asset finance solution, such as Norton Rose Fulbright and Worley Parsons.<br>4. This term sheet summarizes the principal terms and conditions of the proposed asset financing solution and outlines the key elements |

| | | |
|---|---|---|
| | | that proposed to be involved in establishing a viable and innovative solution for the implementation of various identified projects for Eskom in a manner which generates clear commercial value for Eskom. It is designed to give a broad and preliminary overview of the contemplated asset finance solution.<br>5. Please note that the terms and conditions set out in this term sheet:<br>(i) are indicative in nature and do not purport to summarise all the conditions, covenants, warranties and other provisions which would be contained in definitive legal documentation which shall be satisfactory to all parties;<br>(ii) are in respect of certain special conditions which are in addition to other standard terms and conditions typical of the transaction of this nature and remains subject to completion of requisite due diligence, final credit approval and the negotiation of satisfactory agreements;<br>(iii) constitute a statement of mutual intent of the Parties with respect to the contemplated transaction and does not contain all matters upon which agreement must be reached in order for any future transaction(s) to be consummated and therefore does not constitute a binding commitment with respect to the transaction(s) and shall not be implied to create any legally binding obligations on HEA, although the undertaking set forth in "Confidentiality" and "Other" will be binding upon the Parties.<br>6. To the extent that any sections, clauses, phrases, ratios or amounts are blank or within **[square brackets]** in this term sheet or are otherwise indicated to be subject to continuing review or due diligence, it is the intent of HEA to finalize such blanks and bracketed language during the process of negotiating and finalising the definitive agreements.<br>7. **[Notwithstanding the a foregoing however, in the event of cancellation of the proposed finance arrangements after signing of the binding term sheet and Mandate Letter prior to the conclusion of the ALFA, expenses incurred as referred to below in Clause 7 will immediately become due, owing and payable by Eskom.]** |
| **2.** | **Proposed Master Asset Loan Framework Agreement (ALFA)** | 1. This proposal to Eskom is to submit the key financial and commercial terms that will form part of the over-arching master Asset Loan Framework Agreement (**ALFA**).<br>2. The ALFA is proposed to be concluded between HEA (or its nominee) and Eskom for an asset refurbishment/creation program value initially of USD 1.5 Billion subject to further negotiations. Specific capital projects will be contained in project schedules annexed thereto. By mutual agreement the following will be concluded:<br>(i) The commercial terms and conditions common for all projects such as the mechanism to secure best cost, performance and |

| | | |
|---|---|---|
| | | management for each project;<br>(ii) The financial terms and conditions common for all projects, such as payment currency, effective loan repayments that consists of project costs, the cost of capital (including HEA guarantee costs), insurances and maintenance;<br>(iii) The protocol governing the application and approval of project specific agreements; and<br>(iv) The provisions to give the necessary comfort to the funders, typical of funding arrangements for projects of this nature.<br>3. The ALFA will set out more fully the terms and conditions in this term sheet and will ultimately supersede this term sheet on the date that the ALFA becomes unconditional in accordance with its terms. |
| **3.** | **Benefits of the Asset Loan Framework Agreement** | 1. Subject to further negotiation, Eskom will derive the following benefits, amongst others, from the implementation of the ALFA:<br>(i) A fully funded Capital program (in respect of approved projects) with favorable terms.<br>(ii) No sovereign guarantees required for the refurbishment/creation of assets in this finance structure.<br>(iii) No security in favour of HEA over Eskom's existing plant and/or assets.<br>(iv) The fast tracking of the refurbishment and/or creation of Eskom assets (such as power stations, transmission lines and substations) using established, reputable and highly experienced international EPC contractors under the supervision of Eskom and a well-recognized global EPC Management company (**EPCM**).<br>(v) Access to blue chip EPC companies with vast experience and verifiable high quality track records in projects of this nature.<br>(vi) Access to a blue chip global EPCM company with relevant Chinese and Eskom experience for refurbishment and/or asset creation oversight and certification.<br>(vii) Localisation and the direct involvement of South African BEE engineering companies required to fast-track refurbishment projects in accordance with the applicable legislation and Eskom's BEE and localisation policies.<br>(viii) Possible Cash flow benefit resulting from the implementation of our asset refurbishment and/or creation structure, as loan repayments may commence post commissioning of the asset obviating the need for significant upfront capital outlay by Eskom. |
| **4.** | **Timeline and costs for implementation of ALFA** | 1. If the parties agree that the proposal in this term sheet is found to be commercially viable and mutually acceptable, the Parties would then proceed to execute the following:<br>(i) Signing of indicative term sheet by **[23 December 2016],** which assist in obtaining the Mandate to negotiate and conclude the |

| | | |
|---|---|---|
| | | ALFA.<br>(ii) Obtaining of the Mandate to negotiate and conclude the ALFA by **[3 February 2017]..**<br>(iii) Deployment of Eskom and HEA resources required to formulate the Master Asset Loan Framework Agreement (ALFA) for submission to the relevant Boards/committees of both parties after signing of the Mandate Letter.<br>(iv) Approval of the ALFA by the various company Boards/Committees and signed by **[3 February 2017].**<br>(v) On approval of the ALFA, Project Capital allocations and due diligences can commence.<br>2. The timeline set out above can be amended by agreement between the parties. |
| **5.** | **Facility fee** | A once off Facility fee of **[1.6%]** of the amount of the program value is payable by Eskom on signature of the ALFA. This is for the development costs, the arrangement costs and the costs of setup of EPC panels and the working of the solution. |
| **6.** | **Annual Commitment fee** | An annual fee of 0.8% on the amount of the funds made available by HEA but unutilized by Eskom will be due and payable by Eskom at the end of each year.[1] |
| **7.** | **[Cancellation fee]** | **[A cancelation fee of 0.2% of the amount of the program value shall be payable by Eskom if Eskom repudiates, terminates or cancels this term sheet, once the binding Term Sheet and the Mandate Letter are signed by both parties. or accepted by both parties.]** |

| | | |
|---|---|---|
| **8.** | **The construction of the ALFA** | The ALFA will comprise a master asset finance loan agreement which regulates the manner in which various projects will be funded on a project by project basis.<br><br>1 Summary of terms and conditions<br><br><table><tr><td>Date</td><td>[19 December 2016]</td></tr><tr><td>User</td><td>Eskom or any nominated SPV in terms of a financial structure approved by the Lender and Eskom.</td></tr><tr><td>Lender</td><td>Huarong Energy Africa Property Limited or its designees (Lender).</td></tr></table><br>2 Project based asset finance loan terms and conditions<br><br><table><tr><th>Clause</th><th>Description</th></tr></table> |

[1] Period of commitment fee to be discussed during ALFA negotiations

| | |
|---|---|
| 2.1 Description | For Various Capital Projects (individually a **project** and collectively the **Program**) |
| 2.2 Proposed Capital Program Value | The Proposed asset finance program value is USD 1.5billion. However, HEA is willing to extend this facility up to USD 6 Billion by mutual agreement.<br>Each project scope and pricing, which may include soft costs such as guarantees, freight, installation, taxes etc. paid by the Lender will be mutually agreed to between the User and Lender before allocation to this facility.<br>It is a requirement that this ALFA and the facility it offers be committed on projects within 24 months of the signing of the ALFA. |
| 2.3 Asset Classes and Terms of the Loan Agreement | The term of each project Loan agreement will be based on the life cycle of the asset classes in each project. The life cycles of the asset classes will be pre-determined between the User and the Lender. |
| 2.4 Project Asset Loan Agreement | The terms of each project will be specifically dealt with by way of an annexure to the ALFA which will be project specific read together with the terms of the ALFA. |
| 2.5 Currency of ALFA | US Dollar. |
| 2.6 Term – ALFA Commencement Date | No later than **[1 February 2017]**. |
| 2.7 Project Loan Terms | These terms are determined on a project by project basis. The terms are 60, 120 and / or 180 months depending on the asset classes to be refurbished and/or created. |
| 2.8 Term: Project Commencement Date | It is the date at which the User and Lender sign the Project Loan Agreement. |
| 2.9 Project Loan Repayment Commencement Date | It is the date agreed to in the project specific agreement. |
| 2.11 Rates | Loan interest costs shall be calculated as follows:<br>Actual cost of the asset (including installation and HEA guarantee costs) amortised, plus an equivalent of London |

| | | | |
|---|---|---|---|
| | | | Interbank Offered Rate (**LIBOR**) plus **[7.5%]** per annum over the Loan term depending on the asset, the asset life cycle and by mutual agreement.. |
| | | **[2.12 Security Deposit]** | The User shall pay to the Lender a deposit, as security for the obligations of the User in the amount of **[•]** (**Deposit**).[2]<br>The Deposit shall be held by the Lender during the Loan repayment period. The Deposit shall be held without any obligation for the payment of interest thereon to the User, and may be commingled by the Lender with its own general or other funds, during the loan Period as security for the full and punctual performance of all of the User's obligations to the Lender. The Lender may, but shall not be obliged to, apply the Deposit in whole or in part for the payment of any amounts owing from time to time by the User or may utilise the Deposit in whole or in part to perform any of the User's obligations under without prejudice to any other remedy of the Lender.<br>If the Lender shall so apply or utilise the Deposit or any part of it, the User shall, forthwith on demand, restore the Deposit to the full amount by payment to the Lender of an amount in cash equal to the amount applied or utilised.<br>The User shall have the option to provide to the Lender irrevocable letter(s) of credit and/or guarantee(s) in a form and substance reasonably satisfactory to the Lender, issued by an international bank acceptable to the Lender, in substitution for the Deposit. Each such irrevocable letter of credit and/or guarantee shall be in the amount equal to the portion of the Deposit it is replacing, addressed to the Lender, irrevocable, unconditional and capable of only being called by the Lender.<br>Each such letter of credit and/or guarantee shall secure the obligations of the User under the ALFA<br>The User shall maintain or cause to be maintained each such letter of credit and/or guarantee at all times during the Loan |

[2] To confirm the legal implication around security and pari -passu, if applicable security deposit and pari -passu provision is not in line with existing credit agreement, the entire 2.12 provision shall fall away.

| | | | |
|---|---|---|---|
| | | | Repayment Period.<br>This Deposit will be agreed to before finalizing the ALFA. |
| | | 2.13 Loan Repayments profile | The payments are semi-annual in advance. User's obligations to repay and make other payments shall be absolute and unconditional irrespective of any contingency whatsoever. |
| | | 2.14 Maintenance and Insurance Costs | All costs and expenses associated with the utilization of the asset will be borne by the User, including but not limited to maintenance and insurance. |
| | | 2.15 Assurance | The User will:<br>(i) Provide, at its expense, asset operating insurance (with such deductibles as Lender may approve).<br>(ii) Reimburse the Lender for asset maintenance costs to ensure the asset performs to its fully designed functionality for the duration of a project t loan agreement. |
| | | 2.16 Early Termination | Upon any Early Termination of a project loan agreement, the User must repay the Lender the full loan amount including [interest on the full loan amount for the balance of the loan term].<br>Upon the early termination of the ALFA, all project loan agreements will be automatically terminated and all amounts owing thereunder will become immediately due and payable [with interest thereon including default interest.][3] |
| | | 2.17 Assignment | The Lender shall be entitled to cede and delegate, or transfer its right, title with consent from User/ Borrower, which shall not be unreasonably withheld, and interest in the loan to a nominated entity of its choosing. |
| | | 2.18 Escrow Account | If the Lender so desires, and without fee, subject to compliance with applicable regulations including, but not limited to arbitrage regulations, the proceeds of the Loan will be deposited in an escrow account acceptable to Lender. |
| | | 2.19 Finance Documents | Loan documents in form and substance satisfactory to the Lender must be executed and delivered. The User will also be required to fulfil and/or satisfy conditions precedent that are typical of transactions of this nature, including |

[3] Interest compensation to be discussed during negotiations

| | | | |
|---|---|---|---|
| | | | but not limited to board resolutions, incumbency certificates and other documentation required by Lender. It is contemplated that this transaction will utilize this ALFA document between Huarong Energy Africa (or its nominee) and Eskom. |
| | | 2.20 Legal Opinions | The Lender's and the User's respective legal counsel shall deliver legal opinions at closing in a form and substance satisfactory to the User and the Lender. The legal opinions will be in the usual form dealing with, amongst others, the capacity and authority of Eskom and the validity and enforcement of the relevant transaction documents. |
| | | 2.21 Legal Costs | Each party will be responsible for the cost of its legal counsel. |
| | | 2.22 Credit Due Diligence | In order to complete its credit due diligence in respect of the Program, Huarong Energy Africa (or its nominee) and its funders will need Eskom to provide amongst other documents:<br>(i) Three years of its most recent audited financial statements;<br>(ii) Most recent fiscal year's Budget;<br>(iii) Current Asset Insurance policies;<br>(iv) List of technically approved projects; and<br>(v) Balance sheet encumbrances. |
| | | 2.22 Utilization Period | The last date for any project drawdown will be 60 months from the date of signature of the ALFA. The availability of the Multi-year loan facility is subject to an annual credit review of Eskom. |
| **9.** | **Other Commercial Conditions** | The following commercial conditions are integral to this proposal, amongst others:<br>1. Eskom has full control over the scoping of work to be conducted. Eskom will create a project specification with a scope budget and timelines for the work to be conducted.<br>2. HEA will perform the necessary Due Diligence of each project before approving the funding and execution of such project.<br>3. HEA and Eskom (Eskom to prepare the tender documentation) will follow a mini tender process with [pre-approved EPC contractors][4] in a panel based on a criteria determined by HEA. Although Eskom will participate in the approval process, HEA reserves the right to take the final decision on selecting the EPC based on funding | |

[4] Eskom technical and procurement to be satisfied that the pre-approved EPC contractor are appropriate selected and appointed

| | | |
|---|---|---|
| | | contribution, quality, performance, capability and capacity.<br>4. HEA has made provision for the participation of Local South African companies to subcontract with the EPC companies.<br>5. A Special Purpose Vehicle (**SPV**) will be created per project. That SPV's shares shall be held in Escrow by HEA (held as default security). The assets created during the project will be owned by each project SPV.<br>6. HEA in agreement with Eskom will appoint the EPC contractor based on best price, quality and solution and will agree on the implementation terms and conditions. The contract will be between each project SPV and the relevant EPC contractor.<br>7. On receipt of a valid payment certificate, HEA will make payment through the project SPV to the selected EPC contractor.<br>8. Eskom will repay the loan as agreed, to the SPV (in USD) and the SPV will repay HEA.<br>9. Each project SPV's bank account will be controlled by HEA.<br>10. Eskom will have the right to specify quality criteria and acceptable commercial conditions for the work to be initiated and commissioned. |
| **10.** | **Project Due Diligence Fee** | 1. In order to approve and commit funds to a project, a due diligence needs to be performed on the suitability of the project to the Fund and the Panel of preselected EPC contractors. Such due diligence will entail, amongst others, technical, financial, environmental, tax and legal aspects. The following Fee structure will apply per project (a minimum project value of **[USD300million]** will be considered for this fee structure):<br>(i) **[0.1%]** fee payable for preliminary assessment.<br>(ii) **[0.2%]** fee payable for full due diligence work to be performed.<br>(iii) **[0.2%]** fee for final approval of funds and legal agreements.<br>**2. [A different fee structure will be provided and agreed if Eskom wishes us to fund smaller projects (less than USD300million)]** |
| **11.** | **Newly created Asset** | The newly created asset will be owned by and maintained in the SPV. The SPV shares will be held as security by HEA (or its nominee) for the duration of the loan period. On expiry of the loan period or the repayment thereof in full (if earlier) the SPV shares will be transferred to Eskom. |
| **12.** | **Representations and Warranties** | Representations and warranties (subject to usual carve-out and grace periods) normal for this type of transaction including : |
| | | (i) Eskom's corporate status and corporate powers.<br>(ii) Eskom has all requisite consents and authorizations (organizational and shareholder), licenses, recordings, filings, registration, permissions and approvals including, without limitation, all consents required in terms of the *Public Finance Management Act, 1999,* the exchange control regulations, *Income Tax Act, 1962,* in particular, the withholding tax on |

| | | |
|---|---|---|
| | | interest (**WTI**).<br>(iii) Eskom's rights and obligations under the ALFA are legal, valid, binding and enforceable.<br>(iv) No encumbrance on or over the assets financed in terms of the program.<br>(v) Eskom is not engaged in or aware of litigation that could have a material adverse effect.<br>(vi) Eskom is not insolvent or about to be wound up or otherwise subject to insolvency proceedings.<br>(vii) Eskom has complied with all applicable laws, including tax laws and regulations and environmental laws.<br>(viii) Ownership of Eskom.<br>(ix) Information supplied by Eskom.<br>(x) No event of default or potential event of default.<br>(xi) No material adverse change with respect to Eskom.<br>(xii) All required insurances are in full force and effect. |
| **13.** | **[Positive Undertakings]**[5] | Customary covenants (subject to usual carve-out and grace periods) for this type of transaction including:<br>(i) Maintenance of insurance.<br>(ii) Payment of all taxes.<br>(iii) Maintenance of corporate existence.<br>(iv) Maintenance and validity of security.<br>(v) Maintenance of licenses, approvals or consents necessary for carrying out the operations.<br>(vi) Ongoing compliance with the ALFA.[5]<br>(vii) Adherence to all reporting requirements. |
| **14.** | **[Negative Undertakings]** [5] | Customary covenants (subject to usual carve-out and grace periods) for this type of transaction including:<br>(i) Not to abandon, or withdraw from the transaction, without the HEA's consent.<br>(ii) Any change of control to be in accordance with the ALFA and default mechanisms, to remain intact for the duration of the ALFA.<br>(iii) No material change in the nature of the business or trading activities.<br>(iv) No change, consent or waiver to the ALFA.<br>(v) No further debt or encumbrances in respect of the program.<br>(vi) Not cease to carry on the whole or a substantial part of its business.<br>(vii) Not to undertake any merger, consolidation or re-organization of its business.<br>(viii) Not to default on any payments. Eskom agrees that a default in |

[5] Breach of some of the provision should not result in an event of default

| | | |
|---|---|---|
| | | payment is an act of insolvency. |
| **15.** | **Reporting Requirements** | Customary for this type of transaction (subject to usual carve-out and grace periods), including:<br>(i) Quarterly management and operating reports within 45 days after the end of each quarter.<br>(ii) annual audited financial statements of the Borrower within 120 days from year end, and consolidated semi-annual unaudited management accounts within 90 days from the end of such period.<br>(iii) Annual Budget and updated financial model to be provided.<br>(iv) Notice of any event of default, potential event of default or event which may have a material adverse effect.<br>(v) Notice of any material dispute, litigation, legal or administrative proceedings in relation to Eskom, force majeure, material revision of budgets or financial forecasts and/or change in operation of Eskom.<br>(vi) Notice of any event, circumstance or occurrence which will or is likely to have a material adverse effect on Eskom's ability to meet its loan payment obligations under the ALFA. |
| **16.** | **Events of Default** | Customary covenants (subject to usual carve-out and grace periods) for this type of transaction including:<br>(i) Abandonment or cancellation of the operations or any material part thereof.<br>(ii) **[Cancellation of the ALFA or notice of cancellation being given].**<br>(iii) Failure by Eskom to pay any amount due under the ALFA.<br>(iv) Breach of any representation, warranty, positive and/or negative undertaking and/or financial covenants (if applicable), by Eskom.<br>(v) Insolvency, winding up and other similar proceedings by or against Eskom.<br>**(vi) [ALFA not being in full force and effect.]**<br>(vii) **[Material adverse change in respect of the Eskom.]**<br>(viii) **[Security (if any) not being in full force and effect.]**[6]<br>(ix) The authority of Eskom to conduct its business or a substantial part thereof is cancelled, revoked or suspended.<br>(x) Any attachment, sequestration or execution in excess of ZAR [•] is levied against Eskom or any of its assets and is not appealed against or set aside within a reasonable period of time, or the borrower has satisfactory indemnification in respect of the claim. |
| **17.** | **Confidentiality** | The Term Sheet and all the information contained herein are strictly confidential and proprietary to HEA. It is not to be delivered nor shall its contents be disclosed to anyone other than the entity to which it is being |

[6] To move to events of prepayment

| | | |
|---|---|---|
| | | provided to, and its employees. Moreover, it shall not be reproduced or used, in whole or in part, for any purpose whatsoever other than for consideration of the financing described herein, without the prior written consent of HEA. The financial arrangements outlined herein are for the benefit and information of the Eskom only, to whom this document is submitted in good faith, and who is deemed to have accepted responsibility for ensuring that the confidentiality of this document will be maintained at all times. In particular, this document may not be disclosed to any third party without the prior written consent of HEA. |
| **18.** | **Other** | 1. **No Agency**:. It is expressly recorded that no Party is entitled to act as an agent of any other Party, or make any representations or commitments on behalf of any other Party, or hold itself out as an office bearer, employee or other formal representative of the other Part, or to seek to bind the other Party (whether contractually or otherwise) other than with the relevant Party's express consent.<br>2. **Governing law**: This term sheet and the subsequent definitive agreements shall be governed under the laws of [the Republic of South Africa].<br>3. **No publicity**: Neither Party shall issue any public statement or press release without the express written consent of the other Party.<br>4. **Severability**: If any provision of this term sheet is found by any court of competent jurisdiction to be invalid, unlawful or unenforceable, such provision shall not invalidate the remaining provisions of this term sheet.<br>5. **Non-binding**: this term sheet is indicative only and not exhaustive and may require further additions and/or amendments as advised by the HEA's respective legal, tax or other advisers, and will not be legally binding on any party and will not give rise to enforceable rights or obligations, except the terms set out in paragraphs 17 and 18 which will be legally binding as of the date of the last party signing this Term Sheet. |

Kindly sign in the space provided, thereby accepting the terms and conditions of this term sheet.

| | |
|---|---|
| THE USER<br>For and on behalf of Eskom Holdings SOC Ltd<br><br>____________________<br>By: Anoj Singh<br>Designation: **Group Chief Financial Officer**<br><br>Email: Anoj.Singh@eskom.co.za | THE LENDER<br>For and behalf of HEA Pty. Ltd<br><br>____________________<br>By: Rajeev Thomas<br>Designation: **Chief Executive Officer**<br><br>Email:Rajeev.thomas@tribus.co.za |

Annexure B

AFP-043



| | | |
|---|---|---|
| | | management for each project;<br>(ii) The financial terms and conditions common for all projects, such as payment currency, effective loan repayments that consists of project costs, the cost of capital (including HEA guarantee costs), insurances and maintenance;<br>(iii) The protocol governing the application and approval of project specific agreements; and<br>(iv) The provisions to give the necessary comfort to the funders, typical of funding arrangements for projects of this nature.<br>3. The ALFA will set out more fully the terms and conditions in this term sheet and will ultimately supersede this term sheet on the date that the ALFA becomes unconditional in accordance with its terms. |
| 3. | **Benefits of the Asset Loan Framework Agreement** | 1. Subject to further negotiation, Eskom will derive the following benefits, amongst others, from the implementation of the ALFA:<br>(i) A fully funded Capital program (in respect of approved projects) with favorable terms.<br>(ii) No sovereign guarantees required for the refurbishment/creation of assets in this finance structure.<br>(iii) No security in favour of HEA over Eskom's existing plant and/or assets.<br>(iv) The fast tracking of the refurbishment and/or creation of Eskom assets (such as power stations, transmission lines and substations) using established, reputable and highly experienced international EPC contractors under the supervision of Eskom and a well-recognized global EPC Management company (**EPCM**).<br>(v) Access to blue chip EPC companies with vast experience and verifiable high quality track records in projects of this nature.<br>(vi) Access to a blue chip global EPCM company with relevant Chinese and Eskom experience for refurbishment and/or asset creation oversight and certification.<br>(vii) Localisation and the direct involvement of South African BEE engineering companies required to fast-track refurbishment projects in accordance with the applicable legislation and Eskom's BEE and localisation policies.<br>(viii) Possible Cash flow benefit resulting from the implementation of our asset refurbishment and/or creation structure, as loan repayments may commence post commissioning of the asset obviating the need for significant upfront capital outlay by Eskom. |
| 4. | **Timeline and costs for implementation of ALFA** | 1. If the parties agree that the proposal in this term sheet is found to be commercially viable and mutually acceptable, the Parties would then proceed to execute the following:<br>(i) Signing of indicative term sheet by **[23 December 2018]**, which assist in obtaining the Mandate to negotiate and conclude the |

| | | |
|---|---|---|
| | | ALFA.<br>(ii) Obtaining of the Mandate to negotiate and conclude the ALFA by **[3 February 2017]..**<br>(iii) Deployment of Eskom and HEA resources required to formulate the Master Asset Loan Framework Agreement (ALFA) for submission to the relevant Boards/committees of both parties after signing of the Mandate Letter.<br>(iv) Approval of the ALFA by the various company Boards/Committees and signed by **[3 February 2017].**<br>(v) On approval of the ALFA, Project Capital allocations and due diligences can commence.<br>2. The timeline set out above can be amended by agreement between the parties. |
| **5.** | **Facility fee** | A once off Facility fee of **[1.6%]** of the amount of the program value is payable by Eskom on signature of the ALFA. This is for the development costs, the arrangement costs and the costs of setup of EPC panels and the working of the solution. |
| **6.** | **Annual Commitment fee** | An annual fee of 0.8% on the amount of the funds made available by HEA but unutilized by Eskom will be due and payable by Eskom at the end of each year.[1] |
| **7.** | **[Cancellation fee]** | **[A cancelation fee of 0.2% of the amount of the program value shall be payable by Eskom if Eskom repudiates, terminates or cancels this term sheet, once the binding Term Sheet and the Mandate Letter are signed by both parties. or accepted by both parties.]** |

| | | |
|---|---|---|
| **8.** | **The construction of the ALFA** | The ALFA will comprise a master asset finance loan agreement which regulates the manner in which various projects will be funded on a project by project basis.<br><br>1 Summary of terms and conditions<br><br>Date: [19 December 2016]<br>User: Eskom or any nominated SPV in terms of a financial structure approved by the Lender and Eskom.<br>Lender: Huarong Energy Africa Property Limited or its designees (**Lender**).<br><br>2 Project based asset finance loan terms and conditions<br><br>**Clause** \| **Description** |

[1] Period of commitment fee to be discussed during ALFA negotiations

| | | | |
|---|---|---|---|
| | | 2.1 Description | For Various Capital Projects (individually a **project** and collectively the **Program**) |
| | | 2.2 Proposed Capital Program Value | The Proposed asset finance program value is USD 1.5billion. However, HEA is willing to extend this facility up to USD 6 Billion by mutual agreement.<br>Each project scope and pricing, which may include soft costs such as guarantees, freight, installation, taxes etc. paid by the Lender will be mutually agreed to between the User and Lender before allocation to this facility.<br>It is a requirement that this ALFA and the facility it offers be committed on projects within 24 months of the signing of the ALFA. |
| | | 2.3 Asset Classes and Terms of the Loan Agreement | The term of each project Loan agreement will be based on the life cycle of the asset classes in each project. The life cycles of the asset classes will be pre-determined between the User and the Lender. |
| | | 2.4 Project Asset Loan Agreement | The terms of each project will be specifically dealt with by way of an annexure to the ALFA which will be project specific read together with the terms of the ALFA. |
| | | 2.5 Currency of ALFA | US Dollar. |
| | | 2.6 Term – ALFA Commenceme nt Date | No later than **[1 February 2017]**. |
| | | 2.7 Project Loan Terms | These terms are determined on a project by project basis. The terms are 60, 120 and / or 180 months depending on the asset classes to be refurbished and/or created. |
| | | 2.8 Term: Project Commenceme nt Date | It is the date at which the User and Lender sign the Project Loan Agreement. |
| | | 2.9 Project Loan Repayment Commenceme nt Date | It is the date agreed to in the project specific agreement. |
| | | 2.11 Rates | Loan interest costs shall be calculated as follows:<br>Actual cost of the asset (including installation and HEA guarantee costs) amortised, plus an equivalent of London |

| | | | |
|---|---|---|---|
| | | | Interbank Offered Rate (**LIBOR**) plus **[7.5%]** per annum over the Loan term depending on the asset, the asset life cycle and by mutual agreement.. |
| | | **[2.12 Security Deposit]** | The User shall pay to the Lender a deposit, as security for the obligations of the User in the amount of **[•]** (**Deposit**).[2]<br>The Deposit shall be held by the Lender during the Loan repayment period. The Deposit shall be held without any obligation for the payment of interest thereon to the User, and may be commingled by the Lender with its own general or other funds, during the loan Period as security for the full and punctual performance of all of the User's obligations to the Lender. The Lender may, but shall not be obliged to, apply the Deposit in whole or in part for the payment of any amounts owing from time to time by the User or may utilise the Deposit in whole or in part to perform any of the User's obligations under without prejudice to any other remedy of the Lender.<br>If the Lender shall so apply or utilise the Deposit or any part of it, the User shall, forthwith on demand, restore the Deposit to the full amount by payment to the Lender of an amount in cash equal to the amount applied or utilised.<br>The User shall have the option to provide to the Lender irrevocable letter(s) of credit and/or guarantee(s) in a form and substance reasonably satisfactory to the Lender, issued by an international bank acceptable to the Lender, in substitution for the Deposit. Each such irrevocable letter of credit and/or guarantee shall be in the amount equal to the portion of the Deposit it is replacing, addressed to the Lender, irrevocable, unconditional and capable of only being called by the Lender.<br>Each such letter of credit and/or guarantee shall secure the obligations of the User under the ALFA<br>The User shall maintain or cause to be maintained each such letter of credit and/or guarantee at all times during the Loan |

[2] To confirm the legal implication around security and pari -passu, if applicable security deposit and pari -passu provision is not in line with existing credit agreement, the entire 2.12 provision shall fall away.

| | | | |
|---|---|---|---|
| | | | Repayment Period.<br>This Deposit will be agreed to before finalizing the ALFA. |
| | | 2.13 Loan Repayments profile | The payments are semi-annual in advance. User's obligations to repay and make other payments shall be absolute and unconditional irrespective of any contingency whatsoever. |
| | | 2.14 Maintenance and Insurance Costs | All costs and expenses associated with the utilization of the asset will be borne by the User, including but not limited to maintenance and insurance. |
| | | 2.15 Assurance | The User will:<br>(i) Provide, at its expense, asset operating insurance (with such deductibles as Lender may approve).<br>(ii) Reimburse the Lender for asset maintenance costs to ensure the asset performs to its fully designed functionality for the duration of a project t loan agreement. |
| | | 2.16 Early Termination | Upon any Early Termination of a project loan agreement, the User must repay the Lender the full loan amount including [interest on the full loan amount for the balance of the loan term].<br>Upon the early termination of the ALFA, all project loan agreements will be automatically terminated and all amounts owing thereunder will become immediately due and payable [with interest thereon including default interest.][3] |
| | | 2.17 Assignment | The Lender shall be entitled to cede and delegate, or transfer its right, title with consent from User/ Borrower, which shall not be unreasonably withheld, and interest in the loan to a nominated entity of its choosing. |
| | | 2.18 Escrow Account | If the Lender so desires, and without fee, subject to compliance with applicable regulations including, but not limited to arbitrage regulations, the proceeds of the Loan will be deposited in an escrow account acceptable to Lender. |
| | | 2.19 Finance Documents | Loan documents in form and substance satisfactory to the Lender must be executed and delivered. The User will also be required to fulfil and/or satisfy conditions precedent that are typical of transactions of this nature, including |

[3] Interest compensation to be discussed during negotiations

| | | | |
|---|---|---|---|
| | | | but not limited to board resolutions, incumbency certificates and other documentation required by Lender. It is contemplated that this transaction will utilize this ALFA document between Huarong Energy Africa (or its nominee) and Eskom. |
| | | 2.20 Legal Opinions | The Lender's and the User's respective legal counsel shall deliver legal opinions at closing in a form and substance satisfactory to the User and the Lender. The legal opinions will be in the usual form dealing with, amongst others, the capacity and authority of Eskom and the validity and enforcement of the relevant transaction documents. |
| | | 2.21 Legal Costs | Each party will be responsible for the cost of its legal counsel. |
| | | 2.22 Credit Due Diligence | In order to complete its credit due diligence in respect of the Program, Huarong Energy Africa (or its nominee) and its funders will need Eskom to provide amongst other documents:<br>(i) Three years of its most recent audited financial statements;<br>(ii) Most recent fiscal year's Budget;<br>(iii) Current Asset Insurance policies;<br>(iv) List of technically approved projects; and<br>(v) Balance sheet encumbrances. |
| | | 2.22 Utilization Period | The last date for any project drawdown will be 60 months from the date of signature of the ALFA. The availability of the Multi-year loan facility is subject to an annual credit review of Eskom. |
| **9.** | **Other Commercial Conditions** | The following commercial conditions are integral to this proposal, amongst others:<br>1. Eskom has full control over the scoping of work to be conducted. Eskom will create a project specification with a scope budget and timelines for the work to be conducted.<br>2. HEA will perform the necessary Due Diligence of each project before approving the funding and execution of such project.<br>3. HEA and Eskom (Eskom to prepare the tender documentation) will follow a mini tender process with [pre-approved EPC contractors][4] in a panel based on a criteria determined by HEA. Although Eskom will participate in the approval process, HEA reserves the right to take the final decision on selecting the EPC based on funding | |

[4] Eskom technical and procurement to be satisfied that the pre-approved EPC contractor are appropriate selected and appointed

| | | |
|---|---|---|
| | | contribution, quality, performance, capability and capacity.<br>4. HEA has made provision for the participation of Local South African companies to subcontract with the EPC companies.<br>5. A Special Purpose Vehicle (**SPV**) will be created per project. That SPV's shares shall be held in Escrow by HEA (held as default security). The assets created during the project will be owned by each project SPV.<br>6. HEA in agreement with Eskom will appoint the EPC contractor based on best price, quality and solution and will agree on the implementation terms and conditions. The contract will be between each project SPV and the relevant EPC contractor.<br>7. On receipt of a valid payment certificate, HEA will make payment through the project SPV to the selected EPC contractor.<br>8. Eskom will repay the loan as agreed, to the SPV (in USD) and the SPV will repay HEA.<br>9. Each project SPV's bank account will be controlled by HEA.<br>10. Eskom will have the right to specify quality criteria and acceptable commercial conditions for the work to be initiated and commissioned. |
| **10.** | **Project Due Diligence Fee** | 1. In order to approve and commit funds to a project, a due diligence needs to be performed on the suitability of the project to the Fund and the Panel of preselected EPC contractors. Such due diligence will entail, amongst others, technical, financial, environmental, tax and legal aspects. The following Fee structure will apply per project (a minimum project value of **[USD300million]** will be considered for this fee structure):<br>(i) **[0.1%]** fee payable for preliminary assessment.<br>(ii) **[0.2%]** fee payable for full due diligence work to be performed.<br>(iii) **[0.2%]** fee for final approval of funds and legal agreements.<br>2. **[A different fee structure will be provided and agreed if Eskom wishes us to fund smaller projects (less than USD300million)]** |
| **11.** | **Newly created Asset** | The newly created asset will be owned by and maintained in the SPV. The SPV shares will be held as security by HEA (or its nominee) for the duration of the loan period. On expiry of the loan period or the repayment thereof in full (if earlier) the SPV shares will be transferred to Eskom. |
| **12.** | **Representations and Warranties** | Representations and warranties (subject to usual carve-out and grace periods) normal for this type of transaction including :<br>(i) Eskom's corporate status and corporate powers.<br>(ii) Eskom has all requisite consents and authorizations (organizational and shareholder), licenses, recordings, filings, registration, permissions and approvals including, without limitation, all consents required in terms of the *Public Finance Management Act, 1999*, the exchange control regulations, *Income Tax Act, 1962*, in particular, the withholding tax on |

| | | |
|---|---|---|
| | | interest (WTI).<br>(iii) Eskom's rights and obligations under the ALFA are legal, valid, binding and enforceable.<br>(iv) No encumbrance on or over the assets financed in terms of the program.<br>(v) Eskom is not engaged in or aware of litigation that could have a material adverse effect.<br>(vi) Eskom is not insolvent or about to be wound up or otherwise subject to insolvency proceedings.<br>(vii) Eskom has complied with all applicable laws, including tax laws and regulations and environmental laws.<br>(viii) Ownership of Eskom.<br>(ix) Information supplied by Eskom.<br>(x) No event of default or potential event of default.<br>(xi) No material adverse change with respect to Eskom.<br>(xii) All required insurances are in full force and effect. |
| **13.** | **[Positive Undertakings]**[5] | Customary covenants (subject to usual carve-out and grace periods) for this type of transaction including:<br>(i) Maintenance of insurance.<br>(ii) Payment of all taxes.<br>(iii) Maintenance of corporate existence.<br>(iv) Maintenance and validity of security.<br>(v) Maintenance of licenses, approvals or consents necessary for carrying out the operations.<br>(vi) Ongoing compliance with the ALFA.[5]<br>(vii) Adherence to all reporting requirements. |
| **14.** | **[Negative Undertakings]** [5] | Customary covenants (subject to usual carve-out and grace periods) for this type of transaction including:<br>(i) Not to abandon, or withdraw from the transaction, without the HEA's consent.<br>(ii) Any change of control to be in accordance with the ALFA and default mechanisms, to remain intact for the duration of the ALFA.<br>(iii) No material change in the nature of the business or trading activities.<br>(iv) No change, consent or waiver to the ALFA.<br>(v) No further debt or encumbrances in respect of the program.<br>(vi) Not cease to carry on the whole or a substantial part of its business.<br>(vii) Not to undertake any merger, consolidation or re-organization of its business.<br>(viii) Not to default on any payments. Eskom agrees that a default in |

[5] Breach of some of the provision should not result in an event of default

| | | |
|---|---|---|
| | | payment is an act of insolvency. |
| **15.** | **Reporting Requirements** | Customary for this type of transaction (subject to usual carve-out and grace periods), including:<br>(i) Quarterly management and operating reports within 45 days after the end of each quarter.<br>(ii) annual audited financial statements of the Borrower within 120 days from year end, and consolidated semi-annual unaudited management accounts within 90 days from the end of such period.<br>(iii) Annual Budget and updated financial model to be provided.<br>(iv) Notice of any event of default, potential event of default or event which may have a material adverse effect.<br>(v) Notice of any material dispute, litigation, legal or administrative proceedings in relation to Eskom, force majeure, material revision of budgets or financial forecasts and/or change in operation of Eskom.<br>(vi) Notice of any event, circumstance or occurrence which will or is likely to have a material adverse effect on Eskom's ability to meet its loan payment obligations under the ALFA. |
| **16.** | **Events of Default** | Customary covenants (subject to usual carve-out and grace periods) for this type of transaction including:<br>(i) Abandonment or cancellation of the operations or any material part thereof.<br>(ii) **[Cancellation of the ALFA or notice of cancellation being given].**<br>(iii) Failure by Eskom to pay any amount due under the ALFA.<br>(iv) Breach of any representation, warranty, positive and/or negative undertaking and/or financial covenants (if applicable), by Eskom.<br>(v) Insolvency, winding up and other similar proceedings by or against Eskom.<br>**(vi) [ALFA not being in full force and effect.]**<br>(vii) **[Material adverse change in respect of the Eskom.]**<br>(viii) **[Security (if any) not being in full force and effect.]**[6]<br>(ix) The authority of Eskom to conduct its business or a substantial part thereof is cancelled, revoked or suspended.<br>(x) Any attachment, sequestration or execution in excess of ZAR **[•]** is levied against Eskom or any of its assets and is not appealed against or set aside within a reasonable period of time, or the borrower has satisfactory indemnification in respect of the claim. |
| **17.** | **Confidentiality** | The Term Sheet and all the information contained herein are strictly confidential and proprietary to HEA. It is not to be delivered nor shall its contents be disclosed to anyone other than the entity to which it is being |

[6] To move to events of prepayment

| | | |
|---|---|---|
| | | provided to, and its employees. Moreover, it shall not be reproduced or used, in whole or in part, for any purpose whatsoever other than for consideration of the financing described herein, without the prior written consent of HEA. The financial arrangements outlined herein are for the benefit and information of the Eskom only, to whom this document is submitted in good faith, and who is deemed to have accepted responsibility for ensuring that the confidentiality of this document will be maintained at all times. In particular, this document may not be disclosed to any third party without the prior written consent of HEA. |
| **18.** | **Other** | 1. **No Agency**:. It is expressly recorded that no Party is entitled to act as an agent of any other Party, or make any representations or commitments on behalf of any other Party, or hold itself out as an office bearer, employee or other formal representative of the other Part, or to seek to bind the other Party (whether contractually or otherwise) other than with the relevant Party's express consent.<br>2. **Governing law**: This term sheet and the subsequent definitive agreements shall be governed under the laws of [the Republic of South Africa].<br>3. **No publicity**: Neither Party shall issue any public statement or press release without the express written consent of the other Party.<br>4. **Severability**: If any provision of this term sheet is found by any court of competent jurisdiction to be invalid, unlawful or unenforceable, such provision shall not invalidate the remaining provisions of this term sheet.<br>5. **Non-binding**: this term sheet is indicative only and not exhaustive and may require further additions and/or amendments as advised by the HEA's respective legal, tax or other advisers, and will not be legally binding on any party and will not give rise to enforceable rights or obligations, except the terms set out in paragraphs 17 and 18 which will be legally binding as of the date of the last party signing this Term Sheet. |

Kindly sign in the space provided, thereby accepting the terms and conditions of this term sheet.

| | |
|---|---|
| THE USER<br>For and on behalf of Eskom Holdings SOC Ltd<br><br>By: Anoj Singh<br>Designation: **Group Chief Financial Officer**<br>20\12\16.<br><br>Email: Anoj.Singh@eskom.co.za | THE LENDER<br>For and behalf of HEA Pty. Ltd<br><br>By: Rajeev Thomas<br>Designation: **Chief Executive Officer**<br>21/12/2016.<br><br>Email:Rajeev.thomas@tribus.co.za |

# Annexure "AP3"

| Eskom | SUBMISSION DOCUMENT | Unique Identifier | 221-222 |
|---|---|---|---|
| | | Document Type | OCSDTE |
| | | Revision | 0 |
| | | Revision Date | July 2015 |
| | | Office of the Company Secretary | |

## EXECUTIVE SUMMARY

**SUBMISSION TO IFC BOARD ON 3 February 2017**

1. **TITLE OF THE SUBMISSION**
HUARONG ASSET FINANCING

2. **RESOLUTION REQUIRED**
**It is required that**
2.1 The IFC Board mandates Eskom Treasury to enter into negotiations and conclude a financing agreement with Huarong Energy Africa Limited (HEA) amounting to between US$ 1.5 billion and US$ 6 billion.
2.2 Delegate the power and authority to give effect to the above to the Chief Financial Officer or equivalent.

3. **SUMMARY OF FACTS**

3.1 Salient Facts

The funding provided will form part a fully funded "turnkey" type asset creation structure to assist Eskom's capital expansion programme, which requires no government guarantee and has no restriction on the use of proceeds. The structure includes an overarching master Asset Loan Framework Agreement (ALFA) which will be concluded between Eskom and HEA and will include a project schedule containing the project to require financing. The projects listed in the project schedule will be made up projects build by a panel Engineering Procurement and Construction (EPC) companies chosen by Eskom and HEA based on the designs and specifications provided by Eskom.

Upon creation of the project asset, it will be placed in a Special Purpose Vehicle (SPV), in which HEA has a 100% share and once Eskom has repaid the corresponding loan in full, the asset will then be transferred to Eskom. The repayments of the corresponding loan will commence once the project asset in completed and commissioned to the satisfaction of Eskom, and is held by the SPV as security or collateral over the loan.

The corresponding loans will be provided by Construction and Development Financing Institutions (Financing Institutions), which lend money to the SPV, which will then lend to Eskom. The money provided by the Financing Instructions will be covered by the Chinese Export Credit Agency (ECA) SINOSURE.

The corresponding loan may be repaid over 5 years, 10 years or 15 years, based on the useful life of the Asset, more detail provided the attached Term sheet (Annexure A).

| Eskom | SUBMISSION DOCUMENT | Unique Identifier | 221-222 |
|---|---|---|---|
| | | Document Type | OCSDTE |
| | | Revision | 0 |
| | | Revision Date | July 2015 |
| | | Office of the Company Secretary | |

The costs associated and considerations with the financing to be provided are as follows:

- Pricing: Libor plus Spread
- Spread: 750 bps
- Fees:
  - Facility Fees: 160 bps (once off)
  - Annual Commitment Fee: 80 bps
  - Cancelation fees: 20 bps (once off)
  - Guarantee Premium: to be discussed
  - Due Diligence Fee- Prelim Assessment: 10 bps
  - Due Diligence Fee- Full work: 20 bps
  - Due Diligence Fee- final approval: 20 bps

- The funding from HEA will partly replace the international funding planned for 2016/17 – 2012/21 financial years, as approved in the Corporate Plan by the Board of Directors on 19 February 2016.

- It should be noted that pricing contained in the technical term sheet attached hereto as Annexure A is still subject to further discussion during the loan negotiations stage, which will commence after the approval has been granted by the Eskom IFC Board.

3.2 Key assumptions

- Funding is available if the underlying ALFA is successfully executed.
- HEA and Eskom have negotiated the term sheet ,with indicative pricing and other terms and conditions (see Annexure A)
- The cost of this funding that will be negotiated will be aligned to other similar funding sources on an unguaranteed basis.
- The funding provided will be in US$.

3.3 Financial implications

The approval of the transaction will contribute towards the approved Borrowing Programme of R 326.943 billion for 2016/17 – 2020/21 financial years.

3.4 Human Resource implications

There are no human resource implications.

3.5 Risks (including Environment, Legal or Contractual risks)

- All Loan and Facility Agreements are reviewed and co-signed or approved by the General Manager Legal and Compliance or his delegate. Environmental and social conditions and related covenants are signed off by Senior Manager – Environmental Management and where required other specialist functions such as Tax Department will be consulted.

- Eskom is highly leveraged with significant interest and finance charges. There is a limit to the amount of additional debt that Eskom can incur; and currently new borrowings are raised to pay for the existing interest and finance charges.

- The underlying supply is yet to be successfully placed and without the contemplated supply contract this funding will fall away.

3.6 Verification by independent party (if applicable)
N/A

## 4. OTHER APPROVALS REQUIRED

**Parties to be consulted/ informed of decision or further approvals needed:**

IFC Board approval.

**SIGNED**

**GROUP EXECUTIVE** **DATE**
Who hereby represents that the above
Information is correct.

Submission prepared by: Andre Pillay
Contact Number: x 4417

| Eskom | SUBMISSION DOCUMENT | Unique Identifier | 221-222 |
|---|---|---|---|
| | | Document Type | OCSDTE |
| | | Revision | 0 |
| | | Revision Date | July 2015 |
| | | Office of the Company Secretary | |

**ANNEXURE A**

**INDICATIVE TERM SHEET OF THE HUARONG ASSET FINANCING**

| Eskom | ESKOM HOLDINGS SOC LTD<br>BOARD OF DIRECTORS | Unique Identifier | 221-209 |
|---|---|---|---|
| | | Document Type | OCSDTE |
| | | Revision | 0 |
| | | Review Date | July 2015 |
| | | Office of the Company Secretary | |

**EXTRACT FROM THE APPROVED MINUTES OF THE BOARD INVESTMENT AND FINANCE COMMITTEE MEETING HELD ON 3 FEBRUARY 2017 AT HUVO NKULU BOARDROOM**

---

7.3 **Group Finance**
**Huarong Asset Financing**
*Reference document 7.3*

**IT WAS RESOLVED THAT:**

The Investment and Finance Committee **approved:**

7.3.1 that Eskom Treasury be mandated to negotiate, but not conclude, a financing agreement with Huarong Energy Africa Limited (HEA) amounting to between US$1.5bn and US$6bn, with a full disclosure of the names of the shareholders and the value/percentage of each shareholding being presented to the Committee as part of the feedback report; and

7.3.2 the Chief Financial Officer (CFO) was authorised to give effect to the above resolution.

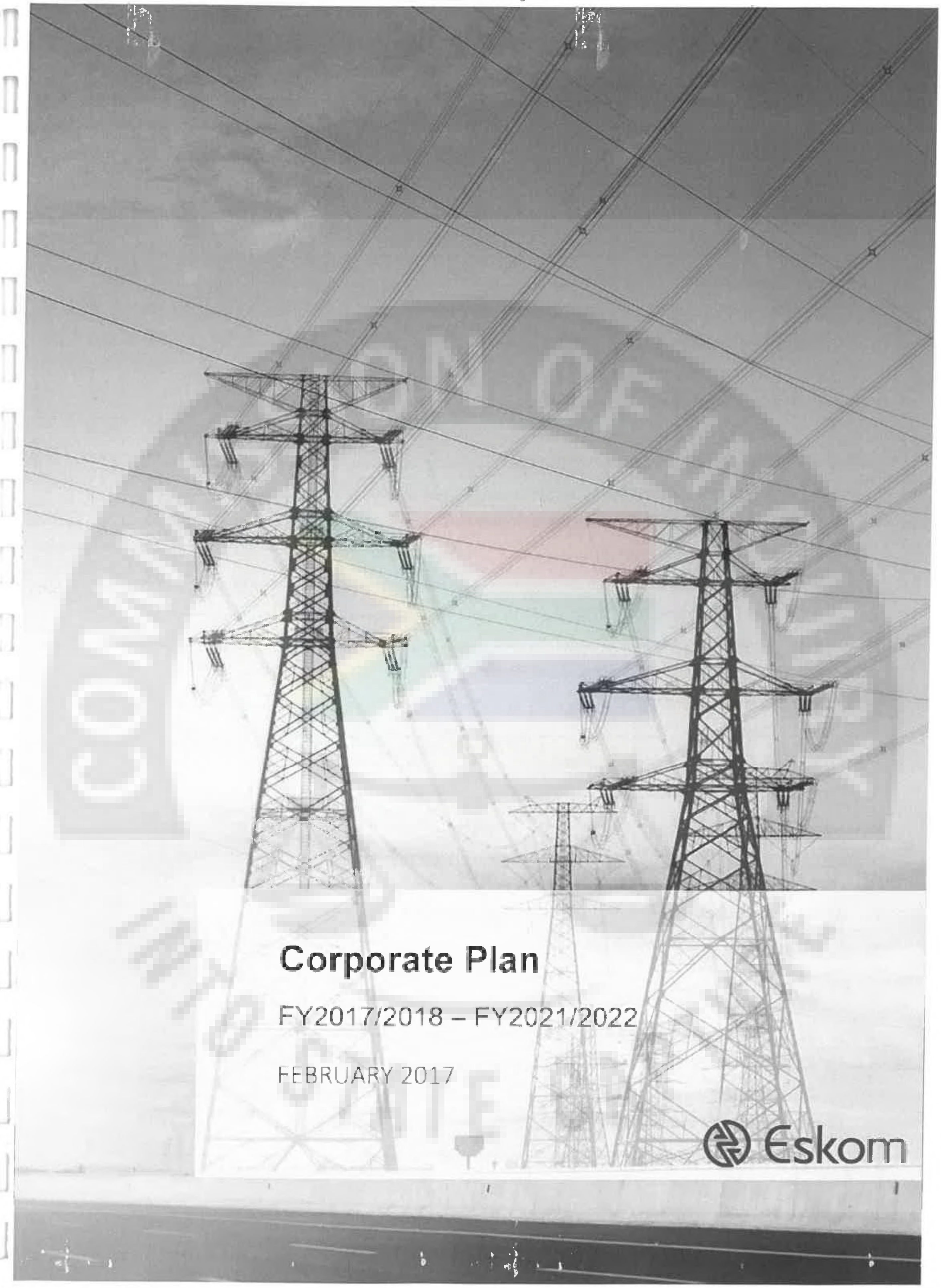
**CERTIFIED AS A TRUE EXTRACT**

SDaniels

**S Daniels**
**GROUP COMPANY SECRETARY**
Date: 21|6|2017

04/07/2017

# Annexure "AP4"



# Corporate Plan

FY2017/2018 – FY2021/2022

FEBRUARY 2017

Eskom

# Contents

Contents ....... 2
Corporate Plan approvals ....... 4
Chairman's letter ....... 5
Section A: Foundations of the Corporate Plan ....... 7
Executive Summary ....... 8
1 Eskom governance ....... 19
2 Market and demand outlook ....... 32
3 Strategy ....... 37
4 Stakeholder engagement ....... 45
5 Regulatory strategy ....... 52
6 Independent Power Producers (IPPs) ....... 64
7 Financial Strategy ....... 70
8 Funding Plan ....... 93
9 Capital Investment Plan ....... 111
10 Eskom targets ....... 121
Section B: Divisional Operational Plans ....... 124
11 Customer Services ....... 125
12 Generation ....... 138
13 Primary Energy Division ....... 152
14 Transmission ....... 166
15 Distribution ....... 177
16 Group Human Resources ....... 187
17 Group Capital ....... 197
18 Procurement & Supply Chain Management ....... 208
19 Group Technology ....... 223
20 Group IT ....... 232
21 Risk and Sustainability ....... 240
22 Strategic Support Services ....... 267
23 Eskom Enterprises ....... 279
24 ESCAP ....... 288
25 Eskom Finance Company ....... 293
26 Development Foundation ....... 297

*Section C: Long term opportunities* ........ *305*
*27 Nuclear New Build* ........ *306*
*28 Operating model review* ........ *310*
*Abbreviations* ........ *312*
*List of exhibits* ........ *317*
*List of tables* ........ *322*

AFP-063



# Corporate Plan approvals

The Corporate Plan is a document prepared by Eskom to engage with its stakeholders on how it intends to implement Eskom's strategy, and it is prepared in accordance with the PFMA and other relevant legislation of the Department of Public Enterprise and National Treasury.

This Corporate Business Plan has been approved by the Board of Directors on 21 February 2017 signed on its behalf by

Dr Baldwin Ngubane
Chairman
Date: 21 February 2017

Mr Matshela Koko
Interim Group Chief Executive
Date: 21 February 2017

Mr Anoj Singh
Group Chief Financial Officer
Date: 21 February 2017

**Information security**

This Corporate Plan must be treated in accordance with the Eskom Information Security Policy 32-85.

Information resources are Eskom's business-critical assets requiring a high level of protection. Sufficient measures commensurate with the risk must be taken to protect these information resources against accidental or unauthorized modifications, disclosure and/or destruction, as well as to assure the confidentiality, integrity and availability of Eskom's information resources.

# Chairman's letter

Dear Minister,

The Eskom Board of Directors approved the new Corporate Plan for FY2017/18 on 21 February 2017. This plan will build on the FY2016/17 Corporate Plan, which aimed to lead Eskom and South Africa into an era of reliable power supply and excess capacity while supporting economic growth through modest tariff increases.

In its first year of implementation, Eskom's Design to Cost strategy showed major progress as the organisation and its operations achieved the required stability to navigate the changing industry dynamics. In particular we are proud of the organisation's efforts in delivering on a number of important objectives for South Africa and the SADC region including:

- **Ensuring reliable electricity supply for South Africa** – Eskom's generation asset performance improvement achieved more than 510 days without load shedding and has created confidence that South Africa is ready for re-industrialisation with an excess capacity situation expected in the short term
- **Delivering new electricity capacity from the build programme** – Eskom increased generating capacity by 2 226MW from the New Build Programme, creating further growth potential for the economy
- **Supporting moderate electricity price increases** through cost efficiencies across the business in FY2016/17. In particular, Eskom slowed the escalation in coal costs to just 3.7% while achieving further savings in Commercial. As a result, earnings before interest, tax, depreciation and amortisation (EBITDA) for the current financial year (FY2016/17) is expected to exceed the budget by R10 billion
- **Increasing Universal Access to electricity in South Africa** – In FY2016/17, Eskom connected more than 200 000 new households to the grid as it continues to increase electricity access for all South Africans
- **Supporting the growth of the SADC region** by supplying 30% more electricity to our neighbouring countries as they faced harsh drought conditions during the period. Eskom ensured that the adverse impact on critical industries in these countries was reduced

The FY2017/18 Corporate Plan aims to build on this strong start to ensure that Eskom drives the re-industrialisation of the economy. Eskom's Corporate Plan is completely aligned with Government's GDP targets and the National Development Plan objectives that will drive economic recovery. These will be supported by Eskom achieving five critical targets over the five-year period, including:

- **Stimulating industrial production in South Africa and SADC** through a sales programme that grows local demand Y-O-Y 2.1% and export sales by 8% by 2021. As part of this programme, Eskom will become a more customer-centric organisation that puts the customer journey at the heart of its operations
- **Transforming the South African coal sector** through driving R 43 billion in efficiencies in Eskom's coal spend over the next 5 years in a way that ensures sustainability for the sector
- **Optimising capital spend** by R25 billion over the next five years while still meeting regulatory and licensing requirements
- **Establishing new, world class capabilities in Digital and Advanced Analytics** that will deliver R6 billion in EBITDA improvement for Eskom over the next 5 years
- **Developing strong partnerships with private sector** to jointly support growth and industrialisation in the country
- **Reducing the burden on the fiscus by** releasing R105 billion in Government Guarantees over the next 3 years while maintaining a moderate tariff path
- **Increasing Universal Access by 2019** and by connecting an additional 1 million households

Overall, Eskom's Corporate Plan will drive radical economic transformation, particularly in the mining sector where Eskom's demand stimulation and coal programmes will have a strong positive impact on the country's competitiveness.

Eskom's FY2017/18 Corporate Plan will not only deliver sustainability in its existing business, but will also lay the foundations for the Eskom of tomorrow, including:

- Supporting the short term decarbonisation of the economy through renewables IPPs. Eskom will connect all IPPs up to Bid Window 4.5, but with prices below 77c/kWh over the planning period
- Support the long term decarbonisation of the economy by leading the country's future nuclear build programme
- Investing in new technologies and businesses that will reshape the South African energy landscape with particular focus on battery storage technology distributed generation technologies

Eskom will continue to engage with government to manage the risks of the IPP programme and mitigate negative operational and financial impacts on Eskom. In the five-year period, Eskom will connect IPPs for all procured rounds at prices below 77c/kWh. This is in line with the State of the Nation Address by the President. In addition, this is dependent on Eskom receiving a tariff increase from Nersa that is in excess of 2.2%. This will enable the programme to be rolled out at a cost and pace that is optimal for South Africa and Eskom. A combination of slower demand growth and increases in Eskom's capacity will result in excess generation capacity in South Africa in the medium term. Eskom plans to decommission two coal-fired power stations by FY2021/22 to mitigate the resulting cost impact. This is critical to maintain a moderate electricity price path. Any additional IPPs will need to be assessed holistically against a framework of security of supply, electricity price, environmental benefits and socio-economic factors.

In delivering the FY2017/18 Corporate plan, Eskom will require support from the shareholder and broader stakeholders on a few other critical topics, including:

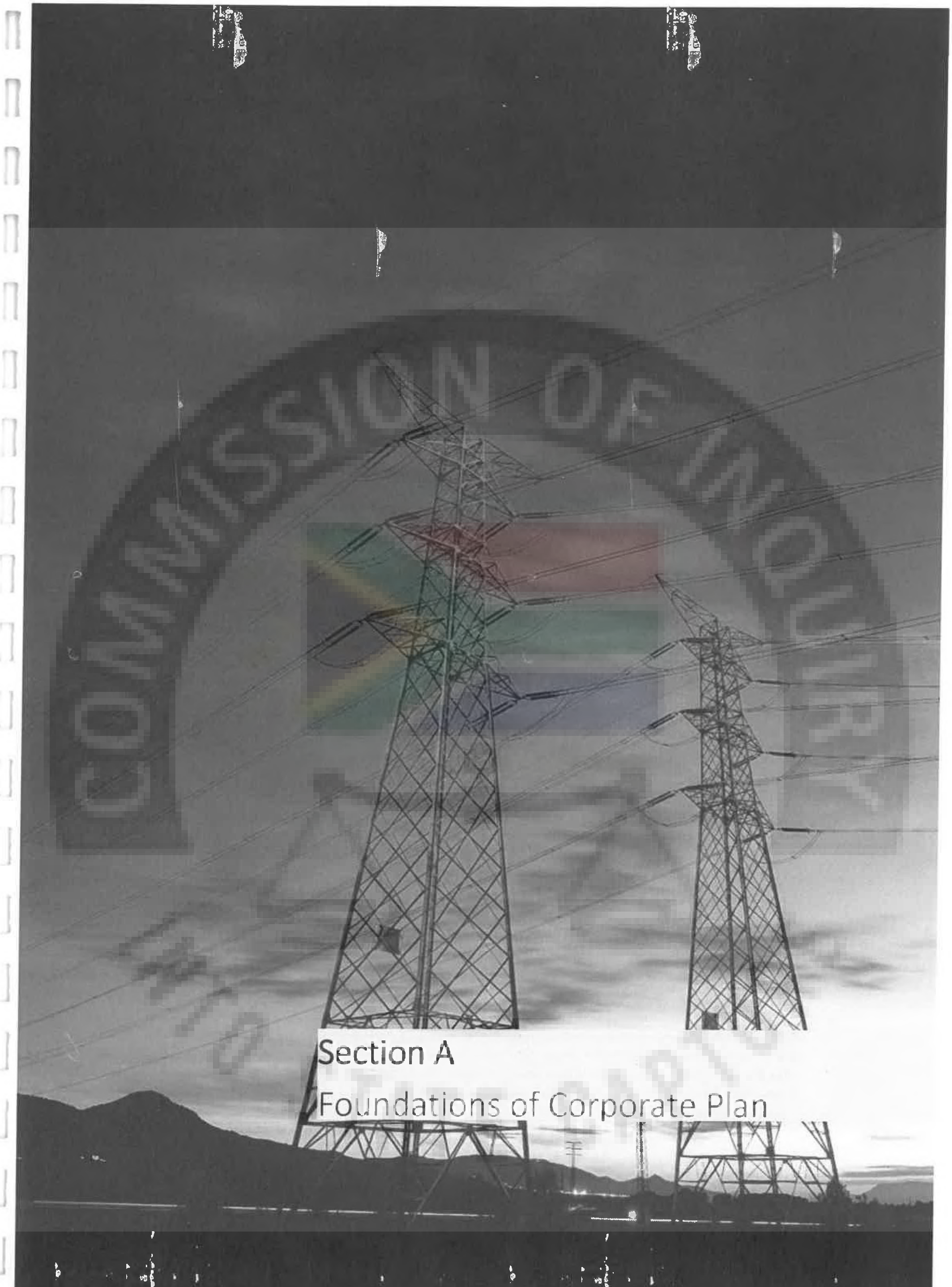
- **Municipal debt payments**. Eskom has a strategy with its key stakeholders, (e.g. the National Treasury), to reduce the current municipal bad debt and limit bad debt in the future. Delivering this strategy will require strong support from all relevant stakeholders in the country.
- **Regulatory Clearing Account (RCA) and tariff determination uncertainty.** A 2.2% tariff increase for FY2017/18 is lower than expected (the FY2017/18 Corporate Plan budgeted for 13%) and well below inflation of approximately 6%. To recover efficient costs and earn a reasonable return during the MYPD4 period, a reasonable step up in price, in line with the regulatory framework, will be necessary. Eskom will complete a fourth multi-year price determination (MYPD4) application in FY2017/18 to enhance long term revenue certainty, which is essential to attract necessary funding. Eskom will work to engage key stakeholders on its application and long term price outlook.
- **Generation and grid asset uncertainty and compliance**. Eskom will optimise N-1 compliance delivery by sequencing project delivery effectively and ensuring financial prudency. In its FY2017/18 Corporate Plan, Eskom is also expected to decommission up to two coal power stations during the next five years to ensure an optimal generation cost. Eskom will work with communities and affected mines to limit the socio-economic impact of the decommissioning.

Eskom has proven that it can deliver against an ambitious plan with the results the organisation achieved in FY2016/17. These successes have strengthened the Board's confidence that Eskom can deliver on the FY2017/88 Corporate Plan that will see Eskom once again take centre stage as a catalyst for economic growth in South Africa and the SADC region.

Dr Baldwin Ngubane

Chairman

AFP-066



# Section A

## Foundations of Corporate Plan

# Executive Summary

In the FY2016/17 Corporate Plan, Eskom set out to re-establish itself as a catalyst for economic growth in South Africa by improving electricity availability and launching the Design-To-Cost (DTC) strategy to deliver surplus capacity and a manageable tariff path for the economy. In its first year of implementation, Eskom's DTC strategy drove the business to achieve this objective while improving its cost base by:

- **Enhancing the reliability of supply and surplus electricity** by increasing the energy availability factor (EAF) to 77.3% (above the target of 72%) and achieving 510 days without load shedding as of 31 December 2016.
- **Adding new capacity to the grid,** including 794 MW from Unit 5 synchronised at Medupi, 800 MW from Unit 1 synchronised at Kusile and 1 332 MW of peaking capacity from units at Ingula.
- **Improving efficiencies across the business** by achieving coal price escalation of 3.7% and savings in other operating costs. As a result, earnings before interest, tax, depreciation and amortisation (EBITDA) for the years is expected to be approximately R40 billion, R10 billion above budget.
- Connecting more than 200 000 households to the grid.

The FY2017/18 Corporate Plan aspires to enable South Africa's economic recovery and drive industrial growth across Southern Africa. The focus of the FY2017/18 Corporate Plan is to drive this recovery and enable incremental gross domestic product (GDP) growth over the next five years, in line with the objectives of the National Development Plan (NDP). Eskom will build on the momentum of its performance and efficiency improvements and become a more customer-centric organisation that partners with key sectors to increase industrial activity, electricity consumption and job creation. Eskom will act on the opportunities outlined in the FY2017/18 Corporate Plan to lay the foundations for a new organisation.

It is important to recognise the macroeconomic climate and utility sector context in which Eskom operates. This context poses a number of risks to which Eskom will need to respond. However, it also presents a number of exciting opportunities that Eskom can capitalise on to strengthen the organisation and plant the seeds for the Eskom of tomorrow:

- **Pockets of real opportunity within a challenging macroeconomic landscape.** In 2016, South Africa's GDP growth slowed to less than 1%. This has had significant impact on Eskom's key customers and their ability to increase their electricity consumption. In 2017, GDP is expected to grow at just 1.2% with no immediate signs of recovery. In the Southern African Development Community (SADC), economic growth has also been affected by regional challenges such as droughts. Despite these challenges, the opportunities in the South African and regional macroeconomic landscape suggest that there is large latent and unserved electricity demand in the region for Eskom.
- **Signs of improvement in commodity markets although volatility continues.** Since the end of the commodity super-cycle in 2008, most major commodities have experienced significant price declines, e.g. the price of iron ore has dropped 60%. In addition, commodity price volatility has increased significantly, increasing the risks involved in capital and growth decisions for metals and mining players. With a few commodities experiencing improved prices over the last year, e.g. the price of aluminium has increased 20%, Eskom has a real opportunity to collaborate with the mining sector to capitalise on the current upcycle.
- **Pressure on sources and cost of funding.** South Africa faces the real risk of a rating downgrade, which would have a significant impact on the economy and its growth outlook. Eskom's issuer long-term corporate credit rating has already been downgraded on Standard and Poor's (S&P) index from BB+ to BB with a negative outlook. In addition, the global macroeconomic outlook indicates a potential risk of increasing yields in emerging market bonds in the event that U.S. interest rates change. With Eskom expected to make decisions on the renewal of its government guarantees over the next five years, an effective funding strategy will be required to manage these risks.

- Rapidly changing dynamics in the global power sector energy mix are requiring traditional fossil fuel utilities to adapt their operating models. The increased competitiveness of renewables – cost declines of more than 30% and growth in market share – has created a challenging situation for traditional fossil fuel-based utilities that focus on conventional power generation. In Europe, the power sector profit pool declined by 30% as cheaper renewables gained share, reducing the profits of traditional utilities by 70%. In addition, industry profitability has moved away from generation to the grid business, i.e. transmission and distribution. In South Africa, the REIPPP has successfully driven growth in renewables capacity over the last five years. The country will need to make serious considerations of the electricity-supply demand balance when considering further IPP capacity beyond Bid Window 4.5.
- **Customer experience and satisfaction are moving to centre stage.** With increased competition from renewables, greater customer choice, and new technology changing consumption patterns, utilities increasingly need to understand the customer journey and preferences better. Traditionally, this has not been a capability required in the sector, but utilities around the world now need to develop it.
- **Discontinuities in technology create opportunities and threats.** Multiple new technologies will disrupt the electricity value chain. The cost of energy storage is expected to decline by approximately 20% over the next four years as investment in this technology grows rapidly. When it becomes viable, energy storage has the potential to increase the competitiveness of renewables even more and change customers' consumption behaviour. This continued growth will be enhanced by the entry of innovative companies such as Tesla and Mercedes Benz into the storage space, creating new business opportunities in the sector.
- **Data and analytics are a new source of value creation and competitive advantage.** Globally, across all sectors, leading companies are building deep capabilities in data science and analytics to achieve the next efficiency horizon and create new business models. Power utilities are no exception and there are already multiple-use cases in predictive maintenance and field force effectiveness.

In addition, it is important to note that Eskom's FY2017/18 Corporate Plan is shaped by NERSA's recent tariff determination of just 2.2% for FY2017/18. This creates a cash flow deficit of R21 billion over the planning period and results in an EBITDA of R31 billion, equal to that of the FY2016/17 budget. All other financial ratios will weaken before they improve. Eskom will aim to close the gap experienced as a result of the 2.2% tariff increase through increased efficiencies and further trade-offs across the business.

Eskom is ideally positioned to stimulate the economic recovery of South Africa and drive its industrial growth. This is the focus of the FY2017/18 Corporate Plan. Building on the DTC strategy, Eskom aims to stimulate industrial production by working closely with its key customers in South Africa and the SADC region. Eskom will continue to moderate the tariff trajectory to stimulate the economy while striving to obtain an investment grade credit rating. Eskom aspires to support GDP growth targets as set by the NDP.

The FY2017/18 Corporate Plan will aim to deliver on five critical targets for the business over the next five years, including:

- Achieving an annual growth of 2.1% in local demand and 8% in cross-border demand by 2021
- Reducing Primary Energy spend by R43 billion over the next five years through greater efficiencies and industry restructuring, (e.g. cost-plus-mine acquisition and consolidation)
- Reducing planned capital expenditure (capex) spend by R25 billion over the next five years
- Driving further efficiencies through digitization and advanced analytics worth R6 billion in EBITDA
- Identifying opportunities for private sector partnerships

Further detail on assumptions can be found in Chapter 6 (Financial Strategy).

The above targets will support Eskom in achieving an investment grade credit rating during the five-year planning period. Through this plan, Eskom will release R105 billion in Government Guarantees by FY2019/20, with the objective of unencumbering the fiscus. Eskom will also achieve the above targets while managing headcount to an optimal level, introducing new skills and capabilities into the organisation and improving organisational health in a way that makes Eskom an employer of choice once again and without compromising operational performance.

The five-year Corporate Plan is built on seven strategic pillars that will help Eskom achieve sustainability in its current business and set up the Eskom of the future, and ensure that the funding strategy supports both objectives with financial prudence. The seven strategic pillars are:

1. **Become a customer-centric organisation that stimulates demand.** Eskom will partner with customers to lead South Africa's economic recovery while ensuring sales growth of 2.1% a year by FY2020/21. Achieving this aim will require Eskom to become a more customer-centric organisation, acting as a service provider and enabler to its customers' needs. Eskom will focus demand stimulation on sectors that are critical to the economy and aligned with Government's National Development Plan (e.g., gold, platinum, aluminium and ferrochrome). In addition, Eskom will aim to increase export sales by 5TWh over the five year to expand its economic impact to the region. Group Customer Services will reach the targets with a strong customer service strategy to improve customer satisfaction supported by greater digitisation of key customer journeys.
2. **Ensure the reliability and availability of power capacity to support South Africa's economic growth ambitions.** Eskom will continue to drive operational excellence and reliability efforts across its fleet and network through a combination of effective maintenance, performance improvements and management, and application of new technologies, e.g. advanced analytics. In addition, the New Build programme will remain a core focus area and efforts will continue to complete Medupi and Kusile within the P80 schedule and P50 costs. Eskom aims to add 8.7 GW capacity in generation, establish a 2 095 km transmission network and achieve 1 million new connections by FY2021/22.
3. **Continue capturing efficiencies in operating and capital costs to achieve a sustainable tariff path for the economy.** The FY2017/18 Corporate Plan builds on the progress made in FY2016/17 to deliver approximately R49 billion in operating expenditure (opex) savings across the business. This includes reducing Primary Energy Division (PED) coal spend by R43 billion compared to the FY2016/17 Corporate Plan. The business will also target further reductions in headcount and employee benefit costs, supported by a comprehensive independent review of Eskom's operating model that will be completed in FY2017/18. Eskom's capital portfolio has been reduced from R334 billion in FY2016/17 to R315 billion for the current five-year planning cycle in support of Eskom's intent to deliver investment grade ratios. The above efficiency targets will be further supported by the decommissioning of two power stations due to the expected excess capacity in the next five years. Eskom will drive this decommissioning in a way that optimises coal, people and capital costs across the fleet. Eskom will also continue to improve recovery of revenue from non-paying customers through effective stakeholder engagement.
4. **New capabilities.** Data and analytics capabilities have made rapid progress in recent years. The volume of data available in the business has grown, while the costs of computational power and storage have improved steadily. Eskom will take advantage of these developments to drive advanced analytics and digitisation initiatives across the business. Eskom has already delivered improvements via advanced analytics at the Majuba coal mills, and plans to strengthen its internal capabilities to improve EBITDA through further advanced analytic applications over the next five years, e.g. via smart grids, field force effectiveness tools and predictive maintenance. Eskom aims to lead the country and global utilities in this field by providing these capabilities to other organisations where applicable.
5. **Decarbonisation of the economy.** South Africa and other countries around the globe are in the process of signing up to COP 21 targets to reduce carbon emissions. Eskom aims to play an important role in this effort by supporting the Department of Energy (DoE) in connecting all renewables as part of the renewable energy independent power producer procurement programme (REIPPP) up to bid window 4.5. In addition, Eskom will continue to play a role in developing the country's next phase of nuclear capacity in line with the DoE's Integrated Resource Plan (IRP) once it is finalised.
6. **Innovation and transformation.** Over the next five years, Eskom will lay the foundation for its long-term future by developing both regulated and non-regulated growth opportunities. It will invest in and partner with players in battery storage technology to improve its viability and develop a new business around this technology. It will also seek to drive transformation in adjacent industries,

e.g. coal mining. Finally, Eskom Enterprises (EE) will drive growth in new businesses and projects, e.g. rooftop solar photovoltaic (PV) panels.

7. **Deliver a funding plan and key enablers that ensure successful delivery of the Corporate Plan.** Eskom's funding plan will aim to unencumber the fiscus by releasing R105 billion in Government Guarantees by FY2019/20. In line with its efforts to achieve an investment grade credit rating, Eskom will deliver a R337 billion funding plan that reduces its exposure to government guaranteed debt. In addition, Eskom will build on its successes of FY2016/17 and scale up its implementation rigour demonstrated in a few key areas (e.g., PED, Generation) across all areas of the business.

**Eskom will drive the above seven pillars while maintaining its support of the country's REIPPP programme** which aims to increase renewables capacity while ensuring that South Africa begins the journey to meet its COP21 carbon emission targets. To date, Eskom has connected IPPs to the grid enabling sales of over 11GWh. In the medium term, the dynamics and assumptions underlying the original REIPP have shifted, particularly with slower growth in electricity demand and declining costs of renewables technology. With an expected excess capacity of approximately 3 000 MW in FY2020/21, there is limited opportunity to connect new IPPs to the grid unless they are economical at a tariff of 77c/KWh. In the long term, as the costs of renewables further decline and the SA economy shows strong growth, Eskom will fully support growth in renewables in order to lead the country in reducing its carbon emissions while delivering electricity at the most competitive price possible. Eskom is also investing in energy storage technology over the next five years in support of this long term commitment to renewables. Eskom's strategy is aligned with its Statement of Strategic Intent as set out by the Minister of Public Enterprises and important country strategies such as the NDP, REIPPP and IRP. It will be updated once South Africa's position on COP 21 and emissions targets is clarified.

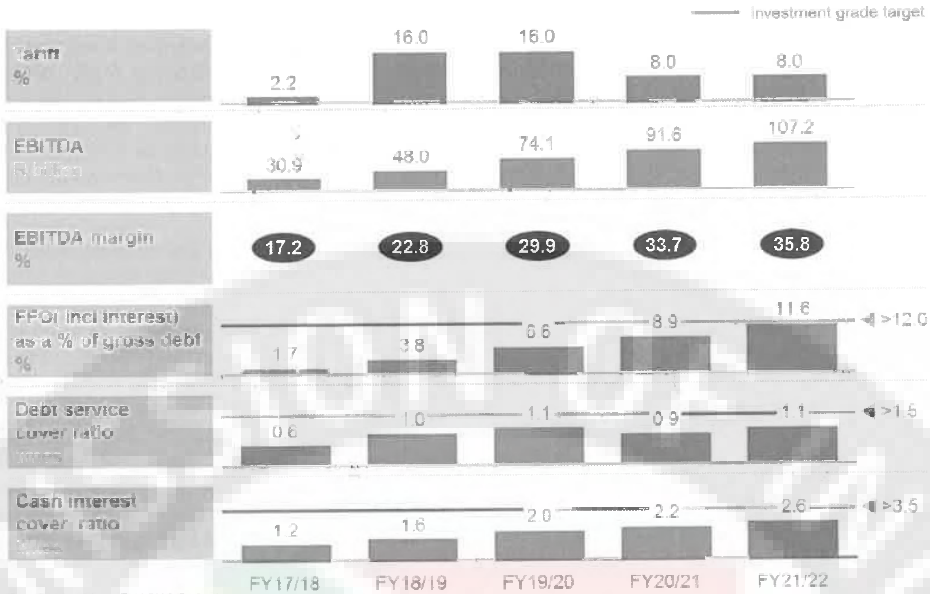
**Financial outcomes**

Eskom's Q3 results indicate that EBITDA for FY2016/17 will reach R40 billion by the end of the financial year. Throughout the year Eskom has implemented DTC I initiatives to drive an increase in EBITDA that has exceeded the target of R32 billion by 26%. The improvement in EBITDA was driven by increased export demand and reduced opex costs

- Increased export demand as a result of the drought experienced in Southern Africa and a focused strategy to boost export sales resulting in R3 billion additional revenue to partially offset reduction in revenue from local sales.
- Reduction in primary energy cost by R12 billion as a result of savings on coal despite higher production from coal and reduction in production from IPPs.

Exhibit 1 outlines the key financial metrics that Eskom plans to achieve over the Corporate Plan period.

**EXHIBIT 1: FINANCIAL OUTCOMES FOR THE NEXT FIVE YEARS**




SOURCE: Eskom FY17/18 Budget

The FY2017/18 Corporate Plan focuses on creating sustainability in Eskom's existing business and sowing the seeds for the Eskom of tomorrow, while catalysing the economic growth of South Africa and the region and achieving an investment grade credit rating that reduces the burden on the fiscus.

The Plan is driven by aggressive revenue growth through the stimulation of industrial activity and efficiency improvement across the business to ensure a tariff path that supports industry.

The Borrowing Programme will support the plan and ensure that Eskom is able to meet its capital obligations, and maintain sufficient liquidity. Eskom will borrow R337 billion for the five year Corporate Plan period. Eskom is investigating opportunities to diversify sources of funding whilst containing interest costs in order to release R105 billion in government guarantees by FY2019 and reduce pressure on the fiscus.

Eskom's strong governance system will ensure that these plans are embedded in the business and all employees' performance contracts. It is committed to delivering on the Plan and launching a new Eskom.

With its focus on economic development and growth, this Corporate Plan aligns with the Government's NDP and the Statement of Strategic Intent as laid out by the Minister of Public Enterprise.

**Key enablers**

Eskom is embarking on an ambitious five year Corporate Plan that will transform the business across multiple fronts – including capacity, cost and manpower. Achieving the targets set out in this Corporate Plan will require focus on a number of clear enablers to support the delivery of the plan, including:

- Effective stakeholder management to ensure the right level of advocacy and clear communication with major stakeholders (for example Government, the public, suppliers) given the level of stakeholder support required to ensure success of the plan. Continued engagement with ratings agencies to understand concerns and deliver investment grade ratings.
- A governance setup that drives effective accountability across the business, particularly leadership. Eskom will also endeavour to apply the principles of King III; and will focus on improving its decision-making approach, starting with ExCo. In order to achieve this, Eskom has established a Results Management office (RMO) to coordinate, monitor and drive the execution of strategic initiatives across the business. The RMO uses a multi-divisional senior management committee to track performance of the identified initiatives. The RMO provides transparency on

performance issues through submissions to ExCo on performance of delivery streams as well as progress made on strategic initiatives

- Effective risk mitigation strategies, particularly to mitigate the risk of lower than budgeted tariffs

This Corporate Plan was developed to align Eskom's performance to the FY2017/18 Compact which sets out the Shareholder's expectation for FY2017/18 and beyond. Eskom's performance will be evaluated primarily against the Shareholder's Compact as a whole and the Minister will be provided with quarterly reports on the progress towards achieving these targets. The achievement of this Corporate Plan will be anchored through disciplined execution by hard-wiring these performance indicators and targets in the performance compacts.

The full Corporate Plan provides the detail on how Eskom will deliver on the above targets and objectives over the next five years.

**Summary of Divisional Plans**

Eskom's divisional plans have been developed in line with the seven strategic pillars and the overall objective to achieve an investment grade credit rating while ensuring reliable and competitively priced electricity for the country. The following section provides a summary of each Divisional Plan, including its key objectives and focus areas.

**Group Capital**

Eskom Group Capital is executing the largest capital-expansion programme in Africa. This includes the completion of the new build projects, Medupi and Kusile, as well as Transmission projects to strengthen and expand the grid. Group Capital will also be responsible for the development of future build projects that Eskom will deliver including future growth opportunities that will ensure a further 8.7 GW of new capacity from Medupi and Kusile over the next five years.

The division has the following objectives over the next five year period:

- Delivering the New Build programme to add 8.7 GW of capacity to the grid by delivering within the approved P80 schedule and P50 cost, resulting in a R14 billion saving
- Constructing 2 095 km of transmission and other lines and commission of 10 775 MVA of transformation capacity
- Completing refurbishment projects, including Matla, Duvha, and low-pressure retrofits
- Executing environmental compliance projects such as nitrogen oxide, sulphur dioxide and fabric filter plants
- Finalising the role of GCD in South Africa's nuclear build programme

GCD will achieve its objectives and deliver its capital plan by implementing the following initiatives:

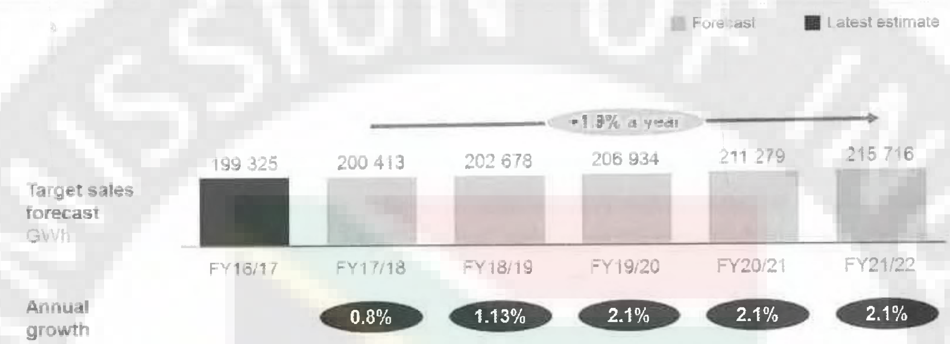
- Scrubbing the capital portfolio to deliver approximately R10 billion in savings over five years in support of Eskom's overall R 25 billion scrubbing target
- Implementing top package and employer-claims avoidance to reduce claims at Medupi and Kusile
- Establishing the Group Capital Division Construction Excellence Programme
- Disposing of non-core / surplus real estate for a targeted saving of R1.5 billion over five years
- Establishing private sector partnerships to reduce capital spend

**Group Customer Services**

Eskom aims to support the recovery of the South African economy through a proactive demand stimulation strategy. In addition, Eskom will become a customer-centric organisation that delivers world-class customer service across all segments. Customer Services will achieve the following objectives over the next 5 years:

- Stimulate LPU demand through an **opportunity pipeline of more than 45 TWh**, against a target of 17 TWh, in priority growth industries for South Africa
- Renegotiate **9 TWh of existing contracts** to protect Eskom's baseline
- Work with high-growth and low-debt municipalities to increase sales
- Improve municipal and other debt collections by:
  - Becoming involved in collection processes in municipal areas on an agency basis
  - Re-enforcing credit controls across customer segments
- Improve customer collections and reduce non-technical losses by implementing an early-warning system

**Exhibit 2: Target Sales Forecast FY2017/18 - FY2021/22**




Group Customer Services will achieve the above objectives through:

- Establishing a key account management approach to drive sales and improve customer engagement
- Launching a comprehensive customer-centricity strategy that develops the full customer journey, supported by digital applications and enhanced collaboration with Distribution and Generation
- Converting customers in Soweto, Midrand and Sandton to split meters to reduce non-payment
- Converting customers to prepaid to reduce non-payments
- Regularly auditing meters, especially for LPUs to reduce non-technical losses
- Achieve savings over the next five years through applying advanced analytics to non-technical losses

Overall, Eskom is committed to ensuring occupational and health and safety across all line divisions and functions. The company's safety principle is that no operating condition or urgency of service justifies exposing anyone to injury or safety or environmental risks arising out of Eskom's business. It follows that occupational health and safety of Eskom employees, contractors and the public at large is of critical importance to Eskom. In this planning cycle, Eskom will roll out initiatives towards improving safety performance, including the roll out of a series of educational campaigns, safety workshops and safety management systems. Consequently, Eskom aims to reduce the fatality count while improving the lost-time incidence rate.

### Generation

Eskom Generation will focus on its mandate to operate and maintain Eskom's generating assets for the duration of their economic life. This mandate will be delivered while ensuring optimal generation costs for Eskom through the economical dispatch of power stations based on the merit order. In delivering this mandate, Eskom Generation will drive the following objectives over the next five years:

AFP-074



- Achieve 80:10:10 EAF: UCLF: PCLF respectively by FY2019/20 through continued compliance with the Tetris plan
- Deliver at least R 4 billion in cost savings with a particular focus on maintenance and an optimised production plan
- Ensure security of supply through operational excellence and reliability initiatives building on the successes of FY2016/17

Generation will deliver the above targets through:

- Continued focus on operational excellence, including training all operational staff (maintenance and production)
- Leveraging new capabilities (including Advanced Analytics) to further reduce Eskom's maintenance costs
- Applying a least cash dispatch methodology to optimise the production plan
- Deliver the decommissioning of two power stations to ensure an optimal production plan and overall Eskom generation costs

With the slowdown in electricity demand and increase in IPP capacity, Eskom will be required to ramp down approximately 3 000 MW of capacity during the next five years to ensure an optimal generation cost. Generation will manage this process rigorously to ensure mitigation of the socio-economic implications of ramp down while minimising the cost impact on Eskom.

Generation aims to support Eskom's aims to contribute towards decarbonising the economy. An approved Air Quality Improvement Plan (Emissions Reduction Plan) will ensure that Eskom meets commitments made to DEA. In addition over the next ten years, Generation will roll out the Emissions Offset Programme, to reduce particulate and gaseous emissions from households in the vicinity of power stations. In tandem, the Division will invest in air quality and water management technologies.

**Primary Energy**

Based on the Generation production plan, Primary Energy will be required to purchase approximately 125 MT of coal per year over the next five years. Primary Energy will ensure security of coal supply, maintaining coal stockpiles at a minimum of 37 days on average across the fleet.

Coal is Eskom's largest operating cost item, contributing approximately 30% to the operating cost base. Following coal cost escalation of >12% since FY2010/11, Primary Energy reduced this escalation to just 3% (against a 12% target) in FY2016/17 through the launch of a targeted savings programme across Cost Plus mines, medium term contracts, logistics and the Medupi coal penalty. PED is expected to deliver R3.2 billion in coal cost savings during FY2016/17 with a projected coal unit cost of R391/tonne against a target of R417/tonne.

For the next five years, Eskom will leverage its strong coal market position to transform the sector while achieving five strategic objectives, including:

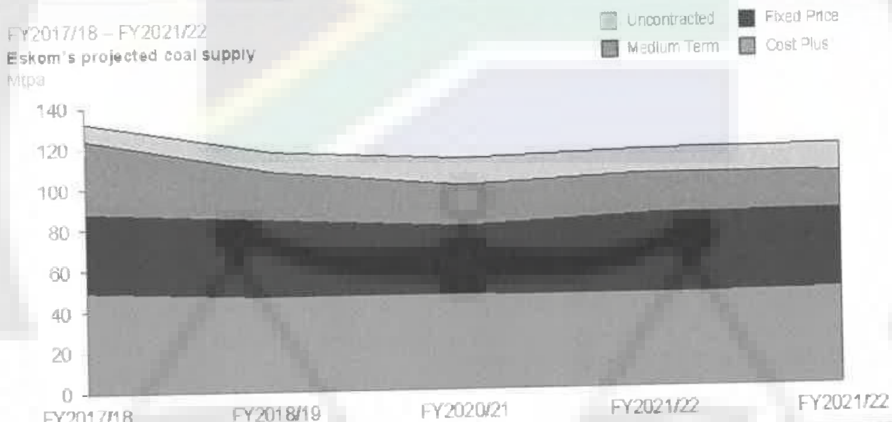
- Build on the successes of FY2016/17 to deliver a further R 43 billion in coal savings over the period
- Ensure the optimal dispatch of coal-fired power stations
- Achieve an acceptable balance of security of coal supply and risk exposure
- Optimise logistics to achieve cost efficiencies across the coal supply network
- Contribute to Eskom's transformation objectives to increase share of black-owned supply to Eskom

Eskom will achieve these objectives through:

- Creating per-mine view status on all cost-plus mines improvement initiatives and developing plans for new prioritised initiatives

- Employing advanced analytics to boost productivity at cost-plus mines and overall coal management
- Recapitalising cost-plus mines to support access remaining contracted reserves, and enable contract extensions to increase production
- Optimising coal-contract mix by implementing a total cost-of-ownership model for each coal-fired power station, including coal-quality specifications and related plant technologies (Exhibit 3)
- Negotiating new coal-purchase contracts in line with the NERSA cost-of-coal determination and ensuring an optimal balance between volumes flexibility and lowest price possible
- Optimising logistics to achieve the optimal balance between minimal transportation costs and secure coal delivery
- Driving coal sector transformation through consolidation and support of operational excellence of black-owned suppliers
- Enhancing performance measurement and management at contract level (e.g. ensuring all contractors are measured on all cost value drivers by contract and have incentive / penalty mechanisms aligned appropriately)
- Adopt newly developed Master Coal Supply Agreements for fixed price and cost plus contracts based on equitable risk sharing
- Enhancing systems to enable enhanced oversight of performance at mine/contract level
- Implementing required training programmes to build the new capabilities required

**Exhibit 3: Coal Contract Mix Projections, FY16/17 - FY20/21**




**Contracted/secured**

- On average 89% of the coal supply for the next five years has been contracted.
- Eskom is fully contracted at Lethabo, Matimba, Medupi, Kendal, Duvha, Matla and Tutuka for the next five years.

## Transmission

Eskom Group Transmission has a mandate to reliably control, maintain, plan, expand and provide access to an interconnected transmission system. Transmission will also trade energy, influence customer demand and effect opportunities in the SADC region in support of interconnectivity.

In the next planning cycle, Group Transmission will aim to achieve the following objectives:

- Sustaining system performance for system minutes<1 at 3.53 and major incidents at 2 across the period

- Continuing asset renewal and strengthening of the network towards attaining N-1 compliance
- Facilitating IPP connections to the Eskom grid and conclude contracts for such IPPs
- Connecting 2 095 km of transmission line
- Increasing revenue to a minimum of R 55 billion over the five-year through cross-border electricity trade
- Expanding the transmission network into the SADC region to unlock constraints to growth.

Transmission will achieve these objectives through:

- Prioritised maintenance and refurbishments
- Effective system operations to ensure prudent dispatch of all generators and demand side resources
- Close collaboration with the DoE and NERSA on optimisation and delivery of the IPP programme
- Engagement with NERSA with respect to N-1 compliance
- Undertake grid expansion to unlock system capacity for IPPs and new load customers.
- Focus on balancing electricity demand and sales management through integrated demand management, and shifting demand from peak to off-peak periods
- Development of projects to advance regional interconnectors
- 'Peak-shifting' demand-side management initiatives

**Distribution**

The role of Eskom Distribution is to manage Eskom's distribution assets by building, operating and maintaining the network. Eskom currently supplies around 60% of South Africa's electricity directly to customers. The remainder is sold to municipalities, which is redistributed to their customers. During the next five years, Eskom Distribution will drive the following objectives:

- Minimise technical losses
- Minimising non-technical losses by preventing access to prepaid metering units
- Delivering a focused roll-out of smart metering in Sandton, Midrand and Soweto with a target of 366 500 over the next five years
- Implementing technologies to prevent tampering of prepaid metering units, and to facilitate the conversion of customers to prepaid
- Driving demand by establishing one million electrification connections over the next five years to drive Universal access

Distribution will deliver the above objectives through:

- Addressing the requisite needs in IT infrastructure to minimise restoration times
- Actively partnering with the wider Electricity Distribution Industry (EDI) in South Africa to ensure provision of accessible and sustainable electricity services
- Implementing refurbishment, as a matter of high priority, of current network infrastructure and reliable investment plans to reduce backlogs
- Working with Group IT to successfully and sustainably implement advanced-analytics initiatives
- Implementing advanced analytics to support minimisation of technical losses and predictive maintenance of assets

**Eskom's FY2017/18 Corporate Plan accounts for a number of risks facing the business, including:**

- **Municipal debt payments**. Eskom has a strategy with its key stakeholders, e.g. the National Treasury, to reduce the current municipal bad debt and limit bad debt in the future.
- **Regulatory Clearing Account (RCA) and tariff determination uncertainty**. A 2.2% tariff increase for FY2017/18 is far lower than expected (the previous Corporate Plan budgeted for a 13%) and well below inflation of approximately 6%. If Eskom is to recover efficient costs and earn a reasonable return during the MYPD4 period, a significant price hike will be necessary coming off a low base in FY2017/18. Eskom will complete a fourth multi-year price determination (MYPD4) application in FY2018 to improve its long term revenue certainty. Eskom will work to engage key stakeholders on its application and long term price outlook.
- **South Africa's sign-off on COP 21 targets.** The country's carbon emissions targets are not yet finalised, but Eskom's five-year plan incorporates a strategy to account for decarbonisation, e.g. nuclear plan, renewables support and future growth.
- **Income equalisation.** Eskom will work closely with labour to optimise working practices and create a truly agile organisation able to equalise income levels fully based on skill and experience levels.
- **Generation and grid asset uncertainty and compliance risks.** Eskom will optimise N-1 compliance delivery by sequencing project delivery effectively and ensuring financial prudency.
- **Inherent risks in tariff determination and ability to drive volumes.** Eskom will continue to identify further cost reduction opportunities and revenue growth initiatives.

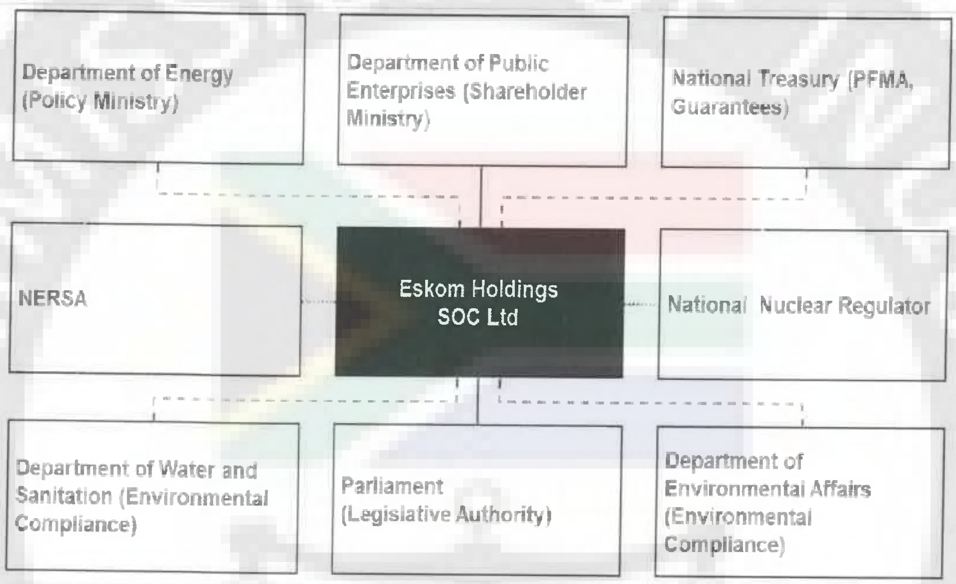
# 1 Eskom governance

## 1.1 Overview of Eskom

Eskom Holdings state-owned company (SOC) Ltd, Registration Number 2002/015527/30, is South Africa's primary electricity supplier and is wholly owned by the South African Government. Eskom generates and distributes approximately 95% of the electricity used in South Africa and approximately 40% of the electricity used on the African continent.

Eskom aims to comply with the policies, conditions and requirements of key government stakeholders such as the Department of Public Enterprises, NT, the DoE, the Department of Environmental Affairs (DEA) and the Department of Water and Sanitation (DWS), among others. Exhibit 4 sets out Eskom's core government stakeholders.

**Exhibit 4: Eskom's Key Government Stakeholders**




**Other key stakeholders**: Cooperative Governance and Traditional Affairs (COGTHA), Dept. of International Relations and Cooperation (DIRCO), Dept. of Economic Development, South African Government Local Association (SALGA)

The Eskom Group consists of four subsidiaries and a self-administered pension and provident fund established in terms of the Pension Funds Act, 1956 and approved as a pension fund in terms of the Income Tax Act, 1962 (Exhibit 5).

**Exhibit 5: Organisational Structure**

**Eskom Holdings SOC Ltd**

- Eskom Enterprises SOC Ltd
- Eskom Finance Company SOC Ltd
- Escap SOC Ltd
- Eskom Development Foundation NPC

Eskom operates as a vertically integrated company that supplies electricity to South Africa and the SADC region. As the main provider of generation, transmission and distribution capacity, Eskom supplies electricity to industrial, mining, commercial, agricultural and residential customers, as well as to redistributors in South Africa. Eskom operates 26 power stations with a total nominal capacity of 42 871 MW, comprising 36 441 MW of coal-fired power, 1 860 MW of nuclear power, 2 409 MW of gas-fired power, 600 MW of hydro power, 1 400 MW from pumped storage stations, and the recently commissioned 100 MW Sere Wind Farm. Eskom maintains 368 331 km of power lines and substations with a cumulative capacity of 239 490 MVA.

Eskom has a number of wholly-owned subsidiaries. These include Eskom Enterprises SOC Ltd, Escap Limited, Eskom Finance Company (Pty) Limited and Eskom Development Foundation (Table 1: List of Eskom Subsidiaries). The purpose of these subsidiaries is to provide specific strategic services to Eskom, its divisions and its employees, as well as to the public.

**TABLE 1: LIST OF ESKOM SUBSIDIARIES**

| Subsidiary | Services |
|---|---|
| Eskom Enterprises SOC Limited Group | • EE provides life-cycle support, plant maintenance & support for capacity expansion programmes to Eskom's line divisions. EE has a subsidiary in Uganda with a concession for electricity operating & maintenance. |
| Eskom Finance Company SOC Limited | • Eskom Finance Company (EFC) was established in 1990, primarily to enable Eskom's employees to have access to home loan finance while optimising home-ownership costs for both Eskom and its employees. Eskom is in the process of finding an appropriate disposal solution for this subsidiary at the request of the shareholder. |
| Escap SOC Limited | • Eskom's wholly owned insurance captive company manages and insures the business risk of Eskom and its subsidiaries, excluding nuclear and aviation liabilities. |
| Eskom Development Foundation | • The Foundation is a wholly owned non-profit company that manages Eskom's corporate social investment in support of Eskom's transformation objectives. |

With effect from 1 July 2002, Eskom was converted from a statutory body into a public company in terms of the Eskom Conversion Act, Act 13 of 2001. It is incorporated in terms the Companies Act, Act 71 of 2008. Eskom is subject to the Public Finance Management Act (PFMA), Act 1 of 1999, and the provisions of the Memorandum of Incorporation (MOI).

Clause 3.5 of the MOI stipulates that: 'notwithstanding anything to the contrary contained herein or any omissions from this MOI of any provisions to that effect, the Company may do anything that the Companies Act and/or the PFMA and the Enabling Legislation empower it to do if not so prohibited by this MOI and/or by any provision of the Companies Act and/or the PFMA and/or the Enabling Legislation as the case may be.'

Clause 3.1 of the MOI stipulates that: 'the objective of the Company is to provide energy/electricity and related services, including the generation, transmission, distribution and retail thereof. In doing so it has all the powers to implement this mandate subject to any limitations set out herein, the shareholder's compact and any other limitations imposed by the shareholder. In fulfilling its obligations it is specifically acknowledged that the Company has a developmental role and will through its activities promote transformation, economic development, broad based black economic empowerment and may support relevant national initiatives.' Eskom's vision, mission and values are set out in Exhibit 6.

**Exhibit 6: Vision, Mission and Values**

| Vision | |
|---|---|
| Sustainable power for a better future | |
| **Mission** | |
| To provide sustainable electricity solutions to grow the economy and improve the quality of life of the people in South Africa and in the region | |
| **Values** | |
| Zero harm | Eskom will strive to ensure that zero harm befalls its employees, contractors, the public and the natural environment |
| Integrity | Honesty of purpose, conduct and discipline in actions, and respect for people |
| Innovation | Value-adding creativity and results oriented. Lead through excellence and innovation |
| Sinobuntu | Caring |
| Customer satisfaction | A commitment to meet and strive to exceed the needs of the receivers of products and services |
| Excellence | Acknowledged by all for exceptional standards, performance and professionalism |

## 1.2 History of Eskom

Eskom has been operating for over ninety years, and in the course of its history it has experienced a number of fundamental changes to its policy and business environment. Notably, Eskom's business follows the South African electricity industry's boom (surplus) and bust (deficit) cycles. The long lead time needed to build new power-generation facilities or transmission networks, can lead to misalignment between power supply and economic cycles.

### 1.2.1 Key developments in Eskom's history include:

**1970s:** The power crisis led to a build programme, resulting in large funding requirements, cost and time overruns and high tariffs.

**1980s:** The build programme created overcapacity in the market. In 1983 the De Villiers commission, which was established in response to concerns about the process and progress of the capital-expansion programme, recommended a 'consumer-privileged' tariff structure to protect and subsidise consumers and establish a Capital Development Fund to save funds for future capital-expenditure programmes. However, in 1987 the Eskom Act abolished the Capital Development Fund, as well as the Reserve Fund and the Redemption Fund. This resulted in assets from these funds being transferred from Eskom loans (bonds), to Eskom's financial statements. This has, in part, contributed to the current situation of insufficient funding for Eskom's capital-expansion programme. During the 1980s Eskom began its electrification programme and recognised the potential to expand the grid in the region.

**1990s:** Electrification was at its peak and Eskom became a world leader in the electricity industry with low-cost electricity, achieving an energy-availability factor of 90% across its generation fleet. There was surplus electricity and three power plants were mothballed. The Energy White Paper, where additional principles related to Eskom's monopoly status and the breaking up of the sector were agreed to, was finalised in the late 1990s. This included instructing Eskom not to build new generation plant, which would be undertaken by IPPs, and the beginning of a process to develop regional electricity distributors (REDs). As a result Eskom changed its operating model, putting some of its best talent into Eskom Enterprises with the view to developing a new business model around selling services and products (not just electricity) around the world. This aligned with the government's position and vision on the African Renaissance and South Africa's increased presence on the continent.

**Early 2000s:** After 1999, the reserve margin declined consistently and use of the generation fleet (measured by load factor) increased. However, unplanned outages of the generation fleet increased; and overall availability of the generation fleet, as measured by EAF, decreased. The direct correlation between the declining reserve margin and decreasing plant availability caused Eskom to maximise the use of existing generation capacity to meet increasing demand from 2001 onwards. This put greater pressure on plant performance levels. Government policy changed in the early 2000s when it was realised that urgent new build was required. Eskom was required to commence the New Build programme in 2004, after 6 years had lapsed since the inception of the IPP programme. Eskom had to quickly establish a department for the execution of the New Build Programme which impacted Eskom's ability to complete the required front end planning and development.

**2005:** Eskom embarked on a capital expansion programme, termed the New Build Programme, to support South Africa's economic growth. Eskom started preparing for the construction of new power stations that will provide an additional 11 096 MW of generation capacity by FY2021/22, in addition to the 6 137 MW of capacity from de-mothballing plant that was added to the system between 2005 and September 2013.

**2008:** In January 2008, Eskom introduced load shedding – planned rolling blackouts based on a rotating schedule – in periods where short supply threatened the integrity of the grid. Demand-side management was used to encourage consumers to conserve power during peak periods in order to reduce the incidence of load shedding. Eskom also took steps to improve maintenance of some of its plant, increase coal stock piles, and improve plant performance – leading to a suspension of load shedding from May 2008 onwards.

**2013:** The impact of the lower NERSA tariff determination required significant changes to the business, so Eskom developed a new strategy, the Business Productivity Plan (BPP) to ensure its sustainability in a changing environment. The strategy was built on the Integrated Delivery Plan that outlined the key trade-offs and risks that Eskom would face, and the implications for its business model.

**2014:** Eskom was forced to implement load shedding due to a number of factors, including the sharp increase in the number of power-station breakdowns, the inability to timeously source sufficient diesel for greater utilisation of open cycle gas turbines (OCGTs), and insufficient capacity to increase water reserves to run the pumped storage schemes. Load shedding was exacerbated in early November 2014 after the Majuba power station lost capacity to generate power when one of its coal- storage silos collapsed.

**2015:** The Board initiated the Denton's inquiry that had a commercial forensic, a financial forensic and a technical forensic component. The report proved that there was no misconduct, corruption or fraud on the part of any Eskom employee however it did highlight process weaknesses. Recommendations were communicated to Group Executives and are tracked by business and incorporated into Eskom's business strategies.

**2016**: The DTC strategy was adopted as a continuation of BPP to extract further efficiencies out of the business, through reductions in primary energy, opex and capex.

**Current status:** Construction on Medupi and Kusile continues. Significant progress has been made – Medupi Unit 6 is in commercial operation, Medupi Unit 5 and Kusile Unit 1 have been synchronised to the grid and both projects are expected to be completed within the P80 schedule All units at Ingula are now in commercial operation, adding 1 332MW peaking capacity to the grid. Eskom continues to expand its transmission grid throughout the country to improve grid connections.

The cumulative savings from BPP at 31 March 2016 was R29.0 billion exceeding the target by R3.1 billion. The cumulative projected savings from BPP at 31 March 2017 is R48.2 billion exceeding the target by R5.2 billion.

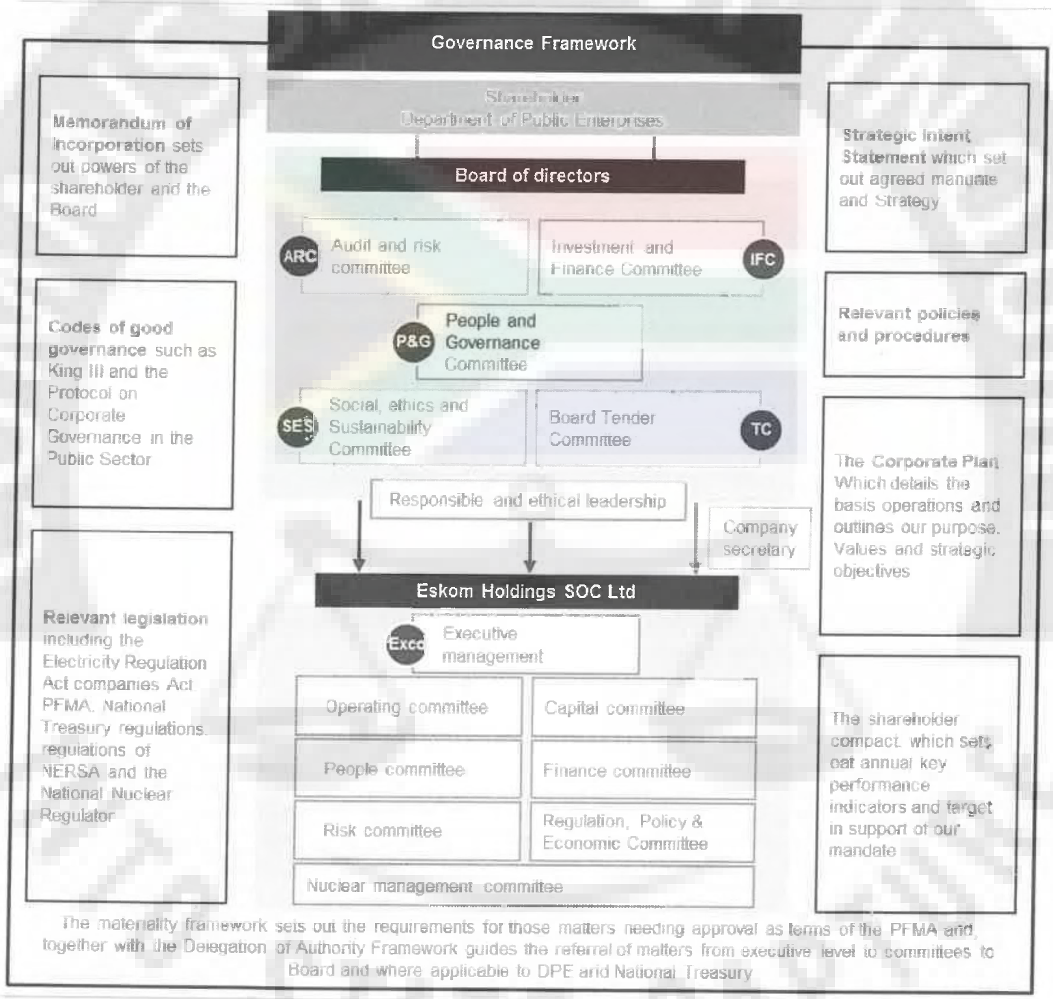
Government policy on introducing IPPs has continued, given its commitment to liberalise the market and encourage private and public sector growth. This began in the electricity sector mainly through the renewable energy IPPs being introduced, and other technologies are planned for in the near future. The DoE has taken over electricity planning from Eskom. However, to ensure long-term sustainability, Eskom has developed their own Integrated Strategic Energy Plan (ISEP).

Eskom's governance approach is focused on providing effective corporate governance that enables the Board and Exco to exercise their fiduciary duties by driving optimal and quality decision-making that considers risks and mitigation, while providing oversight over all divisions of Eskom.

In the spirit of good corporate governance, Eskom endeavours to apply the principles and practices of King III. However, a few of these principles are not applicable to Eskom as a state-owned company and, in such instances, they have been partially applied.

The governance framework, which regulates the relationship with the shareholder and guides the way Eskom does business, is set out in Exhibit 7.

**Exhibit 7: Governance Framework**




One of the essential components of the Governance Framework is the clarity of roles between the shareholder, the board and the management of Eskom, as provided by the Strategic Intent Statement and the shareholder compact with the company.

Eskom utilises the web-based Governance Assessment Instrument (GAI). The results of the assessment, based on a chapter view, are set out in Table 2.

**TABLE 2: KING III GOVERNANCE REGISTER FOR THE YEAR ENDED 31 MARCH 2016**

| Eskom Holdings SOC Ltd (2002/015527/30) | IoDSA GAI score | Applied / partially not applied |
|---|---|---|
| Chapter 1: Ethical leadership and corporate citizenship | AAA | Applied |
| Chapter 2: Boards and directors | AAA | Partially not applied |
| Chapter 3: Audit committees | AAA | Applied |
| Chapter 4: The governance of risk | AAA | Partially not applied |
| Chapter 5: The governance of information technology | AAA | Applied |
| Chapter 6: Compliance with laws, rules, codes and standards | AAA | Applied |
| Chapter 7: Internal audit | AAA | Applied |
| Chapter 8: Governing stakeholder relationships | AAA | Applied |
| Chapter 9: Integrated reporting and disclosure | AAA | Applied |
| **Overall score** | **AAA** | |

| | | | |
|---|---|---|---|
| AAA | Highest application | AA | High application |
| BB | Notable application | B | Moderate application |
| C | Application to be improved | L | Low application |

## 1.3 Overview of Board of Directors and members

The Eskom Board ensures that the utility and its subsidiaries comply with the requirements of the Companies Act the PFMA and Section 29 of the NT regulations, and any other legislation, including regulations and guidelines issued by the NT and the shareholder.

The Board is the focal point for corporate governance responsible to shareholders and stakeholders for performance and meeting of 'legitimate expectations', and to the company for survival and prosperity.

The Board of Directors is responsible for:

- Ensuring the company is and is perceived as a responsible corporate citizen (ethical, socially and environmentally responsible for sustainability).
- Promoting an ethical culture.
- Providing strategic direction for the company, aligned with the strategic intent statement, and appreciate that strategy, risk, performance and sustainability are inseparable.
- Providing oversight for the company, ensuring: risks are recognised and managed; establishment of internal controls to cover financial, operational, compliance and sustainability; the company has an effective compliance framework and effective processes; internal audit is risk-based; and integrity of financial reporting.
- Ensuring the company makes full and timely disclosure of material matters to stakeholders.

### 1.3.1 Board constitution and appointments

The shareholder appoints the Board of directors, reviewable annually at the Annual General Meeting. The Board of Directors through its People and Governance Committee assists the shareholder by identifying the necessary skills, qualifications and experience required by the board to achieve the company's objectives.

The Board of Directors identifies, evaluates and nominates potential candidates for the positions of Group Chief Executive and Chief Financial Officer. The shareholder appoints the Group Chief Executive, whereas the Chief Financial Officer is appointed by the Board of Directors provided that the shareholder approves.

### 1.3.2 Board composition

Eskom's current Board of Directors composition is set out in Exhibit 8.

**Exhibit 8: Eskom Board of Directors**

**Dr BS Ngubane**
***Chairman***

**Executive Directors**

- *Vacant*
- Mr A Singh CFO

**Independent non-executive directors**

- Mr ZW Khoza
- Ms VJ Klein
- Mr GM Leonardi
- Prof. P Naidoo
- Ms C Mabude

### 1.3.3 Board sub-committees

The board appoints members to its various committees, with due consideration of the necessary skills and experience required by members of the different committees. The effectiveness of the board is enhanced through the use of five board committees to which it delegates authority without diluting its own accountability (Table 3). Each board committee is chaired by an independent non-executive director and consists of a majority of independent non-executive directors, who exercise their authority in accordance with board-approved terms of reference which define their composition, role, responsibilities and scope of authority. These terms of reference are reviewed annually to ensure applicability and alignment with legislative prescripts, the Delegation of Authority Framework and governance best practice.

**TABLE 3: BOARD SUB-COMMITTEES**

| Sub-committee | Members | Purpose |
|---|---|---|
| **Audit and Risk Committee** | G Leonardi<br>C Mabude<br>VJ Klein<br>P Naidoo | Oversight of financial reporting and disclosure, internal control systems, the risk management system and internal and external audit functions |
| **Board Tender Committee** | **ZW Khoza**<br>C Mabude<br>P Naidoo | Ensuring that the procurement system is equitable, transparent, competitive and cost effective commercial decision-makings |
| **Investment and Finance Committee** | **C Mabude**<br>ZW Khoza<br>VJ Klein<br>P Naidoo | investment and financial decision-makings |
| **People and Governance Committee** | **VJ Klein**<br>G Leonardi<br>C Mabude<br>BS Ngubane<br>ZW Khoza | Nomination and remuneration of directors and senior executives, human resources strategies and policies; custodian of corporate governance |
| **Social, Ethics and Sustainability Committee** | **P Naidoo**<br>ZW Khoza<br>VJ Klein<br>G Leonardi | Oversight of Eskom's social and economic development role, good corporate citizenship, environment, health and public safety programmes |

### 1.3.4 Company Secretary

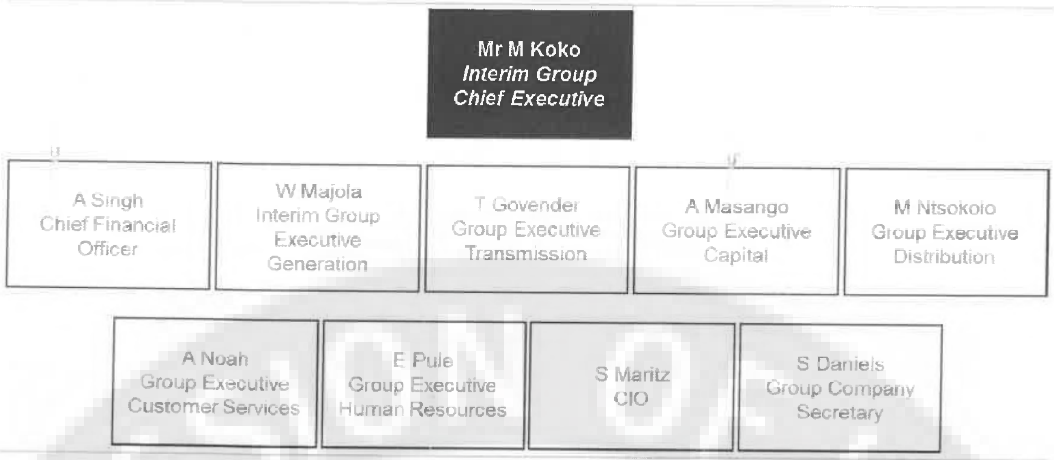
The Group Company Secretary plays a central role in the governance and administration of a company's affairs and is key to the effective functioning of the board and the smooth running of the company, providing impartial advice and support to the directors. The Group Company Secretary's role also involves providing the board with guidance and advice on ethics, and this in turn promotes integrity and accountability within the company. The Group Company Secretary is required to implement a compliance framework, in accordance with relevant legislation, and to ensure that the board is made aware of its compliance requirements

## 1.4 Group Exco structure and committees

Exco is established by the Group Chief Executive and assists him in providing overall direction to the business and exercising executive control in managing day-to-day operations. It comprises Group Executives who are appointed by the board and are full-time employees of Eskom, subject to Eskom's conditions of service.

Exhibit 9 names Eskom's current Group Executives and sets out the positions they hold.

**Exhibit 9: Eskom Exco Composition**




In order to drive effective governance at Exco level, Eskom focuses on the following elements:

- Exco members with clear individual accountability and deliverables through streamlined structure and clearly defined targets
- Clear consequence management where delivery is not achieved against individual targets
- Streamlined committees focusing on critical decisions; these committees meet with a relevant fact base and sufficient preparation to support rapid decision-making
- Decision-making authority allocated to individuals with support from relevant committees
- Decentralised operating model to improve speed and autonomy

To support the Exco structure, seven committees have been created with the mandates described in Table 4 below:

**TABLE 4: EXCO SUB-COMMITTEES**

| Sub-committee | Chairperson | Purpose |
|---|---|---|
| Operating committee | GE Generation | • Key operational decisions in Generation, Transmission and Distribution.<br>• New Build operational decisions<br>• Risk evaluation and mitigation approach to technical and operational health performance |
| Capital Committee | Chief Financial Officer (CFO) | • Investment decisions to support Eskom strategy<br>• Commercial process decisions<br>• Impact of decisions on the funding plan, equity, key financial and investment ratios |
| People Committee | GE HR | • HR issues, processes, procedures and decisions<br>• Talent management and staffing issues<br>• Strategic workforce planning |
| Finance Committee | CFO | • Decisions on financial strategy and budget<br>• Business and Treasury integration<br>• Monitoring funding pipeline, cash-flow position and financial risk management |

| Sub-committee | Chairperson | Purpose |
|---|---|---|
| Risk Committee | GE Risk & Sustainability | • Consolidation and monitoring of overall business risks and processes<br>• Operational risk monitoring within compliance guidelines<br>• Safety, health and environmental compliance<br>• Reputational risk management |
| Regulation, Policy & Economic Committee | CFO | • Review of the impact of regulatory and economic policies and the development of response strategies<br>• Eskom regulated licenses<br>• Long-term energy policy<br>• Tariff outlook and regulatory Strategy<br>• Approach to environmental policies<br>• Eskom's economic impact |
| Nuclear Management Committee | GCE | • Management of Eskom's nuclear objectives (existing and New Build)<br>• Licensing and interfacing with regulatory bodies<br>• Risk management for nuclear operations |

## 1.5 Results management office (RMO)

**"Strengthening execution approach for DTC strategy"**

FY2016/17 was the first year of implementation of the Design to Cost strategy. During this financial year, Eskom made significant strides its financial turnaround. Among other notable success factors were a significant saving in Primary Energy cost against budget; other opex cost containment efforts yielding a saving against budget of 23.28% for FY2016/17 versus a 1.07% savings for 2016; and export sales achieved performance of 47.9% above budget for the FY2016/17.

The success stated above was by and large driven through a very focused delivery approach. This approach entailed the establishment of Delivery streams, which provided oversight of the implementation of DTC I initiatives as well as the establishment of a Results Management Office (RMO).

The purpose of the Delivery streams is to strengthen the oversight on execution of strategic initiatives. The Delivery streams are chaired by Group Executives in order to ensure that each key initiatives have adequate executive sponsorship and decisions needed to gain traction are not delayed.

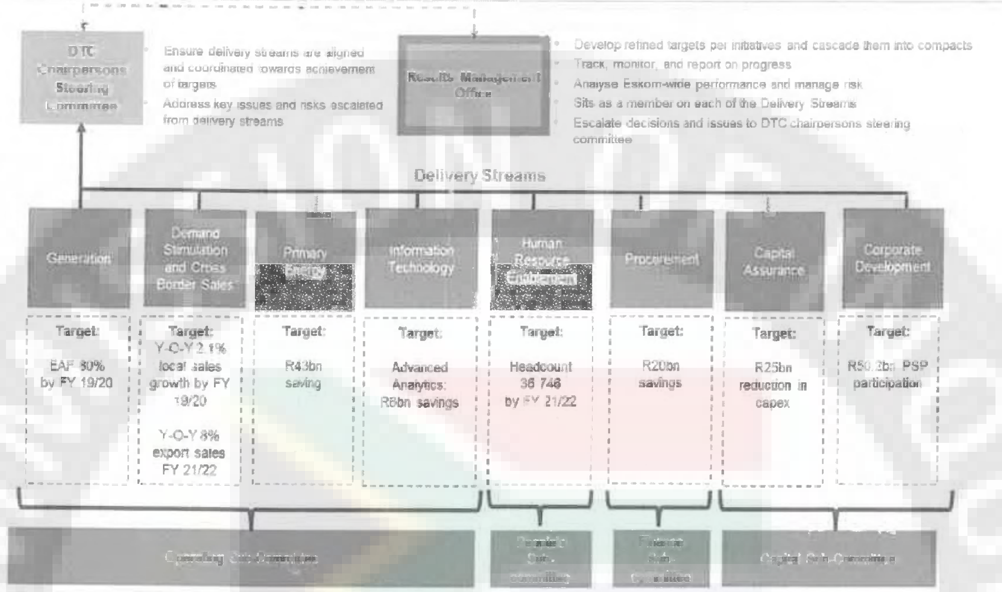
The RMO was established to coordinate, monitor and drive the execution of strategic initiatives across the business. The RMO uses a multi-divisional senior management committee to track performance of the identified initiatives. The committee also serves as platform to highlight key performance issues across the business, identify interventions and follow through on corrective actions. The RMO also provides transparency on performance issues through submissions to ExCo on performance of delivery streams as well as progress made on strategic initiatives.

Having set a platform in FY2016/17, Eskom will continue to drive a strong execution approach to deliver on Corporate Plan commitments. Eskom is cognisant of the fact that the FY2017/18 Corporate Plan carries a higher implementation risk due to the aspirational targets built into it, however, the experience gained from prior year's performance has proven that the organization can be successful when great plans are supported by strong execution, hands-on leadership, dynamic monitoring as well as timely risk identification and mitigation.

The FY2017/18 Corporate Plan five-year plan is built around seven strategic pillars, namely (1) Customer centricity; (2) Reliability and increase in capacity; (3) Cost efficiency; (4) New capabilities; (5) SA decarbonisation; (6) Innovation and transformation and (7) Funding. These strategic pillars will support Eskom in achieving sustainability in its current business, set up the Eskom of the future, while ensuring that the funding strategy supports both objectives with financial prudence.

In order to provide adequate oversight and strengthen execution, each of the strategic initiatives derived from FY2017/18 Corporate Plan will be mapped into delivery streams (Exhibit 10), each delivery stream will provide a monthly report on the programme of initiatives into the DTC Chairpersons Steering committee as well as the relevant ExCo sub-committee.

**Exhibit 10 Delivery Streams**




Operating divisions are required to develop detailed implementation plans with detailed milestones and clear timelines using a "Specific, measurable, action-oriented, relevant and time-bound" (SMART) principle to enable effective monitoring. Risks associated with each initiative need to be identified and closely monitored together with mitigation actions. All divisional implementation plans will be finalized and signed off by Group Executives prior to the beginning of FY2017/18.

Eskom will continue to use the Implementation Levels (IL) methodology in order to standardize the planning and tracking of initiatives. The ILs range from 1 - Identified through to 5 - Delivered. Each IL requires a pre-determined, standard set of deliverables to be met and approved before being able to proceed to the next IL.

For reference, a summary of each IL is described below:

- **IL 1 – Identified (Concept)**: Initiatives in terms of drivers of impact, risks, and benefits are clearly articulated, initial estimates of potential impact are quantified, important pre-requisites are in place, and resources for further detailed work are assigned.
- **IL 2 – Confirmed (Definition)**: Detailed impact has been calculated, IL milestone dates are defined, implications from key stakeholders incorporated and feasibility has been confirmed, and there is explicit approval from the governing authority and the OPCO.
- **IL 3 – Ready to Implement (Planning)**: A detailed implementation plan can be provided, milestones dates are final, quotes have been received from suppliers, any approvals for design changes have been secured, and quantified impact values are final.
- **IL 4 – Implemented (Execution)**: All activities on the implementation plan have been completed, contracts are in place, design changes are implemented, and enabling systems (like changes to performance management) are operational.

- **IL 5 – Delivered (Completion)**: Quantified impact from the final IL3 plans has flowed through to the bottom line and can be validated by Eskom Finance in the accounting, commercial or management information systems.

These implementation plans will form the basis upon which Group Executives (GEs) are compacted for performance management purposes. In addition, GEs are required to identify initiative owners and ensure that the delivery of strategic initiatives are cascaded into their performance compacts with the correct weighting assigned to each initiative / KPI. This will drive a stronger link between strategic objectives and individuals' performance and reward.

The following principles of reward will be detailed and proposed to ExCo to allow for greater accountability and recognition of performance:

- Alignment of performance expectations across the Shareholder compact, Corporate Plan and GE compacting framework
- Compacting against the division delivery implementation plan for all executives. Performance against implantation plans will form the basis of the performance contracts and associated rewards;
- Achieving target will result in no additional rewards, however exceeding target will result in a multiplier bonus for the executive,
- Short term annual cash incentive will reward achievement of annual operational excellence and Long term incentive will reward long term sustainability – a balanced approach will have to be put in place to ensure that both short and long term are incentivised adequately;
- The entire process will be underpinned by comprehensive governance framework in line with Eskom compliance standards

The detailed implementation plans from the operating divisions will also serve as a basis of developing a detailed value map which will assist in

- Providing clarity between the strategic initiatives/levers and the strategic objective
- Prioritising initiatives so that initiatives with high impact receive optimum attention
- Creating visual connection for initiative owners to understand to appreciate the impact of their initiatives in achieving the strategic objectives set for the organisation.

An RMO dashboard is in development and will be in place at the beginning of FY2017/18. The aim of the dashboard is to provide central performance reporting platform for all strategic initiatives and the KPI's linked to those initiatives. This will serve as a tool to further drive performance dialog between the executives accountable and initiative owners responsible. The RMO will work closely with the Enterprise Risk and Resilience department as well as Divisional Risk Management to ensure that Key Risk Indicators associated with KPIs will also be tracked though the risk management information system to strengthen the robustness of performance risk management.

In order for Eskom to realize its aspirations, the organization will have to be single-mindedly focused on delivery. To reinforce this single-mindedness and accountability, there needs to be a continuous pursuit of strengthening the alignment between the Shareholder expectations, key stakeholders and the strategic direction of Eskom. Internally, Eskom will also be reviewing areas in which it can strengthen performance management to drive optimal delivery of DTC.

To shift into a strong execution culture, a robust implementation approach supported by strong oversight and clear ongoing communication will be a major determinant for our success or failure.

## 1.6 Ethics

Eskom's board is accountable for the management of ethics within the organisation. To this end, the board approved the Code of Ethics that was last reviewed in 2014. The Code is underpinned by the six core values set out above, that reflect the organisation's commitment to the highest ethical standards and principles in all its business activities. The values are intended to promote an ethical culture and explicitly inform the company's practices, policies, procedures and conduct in all areas of the business, including HR, procurement, and health, safety and the environment.

The operational responsibilities for the management of ethics lie with Executive Management. The Ethics Office provides assistance in this regard. The Ethics Office assists the Group Chief Executive in setting the framework, rules, standards and boundaries for ethical behaviour in the organisation. In addition, the Ethics Management Programme has been established to manage ethics effectively.

The Code of Ethics is supplemented by the Conflict of Interest policy and procedures. The policy and the procedures deal with specific issues including conflicts of interest, receiving and offering of gifts and supplier relations. The Conflict of Interest policy sets out the obligations of employees and directors with regard to conflicts of interest and the declaration and management of such interests.

The implementation of Eskom's ethics policies and programmes is consistently monitored. Reporting of ethical behaviour within the organisation takes place at different levels and involves various role players including Group and Divisional Executives, the Ethics Office, the Exco, and the Board and its committees.

Eskom is also a signatory to the UN Global Compact, which includes an anti-corruption clause, as well as the World Economic Forum's Partnership against Corruption Initiative. To this end, Eskom has put in place fraud-prevention and whistle-blowing policies. The fraud-prevention policy sets out Eskom's zero-tolerance approach towards fraud, corruption, economic crime, and other activities involving dishonesty. The whistle-blowing policy, on the other hand, sets out principles in terms of which all employees may report information regarding unlawful or irregular conduct by other employees in the organisation, including crimes and irregularities in the workplace, in good faith and in a proper manner.

Eskom has established a system that employees and other stakeholders may use to report unethical behaviour, crime and irregularities. The system is managed by an independent service provider to ensure the integrity and confidentiality of the reports. An internal process has been established to deal with these reports.

# 2 Market and demand outlook

## 2.1 Overview of market trends

Seven main market and demand trends have re-shaped the global energy sector landscape dramatically. While their implications for South Africa and Eskom are uncertain, it is clear that Eskom will need to prepare to operate in a world in which traditional utilities business models will come under pressure, and in which Eskom will need to innovate its business model and take innovative steps to meet customer needs.

Eskom has the benefit of hindsight in understanding the potential implications of these trends as they start to affect the South African electricity market. If acted upon, they provide exciting opportunities for Eskom.

## 2.2 Market trends

As part of its strategy design process, Eskom must consider trends in the broader power industry. Globally, the last five years have been challenging for traditional power utilities, which have suffered significant declines in market share and profitability. The main reasons for this are described below.

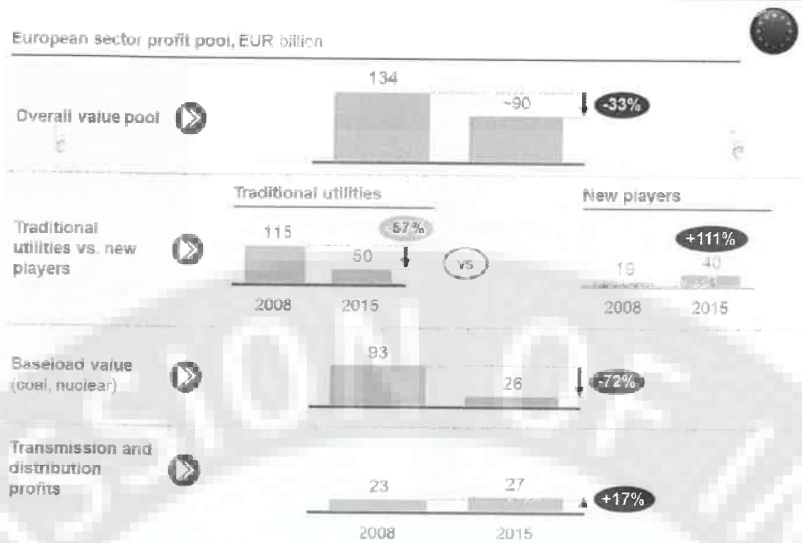
**A challenging macroeconomic landscape with pockets of real opportunity**. Global economic growth has slowed to approximately 2.6% a year and the outlook for the next five years is for continued low growth of 3.4% a year. The South African economy is growing approximately 1% a year (2016), and this has had an impact on the ability of Eskom's customers to maintain their electricity consumption. Economic growth in the SADC has been affected by regional challenges and droughts. The South African and regional macroeconomic situation suggests that there is large latent and unserved electricity demand in the region for Eskom.

**Continued volatility in commodities with signs of improvement in a few commodities**. Since the end of the commodity super-cycle in 2008, most major commodities have experienced significant price declines, e.g. the price of iron ore has dropped 60%. In addition, commodity price volatility has increased significantly, increasing the risks involved in capital and growth decisions for metals and mining players. As a result South African metals and mining players have reduced production in a number of sectors, such as gold, platinum and ferrochrome, with energy-intensive consumers have slowed their production and consumption by 1.7% a year over the past five years. Nevertheless, with a few commodities experiencing improved prices over the last year, e.g. aluminium where prices increased 20%, opportunities to collaborate with the mining sector to capitalise on the current upcycle exist.

**Customer experience and satisfaction are moving to centre stage.** With increased competition from renewables, greater customer choice, and new technology changing consumption patterns, utilities increasingly need to understand the customer journey and preferences better. Traditionally, this has not been a capability required in the sector, but utilities around the world now need to develop it.

Rapidly changing dynamics in the global power sector energy mix are creating an unfavourable environment for traditional fossil fuel utilities, who face an increasing number **of independent renewable power producers and cost-competitive renewable energy sources**. In Europe, the power sector profit pool declined by 30% as cheaper renewables gained share, reducing the profits of traditional utilities by 70% (Exhibit 11). In addition, industry profitability has moved away from generation to the grid business, i.e. transmission and distribution. Europe's five largest traditional integrated power companies collectively lost EUR 100bn in market capitalisation between 2008 and 2013 and faced rating downgrades, while these companies sought to shift their business models in response to a growing share of large-scale renewables and small scale distributed generation has increased.

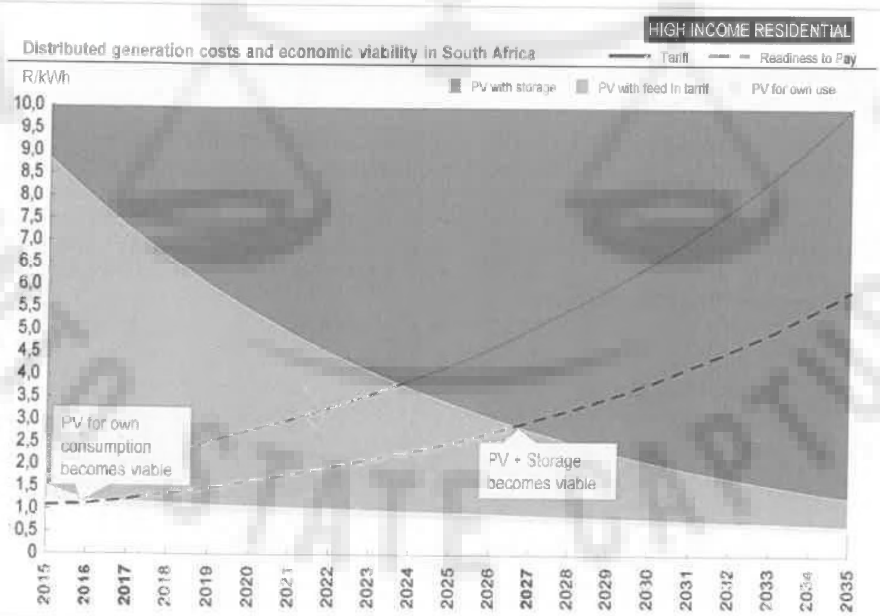
**Exhibit 11: European Sector Profit Pool Evolution from 2008 to 2015**




**Discontinuities in technology create opportunities and threats.** Multiple new technologies will disrupt the electricity value chain. The cost of energy storage is expected to decline by approximately 20% over the next four years as investment in this technology grows rapidly. When it becomes viable, energy storage has the potential to increase the competitiveness of renewables even more and change customers' consumption behaviour. This continued growth will be enhanced by the entry of innovative companies such as Tesla and Mercedes Benz into the storage space, creating new business opportunities in the sector.

In South Africa the penetration of small-scale generation has already increased considerably as the cost of rooftop solar PV panels continues to decline. The potential to increase distributed generation is close to a tipping point (Exhibit 12), creating new opportunities for Eskom to play a role in the shifting energy landscape.

**Exhibit 12: Distributed Generation Economic Viability**



**Digital enablement, process automation and big data-driven decisions**. Data and analytics are a new source of value creation and competitive advantage. Globally, across all sectors, leading companies are building deep capabilities in data science and analytics to achieve the next efficiency horizon. Power utilities are no exception and there are already multiple use-cases in predictive maintenance and field force effectiveness.

**Regionalisation and greater local collaboration**. Regional power pools are well developed in the EU, e.g. Eni, Electricité de France (EDF), E.ON and Energias de Portugal operate in different power pools. These pools contribute to baseload capacity requirements, increase the security of supply and provide cost efficiencies. Regionalisation is also starting to develop and grow in Southeast Asia, East and West Africa, the Baltic areas and Latin America.

A regional development focus, strong policy support and supporting regulatory trading environments are required to develop such power pools. In addition to government investment in interconnectors, there has been a marked increase in public and private investment in support of them.

Eskom is the sole transmission licensee in South Africa and is therefore responsible for developing and maintaining the country's transmission and distribution infrastructure, South Africa's interconnectors within the region. Eskom plays a key role in the Southern African Power Pool and expects to collaborate with the group further in the future.

## 2.3 Demand outlook

Demand is declining in developed economies (-1.4% a year since 2010). Because of regulatory pressure and investment in efficiency programmes, demand for electricity in the European Union (EU) (-1.5% a year since 2010, expected to grow at 1.1% a year to 2020) and the USA (0% since 2010, expected to grow at 1.1% a year to 2020) shows low to no growth. In the long term it is anticipated that the EU 2050 strategy to drive down carbon emissions by 80-95% will have further implications for technology choices and increase overall power consumption.

Electricity consumption in sub-Saharan Africa is expected to rise to 1600 TWh by 2040 (four times the 2010 level) driven primarily by a five-fold increase in GDP, doubling of the population and growing urbanisation. Currently, the average access to electricity in sub-Saharan Africa is 20%; only seven countries (Cameroon, Côte d'Ivoire, Gabon, Ghana, Namibia, Senegal, South Africa) have electricity access rates exceeding 50%. This is much lower than in North Africa, where electrification rates are over 98%. To meet growing demand, electrification rates in sub-Saharan Africa are expected to reach 70% by 2040.

In South Africa, power consumption has declined on average by 0.5% a year since 2006. The decline was highest in large power users (approximately 1.7% a year over the last 10 years) because of a wide range of factors including economic slow-down, commodity market volatility, increasing electricity costs and lack of supply security.

In a context where Eskom is in a position to meet the demands of the country with excess supply and take an active role in catalysing industrial growth, this corporate plan targets higher demand growth rates than in previous years. The draft IRP 2017 is based on electricity demand growth rates of about 2% a year, while the FY2016/17 Eskom corporate plan had forecast growth of 1% a year. This Plan targets sales growth of 2.3% CAGR, across local and cross-border sales (Exhibit 13). Eskom aims to achieve this target by conducting specific initiatives in each customer segment as outlined in the Strategy and Customer Services chapters.

**Exhibit 13: Forecast Annual Sales Growth, FY16/17 - FY21/22**

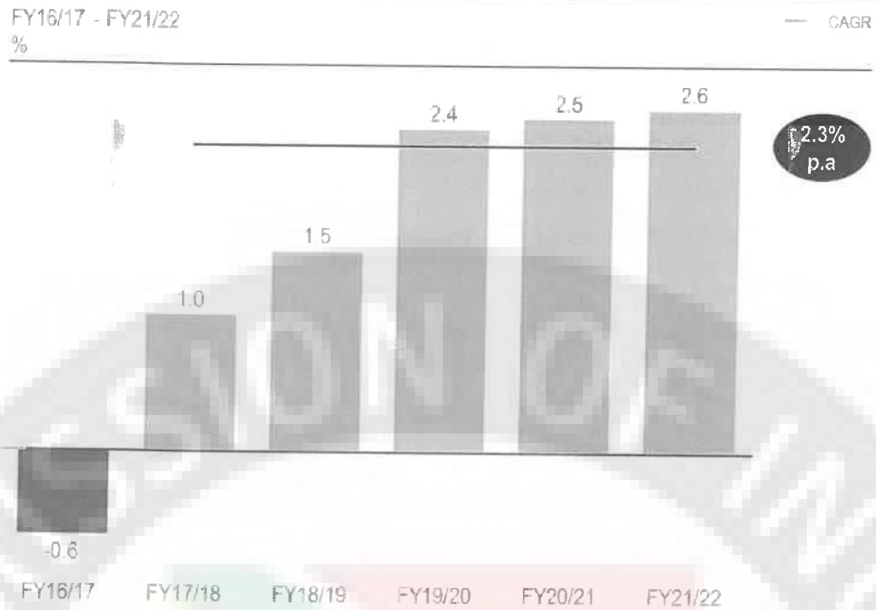
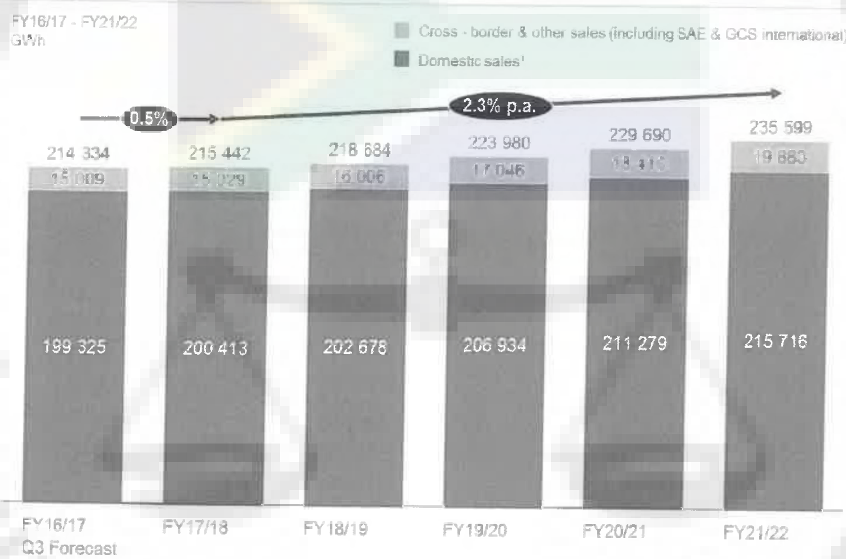



**Exhibit 14: Projection of Sales by Customer Category**




1 Excluding internal sales

## 2.4 Implications for Eskom

These market and demand trends have re-shaped the global energy sector landscape dramatically. While their implications for South Africa and Eskom are uncertain, it is clear that Eskom will need to prepare to operate in a world in which:

- **Utilisation of comparable fossil fleets is lower.** In the EU and USA, changes in utilisation have required a new model that provides energy security while supporting renewables. The UK is a case in point. Geographically isolated, it has introduced capacity markets to ensure security of supply from traditional sources while driving growth in renewables.

- **The importance of regulated grid assets** (transmission and distribution) **increases significantly**. In Europe, the profitability of the grid assets of traditional utilities has remained stable in comparison to that of generation assets.
- **The importance of the customer and customer interactions increases.** Customer choice grows toward other, 'cleaner' power generators or their own solar PV production. Some traditional utilities have rebranded themselves as a first step on a more customer-centric journey.
- **Utilities use more digital and other new technologies** to identify new revenue sources, e.g. battery storage, to achieve the next horizon in sustainable operational efficiency and improve customer experience.
- **The focus on non-regulated activities and services increases** as companies serve their clients' full energy needs or enter alternative adjacent industries/markets.
- **Eskom will need a focused strategy** to catalyse South African growth, open up power demand, and accelerate industrial projects that were cancelled or deferred during periods of load shedding. Eskom will accelerate the development of its customer-centric strategy and implement demand stimulation initiatives by customer segment, as outlined in the Strategy and Customer Services chapters.

Eskom has the benefit of hindsight in understanding the potential implications of these trends as they start to affect the South African electricity market. They offer exciting opportunities but, if Eskom fails to act on them, it will be subject to even greater financial and operational pressure. This Plan outlines how Eskom intends to prepare to capture these opportunities.

# 3 Strategy

## 3.1 Overview

Eskom's DTC 1 strategy has delivered a turn-around for the business, with significant efficiencies. Over the course of this new corporate plan, Eskom has developed a DTC 2 strategy by which it aims to maintain moderate tariff increases and catalyse South Africa's development, while achieving a stand-alone investment-grade credit rating. Eskom will achieve these objectives by driving a number of strategic objectives across seven pillars. The initiatives supporting these pillars are aligned to the shareholder objectives and shareholder compact.

## 3.2 Global trends in the power industry

As part of its strategy-design process, Eskom must consider trends in the broader power industry:

- A challenging macroeconomic landscape with pockets of real opportunity
- Continued volatility in commodities with signs of improvement in a few commodities
- Pressure on sources and cost of funding
- Rapidly changing dynamics in the global power sector energy mix that are creating a challenging environment for traditional coal fossil fuels
- Customer experience and satisfaction moving to the centre stage
- Discontinuities in technology
- Data an analytics as a new source of value creation and competitive advantage

This Corporate Plan marks the start of Eskom's journey to prepare for these trends by reviewing and refining the DTC 1 strategy.

## 3.3 Statement shareholder's strategic intent

As a state-owned entity, Eskom must implement government policy and strategy. The shareholder's Strategic Intent Statement (SIS) lays out Eskom's short-to-medium-term and long-term objectives to:

- Achieve and ensure a secure and reliable electricity supply
- Achieve and ensure business and financial sustainability
- Reduce Eskom's carbon footprint
- Implement cost-containment measures
- Adhere to operating licences and other legislative requirements
- Ensure that the company structure is responsive to the changing energy landscape
- Support and align with the Government's strategic initiatives
- Conduct reporting at divisional levels (Generation, Transmission and Distribution) as of 1 April 2017, in line with regulatory methodology

In addition, the shareholder has provided guidance to Eskom on a number of long-term objectives that the Plan takes steps to address:

- Develop a clear role for Eskom in the South African power sector by developing long-term capacity, e.g. renewables, nuclear, gas and coal

- Consider Eskom's role of single buyer in the light of increasing market liberalisation and the introduction of IPPs
- Given the growth of the green economy and the potential impact of carbon taxes on the electricity price, consider opportunities to shift away from dependence on coal and diversify the primary-energy mix for power generation
- Account for the accelerated use of new technologies and innovation in a mature and stable industry
- Explore regional-integration opportunities, focusing on finding synergies within the SADC region
- Improve business, environmental and social sustainability
- Align with global protocols as well as regional and national agendas such as the National Development Plan, the Integrated Resource Plan and the Integrated Energy Plan

These objectives are examined in detail in the following chapters: Market and Demand Outlook, Primary Energy, Group Commercial, Sustainability, Research, Testing and Development.

## 3.4 Eskom's strategy

In FY2015/16 Eskom launched a four-stage turnaround plan (DTC 1) that has delivered a transformation for the business. For this corporate plan, Eskom has developed a DTC 2 strategy with the objective to maintain moderate tariff increases, catalyse South Africa's development, while achieving a stand-alone investment-grade credit rating. This strategy is based on the strategic objectives from the SIS (Exhibit 15), and defined across seven pillars (Exhibit 16).

**Exhibit 15: Seven Strategic Pillars Mapped to Shareholder Strategic Intent and Objectives**

| Strategic intent and objectives 2017/18-2018/20 | 7 Strategic pillars |
|---|---|
| • Ensure that company structure is responsive to changing energy landscape<br>• Consolidate socio-economic contribution to ensure alignment to national transformation imperatives to unlock growth, drive industrialization and create employment | 1 Customer centricity |
| • Provide reliable and predictable electricity in line with the approvals and line with the approvals and the regulatory model by the national energy regulator | 2 Reliability and increase in capacity |
| • Ensure and maintain a financially viable and sustainable company<br>• Adhere to operating licenses and other legislative requirements | 3 Cost efficiencies |
| • Ensure that company structure is responsive to changing energy landscape<br>• Consolidate socio-economic contribution to ensure alignment to national transformation imperatives to unlock growth, drive industrialization and create employment | 4 New capabilities |
| • Reduce the impact on the environment through identifying, implementing or supporting internal and external options for low carbon emitting generation and transportation and opportunities<br>• Provide reliable and predictable electricity in line with the approvals and line with the approvals and the regulatory model by the national energy regulator | 5 SA Decarbonisation |
| • Consolidate socio-economic contribution to ensure alignment to national transformation imperatives to unlock growth, drive industrialization and create employment and skills development<br>• Consolidate socio-economic contribution to ensure alignment to national transformation imperatives to unlock growth, drive industrialization and create employment | 6 Innovation and transformation |
| • Ensure that company structure is responsive to changing energy landscape<br>• Ensure and maintain a financially viable and sustainable company<br>• Adhere to operating licenses and other legislative requirements<br>• Ensure reporting in line with Regulatory methodology at divisional level (Generation, Transmission and Distribution) as of 1st April 2017 | 7 Funding and enablers |

**Exhibit 16: Seven Areas of Eskom's Strategy**

| 1 Customer centricity | 2 Reliability and increase in capacity | 3 Cost efficiencies | 4 New Capabilities | 5 SA Decarbonisation | 6 Innovation and transformation |
|---|---|---|---|---|---|
| • **Stimulate SA demand growth to 2% by 2022**<br>• **Grow export sales by 8%**<br>• Improve customer satisfaction | • EAF to 80%<br>• 8.7 GW new capacity over the corporate plan<br>• 2 095 km new transmission lines | • **PED cost reduction of**<br>• Headcount reduction of ~7000<br>• **Reduce the capital budget** | • Transform into a digital utility with world leading Data Analytics capability<br>• **Delivery of savings due to Advanced Analytics opportunities** | • Set up for nuclear build programme<br>• Commit to COP21 targets<br>• Support Renewable IPP growth to bid window 4.5 below 77c/kWh | • Develop new energy storage business<br>• Drive radical transformation of the mining industry<br>• Ensure universal access |

← Sustain the existing business → ← Establish the Eskom of Tomorrow →

**7 Funding and three enablers**

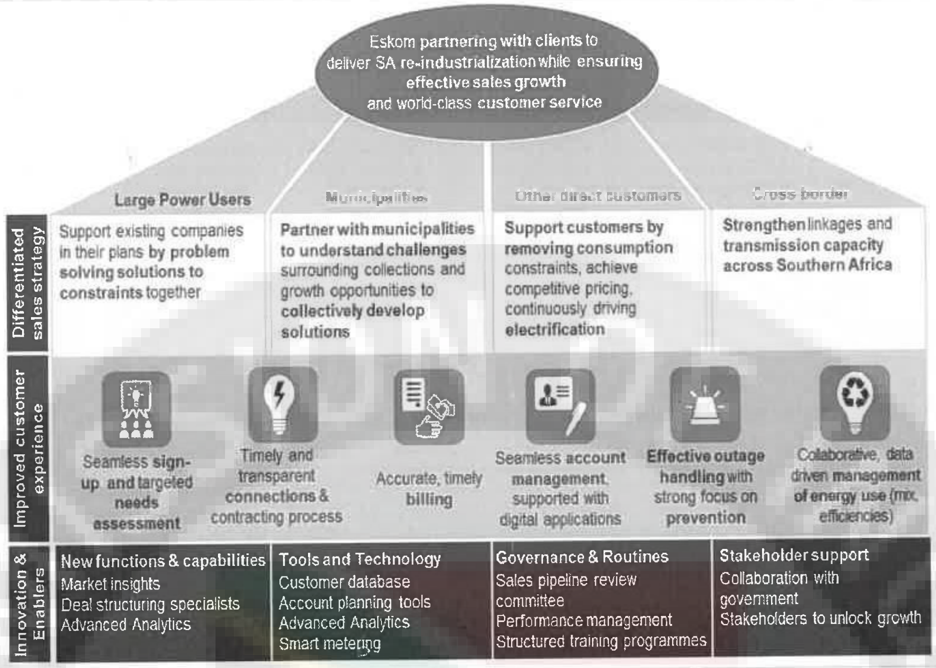
- **Funding plan to reduce reliance on the fiscus**
- **Rigorous implementation and monitoring** – L1-5 tracking methodology; **risk mitigation actions; clear KPIs**
- **Structures to support DTC 2 objectives** - **biweekly SteerCos; clear KPIs; Analytics Centre of Excellence**
- **Tariff risk mitigation** – **Development of a "Delta" management plan**

### 3.4.1 Become a customer-centric organisation that stimulates demand

**Become a customer-centric organisation that stimulates demand.** Eskom will partner with customers to lead South Africa's economic recovery while ensuring sales growth of approximately 2% a year. Achieving this aim will require Eskom to become a more customer-centric organisation, acting as a service provider and enabler to its customers' needs. Eskom will focus demand stimulation on sectors that are critical to the economy and aligned with Government's National Development Plan (e.g., gold, platinum, aluminium and ferrochrome). In addition, Eskom will aim to increase export sales by 5TWh over the five year period to expand its economic impact to the region. Group Customer Services will reach the targets with a strong customer service strategy to improve customer satisfaction supported by greater digitisation of customer journeys along key interaction points (Exhibit 17)

- **Supporting energy-intensive users** and the Government to drive new projects and increase consumption for existing plants/projects. Eskom will develop sector-specific strategies for high-growth sectors that are in alignment with the National Development Plan, such as gold, platinum and aluminium.
- **Partnering with municipalities** to drive growth from low-debt, high-growth industrial areas, improve collections services and anticipate defaults
- **Delivering electrification** for residential customers over the next five years and removing consumption constraints for other direct customers
- **Stimulating cross-border electricity sales** and while strengthening transmission capacity within the South African Power Pool (SAPP)
- **Radically improving customer experience** across the 6 key touch points in a customer's journey with tailored initiatives per segment, detailed further in the Customer Services and Distribution chapters.

**Exhibit 17: Eskom Customer Centricity Approach and Strategies**




To deliver against this vision, Eskom will put in place a suite of enablers including new capabilities (e.g., market insights, deal structuring and advanced analytics capabilities), tools and technology (e.g. digital customer account management and tracking tools, smart metering, etc.), reviewed sales and service routines, and proactive stakeholder engagement in South Africa and SAPP.

### 3.4.2 Ensure reliability and availability of power capacity to support South Africa's economic growth ambitions

Eskom will continue to drive operational excellence and reliability efforts across its fleet and network through a combination of effective maintenance, performance improvements and management, as well as the application of new technologies, e.g. advanced analytics. In addition, the New Build programme will remain a core focus area and efforts will continue to complete Medupi and Kusile within the P80 schedule and P50 costs.

Eskom aims to add 8.7 GW capacity in **generation**, establish a 2 095 km transmission network and drive toward universal access with 1 million new connections by FY2021/22.

In support of these objectives some of the key divisional strategies include:

- **Generation**: Reach 80% EAF through strict maintenance, increased power station manager accountability and targeted power station recovery plan ; maintain a strict maintenance budget (planned and unplanned) of 11.5 GW in summer and 8.5 GW in winter; via Tetris, a flexible outage-schedule optimisation tool, and advanced analytics
- **Transmission**: maintain system performance for SM<1 at 3.53 and limit major incidents to a maximum of two by executing prioritised maintenance and refurbishments; renew assets and strengthen the network to attain N-1 compliance; strengthen transmission infrastructure in SAPP
- **Distribution** will ensure operational excellence and reliability by limiting energy losses e.g., through advanced analytics, investing in protected networks to limit network access, and electrifying one million households and working to expedite the Government's Universal Access Programme (UAP) and investing in the network to help stimulate demand.

### 3.4.3 Continue efficiencies in operating and capital costs to help achieve a sustainable tariff path for the economy

The FY2017/18 Corporate Plan builds on the progress made in FY2016/17 to deliver approximately R53 billion in opex savings across the business. This includes reducing PED coal spend by R43 billion compared to the FY2016/17 Corporate Plan. The business will also target further reductions in headcount and employee benefit costs, supported by a comprehensive independent review of Eskom's operating model that will be completed in FY2017/18. Eskom's capital portfolio has been reduced from R348 billion in FY2016/17 to R314.6 billion for the current five-year planning cycle in support of Eskom's intent to deliver investment grade ratios.

Eskom will do this by:

- Using advanced analytics and digitisation to reduce maintenance opex and improve efficiency
- Lowering coal-cost escalation to approximately 7% a year by increasing the supply of coal from the cheapest cost-plus sources and engaging with other contract suppliers to secure the best prices
- Driving commercial savings across all external spend areas
- Reducing bad debt by working with indebted municipalities to improve collections, providing support to deliver a sustainable long-term solution and rolling out smart meters for residential customers
- Reducing Eskom company headcount from 41 383 in FY2017/18 to 36 746 in FY2021/22
- Reducing capital spend and participating in public sector partnerships
- Decommissioning of two power stations due to the excess capacity situation that Eskom is expected to experience in the next five years. Eskom will drive this decommissioning in a way that optimises coal, people and capital costs across the fleet, and minimises negative environmental and socio-economic impacts. Eskom will also continue to improve recovery of revenue from non-paying customers through effective stakeholder engagement.

### 3.4.4 Develop new capabilities to deliver on targets

Data and analytics capabilities have taken big strides forward. The volume of available data has grown exponentially and the costs of computational power and storage have decreased steadily. Eskom will take advantage of these trends to drive innovation and efficiency.

Eskom's data are a valuable corporate asset. Eskom has collected a large volume of data from plant operations, sensors, customer information and previous BI initiatives, and aims to extract even more value from its data and analytics.

Using advanced analytics, Eskom has already made improvements in several parts of the business, including the Majuba coal mills. Over the next five years, it will strengthen its internal capabilities and deliver savings from further advanced-analytics applications, including:

- Rolling out predictive maintenance in Generation, Transmission and Distribution
- Rolling out field-force effectiveness, smart grids and electrification
- Identifying and addressing further non-technical loss reductions
- Identifying further savings from fraud and error detection
- Improving customer journeys

Eskom aims to lead the country and global utilities in the area of advanced analytics and offer its capabilities to other organisations.

### 3.4.5 Decarbonisation of the economy

South Africa and other countries around the globe are in the process of signing up to COP 21 targets to reduce carbon emissions. Eskom aims to play an important role in this effort by supporting the Department of Energy (DoE) in connecting all economical renewables as part of the REIPPPP up to Bid Window 4.5. In addition, Eskom will continue to play a role in developing the country's next phase of nuclear capacity in line with the DoE's IRP once it is finalised.

### 3.4.6 Innovation and transformation

Over the next five years, Eskom will lay the foundation for its long-term future by developing both regulated and non-regulated growth opportunities. It will invest in and collaborate with players in battery storage technology to improve its viability and develop a new business around this technology. It will also seek to drive transformation in adjacent industries, e.g. coal mining. Finally, EE will drive growth in new businesses and projects, e.g. rooftop solar PV panels.

Eskom has started to invest in research and development into new technologies to understand the potential benefits for the business and the economy. Examples of these include:

- Moving from a traditional coal-based utility to one that leads the way in new technologies in Africa (battery-storage business)
- Investigating how to support the decarbonisation of the economy, and assessing the potential options and trade-offs for the existing coal fleet
- Implementing new technologies and revenue sources in adjacent non-regulated areas, including delivering smart-grid technology in transmission and distribution, and driving additional EBITDA growth in Eskom Enterprises

### 3.4.7 Delivering a funding plan that unencumbers the fiscus

Eskom's funding plan will aim to unencumber the fiscus by releasing R105 billion in government guarantees by FY2019/20. In line with its efforts to achieve an investment grade credit rating, Eskom will deliver a R337 billion funding plan that reduces its exposure to government guaranteed debt. In addition, Eskom will build on its successes of FY2016/17 and scale up its implementation rigour demonstrated in a few key areas (e.g., PED and Generation) across all areas of the business.

In addition, Eskom will investigate three further strategic areas in FY2017/18:

- Eskom's role in South Africa's energy system and how will it contribute to achieving the DoE targets as set out in the latest IRP
- How Eskom can best manage its fleet as well as protect the nation's investments while embracing new players and technologies

Further changes required to Eskom's operating model to deliver its mandate.

## 3.5 Eskom Holdings risk profile

### 3.5.1 Risk approach

The risk assessment of the Corporate Plan was assessed within the following risk context:

- The **continued global decline in economic growth** driven partly by Brexit and an associated potential crisis in the banking sector
- The impact of **several severe regional droughts and impending floods** that are driving concerns around water, food security and investments
- The **increased significance of governance** that is not only informed by local government elections, but also by investment trends and policy decisions

- **New capacity investments**, both in the region and locally, that highlight the continued preference for renewable technology investments.
- The number of off-grid and distributed generation developments is significant and point to the **increased need for storage** solutions. Interest has also been shown in the **gas-based arena**.
- **Energy policy changes**, shifts around renewables and responses to the Paris Agreement on Climate Change.
- **Competitive dynamics** is another notable development, and there is increased competition locally and in the region, – particularly by players that could be potential partners

### 3.5.2 Emerging opportunities

The emerging opportunities to note include:

- Exploring water usage and potential partnerships as a revenue generating business
- Fast tracking the integrated African strategy to leverage fossil fuel and transmission-based opportunities in the region
- Investigating storage options and the opportunities these pose in both diversifying the business and retaining customers in the medium term
- Eskom recognises that storage technologies have matured enough to enable large-scale implementation within reasonable risk parameters. The business is identifying areas on the grid where battery storage can be deployed, with a view to applying these technologies at scale across its grid in the next three years.

### 3.5.3 Emerging risks

The emerging risks include:

- A lack of clarity on transmission investment as is a position is needed concerning around currency-based trade for Eskom's Africa Strategy
- Market blockages in the region from partners
- Reduced access to funding from banks

### 3.5.4 Strategic risks

The risks emerging from these global and regional trends, which were identified in the Strategy Review, include:

- **Market and competition** – the shifting shape of the load profile, the duck curve effect, and declining electricity demand are strategic risk factors
- **Regional market pressure** - Opportunities to sell excess capacity into the region may decrease.
- **Policy and regulation** - Misalignment of energy policy and the electricity price path will affect Eskom's financial sustainability, energy mix and related emissions.
- **Financial risks** - Declining long-term profitability may lead to higher tariff increases and/or capital raising and/or cost cutting to make up the shortfall.
- **Sustainability risks** - Failure to manage the balance between short to medium-term constraints (up to five years) and operational requirements may lead to long-term damage to operating plant and/or compromised operations and reduced profitability.
- **Inherent risk** – Risks faced by Eskom in its day-to-day operations including business-continuity management risks and priority-disaster risks at national and provincial level.

### 3.5.5 Risk specific to the achievement of DTC 2

The risk assessment on DTC 2, which is the basis of the Corporate Plan (2017/18-2021/22) addresses the risks of not achieving the 6 DTC 2 objectives/focus areas. The most significant risks identified are:

- **Decreasing volumes** (of electricity sales) leading to negative impacts on EBITDA growth and margins.
- **Regulatory Clearing Account (RCA) and tariff determination uncertainty**. A 2.2% tariff increase for FY2017/18 is far lower than expected (the previous Corporate Plan budgeted for a 13%) and well below inflation of approximately 6%. If Eskom is to recover efficient costs and earn a reasonable return during the MYPD4 period, a significant price hike will be necessary coming off a low base in FY2017/18. Eskom will complete a fourth multi-year price determination (MYPD4) application in FY2018 to improve its long term revenue certainty. Eskom will work to engage key stakeholders on its application and long term price outlook.
- **Municipal debt payments**. High and increasing level of municipal debt leading to an increase in the cash shortfall/gap. Eskom has a strategy with its key stakeholders, e.g. the National Treasury, to reduce the current municipal bad debt and limit bad debt in the future.
- **Generation and grid asset uncertainty and compliance risks**. Aging plant and/or under-maintained plant leading to poor performance and an increase in operating costs. Eskom will optimise N-1 compliance delivery by sequencing project delivery effectively and ensuring financial prudency.
- **Inadequate human capital** to adapt to the change in work practices and culture
- **The shifting shape of the load profile** is leading to decreasing share of the generation market for Eskom. In order to adapt Eskom is forced to operate base load stations as mid-merit through steep ramp ups and downs in order to balance the residual system.
- Project delays and cost overruns leading to increased pressure on EBITDA and margins
- Increasing input costs leading to increased pressure on EBITDA growth and margins
- Further deterioration in credit ratings of both Eskom and the Sovereign leading to adverse impact on Eskom's ability to secure debt at favourable rates
- Eskom may not be able to sell surplus electricity into the region in the long term (15 - 20 years) leading to stranded generation assets in South Africa.

# 4 Stakeholder engagement

## 4.1 Objectives of Eskom's stakeholder engagement

Eskom's objectives for stakeholder engagement are to ensure alignment and a collaborative policy approach amongst stakeholders on key strategic objectives. To successfully deliver on its mandate and corporate strategy, Eskom needs to ensure effective stakeholder management. Eskom's aim is to build enduring, trusting, and value-adding relationships with its stakeholders.

Eskom defines its stakeholders as those groups that affect, and/or are affected by, the organisation's activities, products or services and associated performance. This includes people who are actively involved in Eskom's programmes and projects, and individuals and groups whose interests may be positively or negatively influenced because of project execution or project completion.

Stakeholder support is crucial for the successful implementation of Eskom's strategy. As a part of the strategy, there are critical areas on which Eskom and key stakeholders need to align. In particular:

- Eskom will require continued collaboration with Government and government entities and their support across a number of areas, including financial sustainability, environmental compliance, decisions on energy mix, sustainable asset creation for future provision of electricity, and enablement of economic growth.
- Future tariff escalations need to take in account both the needs of South African citizens and Eskom's financial health, with any required trade-offs made explicitly and transparently.
- Eskom will partner with research institutions to develop sustainable and renewable energy solutions for South African and African customers.
- Stakeholders' understanding and support is needed for Eskom to drive cost savings and increased productivity, particularly in manpower, primary-energy procurement, capital-project execution and customer service.

## 4.2 Eskom stakeholders

Eskom operates within a complex landscape involving multiple stakeholders with multiple objectives, who are engaged through multiple engagement agents and touch points, as set out in Exhibit 18.

**Exhibit 18: Eskom Stakeholders**

| Industry | Employees | Regulators | Government | Parliament | Key customers |
|---|---|---|---|---|---|
| Associations of municipal electricity undertakings, industry experts, Chamber of Mines | Employees, Executive forum, Exco, Board | National Energy Regulator (NERSA), National Nuclear Regulator (NNR) | Public Enterprise, Water and Environment Affairs, National Treasury, DTI, Trade and Industry, GCIS, Public Works, DST, Cooperative Government and Traditional Affairs (CoGTA), SA Local Government Association | Public Enterprise, Minerals and Resources, Energy, Water and Sanitation, Trade and Industry, Economic Development, Labour, DIRCO Presidency, NCOP, Planning, monitoring and evaluation, Provincial and local government | Top key customers, industrial, mining, commercial, municipalities, agricultural, residential |
| **Suppliers** | **Organised labour** | **International relations** | **Media** | **Business** | **Civil society and academia** |
| Capacity-expansion contractors, fuel suppliers, original equipment manufacturers, service and product suppliers (e.g. coal, IT services) | National Union of Mine Workers (NUM), National Union of Metal Workers (NUMSA), Solidarity, Congress of South African Trade Union (COSATU), Association of Mineworkers and Construction Union (AMCU) | Multilateral institutions (IMF, World Bank, African Development Bank), Department of International Relations and Cooperation (DIRCO), Embassies, official delegations, and bi-lateral and multi-lateral agreements | South African, African and international media, including traditional and social media, agencies, printed and electronic media, provincial and local media | Financial institutions, investors and rating agencies (e.g. Business Unity of SA, SA Chamber of Commerce and Industry, National Economic Development and Labour Council, Black Management Forum, SA National Energy and Association) | Non-governmental organisations and civil-society organisations (e.g. SANGOC, WWF, National Consumer Forum, Earthlife Africa, University of Johannesburg, Nuclear Corporation of SA, Alliance for Nuclear Responsibility and Endangered Wildlife Trust) |

## 4.3 Key stakeholder topics over the next 5 years

Given the strategy to be implemented over the next five years, Eskom has identified key topics of interest on which to engage stakeholders, namely:

- **Financial sustainability** – including Eskom's going-concern status and overall financial performance, the impact of credit-rating downgrades on the ability to secure funding and increasing finance charges. Eskom's liquidity position and ensuring that Eskom implements effective cost-management strategies.
- **Operational sustainability** – with the focus on ensuring the adequate technical performance of power plants, security of electricity supply, renewable-energy programme and coal-stock procurement and cost management.
- **Revenue and customer sustainability** – including the impact of load shedding and load curtailment on customers, the impact of increased tariffs, changing electricity volumes, customer satisfaction and customer debt.
- **Sustainable asset creation** – with the focus on the New Build Programme and its sustainability, (including addressing key issues such as cost increases and project delays), as well as the future build programme.
- **Environmental sustainability** – including reducing Eskom's carbon footprint by procuring renewable energy, the impact of carbon tax, water usage and particulate-emissions management, nuclear-power generation impact and energy-efficiency programmes and incentives.
- **Building a sustainable skills base** – including a focus on the shortage of skills and retention of skilled employees, as well as employee salaries and benefits.
- **Transformation and social sustainability** – including Eskom's socio-economic contribution, the transformation of employment equity, governance and electrification-connection challenges.

- **Governance and leadership** – focusing on the management of changes in and stability of leadership.
- **Safety and security** – including the safety of the workplace, employees, contractors and the public, as well as ensuring adequate business continuity and disaster management.

## 4.4 Specific engagement topics per stakeholder

Specific engagement topics per stakeholder are set out in Table 5 below.

**TABLE 5: GOVERNMENT TOPICS OF INTEREST**

| Stakeholder group | Key topics of interest |
|---|---|
| DPE | • Eskom strategy<br>• Eskom financial and operational performance<br>• Electricity price path and MYPD4 application<br>• Energy supply, mix and allocations<br>• Governance and leadership<br>• Environment sustainability<br>• Government support package conditions<br>• Legal and regulatory compliance<br>• Supplier development and localisation<br>• Management of municipal debt |
| NT | • Eskom strategy<br>• Eskom financial and operational performance<br>• Electricity price path and MYPD4 application<br>• Energy supply, mix and allocations<br>• Management of overdue debt and payment days<br>• Government support package conditions<br>• Management of municipal debt |
| DoE | • Energy supply, mix and allocations<br>• Energy market regulation<br>• Environment sustainability |
| DEA | • Environment sustainability<br>• Legal and regulatory compliance |
| DWS | • Environment sustainability<br>• Legal and regulatory compliance |
| NERSA | • Eskom financial and operational performance<br>• Electricity price path and MYPD4 application<br>• Energy market regulation<br>• Legal and regulatory compliance |
| National Nuclear Regulator | • Energy supply, mix and allocations<br>• Legal and regulatory compliance |
| Parliament | • Legal and regulatory compliance<br>• Eskom strategy, governance and leadership |
| University of Johannesburg | • Energy supply, mix and allocations |

| Stakeholder group | Key topics of interest |
|---|---|
| | • Sustainable and renewable energy<br>• Environment sustainability |

## 4.5 Eskom's relationship with the government

Over the years, the government has demonstrated unwavering support and commitment to Eskom to deliver its mandate to promote GDP growth and ensure energy security for the country. Eskom aims to comply with the policies, conditions and requirements of key government stakeholders such as the DPE, NT, NERSA, National Nuclear Regulator (NNR), DoE, DEA, DWS, etc. (Exhibit 19).

**Exhibit 19: Eskom' s Key Government Stakeholders**


Other key stakeholders: Cooperative Governance and Traditional Affairs (COGTHA), Dept. of International Relations and Cooperation (DIRCO), Dept. of Economic Development, South African Government Local Association (SALGA)

### 4.5.1 Department of Public Enterprises

The DPE has oversight responsibility for Eskom as the shareholder representative of the South African Government. Through the shareholder compact and strategic intent statement (which includes strategic objectives, policies and key performance indicators), the DPE guides Eskom in achieving high levels of service delivery, operational efficiency, commercial viability and regulatory compliance (including the Department of Energy Affairs (DEA) and the DWS for environmental compliance).

### 4.5.2 National Treasury

NT has been instrumental in providing financial support in the light of fiscal challenges, including a serious liquidity crunch coupled with the electricity price awarded by NERSA being lower than required.

### 4.5.3 Nuclear operations/programme

Eskom further enjoys support from DoE and the national energy and nuclear regulators. This support is becoming increasingly vital as Eskom ventures into new areas of the energy industry. In particular, the National Nuclear Energy Executive Coordinating Committee has made a decision that Eskom is to become the Owner-Operator of the nuclear expansion programme.

Specific engagement topics of interest per government body are set out in below

## 4.6 Initiatives

Stakeholder Relations Management aims to re-energise Eskom's relationship with all stakeholders to create an enabling environment for strategic conversations that requires advocacy or collaboration on key strategic issues of mutual concern.

The stakeholder engagement plan will support key initiatives identified in the Turnaround Plan and key issues that could damage Eskom's reputation

The following initiatives will support the achievement of Eskom's objectives over the next 5 years:

- Assessment of Eskom's stakeholder relationships to better understand stakeholders' insights and expectations
- Vigorously drive government relations through collaboration to secure support for Eskom's business objectives
- Issue based advocacy Create networking opportunities to identify and manage issues through advocacy and collaboration
- To establish an independent Stakeholder Advisory Council that consists of leaders to bring an external perspective on material matters to the table in discussions with Board and Exco
- Create opportunities for senior leaders to share business challenges and progress reports to improve credibility and restore trust

## 4.7 Eskom reputation management

Given Eskom's strategy and sustainability challenges, the Corporate Affairs Division's focus over the planning period will be to rebuild and strengthen confidence in Eskom. The company's reputation over the recent past has been negatively impacted by the challenges facing Eskom. The reputation pulse scores are depicted in Exhibit 20.

**Exhibit 20: Reputation Pulse Scores**


The aspiration of the Corporate Affairs Division is to enable Eskom to regain the position as one of the most reputable power companies globally by FY2020/21. This will be achieved through improving Eskom's reputation from a 46 Reptrak™ score rating in FY2014/15 to a 60–69 point RepTrak™ rating in FY2020/21. Specific initiatives relating to this aspirations will include:

- Proactively managing issues that may impact on the reputation of the organisation. In particular, Eskom will improve its 'listening skills' so that it is sufficiently aware of emerging issues.
- Collecting information about reputational threats (issues) across the organisation, analysing the information and addressing problems by taking action to mitigate them.
- Strengthening Eskom's understanding & relationships with critical stakeholders by going beyond traditional public relations to activate a network of supporters who shape key constituencies.
- Instilling an organisational culture that is reputation-centric – one where employees understand their role as guardians and take accountability for their behaviour and for Eskom's reputation. Achieving this will mean stepping up both the sophistication and the internal co-ordination of reputation efforts.
- Building a strong brand, and shaping how customers think and feel about the organisation and product by developing a brand-positioning strategy that builds the value of electricity and Eskom in the minds and hearts of both staff and consumers. The strategy will focus on reframing the value of electricity and creating a better understanding of the entire Eskom value chain. The strategy will be completed within the first quarter of the new financial year.

The strategy and plan needs to:

- Align the corporate brand with the FY2016/17 to FY2020/21 Corporate Plan and the Business Renewal Journey.
- Build a solid brand reputation by stabilising, re-energising and growing the brand health.
- Support the Turnaround Strategy – move the brand beyond 'distresses' (beyond savings tips).
- Deliver on Eskom's purpose – the strategic intent mandated by Government – provide electricity in an efficient and sustainable manner.

- Provide transparency on Eskom's successes

**Internal**: Start off by instilling internal pride in hard work and achievements and increase staff morale and confidence. On-board employees to understand the value of the brand and the product, define the brand promise in terms of their jobs. The next step is to quantify their contribution to the brand health and reputation by understanding the value of their contribution to the job to do to make SA great - how do I bring the brand promise to life in my job? Finally Eskom will drive momentum by getting employees to drive/live the brand promise and then to identify, celebrate and reward ambassadors.

**External**: Create a presence for the brand to remind South Africa about Eskom's great work. Make the brand feel like an important part of their lives thereby building back equity into the brand. Enhance the confidence of brand by fighting the negative publicity, build an understanding of how much Eskom does to provide electricity. Build reputation by moving to active reputation management and less crisis management. Clarify key issues for customers and consumer confidence. Have a consistent clear sight of issues and show that Eskom is addressing the issues.

# 5 Regulatory strategy

## 5.1 Executive summary

Eskom is a regulated utility with revenue requirements determined by the multi-year price determination (MYPD) process with the National Energy Regulator of South Africa (NERSA). The business operates under licences for generation, transmission, distribution, import, export and trading to fulfil its role in the South African electricity industry. As such, Eskom's core strategy and operations are positioned to address the requirements of the regulatory framework and to manage risk prudently.

Eskom is currently in the MYPD3 tariff period, which ends in FY2018/19. The original MYPD3 application granted Eskom a tariff increase of 8% a year following an application of 16% p.a. from Eskom. For the FY2017/18 year, NERSA granted Eskom a 2.2% tariff increase for FY2017/18. This is far lower than expected (the FY2016/17 Corporate Plan budgeted for a 13%) and well below inflation of approximately 6%. This has resulted in a cash flow deficit of approximately R21 billion compared to the FY2016/17 Corporate plan. If Eskom is to recover its costs and earn a fair return during the MYPD4 period, a significant price hike of 22.1% will be required in FY2017/18.

Eskom will be allowed to make a single year application for FY2018/19. Eskom's revenue requirement is based on an expected 2.1% a year increase in electricity demand by FY2020/21. This equates to a price path estimated at 27% for the application year. Eskom is required to submit revenue required for the year of application plus two additional years. The estimated price path for the subsequent two years is 12% and 8% respectively. While Eskom is not applying for price increases in FY2019/20 and FY2020/21, this will be seen by analysts, lenders, stakeholders and customers as an indicator of the expected path for MYPD4 which will follow from FY2019/20 onwards.

Eskom and NERSA are in process of appealing the RCA 2013/14 decision which will likely occur in the second half of 2017. Eskom has submitted the RCAs of R19.2 billion for FY2014/15 and R23.6 billion for FY2015/16 to NERSA, which is currently on hold pending the appeal outcome.

## 5.2 Electricity regulation in South Africa and its relevance to stakeholders

The National Energy Regulator of South Africa (NERSA) is responsible for the economic regulation of the electricity industry, including Eskom. It is governed by the following legislation, policies and regulations:

- Electricity Regulation Act (No. 4 of 2006)
- Electricity Pricing Policy of South Africa
- MYPD regulatory methodology
- Eskom retail tariff and structural-adjustment methodology
- Grid and distribution codes

One of NERSA's key mandates is to oversee the economic regulation of the electricity industry as stipulated in the Electricity Regulation Act. Functionally, Eskom is required to comply with the Act's licensing conditions and regulations, and apply for revenue and tariffs according to regulatory frameworks – all of which NERSA oversees and adjudicates.

NERSA determines Eskom's revenues and tariffs according to the MYPD regulatory methodology and through broad stakeholder consultation. The current MYPD3 methodology includes a risk-management mechanism – the Regulatory Clearing Account (RCA) – that allows for an annual revenue adjustment based on the actual costs incurred by Eskom as well as other assumptions. The mechanism includes thresholds, e.g. if the balance in the RCA is greater than 10% of the allowed revenue, further consultation is undertaken.

As the South African electricity industry has started to attract IPPs in recent years through the Renewable Energy IPP Procurement Programme (REIPPPP) and the baseload and gas programmes, investors are putting more pressure on utilities to uphold the consistency, stability and application of the regulatory framework to create stability, credibility and confidence in the overall regulatory regime.

Credit-rating agencies also place great importance on the regulatory framework within Eskom operates. For example, 50% of Moody's credit-rating assessment is weighted towards an assessment of the regulatory framework and environment. As part of its credit-risk assessment of Eskom, it considers the South African regulatory system, the soundness and predictability of the framework and whether Eskom can reasonably expect to recover its prudent and efficient costs and investments through NERSA-approved revenues. It expects the South African regulatory framework to ensure Eskom's financial sustainability by allowing the recovery of prudent and efficient costs, including the cost of capital through a reasonable risk-adjusted return on capital.

On 8 December 2016, Standard & Poor's Global Ratings lowered its long-term corporate credit rating of Eskom Holdings SOC Ltd. from BB to BB- with a negative outlook. This reflected the 'assessment of a weak regulatory framework .... [which] has been subject to negative intervention aimed at protecting consumers, which has hurt Eskom's credit quality', and their view that 'the company's credit metrics will remain weak over the medium term [as] a result of continued delays in implementing tariffs that reflect costs'. Furthermore, it noted that Eskom is facing increased financial pressures as a result of the ongoing court case against NERSA. Standard & Poor's is concerned that Eskom's capital structure and free cash flow will remain at unsustainable levels, even if its liquidity position and operating performance improve over the current fiscal year. The extension and increase of Government guarantees are also cited as reasons for the downgrade, given Eskom's dependence on these guarantees in the light of its CCC+ stand-alone credit profile, which reflects a greater-than-50% probability of default on its debt.

## 5.3 Overview of the MYPD methodology

The MYPD methodology comprises two elements: disclosure of the requirements and criteria for a revenue application, and a detailed description of the RCA risk-adjustment mechanism (see 5.4). Currently, Eskom is operating in year four of MYPD3 and this methodology will apply for the remainder of the period, which ends on 31 March 2018. Between April and October 2016, NERSA carried out a consultation process that culminated in the publication of an updated MYPD methodology that will be put into effect in April 2018.

## 5.4 Regulatory clearing account (RCA)

### 5.4.1 Overview of the RCA

The RCA is a monitoring and tracking mechanism that compares costs and revenues assumed in the MYPD revenue decision made by NERSA to actual costs and revenues incurred by Eskom. It allows for changes in the conditions for sales volumes, identified costs and other items if assumptions made when the MYPD revenue application was considered to have changed. If the assumptions differ, the differences are subject to RCA rules that are informed by the approved regulatory methodology applicable to the MYPD decision period. This produces an RCA balance that should either be recovered by Eskom (in the case of over-spending) or given back to the customers (in the case of under-spending).

Once NERSA has determined the RCA balance, a separate process is followed to decide how it will be liquidated by adjusting the revenue applicable to future years.

The RCA mechanism is applied to every elapsed year and therefore looks backwards. It retrospectively reconciles the variances between the assumptions upon which NERSA based its original revenue decisions and the actual outcome.

### 5.4.2 RCA FY2013/14 decision, 1 March 2016

On 1 March 2016, NERSA made the RCA decision for FY2013/14 (TABLE 5.1) that stated:

- The RCA balance of R11 241 million is recoverable from standard-tariff customers, local special pricing agreements (SPAs) and international customers in FY2016/17.
- The amount of R10 257 million is recoverable from standard-tariff customers for FY2016/17 only.
- The average tariff for standard-tariff customers should be raised by 9.4% for FY2016/17 only.
- The amount of R983 million is recoverable from Eskom's local SPA customers and international customers for the FY2016/17 only

TABLE 6 : EXTRACT OF NERSA'S RCA DECISION, FY2013/14

| R millions | FY2015/16 | NERSA RCA implementation | FY2017/18 |
|---|---|---|---|
| Forecast revenue from tariff customers | 163 179 | 180 070 | 198 954 |
| MYPD RCA balance | 7 818 | 11 241 | |
| Contribution by standard customers to RCA balance | 7 085 | 10 257 | |
| Contribution by all other customers to RCA balance | 733 | 983 | |
| Forecast revenue from tariff customers after RCA adjustment | 170 264 | 190 327 | 198 954 |
| Increase in average standard tariff (c/kWh) | 3.32 | 4.70 | |
| Standard average price after RCA adjustment (c/kWh) | 79.73 | 87.23 | 89.13 |
| Increase in average standard tariff (%) | 12.69% | 9.4% | 2.2% |

### 5.4.3 RCA FY2013/14 legal process

NERSA's decision on Eskom's RCA application for FY2013/14 was reviewed by the High Court judgement handed down on 16 August 2016. The judge ordered that the decision be set aside and reviewed by NERSA, largely because Eskom had not submitted quarterly RCA reports and NERSA had not alerted the public to the possible adjustment in tariff. Both NERSA and Eskom have been granted leave to appeal in the Supreme Court of Appeal. As the appeal will likely only be heard in late 2017, the subsequent RCA applications for FY2014/15 (R20 billion) and FY2015/16 (R23 billion) are unlikely to be processed by July 2016. The FY2013/14 RCA balance at risk (R11 billion) under appeal will create a total cumulative cash flow at risk of approximately R54 billion for Eskom and therefore an erosion of approximately R54 billion of equity from Eskom's balance sheet in the short term. The RCAs for the two remaining years of MYPD3 are expected to be in the region of R20 billion a year.

Eskom is able to access the debt-capital markets to make up any shortfall to fulfil its Corporate Plan commitments, but will incur additional interest expense as a result, placing the business under further pressure. Eskom has used equity injections and debt to mitigate low tariff increases in the past.

Eskom has taken a conservative approach and has not made any allowance for RCAs in the budget, and will not do so until all legal challenges are resolved.

### 5.4.4 Status of RCA submissions and decisions for MYPD3

To date, the trend in RCAs over the MYPD3 period reflects a growing variance in revenue attributable to lower sales growth than forecast in the assumptions upon which the MYPD3 revenue decision was based, as reflected in the forecast for FY2016/17 (Table 7: MYPD3 RCA Track Record and Forecast).

**TABLE 7: MYPD3 RCA TRACK RECORD AND FORECAST**

| RCA for FY2016/17 (year 4 of MYPD3) | MYPD3 decision | Dec Q3 YTD | Projections Dec 16 Q3 | Variance Q3 to MYPD3 | RCA adjustments | Projected RCA FY2016/17 |
|---|---|---|---|---|---|---|
| **Total revenue, R million** | **198 035** | **140 289** | **180 323** | **-17 712** | **-** | **17 712** |
| **Primary energy, R million** | **81 329** | **60 838** | **82 578** | **1 270** | **-566** | **1 527** |
| Coal | 44 245 | 32 547 | 43 422 | -823 | -694 | -694 |
| OCGTs | 1 599 | 319 | 350 | -1 249 | - | -1 249 |
| Other primary energy | 6 327 | 5 220 | 7 302 | 975 | | 975 |
| IPPs | 19 269 | 14 373 | 20 746 | 1 477 | | 1 477 |
| International purchases | 399 | 2 061 | 2 637 | 2 238 | | 2 238 |
| Environmental levy | 9 490 | 6 175 | 8 142 | -1 348 | | -1 348 |
| Nuclear decommissioning from RCA 2013/14 decision phased in over 10 years | | | | | 83 | 83 |
| Nuclear decommissioning R361 million from RCA 2015/16 decision phased in over 8 years | | | | | 45 | 45 |
| Capital expenditure clearing account for RCA | 46 655 | | | | 230 | 230 |
| Integrated demand management (IDM) for RCA | - | 152 | 238 | 608 | 197 | 412 |
| Operating costs for RCA (incl. employee benefits, impairments and other expenses) | 43 651 | 39 234 | 54 099 | 10 361 | 706 | -706 |
| SQI for RCA | - | | | | - | - |
| Inflation adjustments | - | | | | 121 | 121 |
| Total RCA balance | | | | | | 19 295 |

Eskom has improved its understanding of the RCA process and is committed to submitting future RCAs timeously every year. For FY2016/17, Eskom has submitted quarterly reports for the first and second quarters.

The MYPD3 revenue decision for the second and third years are higher by at least R20bn (against Eskom's audited results), culminating in RCA submissions of at least R20 billion a year when principles are aligned to the NERSA decision for the FY2013/14 RCA. In addition, under the MYPD3 methodology, expenditure for operating costs were higher than those assumed by NERSA for purposes of the revenue decision and do not qualify for RCA purposes. Eskom was therefore obliged to fund over-expenditures of approximately R10 billion a year. It is expected that the RCA balances for the remaining two years of MYPD3 will follow this trend.

## 5.5 Recap of the key assumptions in the FY2016/17 Corporate Plan

Eskom's FY2016/17 Corporate Plan assumed an average price increase of 13% for both FY2016/17 and FY2017/18. RCA adjustments, as allowed for in the MYPD methodology, were required to give effect to the required increase. The FY2016/17 Corporate Plan made the following key assumptions around sales growth, costs levels and escalations, and funding profile:

- **Price path**: 13%, 13%, 13%, 13%, 10% for the years FY2016/17, FY2017/18, FY2018/19, FY2019/20 and FY2020/21 respectively
- **Sales growth:** Conservative sales growth averaging less than 1%
- **Cost base**: Reduced cost-base escalations compared to historical trends
- **Cash balances:** Adequate cash balances in the last two years of MYPD3 falling to less than R5 billion for MYPD4 in FY2019/FY21; cash balance after 10 years to be R153 billion
- **Funding:** Borrowings stretched to R65 billion a year
- **Equity:** No further equity injections
- **Nuclear:** Some development costs included

Eskom's cash and cash equivalent position is forecast to be R32 billon in FY2016/17 and marginally above the break-even point of R3 billion in FY2020/21 (Table 8).

**TABLE 8: CASH-FLOW EXTRACT, FY2016/17 CORPORATE PLAN**

| R millions | Actual | | Budget | Q3 Dec 15 Forecast | Projections | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | FY13/14 | FY14/15 | FY15/16 | FY15/16 | FY16/17 | FY17/18 | FY18/19 | FY19/20 | FY20/21 |
| **Cash from operations** | **23 642** | **27 310** | **39 116** | **36 114** | **45 989** | **46 223** | **59 445** | **86 864** | **101 794** |
| **Net cash used in financing activities** | **(2 102)** | **(31 360)** | **(46 183)** | **(25 002)** | **(42 594)** | **(52 220)** | **(77 736)** | **(87 884)** | **(95 716)** |
| Repayment loans | (8 014) | (14 429) | (25 035) | (10 117) | (16 354) | (19 217) | (38 227) | (40 683) | (65 615) |
| Interest paid | (13 102) | (17 066) | (23 663) | (21 955) | (30 476) | (35 906) | (41 304) | (46 513) | (49 688) |
| Interest received | 2 083 | 1 448 | 1 056 | 1 625 | 2 752 | 2 591 | 1 551 | 556 | 654 |
| Other financing activities | 16 410 | (1 500) | 1 224 | 5 445 | 1 485 | 656 | 408 | (1 229) | 18 932 |
| **Cash available for investment** | **21 540** | **(4 050)** | **(7 067)** | **11 112** | **3 396** | **(5 623)** | **(18 127)** | **(1 006)** | **6 078** |
| Investment activities | (56 461) | (56 387) | (65 413) | (63 583) | (65 477) | (72 371) | (76 209) | (70 532) | (55 196) |
| Cash required to fund investment activities | (34 921) | (60 437) | (72 480) | (52 471) | (62 081) | (77 994) | (94 336) | (71 538) | (49 118) |
| Net borrowings | 44 142 | 49 500 | 75 992 | 84 774 | 68 466 | 68 680 | 68 134 | 68 350 | 53 312 |
| Movement in cash and cash equivalents | 9 221 | (10 937) | 3 442 | 32 303 | 6 385 | (9 314) | (26 202) | (3 188) | 4 194 |
| **Closing balance cash and cash equivalents** | **19 676** | **8 861** | **14 034** | **41 241** | **37 423** | **28 109** | **1 911** | **(1 276)** | **2 917** |

## 5.6 FY2017/18 price increase

This section highlights the regulatory developments since February 2016 when the FY2016/17 Corporate Plan was approved. Any reduction in the price trajectory will have a multiplier effect over the duration of the FY2016/17 Corporate Plan. The RCA decision for FY2013/14 will result in a price increase of 2.2% in FY2017/18 if no further adjustments are allowed by NERSA.

NERSA's February 2016 price decisions were below Eskom's forecast price increase for FY2016/17 following the RCA FY2013/14 decision of 9.4% (not 13%, as assumed). It is also anticipated that the price increase for FY2017/18 will be 2.2% (not 13%, as assumed) based on the NERSA subcommittee recommendation made on 7 February 2017.

Eskom has revised its cash-flow position by adjusting DTC1 for these two price factors but maintaining all other assumptions. As a result, Eskom's cash position will be very negative over the MYPD4 period.

In FY2016/17, NERSA granted Eskom an average 9.4% price increase. If NERSA maintains the allowed revenue in the MYPD3 determination for FY2017/18 to be recovered over the sales volume as had been assumed in the determination for that year, it would result in an average price increase for FY2017/18 of 2.2% and a minimum price adjustment of 0.3% for municipalities from 1 July 2017.

If Eskom is to recover efficient costs and earn a reasonable return during the MYPD4 period, a significant price hike of 22.1% will be necessary coming off a low base in FY2017/18, resulting in volatile electricity tariffs. The breakdown of this tariff increase is given in (Exhibit 21).

The halt in the processing of further RCA applications puts Eskom operations and build programmes at risk and will have a negative impact on existing agreements.

**Exhibit 21: FY2017/8 Price Increase**


## 5.7 Revenue application FY2018/19

The revenue application will be based on the new MYPD methodology that was published on 27 October 2016. Its implications are summarised below.

### 5.7.1 Analysis of MYPD methodology

Eskom has reviewed the MYPD methodology at a high level and our interpretations of the material items are as follows:

**RCA balance threshold has changed to 2-4%**

The change of the RCA balance threshold to 2-4% suggests that, if the RCA application exceeds R8 billion on a revenue allowance of R200 billion, Eskom will have to make a new application. This implies that Eskom will have to make annual revenue applications, as it will be difficult for NERSA to grant Eskom the revenue required in the MYPD4 revenue application process in the current economic and political environment. As a result, future RCAs will breach the 4% level. However, if NERSA has taken into account the current uncertainties surrounding IPPs, nuclear, the IRP update, IEP and their impact on Eskom, Eskom could submit new applications without waiting for the RCA processes to unfold. The change in threshold is a surprise to Eskom, as it was not raised in the Consultation Paper of the draft MYPD methodology.

A new revenue application (for a future year) will not resolve the variances of the past year to which the RCA application of more than 4% pertained.

Also confusing is the requirement for 'a notice and stakeholder comment process *in the year in which the variance occurs*'. This implies that for an RCA claim of less than 4% to be passed through consultation, it must have taken place in the year of origination, i.e. before the final audited results are known and before the formal RCA application is made. It is impossible to comply with this requirement and this could provide another opportunity for legal challenges.

**Sales variances for RCA – no cap**

NERSA has removed the 5% sales-cap variance and replaced it with with a process that allows Eskom to motivate for all sales volumes variances. However, it is not clear whether – if NERSA does not allow a reduction in sales volume for RCA purposes – NERSA will add back the primary-energy cost that the reduced volumes had avoided. NERSA has indicated that it will review and adjust sales forecasts closer to the decision date. This is a positive development.

**Operating cost variances for RCA – partial symmetrical treatment**

NERSA has moved to allow for symmetrical treatment of operating costs. In the case of costs other than manpower, the intention seems to be to allow symmetrical adjustment for prudent over-/under-expenditure. NERSA has also stated that a sharing mechanism could be introduced to deal with the variances.

Manpower-cost allowances will be treated as an incentive mechanism, i.e. Eskom will be responsible for over-expenditure during the year, while variances resulting from changing inflation rates (up or down) will be factored in. Although this is not stated, NERSA may allow Eskom to keep the savings captured from any under-expenditure on manpower (other than variances based on changes in inflation rates).

It is Eskom's interpretation that the symmetrical treatment of all operating and maintenance (O&M) cost variances allows for adjustment (higher/lower) on non-manpower costs, but not on manpower costs (higher/lower – other than inflation).

**Regulated asset base – no indexation**

NERSA has removed the indexation of the regulated asset base (RAB) during an MYPD cycle. If this implies that the RAB is not adjusted annually for the MYPD cycle, it will have a significant impact on the revenue allowed. NERSA's view is that Eskom must provide an updated RAB for every application and that there is therefore no need for indexation.

However, section 9.3.2 of the MYPD4 methodology seems to negate the above: 'In line with the EPP, full cost reflectivity with respect to depreciation and return on assets cost recovery will be implemented over a reasonable period', while section 9.4.3.4 of the MYPD4 Methodology implies an over-riding prerogative to adjust the RAB values in any event: 'Step four: Phase in the DRC on a straight line basis over the MYPD4 period.

If accepted by NERSA, Eskom's strategy to apply for a one-year application will make annual pre-indexation less important for that cycle.

Regarding the new RCA threshold of 4%, the new application requirement will allow Eskom the opportunity to submit a revised RAB value for a future year. However, this will not compensate for the failure to use the correct, inflation-adjusted RAB in a prior year.

The best outcome would be for Eskom to convince NERSA to use the proper pre-indexed RAB value for purposes of depreciation, and to make the full revenue adjustment. In order to manage the revenue requirement, Eskom will utilise the return on assets as the balancing variable.

### 5.7.2 Revenue requirement approach for FY2018/19

**Implementing lessons learned from previous applications**

During the FY2013/14 RCA process, Eskom was criticised for its inability to forecast sales volumes and for getting operational and cost performance fundamentally wrong. Eskom will ensure that key assumptions for the next revenue application are more realistic.

**Understanding NERSA's starting point**

For regulatory purposes it is not enough to compare and explain the variances based on year on year movements in actual/projected modes. Eskom will be required to refer to the MYPD3 determination for FY2017/18 and then explain the costs movements to FY2018/19.

**Revenue-requirement building blocks**

Allowed revenue is based on the recovery of primary-energy costs, operating costs, depreciation and returns – the building blocks of revenue requirement. All four blocks are cash items, including depreciation and returns that must be collected in cash because they have to meet the equivalent cash outflows over the operational life of the asset. However, as the regulatory formula does not follow a short-term/annual cash-flow approach, annual discrepancies may arise regarding the cash flow required to meet Eskom's short-term debt interest and repayment commitments. In the long term, these should be covered by the regulatory formula's depreciation and returns components. In the context of a revenue determination that is still being 'phased in' to reflect prudent and efficient costs, short-term cash requirements must be factored in because of the much-reduced 'cash buffer' implied by prices that do not fully cover prudent and efficient costs.

Eskom's next revenue application will therefore need to address:

- Rebasing of sales volumes
- Rebasing of primary-energy costs
- Aligning IPPs to costs to Bid Window 4.5
- Rebasing of operating costs
- Reflection of long- and short-term debt commitments (interest and repayments) in depreciation and returns in the MYPD revenue application

**Sales-volume rebasing**

Over the entire MYPD3 period, Eskom's sales volumes have been much lower than those assumed in the MYPD3 decision because of the slower-than-anticipated economic recovery. NERSA could not adjust sales volumes through its regulatory processes to reflect current realities, and this will occur during the revenue application for FY2018/19. Even if revenue is not increased for FY2018/19, the recovery through a lower sales volume will result in a price increase. The net impact of this sales volume rebasing is a 9.4% price increase (after accounting for primary-energy savings on the lower sales volumes). Sales volumes will decline by 30 TWh in FY2018/19 compared to the MYPD3 decision starting point for FY2017/18.

Assuming the same standard-tariff revenue of R198 954 million in FY2018/19 and adjusting for lower sales will result in a primary-energy saving of R10 820 million based on an average variable primary-energy production cost of 32c/kWh. In turn, this will result in a drop in allowed revenue to R188 134 million recovered over the lower volumes of 192 953 GWh, which equates to a standard tariff price of 97.5c/kWh. The price will therefore rise by 9.4% from 89.13c/kWh to 97.5c/kWh (Table 9).

TABLE 9: SALES VOLUME REBASING

| Rebasing of sales volumes | | MYPD 3 Decision | MYPD 3 Projections |
|---|---|---|---|
| | | FY17/18 | FY18/19 |
| Standard tariff revenue | (Rm) | 198 954 | 198 954 |
| Savings on primary energy due lower sales | (Rm) | | -10 820 |
| Revised standard tariff revenue after lower sales | (Rm) | | 188 134 |
| Standard tariff volumes | (GWh) | 223 217 | 192 953 |
| Standard tariff average electricity price | (c/kWh) | 89.13 | 97.5 |
| Price adjustments for rebasing sales volumes | | | 9.4% |

**Alignment of IPP costs to Bid Window 4.5**

The MYPD3 decision incorporated IPPs for Bid Windows 1, 2 and 3. Between FY2012/13 and FY2017/18, IPP costs have risen tenfold from R3 billion to R30 billion a year.

As the REIPPPP now goes up to Bid Window 4.5, IPP costs will have to be materially adjusted in FY2018/19 and passed on to consumers. To align with the step change from Bid Window 3 to 4.5, IPP costs will go up from R23 billion in FY2017/18 (MYPD3 decision) to a forecast R34 billion in FY2018/19, equating to a step change of R11 billion and a 5.5% price hike. Eskom IPP programmes ((Short Term Power Purchase Programmes (STPPP), Medium Term Power Purchase Programmes (MTPPP) and Wholesale Electricity Prices (WEPs)) will be discontinued prior to the application period.

**Inclusion of full international purchases**

In the MYPD3 decision, NERSA included a net, not gross, cost for international purchases. Subsequently, through the RCA FY2013/14 decision and the revised MYPD methodology, the gross purchases were implemented to set off the inclusion of international revenue. Therefore the primary energy cost base will reflect the change in FY2018/19. This means that international purchases will increase by R2 billion for regulatory purposes and the electricity price will rise by 1.1%.

**Rebasing of primary energy**

Historically, primary-energy costs have been dominated by coal costs, which have grown by 10.3% while NERSA has assumed cost increases of 4.5% for the MYPD3 period. DTC1 implemented stretch targets, with total primary-energy costs escalating by 6.6% over the MYPD4 period. The coal targets under DTC1 already reflect a 50% improvement in annual cost increases.

**Rebasing of operating costs**

Operating costs comprise employee costs, maintenance and other costs. For FY2018/19, employee-benefit costs (R25 billion) and maintenance costs (R12 billion) account for about 70% of operating costs. Historically, operating costs have reflected a 10.3% growth in actual cost escalations while NERSA has assumed cost increases of 4.5% for the MYPD3 period.

DTC1 implemented stretch targets for operating costs to grow at an average of 2.9% a year. To achieve this, Eskom reduced its staff by 6 000 and assumed salary escalation rates to be at CPI levels, with past labour negotiations reflecting agreement of about 2% above CPI.

Under the MYPD3 methodology, Eskom was not permitted to recover higher expenditure for operating costs, which averaged around R10 billion a year. If this gap is not reduced in the next revenue application, Eskom will continue to borrow to cover operating costs.

Eskom will be challenged on the efficiency of its cost base. In order to unpack the movement in costs from MYPD3 to FY2018/19, for the sake of argument assume that the cost allowed by NERSA in FY2017/18 as a 'proxy for efficient' and this is escalated by inflation. This will add 1.5% to the price of electricity. Generation's primary energy costs will be R1.6 billion (2%) above the MYPD3 decision for FY2017/18. This approach allows Eskom to offer a coherent justification for its revenue application.

Eskom's key challenge is to justify, explain and defend any cost escalations that exceed inflation levels. Primary-energy costs, excluding IPPs, increase by less than inflation and operating costs exceed the MYPD3 cost assumption by 8%. The increase is a function of the low cost base allowed by the MYPD3 decision in FY2017/18, particularly with regard to employee benefits and corporate costs. Eskom will also need to explain why these costs have been escalating.

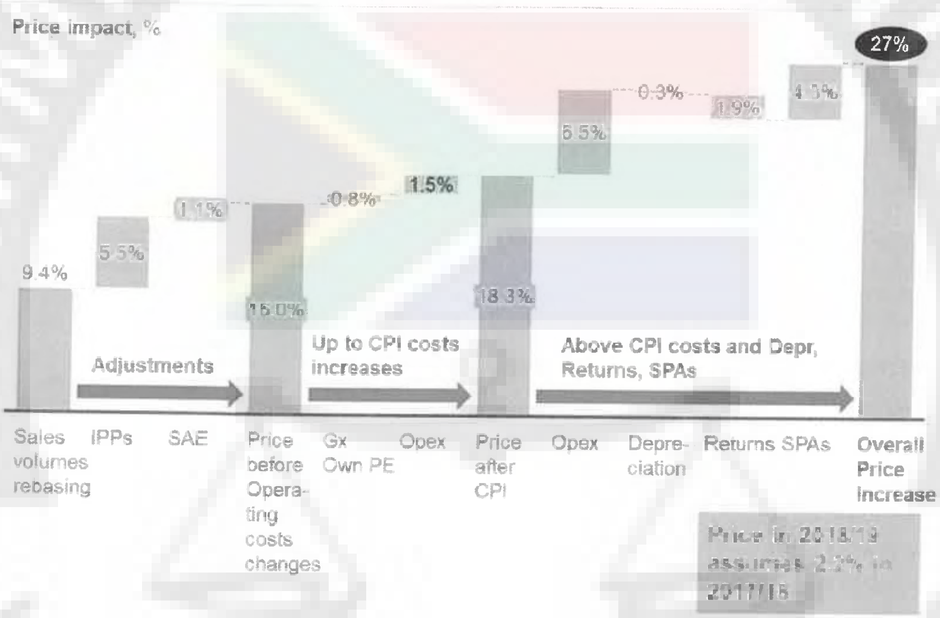
### 5.7.3 Allowable revenue in FY2018/19

NERSA has supported Eskom's request for a single-year application for FY2018/19.

Based on the regulatory methodology and the phasing in of percentage Return on Asset, Eskom's revenue requirement equates to a price path of 27%, 12% and 8% over the period of the application year and the subsequent two years respectively (Eskom is required to submit revenue required for the year of application plus two additional years). While Eskom is not applying for price increases in FY2019/20 and FY2020/21, this will be seen by analysts, lenders, stakeholders and customers as a heads up to the MYPD4 which will follow for FY2019/20 onwards.

The breakdown of the 27% tariff increase is shown in Exhibit 22

**Exhibit 22: FY2018/9 Price Increase**




If the price increase is 8% in FY2017/18, this would result in the price dropping to 20.5% in 2018/19

**Allowable revenue and price increases**

The RAB is determined using the MYPD3 RAB value assumption, factoring in the actual commissioning dates of New Build power stations and plants. The delay in commissioning dates during the MYPD3 period will have an impact on the RAB value, as depreciation is calculated over the life of an asset from its commissioning date. Eskom has assumed a phasing in of percentage ROA from 4.16% in FY2018/19 to 7.96% in FY2020/21.

Eskom is revaluating its assets with the support of Ernst Young and expects to publish the results by the end of February 2017. The allowable-revenue formula has not yet updated the asset base for these inputs and the impact will need to be considered in the final NERSA submission.

Standard-tariff sales volumes have dropped from 223 217 GWh (FY2017/18) to 192 953 GWh (FY2018/19) with returns of R31 billion and depreciation of R29 billion in FY2018/19 (Table 10).

Another way to reconcile the price increase is to consider the DTC1 assumptions that required tariff increases of 13% a year in FY2016/17 and FY2018/19. NERSA granted just 9.4% (FY2016/17) and 2.2% (FY2017/18). Therefore, the under-recovery from the last two years of MYPD3 is 14.4% plus the DTC1 assumption of 13% in FY2018/19, i.e. 27.4%. If Eskom were to claim the cost-reflective price (with full 8% ROA + cost recovery) in FY2018/19, the increase would be approximately 43%.

#### Covering debt-service commitments

NERSA will probably highlight the fact that Eskom has benefited from the positive difference between the allowed return and depreciation and the debt and interest payments during the MYPD3 period (TABLE 5.6). The difference is R112 billion: R34 billion from lower interest payments and R78 billion from lower debt repayments.

TABLE 10: DEBT COMMITMENTS UNDER MYPD3

| Interest payable and debt repayments | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | MYPD 3 window |
|---|---|---|---|---|---|---|
| Interest paid | 13 120 | 17 106 | 22 944 | 28 489 | 31 249 | 112 908 |
| Interest received | -2 047 | -1 417 | -1 250 | -2 202 | -2 435 | 9 351 |
| Debt repayments | 7 488 | 15 251 | 11 013 | 15 132 | 13 057 | 61 941 |
| **Actual/Forecasts debt commitments** | **18 561** | **30 940** | **32 707** | **41 419** | **41 871** | **165 498** |
| MYPD Depreciation | 25 733 | 27 481 | 28 564 | 28 911 | 29 197 | 139 886 |
| MYPD Returns | 23 477 | 26 511 | 26 436 | 27 657 | 33 667 | 137 748 |
| **Eskom cash benefit** | **30 649** | **23 052** | **22 293** | **15 149** | **20 993** | **112 136** |

This situation will reflect an almost break-even position over the next three years, with a cumulative net shortfall of R19 billion in debt commitments (Table 11) attributable to returns marginally beyond interest payments of R4 billion that are linked to equity returns. However, the depreciation contribution is lower than the debt repayments of R23 billion.

TABLE 11: FUTURE DEBT COMMITMENTS

| Interest payable and debt repayments | 2018/19 | 2019/20 | 2020/21 | Total |
|---|---|---|---|---|
| Interest paid | 37 052 | 44 208 | 48 784 | 130 044 |
| Interest received | -857 | -10 | 889 | 22 |
| Debt repayments | 20 651 | 31 649 | 62 259 | 114 559 |
| **Actual/Forecasts debt commitments** | **56 846** | **75 847** | **111 932** | **244 625** |
| MYPD Depreciation | 28 677 | 30 381 | 31 966 | 91 024 |
| MYPD Returns | 30 895 | 44 490 | 58 825 | 134 210 |
| **Eskom cash surplus/(shortfall)** | **2 726** | **-977** | **-21 141** | **-19 391** |
| Net interest shortfall | -5 300 | 292 | 9 152 | 4 144 |
| **Price path** | **27.0%** | **12.0%** | **8.0%** | |

## 5.8 Governance model

**Regulation, Policy and Economic Committee**

The Regulation, Policy and Economic Committee is a sub-committee of the Executive Committee (ExCo) that has been established to help the EXCO make economic and regulatory decisions pertaining to NERSA. The committee is accountable for developing and implementing Eskom-wide regulatory strategy with regards to NERSA. Specifically, it:

- Engages with the DoE and other relevant Government departments on strategic and regulatory policy
- Develops and implements Eskom-wide regulatory strategy and provides input to NERSA on regulatory rules and methodologies. Accountability for each licensee resides with the respective Group Executive. Licensees may choose to discuss licensee-specific matters at this committee
- Approves price applications and review submissions, including MYPD applications, RCA submissions, reopener submissions and tariff-adjustment submissions ((Electricity Retail Tariffs and Structural Agreements (ERTSA))

## 5.9 Conclusion

Low economic growth, the negative outlook from rating agencies, and customer pressure about affordability and uncertainties in the electricity industry will make it difficult for Eskom to increase electricity prices above inflation levels in FY2018/19. As a result, the price of electricity will not reflect its cost and this will have an even greater negative impact on Eskom's financial health. However, regulatory methodology requires several key adjustments to be made:

- Sales volume rebasing
- The incremental IPP volumes procured through Bid Window 4.5
- Rebasing of operating and primary-energy costs

Applying the revenue-requirement formula with a phasing in of ROA will generate a price increase of 27% for FY2018/19. Between FY2018/19 and FY2020/21, Eskom will have to repay R144 billion, including a peak of R65 billion in FY2020/21.

Given NERSA's lack of appetite to increase the electricity tariff and Eskom's debt-service commitments, DTC2 must focus on capturing even greater efficiencies, savings and optimisations. Eskom must grow sales volumes to offset its enormous fixed-cost base.

However, assuming even the most optimistic sales volume and cost-efficiency outcomes, tariffs would have to rise by 25–30% over the next five years to increase reserves to meet Eskom's debt-payment requirements and achieve financial sustainability without burdening the fiscus. This would lead to higher tax rates and put the sovereign credit rating under greater pressure – both of which would be detrimental to South Africa's economy.

# 6 Independent Power Producers (IPPs)

## 6.1 Overview

- Eskom supports that renewables are and will remain an important element of South Africa's energy mix, and is committed to COP21 carbon targets and the country's renewables programme. As at the 31 January 2017, Eskom has connected 3 184 MWs of Renewable IPPs to the grid and has purchased energy from 3 051 MW of commissioned Renewable IPP projects.
- **South Africa's power capacity and demand outlook has however shifted since the start of the Renewable Energy Independent Power Producer (REIPP) Procurement Program** – the current context is one of slowing electricity demand, acceleration of already commissioned coal-fired power stations, and significant improvement in Eskom's operational performance which is resulting in significant excess capacity.
- **In this context, it is critical that the IPP programme is rolled out at a cost and pace that does not negatively impact country and Eskom both operationally and financially** across 4 areas: minimizing total electricity cost for the country, supporting socio-economic development, maintaining capacity balance, while also delivering emissions targets.
- **Eskom believes that in the short to medium term there are significant risks** to introducing additional capacity to the system without a careful assessment of these dimensions.
- **Traditional integrated utilities around the globe are experiencing financial distress with the large scale introduction of IPPs**. South Africa and Eskom have the benefit of learning from these experiences with the ability to avoid a similar adverse economic impact
- .

## 6.2 IPP programme summary

The IPP programmes under consideration are all the programmes being developed or to be developed pursuant to Section 34 Determinations in terms of the Electricity Regulation Act 4 of 2006. The REIPP program is included in the IRP 2010. These programmes include:

- REIPP programme, with a capacity allocation of 14,725 MW, which includes the Small Renewable Energy Projects IPP programme, with a capacity allocation of 400 MW and the Solar Park with a capacity allocation of 1500 MW
- Coal base load IPP programme, with a capacity allocation of 2 500 MW
- Coal from Cross Border projects, with a capacity allocation of 3,750 MW
- Co-generation IPP programme, with a capacity allocation of 1 800 MW
- Gas procurement programmes, with a capacity of 3 726 MW
- Hydro-base load (Imported Hydro), with a capacity of 2 609

7 388 MW have been procured to date by the DoE IPP Office, but not all projects have achieved legal and financial close. Only the DoE Peaking plants and the REIPP BW 1, 2, 3 and one project from BW 3.5 has been signed by Eskom. Eskom signed 5005 MW to date as shown in (Table 12).

**TABLE 12: CURRENT IPP PROGRAM FROM FY 2017/18 TO FY 21/22**

| IPP projects | Capacity procured | | Capacity signed | |
|---|---|---|---|---|
| | Number of projects | MW | Number of projects | MW |
| **Section 34 programmes (non RE)** | 3 | 1 016 | 2 | 1 005 |
| DoE peaking (5% lf) | 2 | 1 005 | 2 | 1 005 |
| Co-generation Round 1A | 1 | 11 | - | - |
| **Section 34 programmes (Renewable IPPs)** | **102** | **6 372** | **64** | **4 001** |
| Renewable IPPs Round 1 | 28 | 1 425 | 28 | 1 425 |
| Renewable IPPs Round 2 | 19 | 1 040 | 19 | 1 040 |
| Renewable IPPs Round 3 | 17 | 1 452 | 16 | 1 435 |
| Renewable IPPs Round 3.5 | 2 | 200 | 1 | 100 |
| Renewable IPPs Round 4 | 13 | 1 121 | - | - |
| Renewable IPPs Round 4 additional | 13 | 1 084 | - | - |
| Small-scale renewable Round 1S2 | 10 | 49 | - | - |
| **Total** | **105** | **7 388** | **66** | **5 005** |

1 (7388MW - 5005.3MW) / 7388MW = 32%

SOURCE: IPP Office Databook

## 6.3 Current situation

The successes of the IPP program to date include the private capital that the program has attracted to the sector and the capacity that was delivered at a time when it was needed by the country have been recognised.

A report issued on the IPP Programme highlights the contribution of the programme to the South African economy:

- Foreign Direct Investment. The program is only funded 27% by foreign investment amounting to R53bn of R194bn invested to date – which means that 73% has been funded locally by local banks – However, see point 5 below which quantifies the additional cost borne by the South Africa consumer as IPPs become part of the energy mix at the current high prices.
- Created 32 323 jobs. These are gross jobs and not net jobs added to the economy as the impact of Eskom and associated mining job losses have not been factored into this calculation.
- Socio-economic development contribution is R256 million. This represents only 0.1% of the total investment of R194 billion.
- Enterprise Development contribution is R80.5 million. This represents only 0.04% of the total investment of R194 billion.
- 11 064 GWh of energy has been generated by renewable energy source procured under the REIPPP since the first project became operational (making a 15% to morning and evening system peak periods). Eskom experience over the past few years was that the contribution from renewable technology was not close to 15% during any peak hour. Contribution towards evening peak is from CSP (which is less than 100 MW) and wind which is exceedingly intermittent and varies between 50 and 600 MW.

The facts indicated above do not measure the trade-offs that the programme has had on the macro economy and therefore are not reflective of the true cost or benefit to the country and consumer.

Furthermore, **South Africa's power capacity and demand outlook has shifted for the short to medium term**. The current context is one of slowing electricity demand, acceleration of already commissioned coal-fired power stations, and significant improvement in Eskom's operational performance which is resulting in significant excess capacity.

- Based on current growth expectations of 0.8% p.a, should the additional IPP Programmes go ahead, the completion of Medupi, Kusile and Ingula and the combined effect of the approved IPP power purchase agreements would lead to overcapacity on the system.
- Eskom's performance has improved and currently has between 3000MW – 5000MW of excess capacity. However, despite reductions in technology costs the existing REIPP programs have come at a significant premium.
- The current prices for REIPPs range from 77.5c/kWh to 380c/kWh. REIPP prices were significantly higher in rounds 1-3 than in round 4, pushing up the average prices to 218c/kWh (at September 2016). By contrast, Eskom's marginal cost of production from coal amounts to 44c/kWh for the first six months of the year. While this is expected to increase to 62.8c/kWh over the next five years. Eskom's average annual tariff is 81.4 c/kWh and renewable energy costs five times as much as Eskom's coal production costs.
- The premium paid for IPP local purchase volumes translates into a total cost to country of R102 billion over the 2017/18 5-year corporate plan period. As the renewable energy costs are a full pass through to the consumer this has a negative impact on electricity prices and ultimately economic growth.

If the IPP Programmes are to continue at the current pace, then the future outlook for Eskom is operationally and financially unsustainable.

- The Eskom energy supply market share is declining and will continue to decline if additional IPPs are introduced into the market beyond bid window 4.5.
- Eskom's requirement for coal will decrease which will directly affect the coal industry. The socio-economic impact of closure of Eskom power stations will directly impact approximately 10,000 people that currently services the power stations. It will in all likelihood impact the livelihood of the various communities and mines in the areas surrounding the affected power stations. This has not been quantified but could have a significant impact on an already distressed economy.
- Further, environmental commitments made by South Africa in terms of COP21 indicate that all but 4 power stations will be decommissioned from 2035 to 2050 which may have implications on the coal industry. In this plan two power stations are already expected to be decommissioned.
- The consequence of Eskom capacity being displaced creates many interrelated impacts which includes impairment of power station assets, additional penalties for cost plus mine closure and the earlier decommissioning costs. This financial impact totalling potentially R68 billion together with the R54 billion of RCA's at risk will significantly deplete Eskom equity of R181 billion at 31 March 2016.
- According to the MYPD Methodology assets not in use will be excluded from the regulatory asset base which will have an impact on Eskom's revenue determination implying that the costs, operating, depreciation and return on assets will be excluded in Eskom's revenue application.
- The further risk of a significant decrease in Eskom revenue is the triggering of a material adverse conditions clause in current existing loan agreements as a result of the deterioration of the financial position of Eskom that may trigger suspension of drawdown in existing facilities and accelerated requests for prepayment of existing debt.
- With the risk of Eskom receiving lower revenues from its operations this will have direct impact on its ability to generate adequate cash flows to meet its existing debt commitments. Eskom will be placed in a position where it would potentially have to trigger the Government guarantees issued to current investors. Based on Eskom's interpretation, it is our view that this would put the sovereign balance sheet at risk by triggering potential cross default clauses in existing loan agreements. The unintended consequences of this is that the GSFA financial

covenants could be triggered resulting in current contingent liabilities becoming actual liabilities.

- The recent Borbet judgement in which the learned Judge found that the efficiency and prudency test must be applied to all IPP costs before and after they are incurred, the ability for Eskom to obtain full cost recovery on the IPP Programmes is uncertain.
  - This poses a serious risk to Eskom as it puts the entire funding model for the IPP Programmes into jeopardy. The impact on Eskom is that any shortfall created by non-recovery of IPP related costs will have to be borne by Eskom, further impacting its financial sustainability.
  - It is expected that the judicial process would need to be finalised prior to NERSA processing further RCA applications.
  - This therefore results in the processing of 2014/15 (R20 billion) and 2015/16 (R23 billion) RCAs being placed on hold and this will result in a cumulative cash flow at risk of approximately R54 billion for Eskom. This amount includes the unprocessed applications currently with NERSA and the R11 billion which was part of the record of decision by NERSA on Eskom 2013/14 RCA application.
- Nersa has announced that for 2017/18 Eskom can only increase electricity prices by 2.2%.
  - IPP costs account for most of the additional revenue therefore leaving Eskom with no effective increase to sustain existing operations. Adjusting for inflation of 6%, this means that Eskom effectively has a 6% decrease in tariff.
  - In the 2018/19 tariff, it is estimated that IPP costs will make up 5.5% of the Eskom requested tariff.
- The REIPP program enjoys government guarantees to the extent of R200 billion from National Treasury. In addition, the Development Bank of South Africa – a state development bank – also funds a major portion of the program, which also enjoys government support (through equity contributions).
- In contrast Eskom currently enjoys the benefit of R350 billion of government guarantees to support its capital programme. . A more effective way to deploy government guarantees should be considered as the REIPP programme only produces energy on average at about 30% of the time.

## 6.4 Short and medium-term outlook for further IPPs

**South Africa's power capacity and demand outlook has shifted for the short to medium term** – the current context is one of slowing electricity demand, acceleration of already commissioned coal-fired power stations, and significant improvement in Eskom's operational performance which is resulting in significant excess capacity.

While Eskom maintains its long-term support of the country's REIPP programme, it is critical further IPP are rolled out at a cost and pace that will not negatively impact the country and Eskom operationally and financially. It is Eskom's view that PPAs with IPPs would need to be signed under the following conditions:

- IPP contract structure need to be **cost competitive**, to reach more economical levels of **77c/KWh or lower**. In the long term, Eskom believes that declining costs of renewables in SA and globally will support the electricity price path that supports economic growth.
- The effect of approving all PPA's up to BW4.5 would lead to **overcapacity on the system** under current demand forecasts of 1%. While the corporate plan targets demand growth of ~1.6%, it would take ~3.3% local demand growth per annum to make the full **additional capacity development viable for the country** by 2030 – which would be the optimum timing for adding such additional capacity, under that growth scenario.
- The introduction of further IPPs would need to support SA COP21 target agreements, and there should be no trade-offs in Eskom's role in meeting COP21 (i.e., meeting investment grade to finance nuclear, vs signing-on additional IPPs).
- Assurance would need to be provided by IPPs or government that shifts in energy mix would have no significant labour implications; and that alternatives will be provided to affected communities..

## 6.5 Learnings from global utilities

South Africa has an opportunity to learn from the lessons experienced by other countries on the role of renewable IPPs. The EU and SA power markets are differentiated by the fact that the EU power market is deregulated with fewer SOEs than in the past and an open buyer market (transmission grid companies that purchase from multiple generators).

However, there are important learnings for South Africa around the impact of subsidised renewables on traditional integrated power companies and customers in the EU. For example:

- Profits of traditional integrated EU power companies has declined by more than 60% over the last 5 years as the aggressive growth in renewables rapidly captured market share away from traditional integrated coal and nuclear base load generating companies. Europe's five largest traditional integrated power companies- EDF, ENGIE, Enel, E.ON and RWE- that represented 60% of Europe's electricity capacity in 2008 have collectively lost over EUR 100bn in market capitalisation till 2013; each of these utilities suffered ratings downgrades, (e.g. from 2008 to 2015 EDF went from Aa1 to A2 in 2015, RWE A1 to Baa3 and E. on from A2 to Baa1)
- Over this period the share of renewables generation (excluding hydro) went from 6% to 16% in 2015. These numbers vary dramatically by country, (e.g. in Germany renewables driven power consumption accounted for 30% of the total)
- The growth of renewables has not necessarily benefitted the consumer. In Germany while wholesale electricity prices, resulting from a deregulated market structure, declined by 14% (EUR8.2c/kWh to EUR7.1c/kWh) at the same time the consumer prices significantly increased (21%) since the consumer had to pay for IPPs while the legacy system remained. Consumer prices developed as follows: 2010 = 23.7 EUR c/kWh, thereof, 2.1 EUR c/kWh being an IPP surcharge; 2015 = 28.7 EUR c/kWh, thereof 6.2 EUR c/kWh being an IPP surcharge

South Africa faces much the same risk and in the end the cost of stranded assets if carried by South African consumers; and there are many valuable lessons to be learnt from the evolution of these markets.

- The market for renewables generation has responded exactly as intended by regulators. There has been an increase of renewables generation capacity based on the guaranteed returns underwritten by the government.
- Judging by the significant generation over-capacity created in many markets, the level of subsidies did not rigorously take into account the demand and supply balance over time.
- The unintended consequences of the approach have resulted in a significant destruction of economic value for these economies simultaneously transferring value to owners of generation renewable capacity.
- This has not ultimately benefitted consumers because the total economic cost of renewables was not taken into account in launching these programmes: consumer electricity prices have risen while wholesale prices have declined.

In hindsight, a strategy that adopts a more fact driven and holistic approach to calculating the costs and benefits of renewables would have resulted in a better managed transition that not only achieved decarbonisation goals but also delivered reduced energy costs for all consumers (not just the few that can afford the capital outlay for solar PV and at scale storage).

## 6.6 Way forward

Applying these lessons to the South African context is instructive.

In the short to medium-term (5-10 years), the dynamics and assumptions underlying the original REIPP have shifted. The country faces slowing electricity demand, acceleration of already committed coal-fired power stations and a significant improvement in Eskom's operational performance which is resulting in a significant excess of generation capacity.

Adding subsidised large scale renewables generation capacity on top of this will result in an acceleration of tariff increases for the consumer and stranded assets for Eskom. Eskom is also investing in energy storage technology over the next 5 years in support of this long term commitment to renewables.

In the long term, Eskom supports that renewables are and will remain an important element of the energy mix and maintains long-term support for the REIPP program. As the costs of renewables further decline and the SA economy shows strong growth, Eskom will fully support growth in renewables in order to lead the country in reducing its carbon emissions, while delivering electricity at the most competitive price possible. Eskom believes that the assumptions made by the Department of Energy to support the continuation, acceleration and/or expansion of the IPP Programmes needs to be reviewed.

Eskom will continue to engage with government to manage the risks of the IPP. In the 5-year period, Eskom will connect IPPs for all procured rounds at prices of 77c/kWh or lower in line with the State of the Nation Address by the President. However, this is dependent on Eskom receiving a tariff increase from Nersa that is in excess of 2.2%. This, Eskom believes, will enable the programme to be rolled out at a cost and pace that will not negatively impact Eskom or the environment. Slower demand growth and increases in Eskom's own capacity will create an excess capacity situation for the country. Eskom has accounted for this excess capacity situation by planning to decommission 2 coal-fired power stations by FY2021/22 in order to maintain a moderate electricity price path. Any additional IPPs will need to be assessed against the holistic benefits it is likely to provide to the economy across security of supply, electricity price, environmental benefits and socio-economic factors..

# 7 Financial Strategy

## 7.1 Executive summary

Eskom's financial health deteriorated between 2008 and 2014 as a result of lower demand, above-inflationary cost increases and an electricity price that is not cost reflective. These challenges were amplified by an ambitious capex programme to provide much-needed capacity. In addition, Eskom applied for a 16% price increase while NERSA allowed only 8% for the MYPD3 period (1 April 2013 to 31 March 2018).

The Board decided to implement a turn-around strategy based on the following three key focus areas:

- Improving in Generation plant performance
- Bringing the capital expansion plan in line with the approved costs and time-line without impacting quality
- Improving the financial health

As part of the finance turn-around strategy, the following actions were taken:

- Introduced the business productivity program (BPP) with the objective to save at least R60 billion
- Obtained support from government through the Government Support package (R23 billion equity injection, conversion of the R60 billion sub-ordinated loan and providing R350 billion government guarantees)
- Developed a clear strategy to manage liquidity

The BPP program started in 2014 and the cumulative actual savings at 31 March 2016 were R29.0 billion – exceeding the target by R3.1 billion. The cumulative projected savings at 31 March 2017 is R48.2 billion – exceeding the target by R5.2 billion.

As a result of these savings and growth in revenue, EBITDA improved from R23 billion in FY2014/15 to R32 billion in FY2015/16, a 37% increase. The improvement in EBITDA resulted in an improvement of most key financial ratios. Cash from operating activities improved by 36% to R 37 billion. The Debt Service Cover Ratio improved from 0.92 in FY2014/15 to 1.07 in FY2015/16 with the Gross Debt / EBITDA ratio improving from 16.1 to 11.4 times. Liquid assets increased by 123% to R39 billion as at 31 March 2016. This was achieved through an increase in EBITDA, restricting capex and securing additional funding.

The Design-to-Cost strategy (DTC 1) was adopted as a continuation of BPP to extract further efficiencies out of the business, through:

- Reduction in primary energy cost; (R12 billion reduction forecast for FY2017)
- Restricting other operating costs to inflation (R4 billion saving forecast for FY2017)
- Re-phasing capex

It is expected that EBITDA will improve further this financial year to approximately R40 billion, an improvement of 26%. While revenue is expected to increase 7.8%, total primary energy cost is expected to reduce by 2.3%. Other operating expenses are expected to increase in line with inflation. As a result of the improvement in EBITDA, the EBITDA margin is expected to increase 3.3 percentage points to 26%, an improvement of 17%. The financial position is much improved from a few years ago and is expected to improve further during the planning period. The ultimate goal is to achieve stand-alone investment grade by year five of the plan.

The FY2017/18 to FY2021/22 Corporate Plan will build on the success of BPP and DTC 1 and aims to

- Drive further cost efficiencies
  - Reduce primary energy costs by R43 billion over the plan with a view to identify further opportunities
  - Use advanced analytics to reduce costs by R6 billion
  - Reduce capex by R25 billion
  - Identify opportunities for private sector participation
- Stimulate demand by ~2.3% CAGR over the five-year plan period
- Reduce reliance on government guarantees, releasing a minimum of R105 billion back to National Treasury

Key to solving Eskom's financial health is to improve the EBITDA margin through a combination of delivering on cost efficiencies, increasing demand and attaining a cost reflective price of electricity. Managing liquidity will be a major focus to ensure Eskom's status as a going concern.

This plan reflects stringent top down cost targets. Various initiatives have been set in place to achieve these stringent targets. Divisional cost targets, including capex, have been set and senior executives assigned responsibility to meet these targets. Achieving these targets is dependent on Eskom wide strategies such as human resources, capex scrubbing, coal procurement and using advanced analytics to identify further cost savings.

With the growth seen in IPPs and the moderate growth in demand, surplus capacity will be available. This plan takes into account the premature decommissioning of stations (Chapter 12, Generation).

There are risks in the plan, of which the sales growth and price path are the most sensitive in meeting stand-alone investment grade by FY2022.

In conclusion, the improvement in financial performance since FY2014/15 gives management confidence that Eskom is able to continue improving its financial performance and reach stand-alone investment grade by FY2021/22.

## 7.2 FY2016/17 latest estimate: achievements and challenges

As indicated by the financial ratio summary (Exhibit 23) and latest estimates for the FY2016/17 period (Table 13) the business will achieve above-target financial performance, despite the challenging operating environment and a price increase of 9.4% being awarded against an assumed increase of 13%. This performance is reflective of the concerted effort made by the business to improve efficiencies resulting in cost reduction and increasing cross border sales.

**EXHIBIT 23: FY2016/17 FINANCIAL PERFORMANCE**

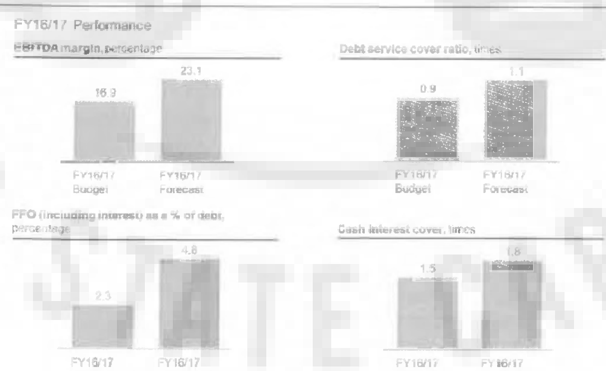


**TABLE 13: LATEST ESTIMATE FY2016/17**

| R millions | Actual FY14/15 | FY15/16 | Budget FY16/17 | Forecast FY16/17 | Variance | % of budget |
|---|---|---|---|---|---|---|
| Revenue | 147 691 | 163 395 | 180 307 | 176 117 | (4 190) | 98% |
| Other income | 4 444 | 2 390 | 3 487 | 1 042 | (2 445) | 30% |
| Primary energy | (83 425) | (84 728) | (94 986) | (82 814) | 12 172 | 87% |
| **Operating expenditure** | **(45 449)** | **(49 090)** | **(58 452)** | **(54 099)** | **4 353** | 93% |
| Employee benefit expense | (25 912) | (29 257) | (31 410) | (32 743) | (1 333) | 104% |
| Net impairment (reversal)/loss | (3 766) | (1 170) | (681) | (1 007) | (326) | 148% |
| Operating expenses | (15 771) | (18 663) | (26 361) | (20 349) | 6 012 | 77% |
| **EBITDA** | **23 261** | **31 967** | **30 356** | **40 246** | **9 890** | 133% |
| Depreciation and amortisation expense | (14 115) | (16 531) | (20 987) | (20 908) | 79 | 100% |
| **Operating profit /(loss) before net fair value and net finance cost** | **9 146** | **15 436** | **9 369** | **19 338** | **9 969** | **206%** |
| Net fair value gain/(loss) financial instruments | (4 117) | (1 452) | (2 578) | (3 813) | (1 235) | 148% |
| Net fair value gain/(loss) embedded derivatives | 1 310 | 997 | 1 675 | 587 | (1 088) | 35% |
| **Operating profit /(loss) before net finance cost** | **6 339** | **14 981** | **8 466** | **16 112** | **7 646** | **190%** |
| Net finance income/(cost) | (6 109) | (7 919) | (13 920) | (12 997) | 923 | 93% |
| Share of profit of equity - accounted investees | 49 | 43 | - | 18 | 18 | N/A |
| **Profit/(Loss) before tax** | **279** | **7 105** | **(5 455)** | **3 133** | **8 588** | **157%** |
| Income tax expense | (37) | (2 488) | 1 552 | (876) | (2 428) | 156% |
| **Loss from discontinued operations** | **(42)** | | | | - | N/A |
| **Profit/(Loss) for the year** | **200** | **4 617** | **(3 903)** | **2 257** | **6 160** | **158%** |

The EBITDA forecast for FY2016/17 is R40 billion, 33% above the FY2016/17 corporate plan target of R30 billion. This increased EBITDA will be achieved despite a lower than budgeted price increase (9.4% granted vs 13% budgeted) as a result of measures that were taken to ensure the improvement in EBITDA as follows:

- Increased export demand as a result of the drought experienced in Southern Africa and a focused strategy to boost export sales resulting in R3 billion additional revenue to partially offset reduction in revenue from local sales
- Reduction in primary energy cost of R12 billion, mainly as a result of lower reliance on the OCGTs due to improved Generation plant performance, savings on coal – despite higher production from coal – and reduction in production from IPPs
- Reduction in other operating expenses of R4 billion

The cost savings more than offset the loss in revenue due to NERSA allowing a 9.4% price increase. The cost reductions mitigated the revenue risk, resulting in an improved EBITDA of R10 billion against the corporate plan. These cost reductions were achieved without impacting operational performance.

## 7.3 Operating landscape

The challenging operating environment is expected to continue to put pressure on Eskom's ability to deliver a strong financial performance:

- **Market demand** – The continuing slowdown in the economy and the availability of alternative energy sources are driving the decline in electricity demand, (refer to section on demand).
- **Regulation** – NERSA has indicated a need to move to an inflationary tariff increase of below 8% a year. This is well below the increase of 13% a year estimated in the FY2016/17 corporate plan. This reduction will create a significant revenue gap of more than R60 billion over the next five years. The decision by the North Gauteng High Court to set aside the FY2013/14 RCA decision (reversing the tariff decision of 9.4%) has created further ambiguity in the tariff path and placed Eskom liquidity under additional pressure. This plan reflects a price spike for two years of 16% for FY2018/19 and FY2019/2020 where after the price increase is planned at 8%, with an average increase of 9% p.a.
- **Independent power producers** – Electricity sourced from IPPs is increasing at a rate above demand growth, which is driving up primary energy expense and displacing Eskom-generated power. This has a negative impact on primary energy costs as the IPP cost is much higher than Eskom's coal fleet.
- **Decommissioning of stations** – Due to the surplus capacity some stations may have to be decommissioned earlier than anticipated. Provision for decommissioning of these stations was made but this will result in an immediate acceleration of depreciation to comply with International Financial Reporting Standards (IFRS). Effectively, the remaining life of these stations are reduced to zero. Operating costs of these stations will reduce during the decommissioning period as activities are closed out. It was assumed that head count will not be reduced as staff will assist with the decommissioning and will be absorbed in other areas of the business. There will be an impact on the cash flow as plant will be dismantled and coal mines rehabilitated, this is funded from the decommissioning provisions raised to the balance sheet.
- **New power stations** – The commissioning of the new power stations, Medupi and Kusile, will increase the cost base as these stations need to be staffed, insured and maintained.
- **Sovereign credit rating** – Uncertainty regarding the stability of South Africa, demonstrated by the threat of a downgrade to sub-investment grade, reduces Eskom's ability to raise adequate funding at historic interest rates.
- **Strong implementation governance** - The challenging operating environment requires a strong implementation plan and clear governance structures in place to ensure success. The Results Management Office (RMO) has a clear process in process, more detail can be found in chapter 1.

## 7.4 Credit rating requirements

To mitigate the risk of the sovereign's rating impact on Eskom, the business aims to improve the company's financial health from the ratings as at 31 December 2016 (Table 14) and meet the financial requirements of an investment-grade entity by FY2022. Further detail on the credit rating can be found in the Funding chapter.

**TABLE 14: SUMMARY OF ESKOM' S CREDIT RATINGS AS AT 31 DECEMBER 2016**

| Rating | Standard & Poor's | Moody's | Fitch: local currency |
|---|---|---|---|
| Foreign currency | BB | Ba1 | – |
| Local currency | BB | Ba1 | BBB- |
| Standalone | ccc+ | b3 | B- |
| Outlook | Negative | Negative | Negative |
| Action date | 08 Dec 2016 | 05 Dec 2016 | 25 Nov 2016 |
| Affirmation date | 08 Dec 2016 | 05 Dec 2016 | 25 Nov 2016 |

## 7.5 Five-year financial strategy

Eskom has developed a financial strategy to deliver sustainable financial performance and address the key concerns raised by the rating agencies. The strategy includes:

- **Customer centricity** – Eskom will focus on improving the customer experience by becoming a reliable business partner and ensuring that the customer's electricity requirements are met. As part of the customer centricity strategy, Eskom will develop and implement demand-stimulation initiatives to increase both local and export sales, achieving an average sales growth of approximately 2.3% CAGR a year over the plan period.
- **Cost containment** – The drive to contain operating costs will continue and be accelerated. The emphasis will be on primary energy costs (R43 billion, with a view to identify further opportunities), employee benefit costs, maintenance and third-party spend. This will be done without negatively affecting operating performance.
- **Operational efficiencies** – Digital and advanced-analytics opportunities will be explored to drive further reduction in costs. Savings identified in the plan amount to a R6 billion reduction, with further opportunities to reduce costs under investigation.
- **Capital and funding** – Capital optimisation and scrubbing will reduce cash for investments and drive the required reduction in debt levels. A reduction of R25 billion has been included in the Corporate Plan.

## 7.6 Corporate Plan assumptions

The Corporate Plan is anchored on key assumptions, described in Table 15. Details on key ratios, assumptions and targets are given in Table 15, Table 16 and Table 17.

**TABLE 15: CORPORATE PLAN ASSUMPTIONS**

| Assumptions | Description | Key indicators |
|---|---|---|
| **Macroeconomic factors** | GDP growth has slowed in the past year.<br>Low GDP growth places pressure on the industrial sector and the impact is evident in the decreasing electricity demand. | PPI ~4% a year<br>CPI ~6% a year<br>GDP reaching a maximum of ~2% a year (World Bank forecast) |
| **New build** | Kusile units 1, 2 and 3 and Medupi 4 and 5 will be delivered within the P80 schedule, with P50 costs. | CO dates<br>Capex reduction |
| **IPPs** | IPP contributions are aligned to bid window 4.5 for those IPPs with a price not more than 77 c/kWh.<br>Eskom will remain committed to meet and deliver its DoE IPP programme objectives and timelines. | IPP costs |
| **Fleet performance and life** | EAF:PCLF:UCLF will be 80:10:10 by FY2019/20.<br>Premature decommissioning of stations will take place. | EAF measure |
| **Regulation** | Moderate price increases with price increases peaking in FY2018/19 and FY2019/20 at 16%, with an average increase of 9% p.a. | Tariff increase, % |
| **Environment** | The restriction of emissions has been factored into the production plan.<br>The business is prioritising environmental requirements and the achieving of emissions targets. | Emissions measured |
| **Sales** | Sales growth over the five-year period has been assumed to grow at a CAGR of 2.3%.<br>Local sales (0.8% to 2.1%) | Increased sales |

| Assumptions | Description | Key indicators |
|---|---|---|
| | Export sales (4.5% to 8%)<br>The increase in sales is driven by demand stimulation initiatives for both the local and export sales. | |
| **Tariff** | The tariff assumption for FY2018 has been revised downwards to account for the risk from NERSA determination.<br>The tariff does not include any assumptions on the RCA. | Tariff profile (Table 16) |
| **Primary energy** | Coal costs will increase by approximately 7.3% a year<br>There will be adequate investment in mining capacity by the mining sector to ensure future security of coal supply through implementation of the new coal policy.<br>The plan is based on least cost dispatch of the coal fleet. | Primary energy expense<br>R/ton cost<br>logistics costs<br>share of cost -plus mines |
| **Opex** | Normal operating expenses, including repairs and maintenance, are expected to escalate at CPI, of ~6%. | Exhibit 32<br>Exhibit 33 |
| **Manpower** | Containing workforce numbers without compromising the required skills.<br>Employee benefits costs are assumed to increase at CPI+2%.<br>Income differential not included in the plan as it is assumed to be self-funded | Headcount<br>Employee benefits |
| **Capex** | Eskom funded capital expenditure is forecast to be R300 billion.<br>Additional capex requirement to be funded through private sector participation | Capex profile (Table 16) |
| **Funding** | Eskom aims to increase funding to match the capex spend requirements and reduce reliance on Government guarantees. | Funding profile (Table 16) |

**TABLE 16: FINANCIAL ASSUMPTIONS**

| | FY17/18 | FY18/19 | FY19/20 | FY20/21 | FY21/22 | TOTAL |
|---|---|---|---|---|---|---|
| Price escalation, % | 2.2 | 16.0 | 16.0 | 8.0 | 8.0 | |
| Capex[1], R billion | 62.2 | 85.7 | 93.1 | 71.5 | 56.8 | 369.2 |
| Funding level (incl. cash sweep), R billion | 69.9 | 70.6 | 68.9 | 49.9 | 39.2 | 298.4 |

## 7.7 Five-year financial performance

### 7.7.1 Key Ratios

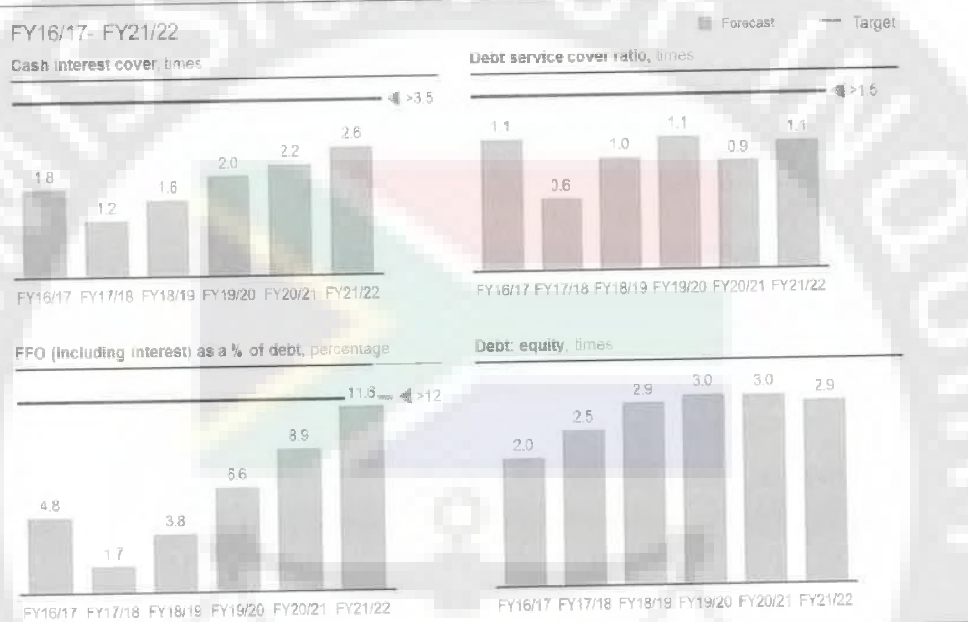
Based on the assumptions outlined above Eskom should achieve stand-alone Investment Grade ratios by FY2022.

1 Includes DoE funded capex – R18.5 billion, PSP funded capex R50.2 billion

**TABLE 17: KEY RATIOS**

| | FY17/18 | FY18/19 | FY19/20 | FY20/21 | FY21/22 |
|---|---|---|---|---|---|
| EBITDA margin, % | 17.2 | 22.8 | 29.9 | 33.7 | 35.8 |
| Debt service cover ratio, times | 0.6 | 1.0 | 1.1 | 0.9 | 1.1 |
| FFO as a % of debt | 1.7 | 3.8 | 6.6 | 8.9 | 11.6 |
| Cash interest cover, times | 1.2 | 1.6 | 2.0 | 2.2 | 2.6 |
| Debt: Equity, times | 2.5 | 2.9 | 3.0 | 3.0 | 2.9 |
| Gross debt: EBITDA, times | 15.4 | 11.3 | 8.1 | 6.6 | 5.6 |

**EXHIBIT 24: KEY RATIOS**

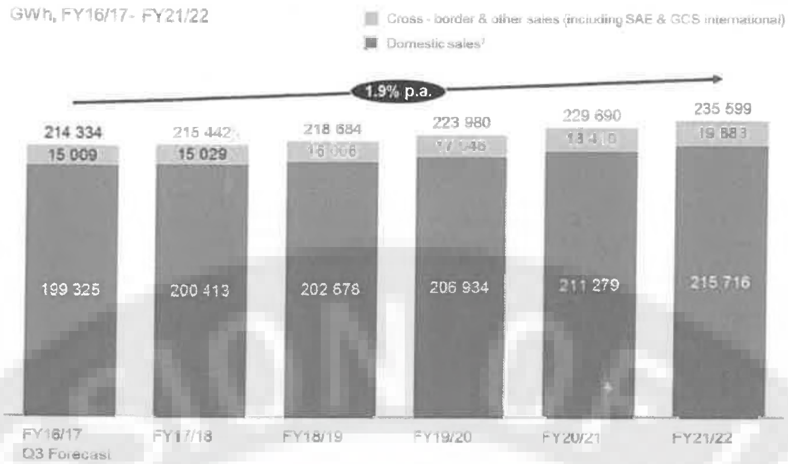



### 7.7.2 Revenue

Net revenue from electricity sales is forecast to increase from R176 billion to R299 billon, an average growth of 11.2% p.a., driven by growth in export and local sales of 2.0% p.a. and the assumed price path.

The demand-stimulation strategy will close the gap of the reducing tariff. Demand is expected to increase by approximately 20 TWh over the five-year period (Exhibit 25).

**EXHIBIT 25: DEMAND OUTLOOK**




1 Excluding internal sales

**TABLE 18: REVENUE FORECAST**

| | FY116/17 | FY17/18 | FY18/19 | FY19/20 | FY20/21 | FY21/22 | Average increase |
|---|---|---|---|---|---|---|---|
| **Net revenue R billion** | 176 117 | 180 629 | 211 336 | 248 334 | 272 633 | 299 805 | 11.2% |
| **Sales volume GWh** | 214 334 | 215 442 | 218 684 | 223 980 | 226 690 | 235 599 | 2.0% |
| **Average price c/KWh** | 83.3 | 84.9 | 97.4 | 111.7 | 119.6 | 128 | 9.0% |

### 7.7.3 Other income

Other income consists mainly of revenue from subsidiaries and in particular ERI. The growth p.a. is planned to be 53% p.a. which will come mainly from ERI. Other operating cost in ERI is growing in support of this additional other income. The net impact will have a positive impact on EBITDA and net income.

### 7.7.4 Operating expenditure

A continued focus on cost containment and operational efficiencies is expected to result in a cost reduction of approximately R53 billion, mainly from primary energy, over the Corporate Plan period.

Cost containment is a key component of Eskom's financial strategy. Eskom has developed programmes, which will deliver long-term sustainable savings, limit cost escalation without affecting negatively on operational performance. These programmes include:

- Delivering a total-cost-of-ownership (TCO) based procurement programme on major commodities
- Containing primary energy costs
- Supporting the delivery of manpower productivity through skills-based assessments, natural attrition and other headcount reduction initiatives and hiring programmes with the aim of reaching a headcount of 36 746 by FY2021/22 for Eskom company and 45 746 for Eskom group.
- Total group operating expenses, excluding depreciation, are expected to increase at approximately 8.0% a year to FY2021/22 (Exhibit 26)

EXHIBIT 26: GROUP-OPERATING EXPENSES BY DIVISION

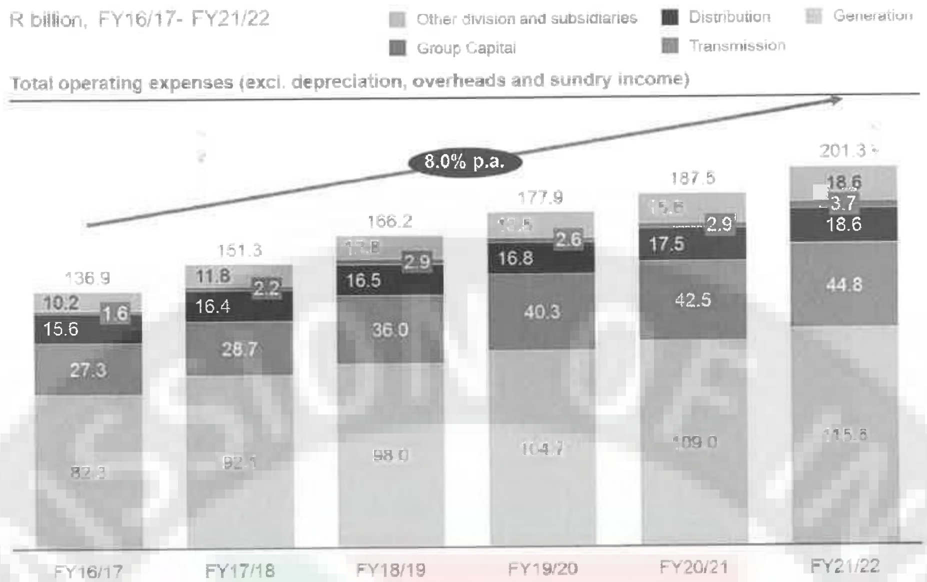
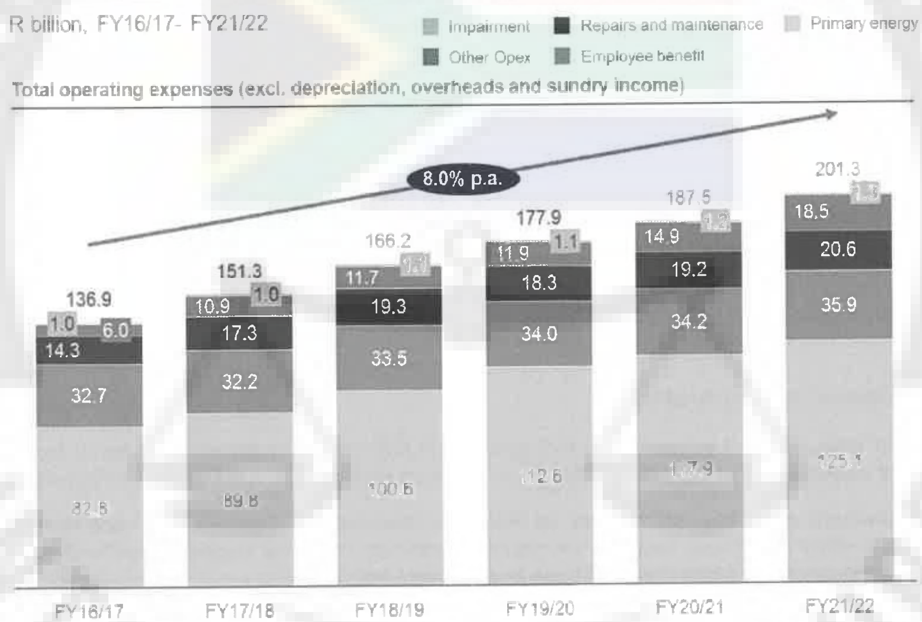



EXHIBIT 27: GROUP-OPERATING EXPENSES BY TYPE




A breakdown of the operating expenditure per division is included in the relevant operation plans

A breakdown of the main components of the cost base for Eskom is detailed below

**Primary energy**

Primary energy comprises approximately 55% of Eskom's cost base. Total primary energy costs include Eskom's primary energy costs, the cost of imported electricity and purchases from IPPs. With the introduction of further IPPs, it is expected that production from IPPs will grow at 8.5% a year, while production from Eskom resources will only grow at 1.6% a year, with a total growth in production of 1.3% p.a.

To allow the business to target a lower annual escalation, the Primary Energy division will implement a number of strategic initiatives, which include:

- Assessing cost-plus mine capex requirements to resolve the recapitalisation backlog and to enable mine delivery against agreed performance
- Negotiating improvements in fixed-price short, medium and long-term contract pricing
- Engaging coal contractors proactively, to avoid potential penalties
- Optimising logistics to ensure cost-efficiency improvement
- Least cost dispatch

**EXHIBIT 28: PRIMARY ENERGY COST BY TYPE**

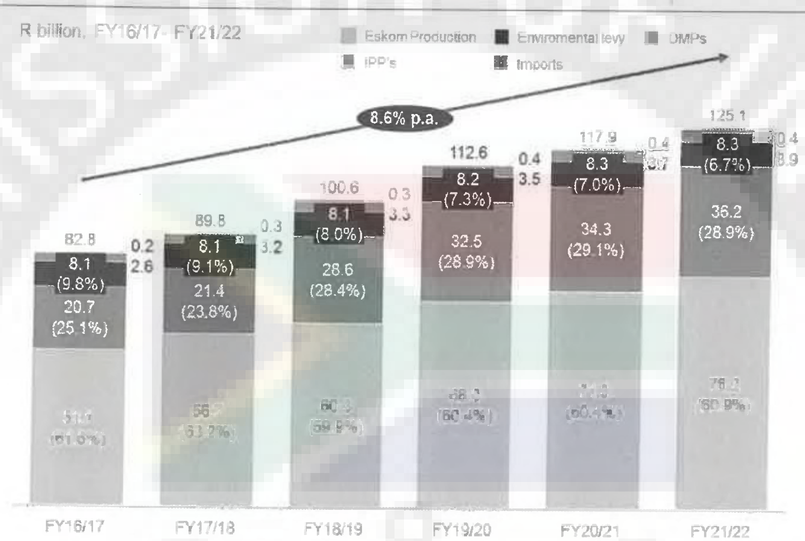
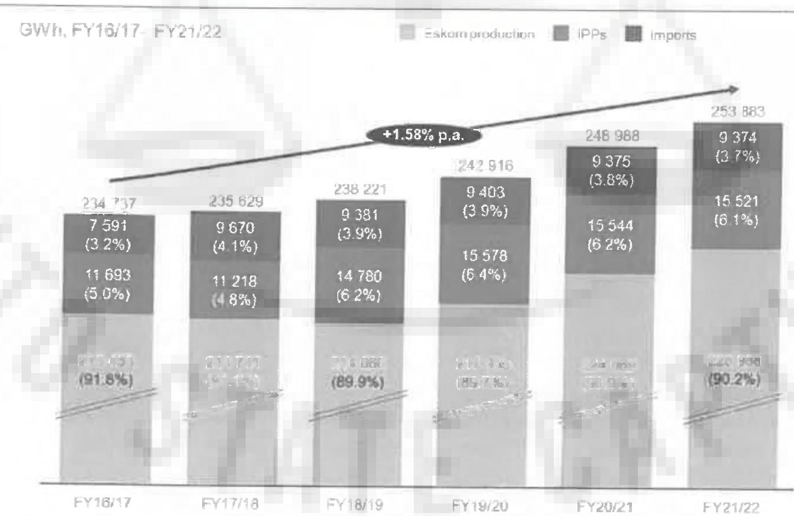



**EXHIBIT 29: PRIMARY ENERGY BY VOLUME**



Primary energy costs are expected to increase at 8.6% p.a. over the five year period:

- Eskom costs growing at 7.7%
- IPPs at 14.1%

By FY2021/22 IPPs will account for 6.0% of total production and 28.9% of primary energy cost.

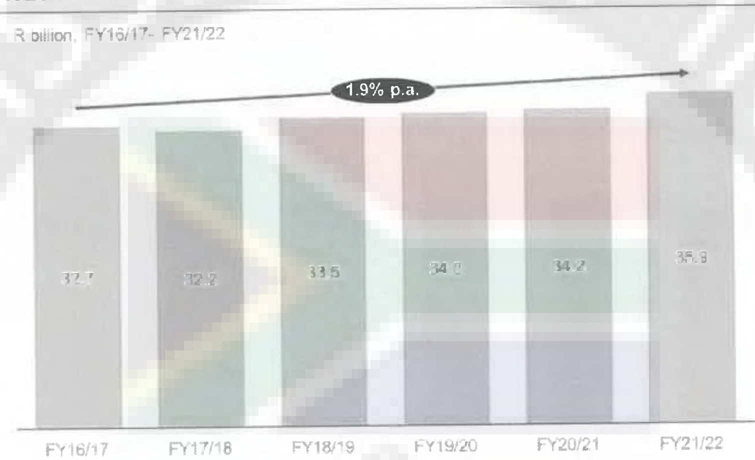
The per unit cost of renewable IPPs declines as new renewable IPPs come in at lower price.

*Further detail can be found in the primary energy operational plan.*

**Employee benefit cost**

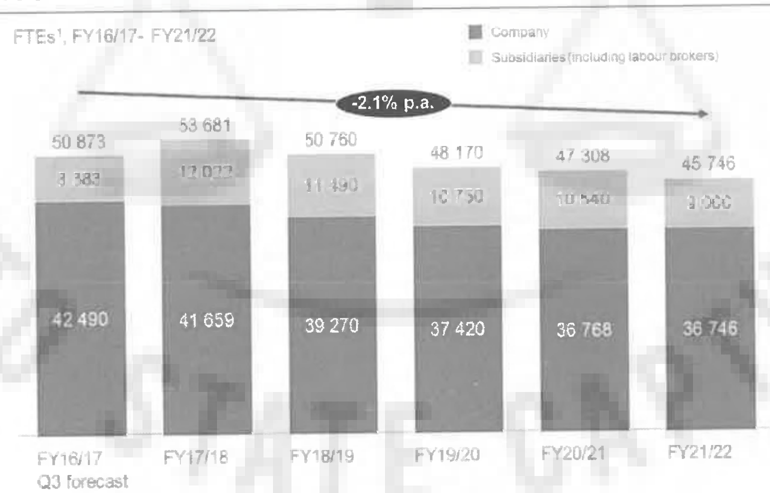
Eskom HR will embark on a drive to review the operating model to ensure that the right balance of skills and workforce numbers is embedded across the business. Divisions will aim to have salary increases in line with CPI. Eskom will reduce headcount to align with the right staff complement for the business (Exhibit 31). The employee benefit cost over the five-year period is shown in Exhibit 30.

**EXHIBIT 30: NET EMPLOYEE BENEFIT COST**




1 Net of capitalised labour cost

**EXHIBIT 31: ESKOM GROUP HEADCOUNT TARGETS**

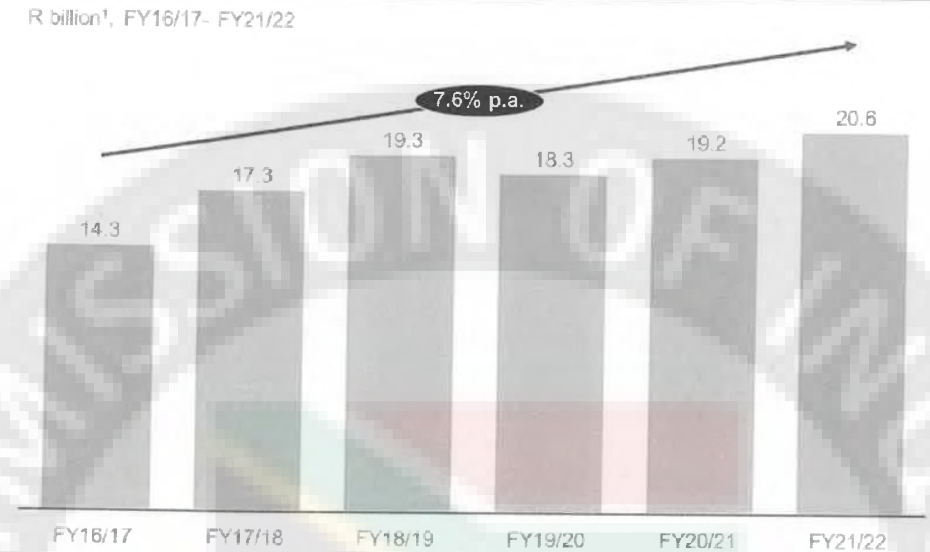



1 As per HR plan

Employee benefit costs are projected to grow at 1.9 % p.a. over the planning period with:

- Cost per employee growing at 9% p.a for the first year and then CPI+2% (~8% p.a) thereafter
- Eskom Group headcount reducing to optimal staffing level whilst maintaining workforce effectiveness and operational performance

**EXHIBIT 32: MAINTENANCE COST**




1 Company spend before Group eliminations

**Repairs and maintenance**

The acceleration of the delayed maintenance has taken place (this is evident through the increase in the improving availability) and the business expects the maintenance cost to normalise. Repairs and maintenance costs are expected to increase with inflation over the five-year period. The business will embark on various initiatives to reduce maintenance costs without compromising operational performance.

Refer to divisional operational plans for more information on maintenance strategies.

**Decommissioning costs**

The pre-mature closure of stations will result in an acceleration of depreciation in FY2019 in terms of IFRS whereby the remaining useful life of the station is reduced to zero, which will have a negative impact on net income in that year. Once the decommissioning program starts operating cost reductions will be achieved.

The decommissioning impact on operating expenses will be as follows:

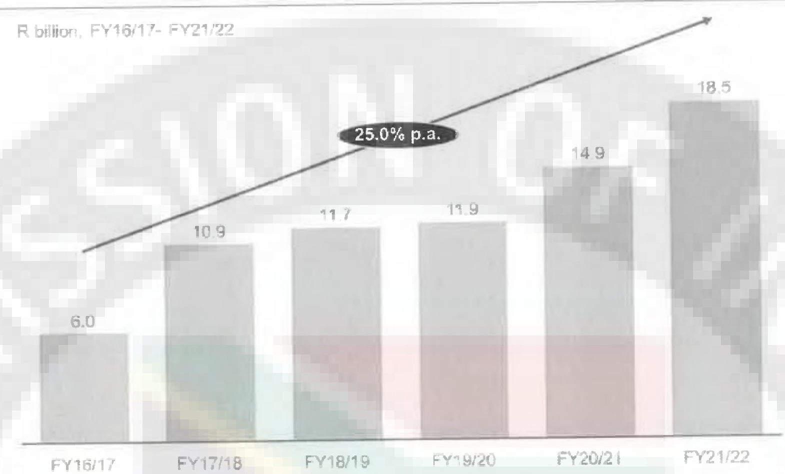
| R million | FY17/18 | FY18/19 | FY19/20 | FY20/21 | FY21/22 |
|---|---|---|---|---|---|
| Decommissioning change - Cost | - | 855 | - | - | - |
| Decommissioning change - interest | - | 476 | - | - | - |
| Depreciation acceleration | - | 9 592 | (164) | (183) | (203) |
| Opex reduction | - | (1 255) | (1 600) | (2 036) | (2 397) |
| Net cost | | 9 668 | (1 764) | (2 219) | (2 600) |
| Decommissioning prov Cash Outflow | - | - | (388) | (775) | (1 163) |

**Other Operating Expenditure**

The following spend is included as operating expenditure:

- Professional fees- Audit fees, consultant fees and information technology expenditure
- Insurance expense
- Infrastructure operational expense

**EXHIBIT 33: OTHER OPERATING EXPENDITURE (AFTER ELIMINATIONS)**




Other operating expenses is growing at 25% p.a. during the planning period. The above inflationary increase in other operating expenses is as a result of a growth as ERI was tasked to identify non-regulated revenue streams to improve EBITDA. The plan reflects the cost associated with the growth in EBITDA. The growth in operating expenses in Eskom Company is within inflation.

### 7.7.5 Profitability

EBITDA is planned to increase by 36.4% p.a. over the five years. EBITDA will initially drop due to the 2.2% price increase, where after it is expected to grow. EBITDA margin will follow a similar pattern and is expected to grow to 35.8% by FY2022.

**EXHIBIT 34: EBITDA AND EBITDA MARGIN**

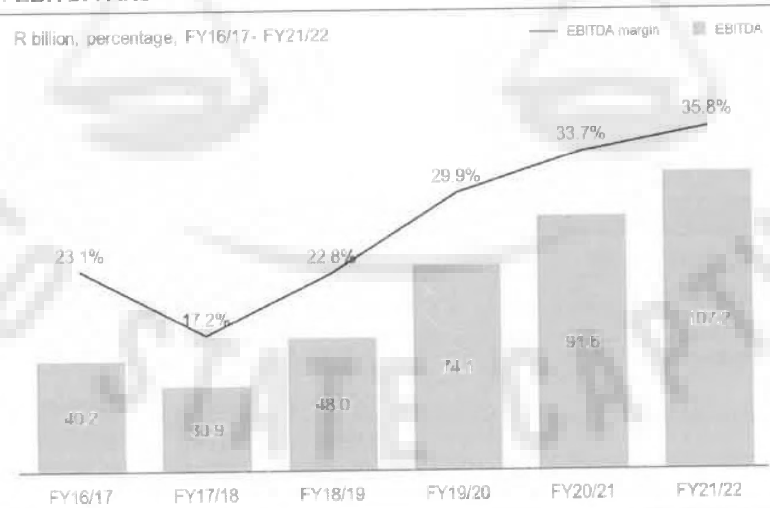
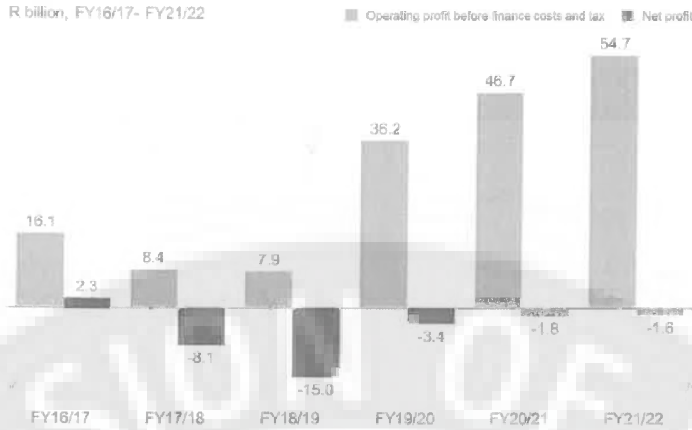


**EXHIBIT 35: OPERATING AND NET PROFIT**




It is expected that a net loss will be realised during the planning period. Depreciation is expected to grow from R20 billion to R 50 billion as new units of Medupi and Kusile will be placed in commercial operation. Net finance cost will grow from R13 billion to R 56 billion as new loans will be taken up in support of the capital expansion program while the capitalisation of interest during construction will reduce once units are completed and placed in commercial operations. This will have a negative impact on the net income although EBITDA will reflect a substantial growth.

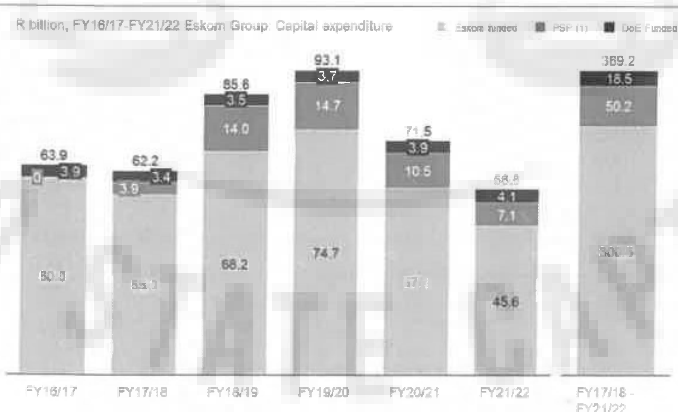
### 7.7.6 Capital expenditure

The business has identified initiatives, which will deliver a R25 billion reduction on capital spend over the next 5 years to FY21/22.

The R25 billion can be attributed to the following:

- R14 billion from the New Build programme, Kusile Units 1, 2, 3 and Medupi Units 4.5 will be delivered on the P80 schedule at P50 costs
- Reduction in capital spend due to the decommissioning of assets
- Capital scrubbing of projects
- Prioritising of projects
- Projects to be funded through public participation

**EXHIBIT 36: CAPITAL EXPENDITURE**




1 Public Sector Partnerships - includes Capex for cross-border, IT and renewables

- 75% of cross border Capex will be funded by external investors
- DOE Capex is funded by the grant

### 7.7.7 Funding and liquidity

- Debt funding of R298 billion (including cash sweep) is required to finance expansion, strengthening of networks, N-1 requirements and environmental requirement.
- FFO as a percentage of debt meets the 12% target in FY2021/22 to support an investment-grade rating in year five of the plan.
- The cash-interest cover and debt-service cover ratios are both under pressure as the interest and capital repayments increase. The ratios start improving after the initial five-year period.
- The debt: equity ratio remains high over the five-year period.
- Management of liquidity will be key to the successful delivery of the financial plan.

**Cash flow drivers**

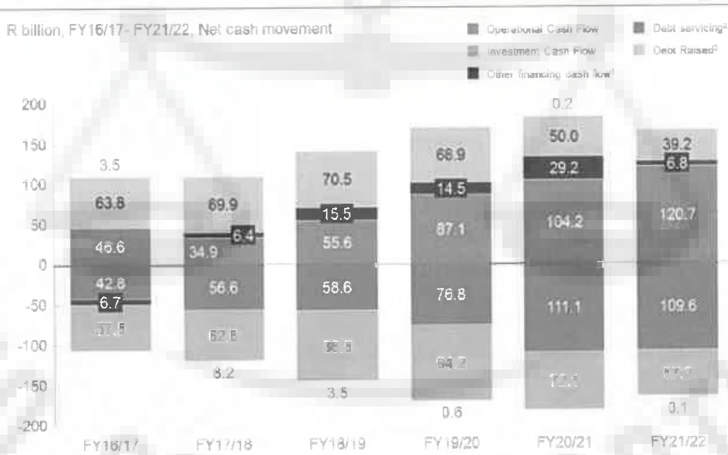
Operational cash flow will show strong growth over the next five years. Short-term liquidity must be managed closely by:

- Delivering operational efficiency and cost efficiency to ensure revenue uplift
- Managing capex
- Assessing options to re-phase debt redemptions between FY2017/18 and FY2021/22

Debt servicing is anticipated to increase over the next five years, driven by increases in new debt raised. This will result in higher interest repayments owing to debt-service arrangements and debt repayments. Cash flow from operations will be sufficient to cover debt repayments and interest payments.

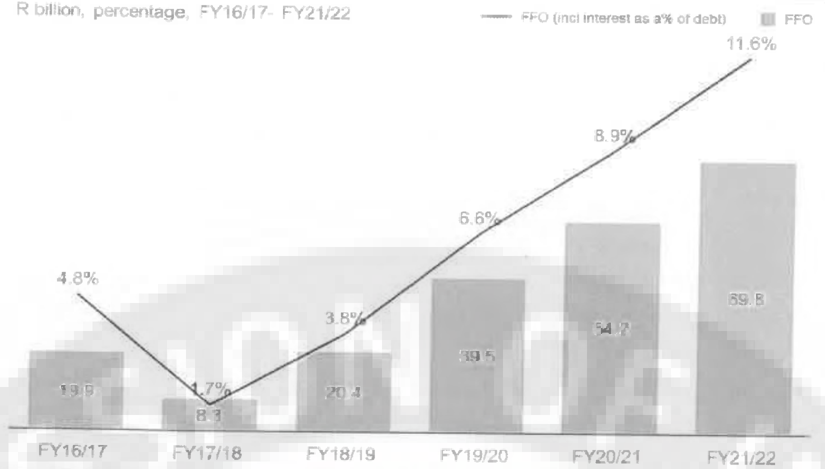
A summarised cash-flow statement is given in Exhibit 37 and free funds from operations are shown in Exhibit 38.

**EXHIBIT 37 NET CASH FLOW MOVEMENT**




1. Includes interest received and cash flows from trading assets and liabilities
2. Capital and interest repayments
3. Includes cash sweep

**EXHIBIT 38: FREE-FUNDS FROM OPERATIONS**




### Optimising finance cost

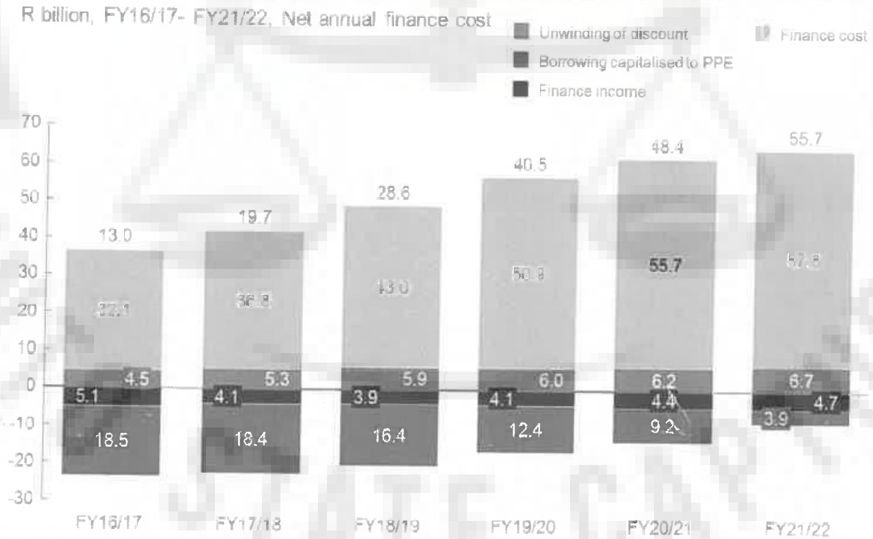
Net finance cost is calculated as the sum of charges on borrowings, less the interest capitalised during construction, plus the interest earned on liquidity reserves and the movements resulting from changes in the discount rate of the decommissioning provision.

Net finance cost is projected to grow from R13 billion in FY2017/18 to R56 billion in FY2021/22 as outlined in Exhibit 39.

The key drivers of the increase are:

- A reduction in the amount of interest capitalised as assets (Medupi, Kusile and Ingula) are put into commercial operation
- Growth in the debt requirement to fund the capital plan over the next five years

**EXHIBIT 39: ANNUAL NET FINANCE COST**



## 7.8 Sensitivity scenarios

Several sensitivity analyses have been performed on the plan to understand the potential impact of key assumptions and experience not holding.

**Scenario 1**: This scenario assumes a standard tariff price increase of 6.78% in FY 2018; all other variables are common to the base plan.

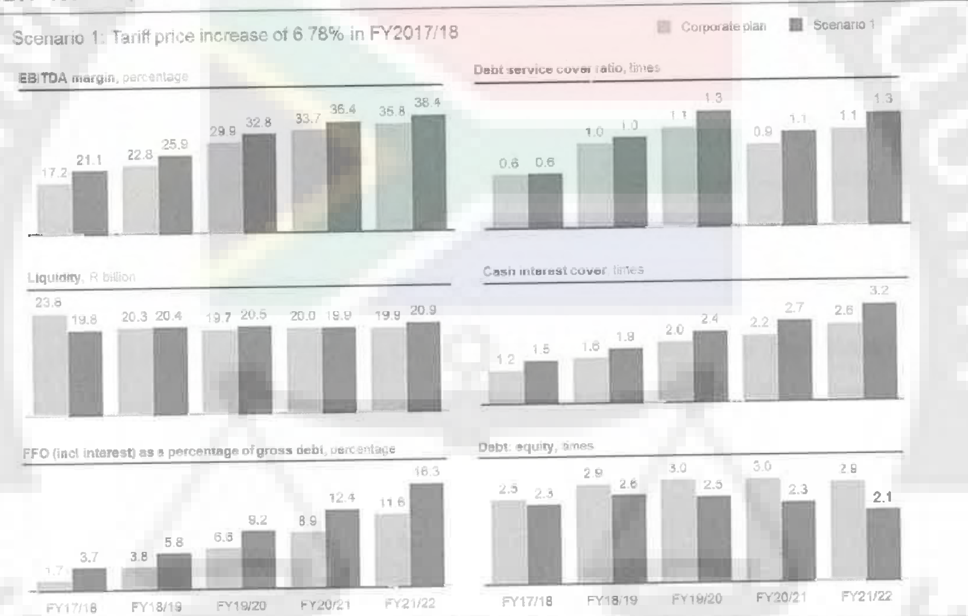
**Scenario 2**: This scenario undoes the assumption that IPP purchases will be restricted to currently contracted plus new contracts within a landing price of 77c.kWh (current values using DOE indicative prices from August 2015). Cost is increased by approximately R14.7billion over the period as production from coal is switched to power acquired from IPP's within BW4.5, again all other variables are consistent with the base plan.

**Scenario 3**: This scenario assumes that the average carry cost of debt is increased by 100 basis points (1%). All other variables are as per base plan scenario.

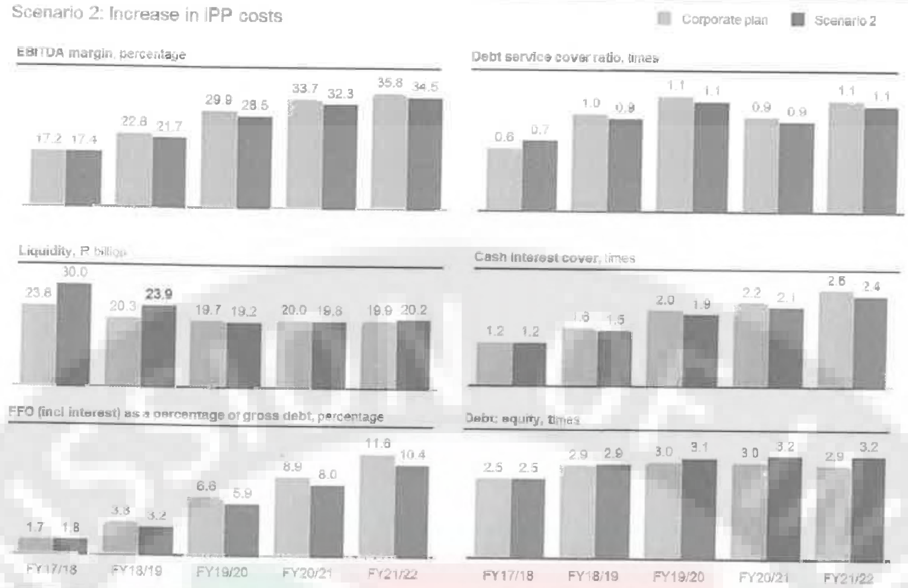
**Scenario 4**: This scenario assumes that the average growth rate in sales is a CAGR of ~0.8% on the FY 2017 YE Forecast (down from the ~2% reflected in the base plan). All other variables are consistent with the base plan scenario.

The graphs below outline the impact of these sensitivities on the key financial ratios.

**EXHIBIT 40: TARIFF INCREASE OF 6.8% IN FY2017/18**



## EXHIBIT 41: INCREASE IN IPP COSTS




## EXHIBIT 42:100BPS INCREASE IN INTEREST RATES

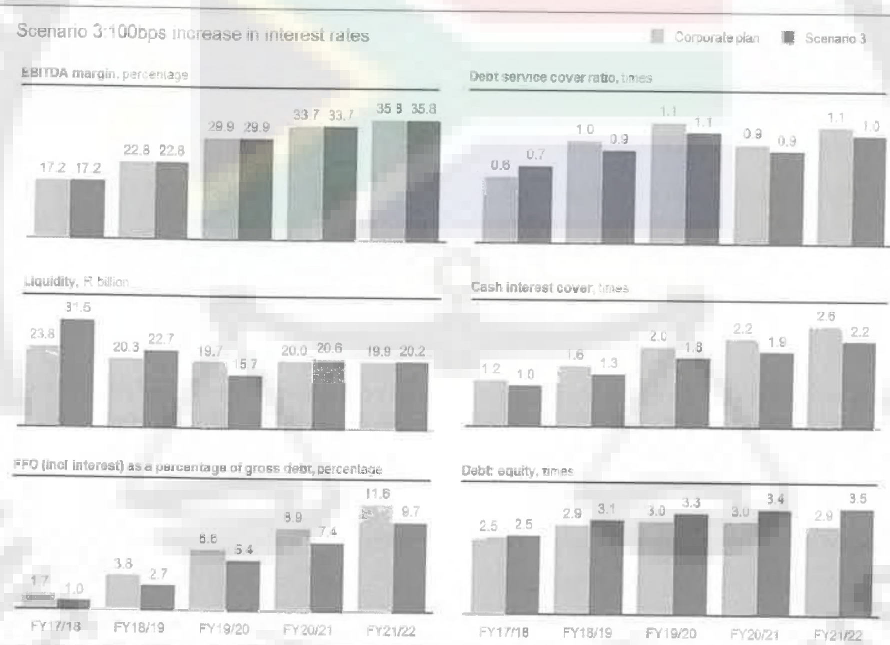
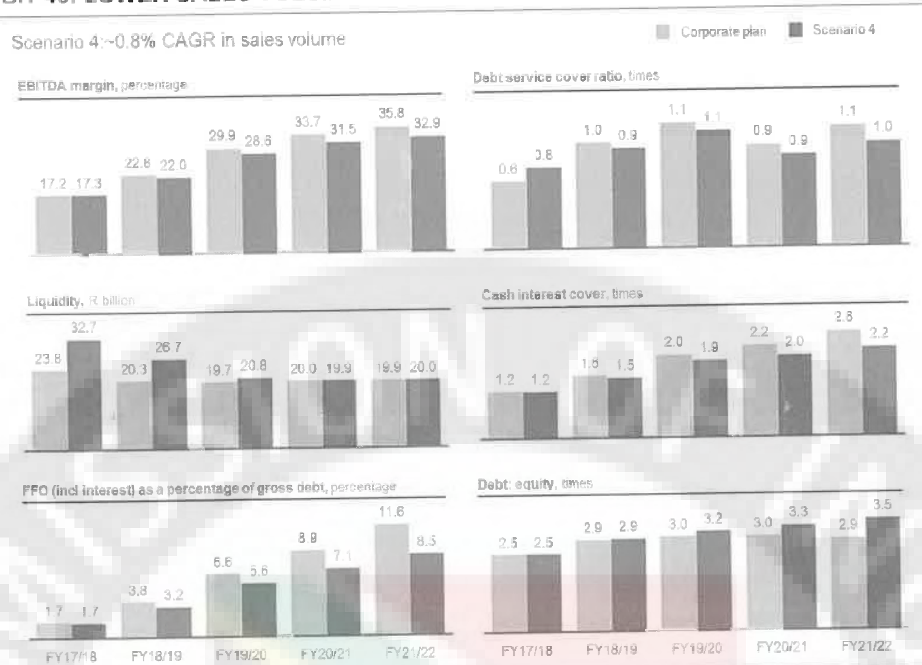


**EXHIBIT 43: LOWER SALES VOLUME GROWTH**




Achievement of the corporate plan cost containment measure is crucial to maintain the improved performance of the key financial ratios. The sensitivity tests illustrate that a slight deviation from the operating expense budget can have significant risk in the ability of Eskom to move towards investment grade. This implies that management execution of the budget and maintaining targets is crucial for the financial success of Eskom.

The implication of a deviation in capital expenditure and an increase in the interest rate result in similar outcomes on the key financial ratios. The deviation from the expected outcome in the corporate plan versus the scenario weaken the ratios and indicators. This highlights the importance of the business in executing their targets and outcomes as per the plan.

## 7.9 Risks

There are several financial risks that need to be monitored and managed to ensure that the Company and Group achieve their financial targets over the next five years. Table 19 below outlines the major financial risks and the treatment plans in place to manage them.

**TABLE 19: FINANCIAL RISKS AND TREATMENT PLANS**

| | Risks | Treatment plan |
|---|---|---|
| 1 | Rating downgrade - Further deteriorating credit ratings of both Eskom and the Sovereign | • Maintain Eskom status as a going concern through management of liquidity<br>• Develop strategy in conjunction with NERSA, DPE and NT to migrate towards cost reflectivity<br>• Rating agency strategy in development that will address key concerns<br>• Funding plan has been de-risked<br>• Provide assurance to rating agencies on price path |

| | Risks | Treatment plan |
|---|---|---|
| 2 | Revenue shortfall between Eskom's revenue application and NERSA's determination | • Focus on stakeholder support around tariff path<br>• Pursue alternative for non-regulated revenue streams<br>• Improve sales forecast accuracy |
| 3 | Sales shortfall with expected growth not materialising | • Identify further cost reductions<br>• Decommissioning of stations<br>• Rephasing of IPP program<br>• Slowing down build program |
| 4 | Increasing input costs (e.g. primary energy, employee benefit) | • Target further cost-plus mine improvement beyond mix<br>• Incorporate social plan<br>• Re-launch procurement savings programme<br>• Cost saving decisions based on net benefit (operational impact)<br>• Early involvement with organised labour to agree salary increases, and staff reductions |
| 5 | Increase in capex | • Prioritised list of capex projects to be managed on a quarterly basis<br>• Any overruns to be funded off balance sheet or through other mechanisms<br>• Capital scrubbing through advance analytics |
| 6 | Additional other income in ERI not materialising | • Ensure that costs are only incurred when other income is confirmed<br>• Close monitoring of progress |

## 7.10 Conclusion

Successful implementation of the DTC 2 strategy will result in Eskom achieving investment grade ratios by year five of the Corporate Plan and enable Eskom to return a minimum of R105 billion in government guarantees to National Treasury. Achieving the demand stimulation targets and tariff path are key to this strategy but the continued focus on cost reduction aids in mitigating revenue related risks.

Over the past two years the financial performance improved and this plan reflects the continuation of the improvement. This will put Eskom on the path to strengthen its balance sheet.

**Eskom Group Income statement**

**TABLE 20: ABRIDGED INCOME STATEMENT FOR FY2017/18 TO FY2021/22**

| | Actual | | Forecast | | | | | |
|---|---|---|---|---|---|---|---|---|
| R millions | FY14/15 | FY15/16 | FY16/17 | FY17/18 | FY18/19 | FY19/20 | FY20/21 | FY21/22 |
| Revenue | 147 691 | 163 395 | 176 117 | 180 629 | 211 336 | 248 334 | 272 633 | 299 805 |
| Other income | 4 444 | 2 390 | 1 042 | 1 571 | 2 916 | 3 695 | 6 479 | 8 702 |
| Primary energy | (83 425) | (84 728) | (82 814) | (89 304) | (100 630) | (112 560) | (117 948) | (125 067) |
| **Operating expenditure** | **(45 449)** | **(49 090)** | **(54 099)** | **(61 455)** | **(65 580)** | **(65 330)** | **(69 575)** | **(76 273)** |
| Employee benefit expense | (25 912) | (29 257) | (32 743) | (32 217) | (33 465) | (33 958) | (34 243) | (35 907) |
| Net impairment (reversal)/loss | (3 766) | (1 170) | (1 007) | (1 019) | (1 099) | (1 134) | (1 202) | (1 263) |
| Operating expenses | (15 771) | (18 663) | (20 349) | (28 219) | (31 016) | (30 237) | (34 131) | (39 103) |
| **EBITDA** | **23 261** | **31 967** | **40 246** | **30 942** | **48 043** | **74 140** | **91 589** | **107 167** |
| Depreciation and amortisation Expense | (14 115) | (16 531) | (20 908) | (20 843) | (38 040) | (36 270) | (43 165) | (50 021) |
| **Operating Profit /(Loss) Before Net Fair Value and Net Finance Cost** | **9 146** | **15 436** | **19 338** | **10 099** | **10 002** | **37 870** | **48 424** | **57 146** |
| Net fair value gain/(loss) financial instruments | (4 117) | (1 452) | (3 813) | (3 347) | (3 716) | (3 260) | (2 503) | (2 501) |
| Net fair value gain/(loss) on Embedded derivatives | 1 310 | 997 | 587 | 1 673 | 1 644 | 1 596 | 748 | 22 |
| **Operating profit /(loss) before net finance cost** | **6 339** | **14 981** | **16 112** | **8 425** | **7 931** | **36 206** | **46 669** | **54 667** |
| Net finance income/(cost) | (6 109) | (7 919) | (12 997) | (19 670) | (28 577) | (40 481) | (48 401) | (55 662) |
| Share of profit of equity - accounted investees | 49 | 43 | 18 | ( 63) | ( 253) | ( 454) | ( 806) | (1 179) |
| **Profit/(loss) before tax** | **279** | **7 105** | **3 133** | **(11 308)** | **(20 899)** | **(4 729)** | **(2 539)** | **(2 174)** |
| Income tax expense | (37) | (2 488) | ( 876) | 3 176 | 5 862 | 1 335 | 723 | 621 |
| **Loss from discontinued operations** | **(42)** | | | | | | | |
| **Profit/(loss) for the year** | **200** | **4 617** | **2 257** | **(8 132)** | **(15 036)** | **(3 394)** | **(1 816)** | **(1 552)** |

## Eskom Group Statement of financial position

### TABLE 21: STATEMENT OF FINANCIAL POSITION

| | Actual | | Forecast | | | | | |
|---|---|---|---|---|---|---|---|---|
| R millions | FY14/15 | FY15/16 | FY16/17 | FY17/18 | FY18/19 | FY19/20 | FY20/21 | FY21/22 |
| Property, plant and equipment | 455 977 | 518 036 | 584 660 | 637 396 | 691 232 | 750 693 | 781 100 | 783 591 |
| Future fuel supplies | 9 079 | 10 502 | 7 745 | 8 406 | 11 497 | 13 646 | 16 359 | 22 022 |
| Derivatives held for risk management | 14 303 | 27 600 | 20 914 | 20 914 | 20 914 | 20 914 | 20 914 | 20 914 |
| Other non-current assets | 20 900 | 9 337 | 9 047 | 9 222 | 10 194 | 11 314 | 11 945 | 12 262 |
| **Non-current assets** | **500 259** | **565 475** | **622 366** | **675 938** | **733 837** | **796 567** | **830 318** | **838 790** |
| Inventories | 16 033 | 17 821 | 23 369 | 30 112 | 34 452 | 35 887 | 37 744 | 38 468 |
| Trade and other receivables | 16 856 | 21 810 | 20 898 | 21 838 | 26 187 | 26 496 | 28 856 | 30 828 |
| Cash and Cash equivalent | 8 863 | 28 454 | 32 007 | 23 832 | 20 330 | 19 730 | 19 957 | 19 881 |
| Other current assets | 15 934 | 27 125 | 18 509 | 17 612 | 16 843 | 18 281 | 19 731 | 21 011 |
| **Total current assets** | **57 686** | **95 210** | **94 783** | **93 394** | **97 813** | **100 395** | **106 289** | **110 188** |
| **Total assets** | **557 945** | **660 685** | **717 149** | **769 332** | **831 649** | **896 962** | **936 607** | **948 978** |
| **Total equity** | **117 164** | **180 563** | **175 571** | **171 190** | **169 907** | **180 530** | **188 103** | **192 704** |
| Debt securities issued | 277 458 | 306 970 | 353 915 | 394 211 | 451 488 | 472 746 | 498 897 | 491 013 |
| Deferred tax liabilities | 18 154 | 21 000 | 20 867 | 17 142 | 10 447 | 8 203 | 6 426 | 4 667 |
| Deferred income | 14 055 | 15 516 | 17 844 | 20 054 | 22 367 | 24 761 | 27 216 | 29 735 |
| Provisions | 31 078 | 32 841 | 34 011 | 37 424 | 42 936 | 46 677 | 50 009 | 53 146 |
| Other non-current liabilities | 25 401 | 28 016 | 34 493 | 30 002 | 27 021 | 25 686 | 43 823 | 46 309 |
| **Non-current liabilities** | **366 146** | **404 343** | **461 129** | **498 834** | **554 259** | **578 073** | **626 371** | **624 870** |
| Debt securities issued | 19 976 | 15 688 | 16 759 | 34 287 | 40 039 | 69 959 | 45 997 | 46 687 |
| Provisions | 9 972 | 11 415 | 8 209 | 6 991 | 1 872 | (267) | 1 076 | 1 612 |
| Trade and other payables | 27 984 | 32 319 | 38 032 | 40 678 | 48 178 | 51 289 | 56 760 | 63 884 |
| Other current liabilities | 16 703 | 16 357 | 17 448 | 17 352 | 17 394 | 17 377 | 18 300 | 19 221 |
| **Current liabilities** | **74 635** | **75 779** | **80 448** | **99 307** | **107 483** | **138 358** | **122 134** | **131 405** |
| **Total liabilities** | **440 781** | **480 122** | **541 577** | **598 141** | **661 742** | **716 431** | **748 505** | **756 274** |
| **Total equity and liabilities** | **557 945** | **660 685** | **717 149** | **769 332** | **831 649** | **896 962** | **936 607** | **948 978** |

Eskom Group Cash flow statement

TABLE 22: CASH FLOW STATEMENT

| | Actual | | Forecast | | | | | |
|---|---|---|---|---|---|---|---|---|
| R millions | FY14/15 | FY15/16 | FY16/17 | FY17/18 | FY18/19 | FY19/20 | FY20/21 | FY21/22 |
| Cash from Operations | 27 311 | 37 242 | 46 599 | 34 885 | 55 565 | 87 063 | 104 198 | 120 682 |
| Repayment loans | (14 429) | (11 123) | (14 547) | (24 057) | (20 651) | (31 828) | (62 548) | (60 754) |
| Debt raised | 49 500 | 41 052 | 63 847 | 69 851 | 70 549 | 68 867 | 49 964 | 39 153 |
| Interest paid | (17 064) | (22 791) | (28 281) | (32 592) | (37 919) | (45 003) | (48 572) | (48 809) |
| Interest received | 1 449 | 1 275 | 2 140 | 2 391 | 2 082 | 1 968 | 1 893 | 1 932 |
| Other financing activities | (1 502) | 32 514 | (8 829) | 3 966 | 13 419 | 12 581 | 27 354 | 4 889 |
| **Cash flows from financing activities** | **17 954** | **40 927** | **14 330** | **19 560** | **27 479** | **6 585** | **(31 909)** | **(63 589)** |
| Acquisitions of property, plant and equipment | (51 578) | (53 248) | (57 641) | (53 587) | (74 015) | (82 999) | (63 485) | (47 352) |
| Other investment activities | (4 808) | (5 342) | 169 | (9 034) | (12 530) | (11 250) | (8 576) | (9 817) |
| **Cash flows from investing activities** | **(56 386)** | **(58 590)** | **(57 472)** | **(62 621)** | **(86 545)** | **(94 249)** | **(72 062)** | **(57 170)** |
| Movement in cash and cash equivalent | (11 121) | 19 579 | 3 457 | (8 177) | (3 501) | (601) | 227 | (76) |
| Closing balance cash and cash equivalents | 8 863 | 28 454 | 32 007 | 23 832 | 20 330 | 19 730 | 19 957 | 19 881 |

# 8 Funding Plan

## 8.1 Executive summary

Eskom's Borrowing Programme is to facilitate and execute required borrowings on behalf of the company and is revised and updated annually in accordance with the Corporate Plan. The objective of the Borrowing Programme is to support the capital-expansion programme by coordinating annual funding requirements with associated capital expenditure. Given that certain funding is tied to specific projects flexibility is built into the Borrowing Programme to adjust annual requirements to meet project milestones. This flexibility has ensured the successful funding of the capital-expansion programme.

Eskom continues to access various debt markets and maintain healthy liquidity levels, these successes continue to demonstrate continued investor support to Eskom. To date, Eskom has successfully secured 97.5 % of the revised funding requirement of R58 billion for FY2016/17 from a combination of Development Finance Institution (DFI) loans, domestic bond issuances and funding from Export Credit Agencies (ECAs). Eskom is projected to close the financial year with liquid assets amounting R27.4 billion excluding committed facilities of R6.25 billion, this will mitigate any potential liquidity risk for the 2017/18 financial year.

Eskom's credit ratings and outlook has been revised downwards by Standard and Poor's (BB), Moody's (Ba1) and Fitch Ratings (BBB-). However Eskom was able to execute its borrowing plan for FY2016/17 in this uncertain credit environment.

For FY2017/18 Eskom plans to raise R72 billion of which R12 billion (17 %) is already committed. Eskom has targeted to secure additional DFI funding currently under negotiation which amounts to approximately R20 billion by 31 March 2017.This will increase the committed funding to R32 billion (45 %) for FY2017/18.The key focus areas for the FY2017/18 to FY2021/22 Borrowing Programme are raising unguaranteed funding within acceptable risk levels, diversifying Eskom's funding sources and investor base, and prioritising the execution of various facilities to bolster liquidity reserves.

The factors that have potential to affect the company's ability to execute funding include the credit ratings of Eskom and the South African Government (Sovereign), tariff-regulation uncertainty and media related issues. Investor and lender sentiment remains constructive and it enabled the successful execution of the funding for FY2016/17. Eskom will continue to leverage off the improved business and financial performance of the company to give effect to the FY2017/18-2021/22 Borrowing Programme. The scheduled investor and lender engagements have indicated that prior concerns related to liquidity, load shedding and delays in the capital expansion programme have been sufficiently mitigated.

The R350 billion in Government Guarantees (GG) supports existing funding of which R253 billion is committed. The availability period under the Guarantee Framework Agreement (GFA) expires on 31 March 2017. Eskom's application to extend this availability period has been submitted to Government. Eskom awaits approval on the extension of the GFA.

The Borrowing Programme execution strategy aims to maximise unguaranteed funding sources through the increased execution of international bonds, structured products and funding supported by Export Credit Agencies (ECAs). Eskom will achieve investment-grade credit ratios by FY2021/22, this will enable the cumulative release of R105 billion GGs by FY2019/20. The improved financial position of the business (Chapter 6, Financial Strategy) will also support this strategy and allow Eskom to secure unguaranteed debt to anchor the Borrowing Programme.

## 8.2 Review of FY2016/17 Borrowing Programme

The planned funding for FY2016/17 amounted to R69 billion and was subsequently revised to R58 billion as a result of approximately R10 billion realised in organisational savings. To date, 97% of the funding has been secured. The secured funding constitutes the following:

- R30.3 billion of funding sourced from DFIs, R19 billion worth of loans signed with the African Development Bank (AfDB), R7 billion from China Development Bank (CDB) and the remaining balance from drawdowns off existing facilities

- R6.7 billion secured from ECAs was drawn off existing facilities
- R11.5 billion secured from the domestic bond market mainly attributable to a R10 billion Eskom Corporate Note (ECN) domestic private placement
- Structured products of R3.3 billion have been secured through the monetisation of existing Cross Currency Swap transactions
- Commercial Paper Bill (CPB) issuances amounted to R4.9 billion

Table 23 and Table 24 depict the FY2016/17 budgeted funding changes and the funding progress for the financial year.

**TABLE 23: CHANGES IN FUNDING REQUIREMENTS**

| Funding sources R billion | |
|---|---|
| Initial annual funding requirement | 68.5 |
| Realised organisational savings | (10.4) |
| **Revised annual funding requirement** | **58.1** |

**TABLE 24: FUNDING PROGRESS AS AT 31 JANUARY 2017 - FY2016/17**

| Funding sources R billion | Budgeted | Secured |
|---|---|---|
| Domestic bonds | 11.6 | 11.5 |
| Structured products: swap restructuring | 1.8 | 3.3 |
| DFI financing | 30.4 | 30.3 |
| CA financing | 8.4 | 6.7 |
| CPBs | 6.0 | 4.9 |
| **Total** | **58.1** | **56.7** |

- The outstanding funding of R1.4 billion will be secured through the issuance of CPBs during this remainder of the financial year

**Liquidity reserves**

Eskom deems it prudent to maintain a liquidity buffer that covers an average of three months organisational cash flow requirements. As at 31 December 2016, Eskom had liquidity reserves of R27.4 billion and this excludes committed bank facilities of R6.25 billion which serve as further support to the liquidity buffer.

**Current funding costs**

Eskom's chosen funding sources bear varying finance costs and tenors, which are affected by several internal and external factors. Global and domestic macro-conditions, including the performance of emerging market counterparts have affected associated costs with accessing the various funding markets.

Eskom funding costs have gradually increased and include a blend of fixed and floating rates. Given that fixed finance costs provide better hedging of interest rate exposures, currently 80% of finance costs are fixed. The increase in costs can be attributable to:

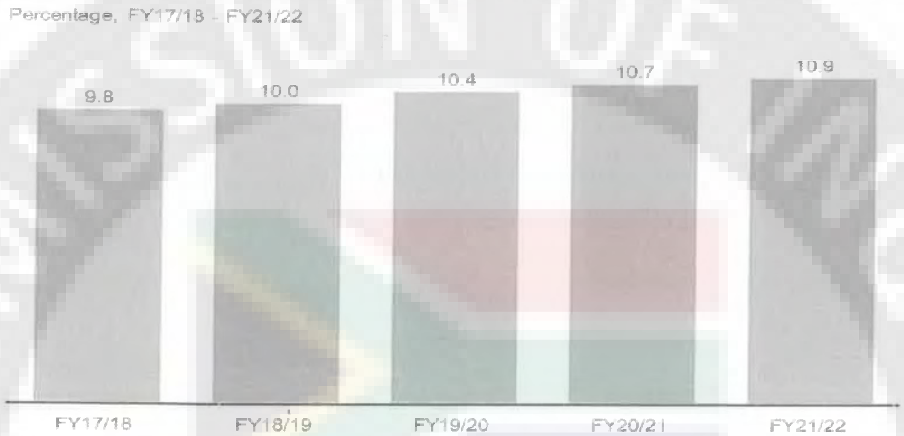
- Delays in delivering the capital-expansion programme and associated cost overruns
- Maintenance and performance of existing generation fleet
- Sub-investment-grade credit rating
- Unfavourable tariff awards and subsequent revenue shortfalls
- Decrease in electricity demand

- Reliance on government support
- Increasing leverage position

The cost of funding during the Borrowing Programme period, is calculated by dividing the finance cost by the average debt and borrowings outstanding for each financial year. The calculation considers the impact of Cross Currency Swaps (CCSs) used to hedge such debt and borrowings but excludes costs associated with Forward Exchange Contracts (FECs).

Although the cost of funding is showing an upward trajectory, (Exhibit 44), as the costs of new debt facilities are more expensive than historical debt, these costs are expected to remain between the 10 to 11% range. The trajectory of these finance costs will be influenced by Eskom's improved financial performance and a greater revenue pool to support capital expansion in place of debt.

**EXHIBIT 44: FINANCE COST PROJECTIONS**




**Utilisation of Government Guarantees**

The Guarantee Framework Agreement (GFA) of R350 billion was approved to enhance Eskom's credit rating and facilitate the funding required to complete the capital-expansion programme. The decision supporting the utilisation of guarantees takes the following points into account:

- Bank mandates and credit rating considerations do not allow access to funding without provision of guarantees.
- Domestic market investors have mandates that preclude non-investment-grade-rated instruments.

R253 billion of the GG has been committed as follows (Exhibit 45):

- R184 billion utilised for existing funding which includes R75 billion drawn from DFI funding and R109 billion issued from the Domestic Multi Term Note (DMTN) programme.
- R69 billion is committed for existing funding with future drawdowns of R28 billion from DFIs and R41 billion for future DMTN issuances.

Eskom has R97 billion worth of available GGs to use for future transactions. Currently GG transactions under negotiation amount to R82 billion, the applications for the utilisation of these GGs have been submitted to Government. This demonstrates that there are sufficient GGs available to facilitate the execution of this funding during the borrowing period.

Given the focus in the current Borrowing Programme Eskom will execute unguaranteed funding thus drastically reducing the utilisation of the GG during the funding period.

Eskom classifies the utilisation of the Government Guarantee in four sections:

1. **Utilised** – This includes loans and bonds currently drawn. Outstanding bonds issued under the DMTN programme are also included here.
2. **Committed** – This includes transactions that have a signed GG agreement in place. The DMTN programme is also included here.
3. **Under negotiation** – This includes transactions with GG-utilisation applications sent to the Department of Public Enterprises (DPE) and National Treasury (NT) as at 31 December 2016. A portion of the GG amount has been reserved for these facilities.
4. **Guarantees available for future transactions** – This is the residual balance that remains unutilised and unallocated and may be utilised for future transactions.

**EXHIBIT 45: UTILISATION OF GOVERNMENT GUARANTEE**

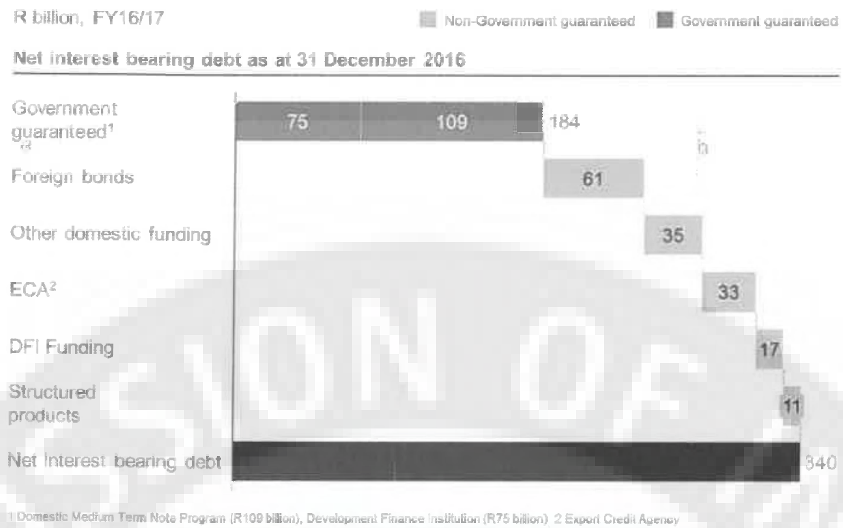

1 R184 billion of the R253 billion committed has been utilised

The availability period under the GFA expires on 31 March 2017; Eskom's application to extend this availability period to 31 March 2023 has been submitted to Government for approval. The extension of the GFA availability period will be approved before the expiration of this availability period.

**Eskom debt**

As at 31 December 2016 the total net interest bearing debt from the various domestic and international funding sources amounted to R340 billion. Government-guaranteed debt currently constitutes 54% of Eskom's total debt (Exhibit 46) and includes only the drawn portion of the loans and outstanding GG domestic bonds. The undrawn portions of the loans and unissued bonds are included in the committed GG amount of R253 billion.

**EXHIBIT 46: NET INTEREST BEARING DEBT**



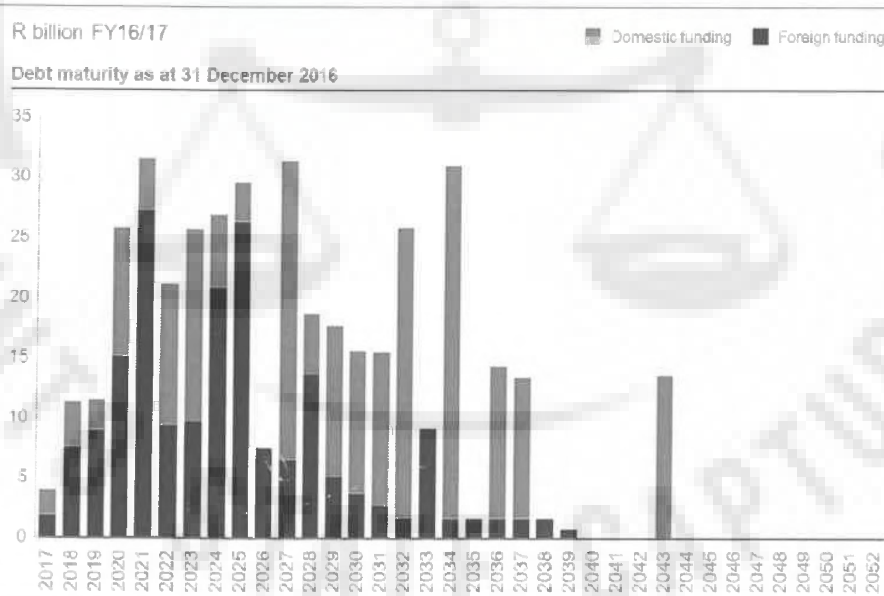

1 Domestic Medium Term Note Program (R109 billion), Development Finance Institution (R75 billion) 2 Export Credit Agency

The existing debt composition supports the existing funding execution strategy with underweight balances in unguaranteed debt including foreign bonds, ECA-supported funding and structured products. The current Borrowing Programme execution strategy aims to escalate borrowings in these funding markets.

### Existing debt maturity profile

Eskom's debt-repayment profile is relatively pressured in both the short and long term as there are maturities that extend from 2017 to 2043. The debt repayment peaks in FY2021 with the redemption of the outstanding USD 1.75 billion international issuance. The revised strategy will prioritise longer-term funding to support the short-term debt maturities and alleviate debt-repayment risk.

**EXHIBIT 47: DEBT MATURITY PROFILE**



As at 31 December 2016, the average life of all debt and borrowings was 8.29 years. Of this, the average life of foreign debt is 5.72 years and domestic debt is 10.41 years.

The shorter average life of foreign debt is reflected in the higher foreign debt repayment in the first ten years, when compared to the domestic debt repayment in the same period. The foreign bonds represent a large portion of this debt repayment as most of foreign bonds are expected to mature over the ten-year horizon. The shorter-term maturity profile of foreign bonds is characteristic of issuances done in foreign markets, where the market prefers shorter-term notes, usually between five and ten years. Eskom is however able to raise bonds with longer maturities in the domestic market, which alleviates debt repayment pressure and optimises repayment of the debt across a number of years.

### Foreign currency

Approximately 50% of the outstanding debt as at 31 December 2016 is denominated in foreign currency. This also constitutes 68% of maturities over the funding period.

**TABLE 25 : FOREIGN AND DOMESTIC FUNDING REPAYMENT**

| R million | FY17/18 | FY18/19 | FY19/20 | FY20/21 | FY21/22 | |
|---|---|---|---|---|---|---|
| Foreign Funding | 7 613 | 9 013 | 15 160 | 27 315 | 9 453 | **68 554** |
| Domestic Funding | 3 719 | 2 478 | 10 684 | 4 304 | 11 754 | **32 940** |

This exposure has been duly hedged utilising Forward Exchange Contracts (FECs) and Cross Currency Swaps. The Euro, Yen and U.S dollar remain the largest hedged exposures, (Table 26)

**TABLE 26: HEDGED FOREIGN EXCHANGE EXPOSURE**

| Currency | FECS C&O | FECS Debt | Cross Currency Swaps | Total Hedged |
|---|---|---|---|---|
| AUD | 2 | | | 2 |
| CAD | 3 | | | 3 |
| CHF | 3 | | | 3 |
| EUR | 887 | 1 740 | 1 268 | 3 896 |
| GBP | 20 | | | 20 |
| JPY | 167 | | 9 912 | 10 079 |
| NOK | 2 | | | 2 |
| SEK | 240 | | | 240 |
| USD | 225 | 155 | 5 542 | 5 922 |

Since the 2007/8 financial crisis, the ZAR exchange rate has weakened substantially following broad based emerging market sell-off. The ZAR further weakened in subsequent years because of weak domestic fundamentals, weak domestic expansion, benign consumer demand, wide current account and fiscal deficits, subdued commodity prices, poor economic performance from trading partners amongst others. Most recently, the ZAR recovery has been largely influenced by favourable investor sentiments because of Brexit, rating's downgrade reprieve and withdrawal of charges against the Minister of Finance. The newly elected President of the United States (US) has signed a number of executive orders that support growth in the US which has subsequently lifted commodity prices with positive impact on the ZAR. Stronger USD against the EURO has equally lifted the EUR/ZAR exchange in favour of the ZAR. Currency volatility over the last ten years is shown in (Exhibit 48).

**EXHIBIT 48: NOMINAL EXCHANGE RATE MOVEMENTS**


It is important to highlight the negative financial impact that this quantum of foreign currency exposure would have had on Eskom's financial position given currency volatility. Therefore, the conservative hedging strategy employed by Eskom has significantly mitigated potential financial losses.

## 8.3 Borrowing Programme for FY2017/18 to FY2021/22

### 8.3.1 Borrowing Programme

The primary focus of Eskom's Borrowing Programme is to raise funding to match annual capital expenditure (capex) spend of the organisation.

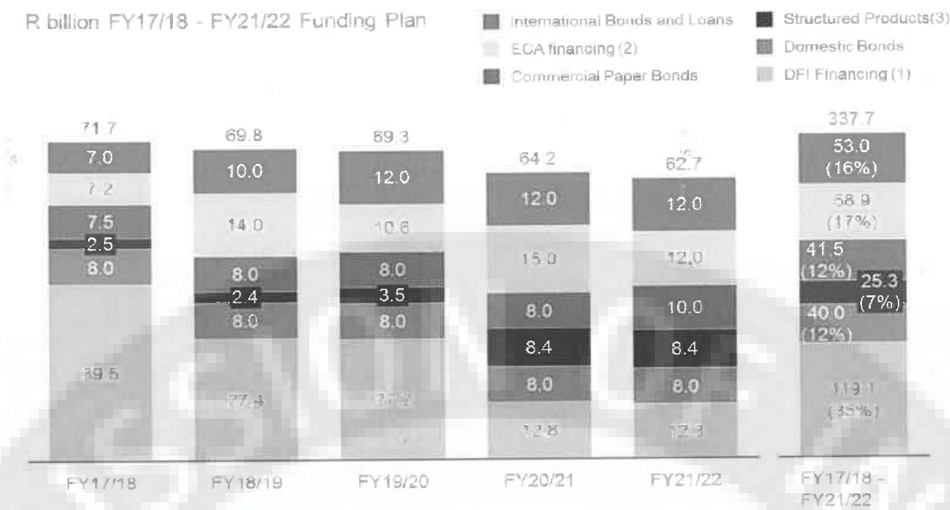
The Borrowing Programme objectives include:

- Ensuring that Eskom has adequate liquidity reserves to meet all its operational and capital requirements by maintaining and managing appropriate cash balances and committed lines of credit
- Diversifying Eskom's funding sources and investor base
- Prioritising unguaranteed debt execution with extended maturities
- Raising funding cost-effectively within acceptable risk levels
- Managing interest rate, foreign-exchange rate and liquidity risk

The volume of debt per category, set out in the Borrowing Programme, has been based on a combination of anticipated investor appetite, market depth, funding costs, tenor and phasing of liquidity requirements.

Eskom currently requires funding of R337 billion over the period FY2017/18 to FY2021/22 (Exhibit 49). This is a R10 billion increase in the funding requirement for the budget period ending in FY2021/22 compared to the R327 billion period FY2016/17 to FY2020/21.

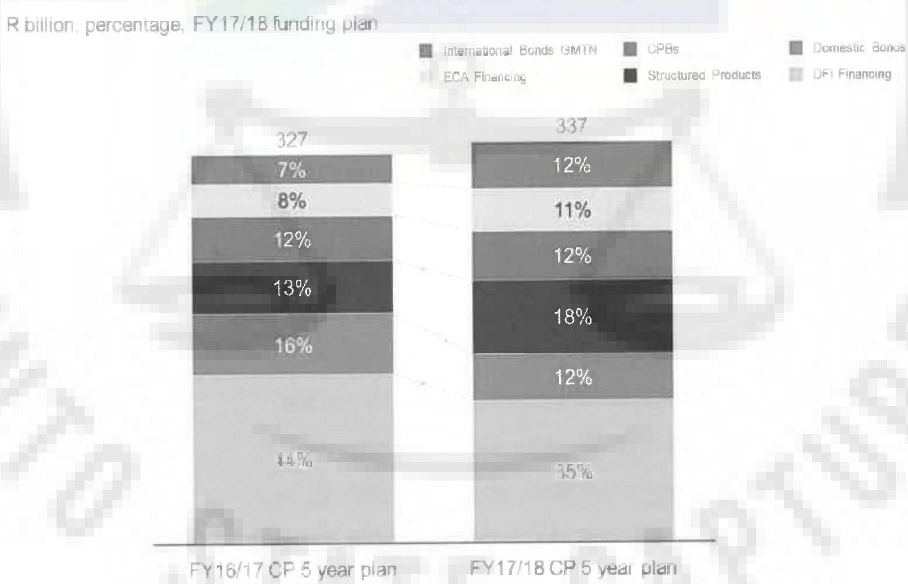
**EXHIBIT 49: BORROWING PROGRAMME- FY2017/18-FY20121/22**




1 Development Financing Institutions 2 Export Credit Agencies 3 Structured Products – Bank loans, Sukuks, Refinancing structures and Swap restructuring

Securing unguaranteed funding in the Borrowing Programme for FY2017/18 to FY2021/22 shows the changes in funding allocation compared to the previous R327 billion Borrowing Programme to support the change in this strategy. The current Borrowing Programme shows increased allocations to international bonds and ECA backed financing, Exhibit 50. The increase in unguaranteed funding is anticipated to reduce GG debt and the current Borrowing Programme shows decreases in domestic bond issuances and DFI funding allocations. This will release approximately R37 billion of GG, including redemptions and currently available GGs by the end of FY2021/22.

**EXHIBIT 50: BORROWING PROGRAMMES FY2016/17-FY2017/18 AND FY2017/18- FY2021/22**




In order to obtain the funding required, Eskom intends to raise the required borrowings by using a combination of:

- Domestic Bonds

- Commercial Paper Bills (CPBs)
- International bonds
- Development Finance Institutions (DFIs) funding
- Export Credit Agencies (ECAs) supported funding
- Structured funding, which includes balance sheet optimisation structures and other unguaranteed capital raising structures

**Domestic Bonds**

Eskom intends to raise R40 billion from the domestic bond market in the five year period from FY2017/18 to FY2021/22. A combination of auction based issuances and private placements of bonds and notes will be used to secure the required domestic bond market funding.

Scheduled investor engagements will support the successful issuance of the domestic bond market requirement over the funding period. Investors have cited concerns regarding the governance of State Owned Companies in particular revenue certainty and further credit rating downgrades. Eskom is in discussion with these investors as well as rating agencies to address the concerns raised and create comfort for greater investor participation in domestic bond market funding activities. The issuance programme will be a function of the demand for all the existing, fixed and inflation-linked debt. Eskom will constantly assess the need to issue new maturities across the existing yield curve.

Eskom has planned to increase the existing R150 billion DMTN programme to facilitate the issuance of additional bonds and short term notes to support liquidity requirements.

Given the achievement of investment-grade credit-rating ratios in FY2019/20, funding in the domestic bond market will no longer require a GG.

**Commercial Paper Bills (CPBs)**

Eskom plans to raise R41.5 billion in CPBs over the five-year period. The issuance of CPBs remains critical to support short-term liquidity needs. The CPBs are issued on demand with various maturities of up to 12 months and add to the diversification of issuances in the local markets.

CPBs remain a source of funding that does not require utilisation of GGs. The envisaged financial performance will increase demand in this market and allow for greater investor participation as a result of Eskom's improved credit strength.

**International Bonds**

Given the revised funding-execution strategy, the budgeted issuance of international bonds over the borrowing period now amounts to R53 billion showing an increase of over 50% from the previous Borrowing Programme.

The international bond market still provides sizeable funding with the shortest lead-time to execution in the international market. Although the cost of issuance in this market is higher than other funding instruments, the market remains a significant pool of liquidity for Eskom; plans are to opportunistically access this market every 12–18 months.

Investor sentiment is the main contributor to the successful placement of international bonds, messaging to these investors is therefore crucial to ensure adequate support for potential issuance.

The improvement in Eskom's generating capacity, accelerated delivery of the capital expansion programme and continued government support has addressed concerns raised by international investors. Decreased issuances from South African corporates and other Emerging Market issuers have increased demand and appetite for instruments that can provide sufficient yield. Eskom international bonds provide this to investors and this will support future issuances.

Issuances will either be off the established Global Medium Term Note (GMTN) programme, through stand-alone issuances or private placements to provide ample issuance flexibility.

**Export Credit Agency (ECA) financing**

Eskom intends to secure funding amounting to R59 billion in this market over the five-year period. The liquidity in ECA banks and the available exporter-country guarantees, subject to eligible content and application of the new OECD Guidelines for Export Credit to Coal Fired Projects, make this funding source attractive. In line with Chapter 8, Capital Investment Plan, Eskom will utilise ECA funding on a retrospective basis therefore providing financing for eligible content to be refinanced under the ECAs. Eskom has established an ECA Framework to utilise this funding source for maintenance and refurbishment programmes. ECA funding also provides flexibility as it does not require the use of GG.

**Development Finance Institution (DFI) financing**

Eskom's envisaged borrowings from DFIs represent 35% of the Borrowing Programme. Eskom has executed loan facilities with many DFIs from Africa, Asia and Europe.

The developmental nature of DFIs investment mandates implies support for Eskom's capital requirement at low cost in comparison to other commercial and investment banks. It is for this reason that DFI funding constitutes the largest portion of the Borrowing Programme. Although DFIs represent a significant proportion of funding, they are subject to strict conditions:

- Most DFIs require a GG to support their funding
- DFIs support project-specific financing with rigorous monitoring reporting requirements
- There are specific restrictions on loan proceeds which fund coal-fired power stations. Given that 85% of Eskom generation capacity is coal-fired, future loan facilities from DFIs may be limited.

The revision of the GG utilisation strategy still caters for accessing funding from these institutions, as available GGs will be offered to DFI institutions that require a GG provision.

**Structured products**

Structured products include diverse capital-market products and solutions offered by investment banks and other institutions. Eskom has undertaken necessary commercial processes to identify potential funding instruments that will diversify funding sources as it is non-traditional and unguaranteed. These funding sources also have no limitations on the use of proceeds and the instruments are tailor-made to support the existing Borrowing Programme. The execution of existing funding swaps and other non-traditional funding sources have been included under this funding item.

The funding under negotiation amounting to R157 billion, 47% of the five year funding requirement, will be committed in the following two financial years. This will ensure greater certainty of the Borrowing Programme and liquidity.

Table 27 details the funding sources for the five-year planning period.

**TABLE 27: FUNDING SOURCES**

| R million | FY17/18 | FY18/19 | FY19/20 | FY20/21 | FY21/22 | Total |
|---|---|---|---|---|---|---|
| **Committed and Signed** | | | | | | |
| DFI financing | 27 355 | 3 161 | 3 475 | 543 | 0 | **34 534** |
| ECA financing | 2 170 | 5 047 | 1 640 | 0 | 0 | **8 856** |
| Structured products | 2 500 | 0 | 0 | 0 | 0 | **2 500** |
| CPBs | 0 | 0 | 0 | 0 | 0 | **0** |
| Domestic bonds | 0 | 0 | 0 | 0 | 0 | **0** |
| **Total: Committed and Signed** | **32 025** | **8 208** | **5 115** | **543** | **0** | **45 891** |
| | **45%** | **12%** | **7%** | **1%** | **0%** | **14%** |
| **Capital and Money Markets** | | | | | | |
| Domestic Bonds | 8 000 | 8 000 | 8 000 | 8 000 | 8 000 | **40 000** |
| International Bonds | 7 000 | 10 000 | 12 000 | 12 000 | 12 000 | **53 000** |
| CPBs | 7 500 | 8 000 | 8 000 | 8 000 | 10 000 | **41 500** |
| **Total Signed** | **22 500** | **26 000** | **28 000** | **28 000** | **30 000** | **134 500** |
| | **31%** | **37%** | **40%** | **44%** | **48%** | **40%** |
| **Currently under Negotiation** | | | | | | |
| DFI financing | 12 132 | 24 207 | 23 708 | 12 250 | 12 250 | **84 547** |
| ECA financing | 5 023 | 9 000 | 9 000 | 15 000 | 12000 | **50 023** |
| Structured products | 0 | 2 430 | 3 472 | 8 440 | 8 440 | **22 782** |
| **Total Under Negotiation** | **17 155** | **35 637** | **36 180** | **35 690** | **32 690** | **157 352** |
| | **24%** | **51%** | **52%** | **56%** | **52%** | **47%** |
| **Total** | **71 680** | **69 845** | **69 295** | **64 233** | **62 690** | **337 742** |

**Release of Government Guarantees**

The Borrowing Programme prioritises the execution of unguaranteed funding, under an accelerated Government Guarantee (GG) release programme of R230 billion for the funding period FY2017/18 to FY2021/22. The two scenarios have been modelled to reflect the impact of this GG release programme on the maturity profile GG debt. The modelling implies that Eskom will utilise various unguaranteed debt sources to replace guaranteed debt.

**Scenario 1**

Eskom will achieve investment-grade credit ratios by FY2021/22, see Financial Strategy Chapter 6, this will enable the cumulative release of R105 billion guarantees by FY2019/20, (Table 28), under this accelerated GG release scenario. The existing available GG net of funding under negotiation amounts to R15 billion, which forms part of the base of GG released in FY2017/18 in both scenarios.

Eskom will enable the execution of unguaranteed debt as follows:

- R20 billion DFI funding, this will be achieved through USD1.5 billion funding that is currently under negotiation.
- R35 billion domestic bonds issued through private placements.

- R15 billion ECA backed loans on existing facilities and new facilities.
- R15 billion structured products through non-traditional funding such as restructuring eligible primary energy contracts.

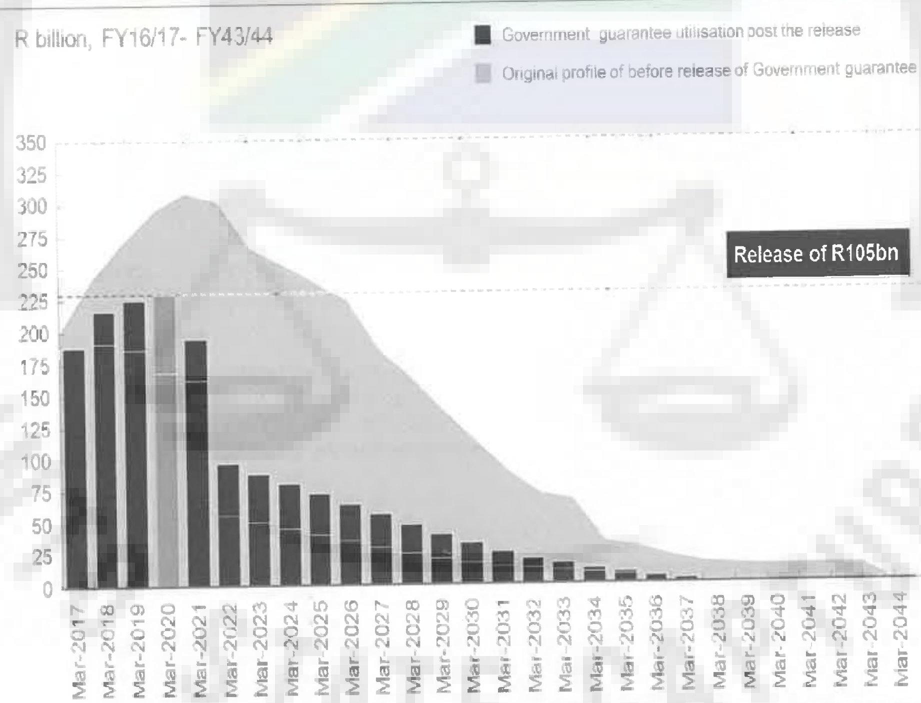
A minimum of R5 billion working capital structures which include debtor and inventory monetisation. Eskom also intends to increase the size of this funding over the funding period

**TABLE 28 : GUARANTEE RELEASE PROFILE - SCENARIO 1**

| R Million | FY17/18 | FY18/19 | FY19/20 | FY20/21 | FY21/22 |
|---|---|---|---|---|---|
| Opening balance | 15 000 | 25 000 | 70 000 | 105 000 | 125 000 |
| DFI funding | | 20 000 | | | |
| Domestic bonds | 5 000 | 10 000 | 20 000 | 10 000 | 105 000 |
| ECA funding | 5 000 | 5 000 | 5 000 | | |
| Structured products | | 5 000 | 10 000 | 10 000 | |
| Working capital | | 5 000 | | | |
| **Cumulative guarantee released** | **25 000** | **70 000** | **105 000** | **125 000** | **230 000** |

The accelerated release of GGs in relation to the current guarantee utilisation can be seen in Exhibit 51.

**EXHIBIT 51: R105 BILLION RELEASED IN GOVERNMENT GUARANTEE BY FY2019/20**




**Scenario 2**

If Eskom achieves investment-grade credit ratios by FY2019/20, a cumulative release of R220 billion guarantees can be achieved, Table 29. Eskom will secure unguaranteed debt similar to the debt secured under Scenario 1 with exception of the domestic bonds which will be secured as follows:

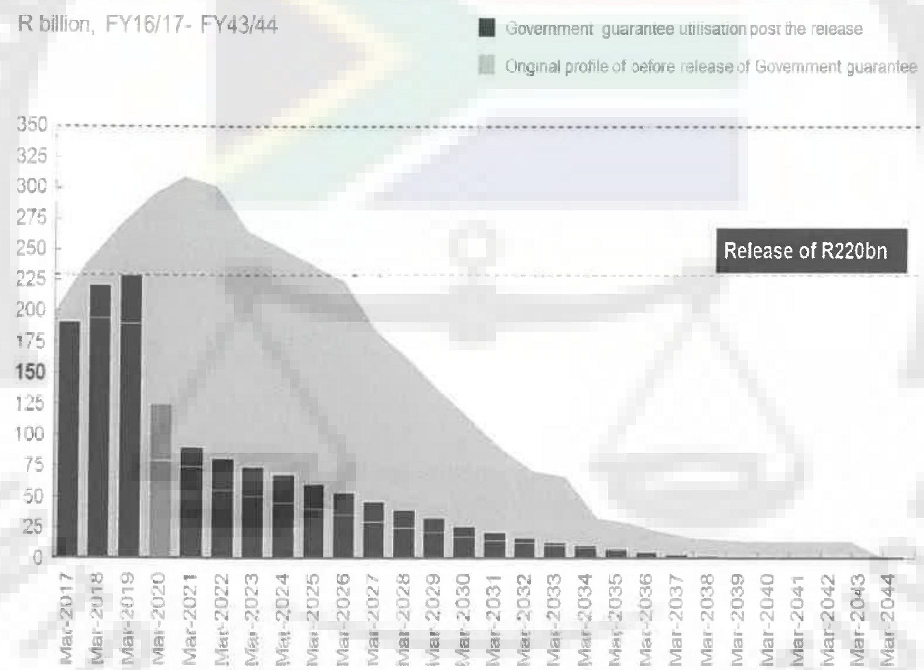
- R150 billion domestic bonds, this will imply that all existing domestic bonds will be unguaranteed, this will have to be agreed with investors

**TABLE 29 : GUARANTEE RELEASE PROFILE - SCENARIO 2**

| R million | FY2017/18 | FY2018/19 | FY2019/20 | FY2020/21 | FY2021/22 |
|---|---|---|---|---|---|
| Opening balance | 15 000 | 25 000 | 70 000 | 220 000 | 230 000 |
| DFI funding | | 20 000 | | | |
| Domestic bonds | 5 000 | 10 000 | 135 000 | | |
| ECA funding | 5 000 | 5 000 | 5 000 | | |
| Structured products | | 5 000 | 10 000 | 10 000 | |
| Working capital | | 5 000 | | | |
| **Cumulative guarantee released** | **25 000** | **70 000** | **220 000** | **230 000** | **230 000** |

The accelerated release of GGs in relation to the current guarantee utilisation can be seen in Exhibit 52.

**EXHIBIT 52: R220 BILLION RELEASED IN GOVERNMENT GUARANTEE BY FY2019/20**




The important considerations under Scenario 1 and 2 are:

- Replacing guaranteed debt with unguaranteed debt
- Pre-payment loan covenants
- Increasing unguaranteed debt funding sources

- Potential changes to interest and finance costs
- Eskom will provide no security to all funding sources

**Liquidity management**

Eskom will maintain a liquidity buffer that covers an average of three (3) months organisational cash flow requirement. The following strategies have been identified to assist in improving liquidity reserves:

- Eskom will execute its Borrowing Programme to maintain higher levels of liquidity through prefunding
- Eskom will increase committed funding facilities by R10 - R15 billion
- Maintain flexibility to reprioritise and rephase committed funding
- Reduce the negative carry associated with elevated levels of liquidity
- The business requirements and cash flows will be proactively managed

The funding requirement contained in the Financial Strategy, Chapter 6, amounts to R298 billion, Table 30. The Borrowing Programme has a funding requirement of R337 billion resulting in a R39 billion difference in the funding requirement over the 2017/18 to 2021/22 period. It should also be noted that the biggest impact of the difference between Borrowing Programme and the Financial Strategy funding requirement will be in FY2020/21 and FY2021/22. The Borrowing Programme is premised on Eskom achieving tariff increases not in line with the expectation as detailed in the Financial Strategy.

The Borrowing Programme will allow Eskom to mitigate liquidity risk as a result of lower than expected tariff increases. The benefit of achieving the expected tariff will allow Eskom to reduce its funding requirement or repay outstanding debt, alternatively maintain higher cash balances.

**TABLE 30: FUNDING REQUIREMENTS**

| Funding Plan R billion | FY17/18 | FY18/19 | FY19/20 | FY20/21 | FY21/22 | Total |
|---|---|---|---|---|---|---|
| Borrowing programme | 71.7 | 69.8 | 69.3 | 64.2 | 62.7 | **337.7** |
| Financial strategy | 69.9 | 70.5 | 68.9 | 50.0 | 39.2 | **298.4** |
| Differences | **1.8** | **(0.7)** | **0.4** | **14.2** | **23.5** | **39.3** |

## 8.4 Credit-rating overview

Credit ratings assigned to Eskom by the rating agencies (Moody's, Fitch, and Standard and Poor's) are critical measurements of Eskom's creditworthiness to investors and various other counterparties from which Eskom secures funding.

Regular engagement with rating agencies is critical for Eskom to manage the company's credit ratings and the relationships with the rating agencies. These engagements take place through the rating agencies' management-review meetings, which they conduct bi-annually through their due-diligence visits.

Eskom also engages with rating agencies on a quarterly basis through the scheduled meetings. These meetings provide Eskom with the opportunity to update credit-ratings agencies and address any specific issues that the rating agencies may have at the time. In addition to the bi-annual management reviews and the quarterly meetings, Eskom and the rating agencies engage on an ad-hoc basis whenever there is an immediate issue to be addressed. These ad-hoc engagements also enable Eskom to comply with rating-agency reporting requirements timeously.

Eskom's stand-alone credit rating is currently deemed highly speculative within the sub-investment grade rating matrices. As a State Owned Company (SOC), Eskom's credit rating enjoys a substantial uplift because of implicit and explicit South African Government (the sovereign) support. The uplift also links Eskom's rating to that of credit rating actions taken on the sovereign.

The ratings agencies' most recent Eskom related action took place in December 2016.

**TABLE 31: SUMMARY OF ESKOM' S CREDIT RATING**

| Rating | Standard & Poor's | Moody's | Fitch Ratings |
|---|---|---|---|
| Foreign currency | BB | Ba1 | - |
| Local currency | BB to BB- | Ba1 | BBB- |
| Stand-alone | ccc+ | b3 | B- |
| Outlook | Negative | Review for Downgrade to Negative | Stable to Negative |
| Action Date | 08-Dec-16 | 05-Dec-16 | 08-Dec-16 |
| Affirmation Date | 08-Dec-16 | 05-Dec-16 | 08-Dec-16 |

On 05 December 2016 Moody's confirmed Eskom's Ba1 ratings and assigned an A2.za national scale rating with a negative outlook. The rating confirmation reflects Eskom's ongoing access to funding which is supported by the government's Guarantee Framework Agreement (GFA).

On 08 December 2016 Standard and Poor's (S&P) downgraded Eskom from 'BB' to 'BB-', following the Sovereign Downgrade with a negative outlook. S&P ratings continue to reflect the assessment of an extremely high likelihood of government support, but also factors in the continuing substantial gap between Eskom's stand-alone credit profile (SACP) and its global scale rating.

On 08 December 2016 Fitch Ratings revised Eskom's outlook from stable to negative and affirmed the rating at 'BBB-'. The revision follows the change in outlook on the Sovereign's long term issuer Default Rating (IDR) from stable to negative on 25 November 2016. The uncertainty around the approval for the extension of the GFA also contributes to the negative outlook on the IDR and national long term ratings.

Given the importance of the drivers of Eskom's credit rating, the company has made significant strides in addressing the Rating Agencies' concerns (Table 32).

**TABLE 32: CREDIT RATINGS – DRIVERS**

| Ratings drivers | Eskom's position |
|---|---|
| Eskom's critical role to the broader economy | Eskom is the main electricity supplier in South Africa. Security of supply improved and no load shedding is expected |
| The extraordinary support provided by the Government | Eskom is critical to the Government and the economy |
| Potential risk to the continuance of extraordinary Government support | Government will extend the GFA availability period |
| Weak business profile, as a result of execution risks on the capital-expansion programme | Ingula peaking station has been completed and is in commercial operation.<br>Lessons learned from capital execution have been incorporated, and there is an acceleration in construction<br>The New Build programme has been accelerated, with units being delivered ahead of schedule |
| Challenging regulatory environment and uncertainties around the company's future financial trajectory in terms of tariff setting | Cost-containment initiatives are being implemented to mitigate lower-than-expected RCA recoveries and lower tariff determinations |

| Ratings drivers | Eskom's position |
|---|---|
| Less-than-adequate liquidity level | Through the execution of the Borrowing Programme Eskom will maintain sufficient liquidity through pre-funding initiatives and committed facilities |
| Increased financial pressure and weak credit metrics | Cost containment, lower capex, lower debt raising and increased demand will result in improved credit metrics |

**Consequences of credit rating downgrade on existing debt**

The existing loan agreements are unaffected by credit ratings actions and agreements with GG provisions would not be affected by any further downgrades, this includes significant re-pricing and any pre-payment triggers. In line with existing agreements Eskom intends to negotiate future loan agreement terms to be unaffected by ratings actions.

**Impact of credit rating on funding**

The impact of further downgrades of Eskom's credit rating, directly or as a result of a downgrade of the sovereign, will have a negative impact on the sourcing of the R337 billion funding requirement.

A sovereign downgrade to sub-investment grade will amplify the impact on Eskom as access to investment-grade mandates utilising the GG will drastically reduce, despite the availability of the GG access to potential funding will also reduce and, where available, will be expensive.

The availability and cost of funding for Eskom will be adversely impacted upon by further credit-rating downgrades. The consequence of Eskom's weaker credit rating will be evident in:

- Increased cost and decreased volume of funding available for future borrowings
- Decreased investor base owing to investor/trustee mandates excluding sub-investment-grade investments
- Reduction in loan tenors
- Investors requesting stricter loan covenants
- Lack of demand and reduced investor appetite
- Inability to roll over or refinance existing exposures
- Increased hedging cost
- Counterparty banks reducing credit limits for Eskom
- Eskom anticipates that its efforts to engage credit-rating agencies and institutional investors continuously to alleviate concerns, the improved performance of generation fleet and the accelerated delivery of the capital-expansion programme will greatly contribute to maintaining the current credit profile. The achievement of investment-grade credit ratios will be great consideration for potential credit rating uplifts.

## 8.5 Borrowing Programme execution risks

Table 33 highlights all the factors and risks that will impact on the execution of the Borrowing Programme

TABLE 33: FACTORS INFLUENCING THE FUNDING STRATEGY

| Factor | Description |
|---|---|
| **Investor confidence/ credit rating** | • Investor sentiment is vital for securing funding, given the need to access markets to fund the capital projects. The corporate-governance matters highlighted by investors, the ongoing investigations by National Treasury (NT) on some coal contracts, the political environment of South Africa and concerns from credit-rating agencies may have a negative impact on investor sentiment. |
| **Regulatory environment** | • The uncertainty of favourable tariff decisions could impede the success of the planned funding. Revenue certainty will assure investors and lenders of Eskom's ability to service debt obligations. |
| **Unguaranteed debt costs** | • Since the revised Borrowing Programme prioritises the execution of unguaranteed debt, it is important to note that the various adverse factors influencing Eskom's credit quality will be priced into the funding and most likely increase the cost of funding. |
| **Interest rates** | • Current prospects of elevated local and international policy interest rates will result in higher and more volatile long-term interest rates. This will impact negatively on the cost of the funding to be raised during the borrowing period. |
| **Currency movements** | • The performance of the Rand against the US dollar, in particular, will impact on the cost of debt associated with local and international bonds and loans. The cost of hedging, which is incurred to reduce impact of the volatile currency on the current debt, and the additional debt to be raised will also be adversely affected. |
| **Implementation of the Basel III requirements** | • Access to bank funding and facilities will be considerably more expensive as a result of the implementation of the new regulatory requirements. |
| **OECD guidelines** | • The new OECD Guidelines for Export Credit to Coal Fired Projects prohibit ECAs from covering projects that do not meet sub critical and certain super critical coal fired power plants. Support for most of the refurbishment and maintenance projects on the old power plants, that have an eligible content, is at risk. |
| **Business performance** | • The deterioration in the financial and operational performance may discourage investors in participating in the Borrowing Programme. |

## 8.6 Conclusion

The funding requirement of R337 billion for the period FY2017/18 to FY2021/22 is sizable and it represents only a R10 billion increase compared to the previous Borrowing Programme of R327 billion for the period FY2016/17 to FY2020/21. Eskom remains confident that the targeted funding requirement will be achieved. Eskom's approach is to continue the proactive engagement with investors and lenders (across various sources of funding) to explore opportunities for unguaranteed funding. This includes DFIs who have expressed interest to expand their range of financial products which should enable Eskom to expand existing sources of funding and access a broader range of investors. During the following 18 – 24 months Eskom will endeavour to secure all funding initiatives that are currently under negotiation. This will provide stability and confidence to the business given the annual funding requirements.

In addition the continued improvement in Eskom's financial and operational performance there should create sufficient investor appetite and market depth to execute the Borrowing Programme. Eskom will also manage the risks surrounding the tariff increases, Eskom's credit ratings and general investor and lender concerns, this will ensure:

- Eskom has adequate liquidity reserves to meet all its operational and capital requirements
- High levels of committed funding
- Diversification of funding sources
- The increase of unguaranteed debt
- Funding costs within acceptable risk levels
- Interest rate and foreign-exchange rate risk are adequately managed

# 9 Capital Investment Plan

## 9.1 Executive Summary

In the FY2017/18 planning period, Eskom continues to have significant capital requirement to drive the completion of the New Build programme which has been accelerated. Focus will remain on the recovery of the generation assets while balancing the demand requirements of electricity as well as the completion of long delayed investments in its Transmission and Distribution grid.

Changes have been made to the Delegation of Authority (DOA) with regards to the management of investment capital to promote agile planning by the divisions and to ensure that the business has the mandate to react to strategic changes more frequently. Governance and controls have been achieved through the formation of a new Group Capital Integration and Assurance (GCIA) function within the Finance Division. The function will aim at providing a more transparent capital plan through enabling the business and providing assurance for the respective capital committees to ensure that the Return on Investment (ROI) of capital projects are achieved. This function will also ensure a centre-led approach to capital prioritisation and optimisation.

Given the current strategic objective to achieve investment grade in the next five years and managing the current liquidity constraints, the capital plan will be challenged to ensure that all capital spent is done efficiently. In addition to this, capital optimisation will be used as a key lever to remove R25 billion, over the five-year window, to ensure that Eskom achieves its key credit metrics. One of the key levers is to deliver Medupi and Kusile according to P80 schedule and P50 costs. This will unlock R14.3 billion, with majority of the benefit only realising in FY2020/21. The integrity of the existing operations, future safety and compliance to environmental regulation will remain the objective of the capital plan, however capital reduction initiatives will ensure that the same products and services will be delivered with less capital.

Group Capital will be responsible the execution, establishment and development of the plan for nuclear. Capex of R400 million has been set aside for the acquisition of land for nuclear.

The capital investment plan for the FY2017/18 planning period includes increased allocations for Generation and Distribution, resulting in a slightly higher capital requirement than that forecasted in FY2016/17 corporate plan. The increased divisional allocations will be used to further manage the asset base to deliver critical maintenance projects.

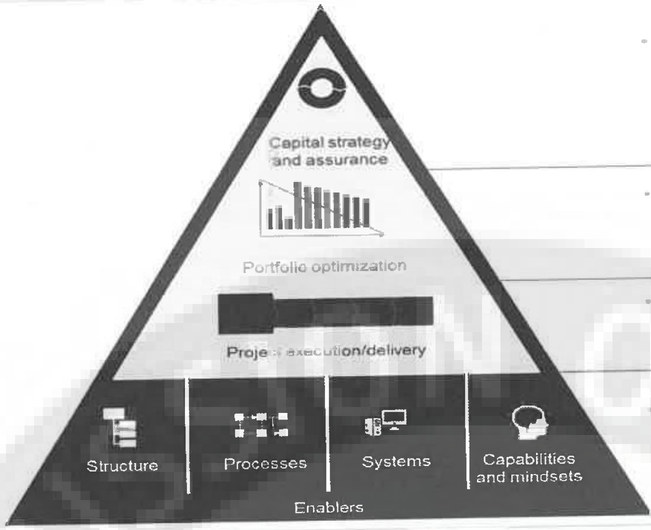
## 9.2 Capital project management approach

Eskom's capital project management approach is based on the following key principles to:

- **Provide an integrated view of the capital portfolio** with transparency and visibility of projects and programmes in the capital pipeline
- **Allocate Eskom's limited resources efficiently** to programmes that have the greatest alignment to Eskom's strategic objectives
- **Drive project optimisation to ensure that maximum return** is obtained from projects by reducing capital expenditure or increasing revenue to be generated
- **Perform capital project scrubbing to validate project existence** and business cases to ensure the unbiased account of the expected project return
- **Improve delivery rigour and agility** and ensure early identification of key project risks through focussed oversight and assurance

**The Capital Project Management Approach** (Exhibit 53) is underpinned by the project life-cycle model (PLCM) (Exhibit 54) that provides functional support for capital projects.

**EXHIBIT 53: CAPITAL PROJECT MANAGEMENT APPROACH**




- Capital projects are aligned to Eskom's company strategy
- GCD creates visibility of portfolio to enable trade-offs in light of affordability constraints
- Group Capital utilizes Project Life Cycle Model to drive project execution
- Different functions (PDD, EPMO, CMO and Performing, Monitoring, Oversight & Assurance) collaborate to support the project life cycle model

**EXHIBIT 54: PROJECT LIFE CYCLE MODEL (PLCM)**


* At each stage gate the relevant committee will review and approve the project to proceed to the next phase

| Key | | |
|---|---|---|
| 1 | CRA | Concept Release Approval |
| 2 | DRA | Definition Release Approval |
| 3 | ERA | Execution Release Approval |
| 4 | HOA | Hand Over Approval |
| 5 | FRA | Finalisation Release Approval |
| 6 | BRA | Benefits Realisation Approval |

## 9.3 Capital governance and assurance

Over the last year, Eskom has implemented a number of major activities with the aim of strengthening governance of the delivery of the capital portfolio. Group Capital Integration and Assurance (GCiA) function was established to strengthen and support the capital investment process and de-risk the capital programmes and projects of Eskom.

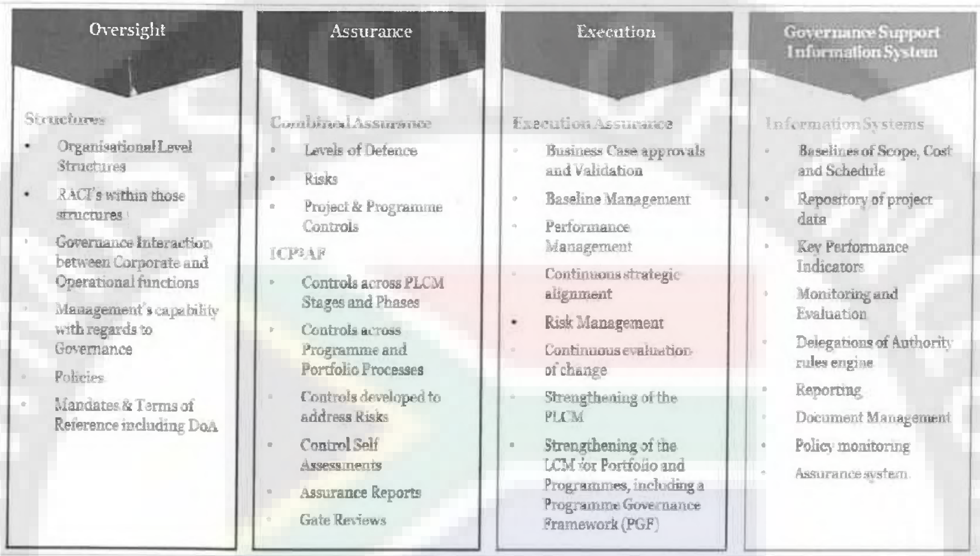
Ultimately, the aim is to ensure that the overall responsibility of the capital portfolio lies with the Group Chief Financial Officer (GCFO). Thus it was important to have the new GCiA function report within the Finance Division to be able to act independently and exploit possible synergies. This reporting line change has enabled GCiA to drive more transparent reporting and deliver on the prescribed mandate.

The GCiA's prescribed mandate is to provide Capital Assurance and oversight at a Group level to ensure an optimal return on investments in alignment to Eskom's strategic objectives. The GCiA will therefore consist of mixture of assurance services as well as business enablement to provide Portfolio Optimisation and Capital Project Scrubbing support to the divisions.

GCIA is tasked with delivering a number of initiatives in respect of capital in Eskom, including significant enhancements to the Project Life Cycle Model (PLCM). In order to fully embed and maximise the success of these, the Capital Governance Framework has been established and will be standardised across the business to ensure that the capital portfolio is optimally delivered.

The Capital Project Governance is the collective business framework used to plan and deliver all commercial and technical aspects of a capital project. It includes the systematic and structured processes of the control, oversight and assurance over the selection, development, execution and benefits realisation of capital projects to ensure a transparent, accountable, and auditable project delivery environment. This in turn supports informed decisions, underpinned by strategic insight and effective risk management.

**EXHIBIT 55: CAPITAL PROJECT GOVERNANCE FRAMEWORK**




In order to address the governance risks of the Capital Expansion Programme going forward, Eskom has embarked on a program that will systematically implement better Capital Project Governance to derive maximum benefit and value.

In this regard GCIA intends to address the following gaps:

- Development of Control Frameworks (ICP3AF)
- Tightening up on gaps found in Combined Assurance
- Governance Policy enhancements
- Tightening up the Terms of Reference for oversight committees, including Delegations of Authority
- Enhancements/ producing Governance Process maps
- Guiding Governance questions for committee members at various stages/phases of project lifecycles
- Enhancing gate review procedures including a combination of technical and financial assurance
- Tools and systems to better manage capital allocation and efficiency

## 9.4 Capital investment plan

The FY2017/18 ten-year capital investment plan will deliver some of the current new build generating capacity on an accelerated P50 plan, an expanded and strengthened transmission grid, electrification for more South Africans by 2020 and will continue to drive regulatory compliance.

The Group Capital allocation remains the largest across Eskom, and will deliver the following until FY2026/27:

- New Build programme (Commercial operation of Medupi, Kusile and Ingula) with some units on accelerated construction plans
- Expanded and strengthened transmission grid which gets Eskom closer to N-1 compliance whilst executing Power Delivery Plan
- Investments into other projects including Kusile Ash Dump, Majuba Silo recovery and rail, Medupi FGD, Duvha Unit 3, amongst others (more detail provided in Group Capital section)
- Front-end planning for nuclear, gas and coal. The current budget is for predominantly for project development (R1.5 billion) that is factored into the operating cost and land procurement activities (R0.4 billion) that is factored into the capital budget.

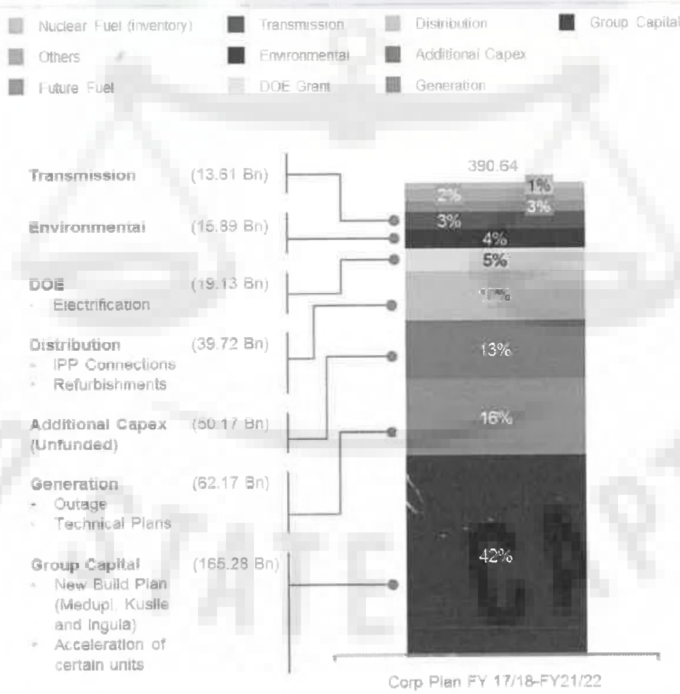
The Generation, Transmission and Distribution allocations will mainly drive investments into ensuring the integrity and reliability of Eskom's asset base by performing maintenance and refurbishments.

Over the next ten years, Primary Energy is allocated capital to do investments into Cost-Plus mines which will provide Eskom with cheaper coal.

Eskom will also invest in projects to reduce particulate emissions and water consumption, on the journey towards environmental compliance.

The breakdown of the current capital investment plan is outlined in Exhibit 56 below. It is important to note that this profile is before the capital optimisation initiatives the business will implement.

**EXHIBIT 56: FIVE-YEAR CAPITAL INVESTMENT PLAN, FY2017/18 - FY2021/22, BEFORE DTC 2**



The annual breakdown of the capex per annum is detailed in Table 34 below:

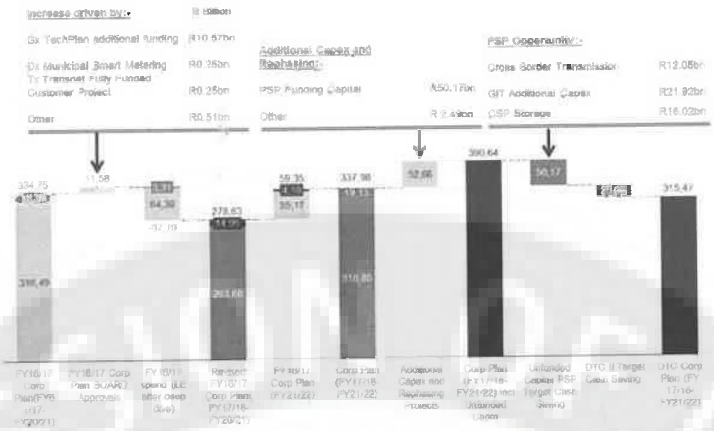
**TABLE 34: ESKOM FY2017/18 TO FY2021/22 CAPEX PLAN**

| Capex R billion | FY17/18 | FY18/19 | FY19/20 | FY20/21 | FY21/22 | Total |
|---|---|---|---|---|---|---|
| **Eskom and DoE funded capex** | | | | | | |
| Group Capital | 38.49 | 42.44 | 40.06 | 27.08 | 17.21 | 165.28 |
| Medupi | 7.71 | 8.55 | 10.73 | 10.47 | - | 37.46 |
| Kusile | 16.42 | 13.02 | 9.60 | 3.21 | 2.01 | 44.26 |
| Ingula | 0.41 | 0.07 | - | - | - | 0.48 |
| PDP | 4.90 | 8.20 | 8.69 | 7.52 | 9.84 | 39.16 |
| Other GCD | 9.05 | 12.59 | 11.04 | 5.88 | 5.36 | 43.92 |
| Generation | 11.38 | 12.81 | 12.10 | 13.32 | 12.56 | 62.17 |
| Transmission | 1.63 | 2.58 | 2.87 | 3.12 | 3.41 | 13.61 |
| Distribution | 6.78 | 7.20 | 7.58 | 8.33 | 9.84 | 39.72 |
| Environmental | 0.56 | 1.96 | 4.66 | 4.36 | 4.36 | 15.89 |
| Future Fuel | 1.66 | 1.55 | 1.79 | 2.15 | 2.91 | 10.06 |
| DOE Grant | 3.46 | 3.66 | 3.83 | 4.00 | 4.18 | 19.13 |
| Others | 2.01 | 2.18 | 2.18 | 1.41 | 1.58 | 9.36 |
| Sub Total (A) | **65.97** | **74.38** | **75.07** | **63.77** | **56.05** | **335.24** |
| Nuclear Fuel (inventory) | 1.27 | 0.76 | 1.55 | 0.86 | 0.80 | 5.24 |
| **Capital to be funded through private sector partnerships** | | | | | | |
| Cross border | 0.70 | 2.07 | 2.07 | 3.61 | 3.61 | 12.05 |
| GIT additional | 3.16 | 7.09 | 4.56 | 3.64 | 3.47 | 21.92 |
| Concentrated solar power (CSP) storage | | 4.86 | 8.10 | 3.24 | | 16.20 |
| Subtotal (B) | 5.13 | 14.77 | 16.28 | 11.35 | 7.88 | 55.41 |
| Total (A+B) | **71.10** | **89.15** | **91.35** | **75.12** | **63.93** | **390.64** |

## 9.5 Current year capital movement

Eskom's FY2017/18 capital investment plan makes increased allocations at the divisional level, resulting in a capital requirement higher than that forecasted in the FY2016/17 corporate plan. These increased divisional allocations were to fund sustainability capital to restore the asset base integrity and reliability whilst extending the current smart metering municipal reach. Exhibit 57 shows the composition of the increase in capital spend for the planning cycle. The increase in capital spend is the result of increased allocations for mainly Generation, Distribution and Transmission. Eskom has developed initiatives to decrease the capital investment plan, with the aim of reducing capital spend by R25 billion over the next five years.

**EXHIBIT 57: CAPITAL MOVEMENT FROM FY2016/17 TO FY2017/18 CORPORATE PLAN (EXCL. SUBSIDIARIES)**




## 9.6 Capital projects included in the Capital Plan

Eskom's capital portfolio is constructed to support the company's strategic objectives. The capital portfolio and associated capital investment plan for FY2017/18 to FY2021/22 has been determined by considering Eskom's strategic objectives (until FY2026/27) while balancing this with the projected cash flow availability for capital investment.

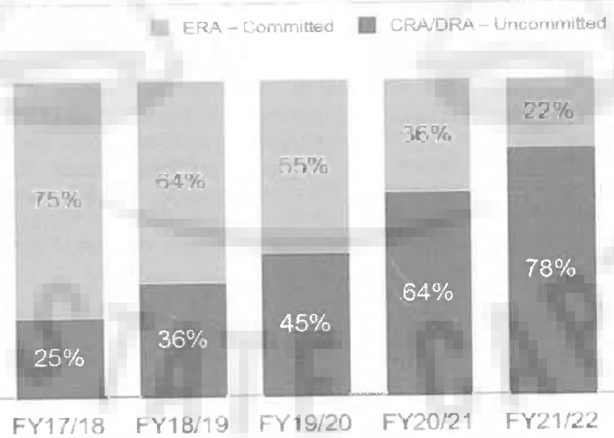
In this planning cycle, this first Eskom-wide level of prioritisation identified a capital portfolio requirement of R758.90 billion over the next ten years.

The five-year capital investment plan was revised to align to the DTC 2 cost program and the strategic goal of achieving investment grade in the next five years. Strict targets have been set for the DTC 2 program with R25 billion of capital saving to be achieved over the first five years.

A risk to the current plan is that the budget does not include legislative capital requirements currently estimated at R40 billion. The R40 billion relates largely to Compliance Projects in the areas of Health and Safety, Environmental and Regulatory Licencing Requirements.

Exhibit 58 shows a percentage split between projects that are in the development phase (uncommitted) and those that are in the execution phase (committed).

**EXHIBIT 58: PERCENTAGE OF UNCOMMITTED AND COMMITTED PROJECTS**



## 9.7 Key top-down levers to optimise capital project portfolio

The capital investment plan has set a target of R25 billion of capital savings over the next five years with the objective of reaching investment grade. The target will be achieved through different identified capital levers and the balance will be assigned to the divisions to achieve. GCiA has initiated Group wide capital interventions that will enable the business to achieve their targets.

The specific capital levers have been identified by the GCiA through the alignment of the capital investment plan to the corporate objectives. The levers identified are currently being investigated to ensure the quantification of the target and the opportunity can be realised.

The specific levers are the following:

- Acceleration of specific Medupi and Kusile units construction dates
- Alignment to low carbon outlook of ISEP resulting in the stranding of base capital assets
- IPP capital limited to Bid Window 4.5
- Alignment to production plan dispatch utilisation
- Advanced analytics projected saving for maintenance and refurbishments
- Private Sector Participation in Capital Investment Plan
    - Cost plus mines capital
    - Flue-Gas Desulfurisation (FGD) capital
    - Maintenance Analytics
    - Storage Capital
    - Cross Border Transmission

Quantification of the levers and projected targets is detailed in Table 35.

**TABLE 35: QUANTIFICATION OF LEVERS AND PROJECTED TARGETS**

| Levers | FY18 | FY19 | FY20 | FY21 | FY22 | Total |
|---|---|---|---|---|---|---|
| L1 | -0.10 | 1.40 | 6.31 | 6.20 | 0.49 | **14.30** |
| L2 | 2.51 | 2.00 | 2.32 | 2.87 | 1.63 | **11.33** |
| L3 | 0.01 | 0.09 | 0.10 | 0.04 | 2.84 | **3.08** |
| L4 | 0.70 | 0.94 | 1.26 | 1.17 | 1.32 | **5.39** |
| L5 | 0.97 | 1.36 | 1.70 | 2.13 | 2.86 | **9.02** |
| L6 | 0.00 | 0.04 | 0.22 | 1.43 | 2.83 | **4.54** |
| L7 | 0.83 | 1.08 | 1.03 | 1.06 | 1.08 | **5.09** |
| **Sub Total** | **4.92** | **6.91** | **12.96** | **14.90** | **13.06** | **52.76** |
| L8 | 3.86 | 14.01 | 14.73 | 10.49 | 6.07 | **49.17** |
| **Total** | **8.78** | **20.93** | **27.68** | **25.39** | **19.14** | **101.93** |

**L1** = Acceleration of Medupi and Kusile construction dates

**L2** = Stranding of baseload capital assets

**L3** = IPP Bid Window 4.5

**L4** = Production-plan alignment

**L5** = Private-sector participation – cost-plus mines

**L6** = Private-sector participation – FGD

**L7** = Maintenance predictive analytics

**L8** = Unfunded capital private-sector participation

The levers quantified excluding unfunded PSPs will cover just under 81% of the DTC 2 target however, the yearly targets are not met within the first two years. The first two years thus will be achieved through business unit targets, which will be enabled through the GCiA Group interventions.

## 9.8 Capital Plan interventions

GCiA has further initiated two strategic Eskom Group initiatives to actively work towards the DTC 2 saving targets. The initiatives include the enhancement of the current portfolio prioritisation methodology and a group wide capital optimisation project. The combination of portfolio prioritisation enhancement and Capital Project Optimisation will ensure that the whole project lifecycle is impacted.

Both interventions will ensure that the FY2017/18 and FY2018/19 targets are achieved either through deferral or re-phasing of capital projects to the latter years of the five-year plan or hard savings through capital project scrubbing. A summary of each of the interventions have been included below:

**Enhancement of the Portfolio Optimisation Methodology**

GCiA performed an in depth analysis of the Portfolio Management processes across the Group and has found that there are some shortcomings and inconsistencies across the business units. This information was utilised to define the scope for an enhancement project that is aiming to establish the same capability and standardised process across all business units.

The enhancement of the process is focusing on the alignment of ranking criteria to corporate and strategic objectives through the development of a robust objective hierarchy framework. These criteria will enable Eskom to better prioritise projects, eliminating projects that do not meet the appropriate criteria, ensuring DTC 2 targets are met and developing an optimal project list to enable capital optimisation.

Project selection within individual portfolios will be optimised further, considering contribution to value delivery, risk and cash flow over time. This ensures that available capital is utilised optimally, eliminating the need for inefficient manual juggling of projects to fit within budgetary constraints. The initial piloting of the capability will be performed within the Generation (Technical Plan) and Distribution divisions as they are material enough in value and provide the complexity to prove the concept within Eskom portfolio environment.

Further to enhancing the current capability, a roadmap was developed to roll out the fully-fledged portfolio optimisation capability to the entire portfolio of projects within Eskom. This will provide for further optimisation and efficient capital allocation, eliminating the natural bias that exists within the capital allocation processes.

### 9.8.1 Capital optimisation

Based on the foundation of an prioritised model the capital optimisation project has been initiated to focus on significantly reducing whole project and in project costs as well as introduce controls to avoid scope, cost and time overruns during execution of scrubbed projects. These capabilities will be developed over the course of 18 months.

A series of "levers" are being utilised to identify potential capital optimisation opportunities, such as scope removal; commercial contracting and procurement improvements; leveraging third party capital to reduce balance-sheet pressures and deferral or re-phasing. The application of these levers will not compromise reliability or safety, and ensure that Eskom doesn't incur any excessive risk.

The capital optimisation approach includes the identification of early rewards, and the implementation of a structured process to ensure the realisation of identified saving opportunities in a sustainable manner throughout the five-year Capital Plan period and beyond.

Further Eskom will establish and introduce a Public Private Participation (PSP) unit within Group Capital to investigate alternative methods of funding and ensuring that we meet our strategic objectives. The target for this unit will be to execute in excess of R50.2 billion of PSP structures.

The Eskom PSP unit will take accountability for the implementation of the Eskom PSP policy. The objectives of the unit are to explore and implement the execution of projects utilising off-balance sheet structures that would incorporate the private sector. This will ensure that key projects not included or partially included for in the budget could be delivered through partnerships with the private sector, thus allowing for the incorporation of different sources of funding. These structures could also provide a relief to the current Government guarantee framework. Involving the private sector could also provide a mechanism to better manage certain implementation risks.

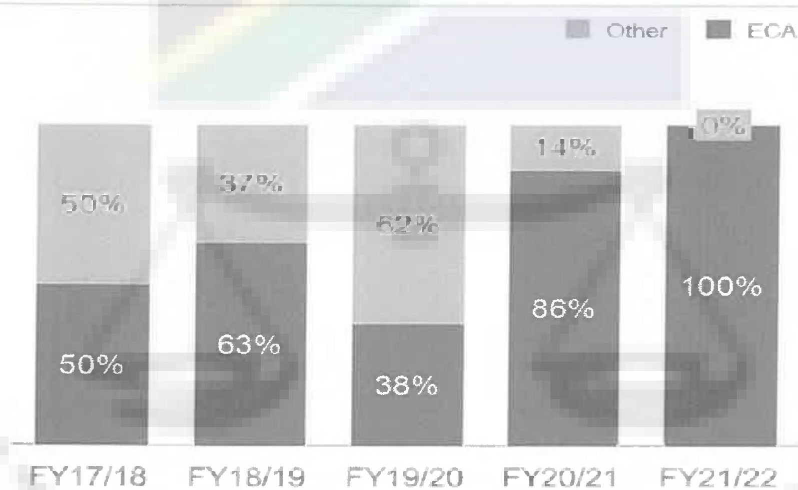
The unit will select PSP candidate projects, and ensure projects progress through the five phases and gates outlined in the Eskom PSP policy.

The PSP unit comprises of multidisciplinary team members (project developers, commercial, contract management, legal, finance, treasury etc.). These team members will be working to develop the PSP candidate projects with the assistance and guidance of transactional advisors, advancing projects through PSP feasibility, procurement, financial close and contract management.

The PSP unit forms part of the PSP operating model (or PSP factory) that includes the people, processes, tools, governance, standards and information. The core PSP team will reside within the Group Capital Division and will be supported by knowledge area experts from other business units within.

A further opportunity to reduce the burden on the Government guarantee framework would be to look at the opportunity for export credit agency (ECA) funding opportunities. The ECA funding is described in the treasury section of the plan. The following graph shows the ECA potential per business area as a percentage of the total spend over the next 5 years. The total ECA potential is approximately 50% of the capital plan over the next 5 years.

**EXHIBIT 59: ECA FUNDING OPPORTUNITIES**




## 9.9 Business targets

Business targets have been set for each of the divisions to ensure capital optimisation targets are met. These targets are in excess of the R25 billion target, totalling R65 billion, in order to ensure Eskom meets its capital spend targets. The business targets were calculated based on a weighted average excluding Group Capital Division which was limited to a reasonable percentage of total spend. The business units will be enabled through the capital interventions that is managed through the GCiA function.

The business targets (including budgeted top down levers) are the following:

**TABLE 36: BUSINESS TARGETS AND TOP-DOWN LEVERS**

| Divisions | FY2017/18 | FY2018/19 | FY2019/20 | FY2020/21 | F2021/22 | TOTAL |
|---|---|---|---|---|---|---|
| Distribution | 1.01 | 1.09 | - | - | - | **2.10** |
| Eskom Academy of Learning | 0.00 | 0.00 | | | | **0.01** |
| Fleet | 0.10 | 0.09 | | | | **0.19** |
| Group Capital Division | 4.30 | 4.30 | 8.93 | 9.49 | 7.98 | **34.99** |
| Group Customer Services | 0.00 | 0.00 | | | | **0.00** |
| GIT | 0.10 | 0.10 | | | | **0.20** |
| Generation | 5.22 | 4.56 | 2.33 | 3.28 | 2.22 | **17.62** |
| PED | 0.97 | 1.36 | 1.70 | 2.13 | 2.86 | **9.02** |
| Renewables | 0.01 | 0.01 | | | | **0.02** |
| Security | 0.07 | 0.10 | | | | **0.16** |
| Sustainability | 0.02 | 0.03 | | | | **0.05** |
| Technology | 0.00 | 0.00 | | | | **0.01** |
| TxAME | 0.24 | 0.39 | - | - | - | **0.63** |
| **TOTAL** | **12.04** | **12.04** | **12.96** | **14.90** | **13.06** | **65.00** |

# 10 Eskom targets

**Corporate Plan and 2017/18 Shareholder Compact KPIs and Targets**

This Corporate Plan was developed to align Eskom's performance to the FY2017/18 Compact which sets out the Shareholder's expectation for FY2017/18 and beyond. Eskom's performance will be evaluated primarily against the Shareholder's Compact as a whole and the Minister will be provided with quarterly reports on the progress towards achieving these targets. The achievement of this Corporate Plan will be anchored through disciplined execution by hard-wiring these performance indicators and targets in the performance compacts.

The full Corporate Plan provides the detail on how Eskom will deliver on the Compact and other targets.

The Shareholder's Compact may be reviewed if there are any material changes in relation to the 13% tariff adjustment as per Government Support Package in FY2017/18.

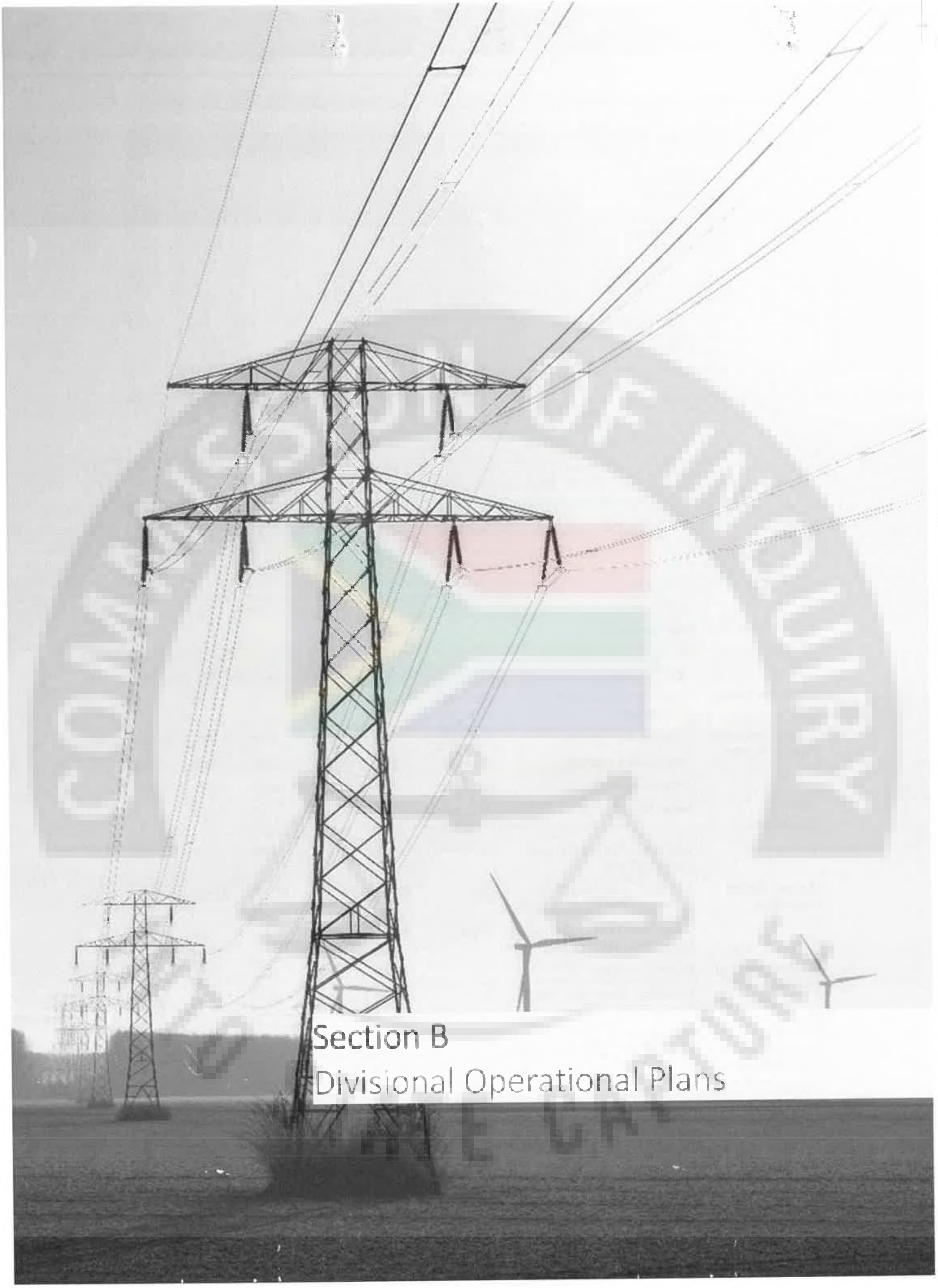
| Key performance Areas | Key Performance-Indicator | Unit | FY17/18 | Q1 | Q2 | Q3 | Q4 | FY18/19 | FY19/20 | FY20/21 | FY21/22 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Focus on Safety | Lost Time Injury Rate (Employee) (LTIR) | Rate | **0.31** | 0.34 | 0.33 | 0.32 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 |
| Improve Operations | Energy Availability Factor (EAF) | % | **78** | 78 | 78 | 78 | 78 | 79 | 80 | 80 | 80 |
| | Planned Capability Loss Factor (PCLF) | % | **10** | 11.64 | 10.62 | 10.27 | 10 | 10 | 10 | 10 | 10 |
| | System Average Interruption Duration Index (SAIDI) | Hours | **39** | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 |
| | System Average Interruption Frequency Index (SAIFI) | # | **20** | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | System Minutes <1 | Min | **3.53** | 0.8825 | 1.765 | 2.6475 | 3.53 | 3.53 | 3.53 | 3.53 | 3.53 |
| | Distribution Total Energy Loses | % | **6.55** | 6.55 | 6.55 | 6.55 | 6.55 | 6.58 | 6.63 | 6.65 | 6.65 |
| Deliver capital expansion | Generation capacity installed and commissioned (Commercial Operation) | MW | **1460** | | 794 | 794 | 0 | 1594 | 2448 | 2394 | 800 |
| | Transmission lines installed | Km | **677** | 123 | 198 | 189 | 167 | 596 | 386 | 169 | 267 |
| | Transmission transformers capacity installed and commissioned | MVA | **2010** | 500 | 500 | 500 | 510 | 2050 | 1150 | 2065 | 3500 |
| Reduce environmental footprint in existing fleet | Relative Particulate Emissions (Kg/MWh sent out) | Kg/MW | **0.34** | 0.34 | 0.34 | 0.34 | 0.34 | 0.33 | 0.28 | 0.25 | 0.21 |
| | Specific Water Usage – Litres per kWh sent out | L/kWh | **1.37** | 1.37 | 1.37 | 1.37 | 1.37 | 1.36 | 1.35 | 1.34 | 1.3 |
| Implementing coal haulage and the road-to-rail migration plan. | Migration of Coal Delivery Volume from Road to Rail | Mt | **15.1** | 3 | 3.7 | 3 | 3.2 | 17 | 15 | 11 | TBC |
| Ensure Financial | Value add per employee *** | Rm | **1.56** | 0.39 | 1.08 | 1.33 | 1.56 | 1.87 | 2.25 | 2.6 | 2.99 |

| Key performance Areas | Key Performance Indicator | Unit | FY17/18 | Q1 | Q2 | Q3 | Q4 | FY18/19 | FY19/20 | FY20/21 | FY21/22 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sustainability<br><br>*** In light of the recent 2.2% price path as announced by NERSA, all the financial metrics contained in the original calculation need to be revised to align to the Corporate Plan submitted to DPE in February 2017. Impacted measures are shown with an *** | Cash Interest Cover *** | Ratio | 1.40 | 1.11 | 1.71 | 1.59 | 1.40 | 1.39 | 1.45 | 1.52 | 1.7 |
| | Debt: Equity including long-term provisions *** | Ratio | 3.07 | 2.71 | 2.55 | 2.78 | 3.07 | 3.86 | 4.85 | 5.92 | 7.27 |
| | Free Funds From Operations As Percentage of Gross Debt *** | % | 8.86 | 2.17 | 7.29 | 8.31 | 8.86 | 9.7 | 10.91 | 12.79 | 14.53 |
| | Free Funds From Operations As Percentage of Capex *** | % | 64.77 | 49.84 | 91.15 | 75.51 | 64.77 | 72.92 | 96.62 | 147.31 | 156.63 |
| | EBITDA Margin *** | % | 19.60 | 20.95 | 29.25 | 23.41 | 19.60 | 21.1 | 22.8 | 24.6 | 26.6 |
| | BPP savings | R'bn | 18.9 | 4.4 | 9.2 | 14.1 | 18.9 | 0 | 0 | 0 | 0 |
| | Average Debtors Days (Including Soweto) *** | Days | 65.82 | 65.82 | 65.82 | 65.82 | 65.82 | 65.8 | 66.48 | 67.5 | 68.5 |
| | Arear Debt as % of electricity Revenue *** | % | 1.29 | 1.19 | 1.20 | 1.20 | 1.29 | 1.17 | 1.14 | 1.13 | 1.12 |
| | Coal Purchase Rand/Ton % increase | % | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Socio-Economic Impact: Human Capital | Training Spend as % of Gross Manpower Costs | % | 5 | 4 | 4.5 | 4.5 | 5 | 5 | 5 | 5 | 5 |
| | Learner Intake (artisan ) | Number | 500 | 125 | 250 | 375 | 500 | 500 | 500 | 500 | 500 |
| | Disability Equity (in Total Workforce) | % | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| | Racial Equity in Senior Management | % | 71.39 | 64.39 | 66.73 | 69.06 | 71.39 | 77.23 | 83.06 | 88.9 | 83.06 |
| | Gender Equity in Senior Management | % | 35.64 | 31.42 | 32.83 | 34.23 | 35.64 | 38.99 | 42.35 | 45.7 | 42.35 |
| | Racial Equity in Professional and Middle Management | % | 78.22 | 74.88 | 75.99 | 77.11 | 78.22 | 81.78 | 85.34 | 88.9 | 85.34 |
| | Gender Equity in Professional and Middle Management | % | 39.59 | 37.69 | 38.33 | 38.96 | 39.59 | 41.62 | 43.66 | 45.7 | 43.66 |
| Socio-Economic impact: Economic Impact | Local Content Contracted (New Build Programs) | % | 70 | 70 | 70 | 70 | 70 | 70 | 70 | 70 | 70 |
| | Local Content Contracted (Eskom wide) | % | 70 | 70 | 70 | 70 | 70 | 70 | 70 | 75 | 75 |
| | Percentage of B-BBEE attributable spend against TMPS | % | 82 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 |
| | Percentage of BWO attributable spend against TMPS | % | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| | Percentage of BO attributable spent against TMPS | % | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 45 | 45 |

| Key performance Areas | Key Performance Indicator | Unit | FY17/18 | Q1 | Q2 | Q3 | Q4 | FY18/19 | FY19/20 | FY20/21 | FY21/22 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Percentage of BYO attributable spend against TMPS | % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | Percentage of PwD attributable spend against TMPS | % | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | Percentage of QSE attributable spend against TMPS | % | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| | Percentage of EME attributable spend against TMPS | % | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| | BBBEE Score Level | Number | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | Technology Transfer: Acquisition of Intellectual Property | Rm | 25 | 9 | 13 | 17 | 25 | 25 | 25 | 25 | 25 |
| | Technology Transfer: Skills Development | Number (People) | 30 | 20 | 20 | 30 | 30 | 30 | 30 | 30 | 30 |
| Socio-Economic Impact: Corporate Social Investment (CSI) | CSI Budget | Rm | 192 | 63 | 78.6 | 121.5 | 192 | 175.9 | 175.2 | 185.2 | 196.3 |

## Other Corporate Plan Targets

| Key performance Areas | Key Performance Indicator | Unit | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 |
|---|---|---|---|---|---|---|---|
| Focus on Safety | Fatalities (Eskom and Contractors) | Number | 0 | 0 | 0 | 0 | 0 |
| Socio-Economic: Human Capital | Engineering Learners | Number | 391 | 352 | 317 | 285 | 257 |
| | Technicians Leaners | Number | 652 | 587 | 528 | 475 | 428 |
| | Artisans Leaners | Number | 1434 | 1291 | 1162 | 1045 | 941 |
| Improve Operations | Major Incidents | Number | 2 | 2 | 2 | 2 | 2 |
| | Unplanned Capability Loss Factor (UCLF) | % | 10.9 | 9.9 | 8.9 | 7.9 | 6.9 |
| Deliver capital expansion | CAPEX - excluding IDC including DOE Funded Capital | Rm | 39.06 | 44.4 | 44.72 | 31.44 | 25.05 |
| | Generation New Build Capacity Milestones (Medupi and Kusile) | Days | 30 | 30 | 30 | 30 | 30 |
| Put Customer at Centre | Eskom KeyCare | % | 102 | 102 | 102 | 102 | 102 |
| | Enhanced MaxiCare/ PreCare | % | 93.7 | 93.7 | 93.7 | 93.7 | 93.7 |
| Reduce environmental footprint in existing fleet | Environmental Legal Contravention in terms of the Operational Health Dashboard | Number | 1 | 1 | 1 | 1 | 1 |
| Sustainable Asset Base whilst ensuring security of supply | Demand savings | MW | 415 | TBC | TBC | TBC | TBC |



# Section B
## Divisional Operational Plans

# 11 Customer Services

## 11.1 Summary of the operational plan

### 11.1.1 Overview

Eskom aims to become a customer-centric organisation that stimulates demand and catalyses South African growth. In support of these objectives, Customer Services aims to achieve sales growth by 2.1% a year by FY2019/20, and to partner with its customers to address their needs and aspirations. In a context where customers have greater choice and where technology is changing consumption patterns, Customer Services aims to closely understand its customers' preferences, and to launch a set of initiatives that will deliver world-class service along key interaction points – in close collaboration with other parts of the organization. Driving value through customer outreach is critical in order to help Eskom's customers, and the country, achieve the best possible solution for long-term growth.

### 11.1.2 Financial and operational highlights FY2016/17

During FY2016/17 Customer Services delivered several operational and financial highlights:

- Eskom **key care** of **105.95%** above target of **104%**
- Customer engagement expedited **2 200 MW** of new connection projects in the pipeline
- In Soweto **8 500 post-paid meters** were converted to prepaid meters as at the end of November 2016, against a target of 7 833.
- In Midrand and Sandton **9 511 smart meters** were installed as at the end of November 2016, against a target of 7 333.

### 11.1.3 Objectives and five-year targets

Customer Services has to respond to a changing market which includes the following trends:

- Stagnant macro-economic conditions
- Growth of **market disruptors**, e.g. rooftop solar photovoltaic panels that were seen as solutions to capacity constraints
- **Difficulties in executing debt-management strategies**, particularly regarding residential and municipal debt

Customer Services will address these market trends and deliver Eskom's aims through the following initiatives:

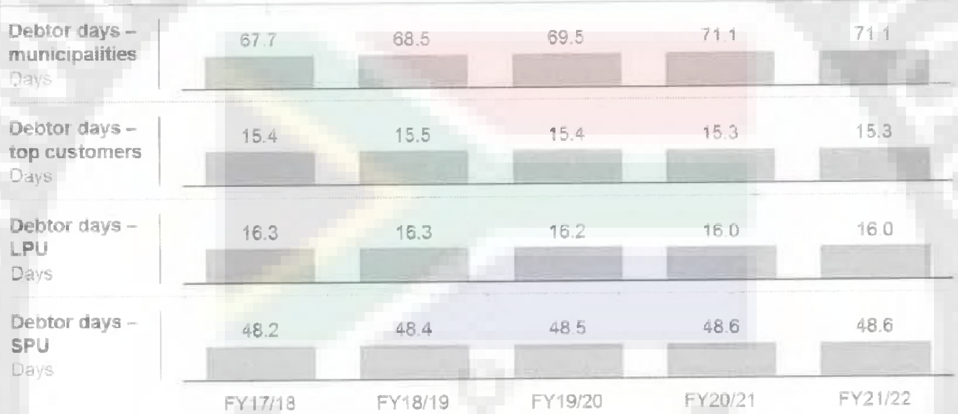
- Stimulate large power user (LPU) demand through an **opportunity pipeline of more than 45 TWh**, against a target of 17 TWh
- Renegotiate **9 TWh of existing contracts** to protect Eskom's baseline
- Work with high-growth and low-debt municipalities to increase sales
- Improve municipal and other debt collections by: becoming involved in collection processes in municipal areas on an agency basis and re-enforcing credit controls across customer segments

Achieving these strategic initiatives will support Customer Services in delivering on the following targets over the next five years. Sales forecasts are shown in Exhibit 60 and debt collection targets in are shown in Exhibit 61.

**EXHIBIT 60: FORECAST AND TARGET SALES VOLUMES FY2017/18 - FY2021/22**


1 As of December 2016

**EXHIBIT 61: DEBT COLLECTION TARGETS FY2017/18 - FY2021/22**




Customer Services will manage the following key risks by implementing identified treatment plans:

- **Increase in Soweto debt**, by converting customers to prepaid
- Increase in late payment or non-payment as a result of defaulting municipalities, by establishing suitable payment arrangements
- **Loss in revenue through non-technical losses**, by regularly auditing meters, especially for LPUs

## 11.2 Divisional overview

### 11.2.1 Mandate

Eskom is in a position to take an active role in growing the economy and supporting South Africa's competitiveness in key industries through delivering reliable, affordable power, with a greater focus on customer-centricity. Customer Services is accountable for 5.6 million customers of which 0.4 million are served through a conventional credit meter. The division's mandate is to put the customer at the centre of the business and guide Eskom towards the overall objective of achieving fully satisfied and serviced customers. This will be achieved through:

- Ensuring that customers are provided with a world-class experience at primary touch points
- Developing and implementing an integrated revenue management strategy per priority segment
- Energising the division's workforce, especially the frontline staff, through structured training interventions and a conducive work environment

### 11.2.2 Regulatory environment

Customer Services operates under the Distribution licence and focuses on customer issues that require attention to avoid any potential penalties from the regulator. As a result, Group Customer Services needs to comply with the following legislation:

- Electricity Regulation Act 04 of 2006 (ERA), in particular Section 21(2), which pertains to the discrimination between customers or classes of customers. Should Eskom violate this, the regulator may issue a compliance notice for which the penalty is equivalent to 10% of annual turnover per day from the date the compliance note was issued.
- National Regulator Specification 047-1, Electricity Supply – Quality of Service (Industry Standards), which requires Eskom to provide clients with quotations within specified periods. This is measured through KPIs such as 'minor quotes < 30 days'. It also requires Eskom, upon request by the customer, to provide meter accuracy requests within 15 working days, and resolve customer complaints, enquiries and requests within two weeks.

## 11.3 Performance review FY2016/17

### 11.3.1 Context

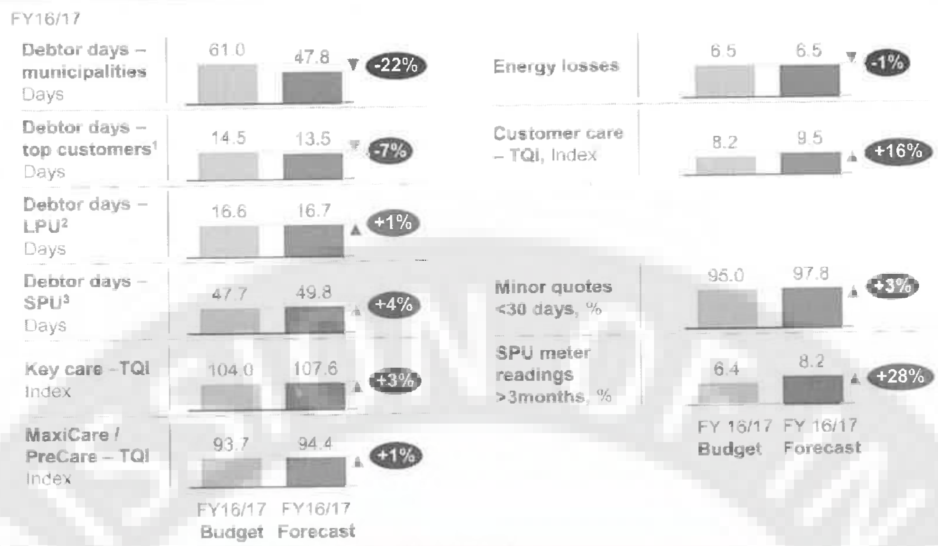
Municipal overdue debt has doubled almost every year since 2011 to reach the current level. Overdue debt for FY2016/17 is forecast at R11.9 billion. With current payment levels at 93%, and the assumption that certain municipalities will take longer to honour their current debts, the outlook is that of increasing arrears.

### 11.3.2 Achievements

Despite the challenging environment, the division showed the following achievements during FY2016/17:

- Eskom, through Customer Services, embarked on a programme to stimulate local demand through communicating the availability of consistent and reliable capacity.
- Customer engagement expedited 2 200 MW of new connection projects in the pipeline.
- Medium-term industrial growth was stimulated through targeting specific industries, e.g. platinum and ferrochrome.
- Eskom converted 8 500 postpaid meters to prepaid meters in Soweto.
- Eskom installed 9 511 smart meters in Midrand, and Sandton.
- Technical and operational highlights for FY2016/17 are shown in Exhibit 62.

**EXHIBIT 62: TECHNICAL AND OPERATIONAL KPIS FY2016/17**




1 Excluding disputes 2 <100GWh a year 3 Excluding Soweto

### 11.3.3 Challenges for FY2016/17

Eskom, and the division, experienced the following challenges during FY2016/17:

- A shift in the operating landscape, from excess demand to excess capacity, with demand growth slowing to -1.1% over the last three years
- Declining demand growth driven by economic conditions, the escalating price path and market disruptors
- Difficulties in executing debt-management strategies

## 11.4 Aspirations and objectives

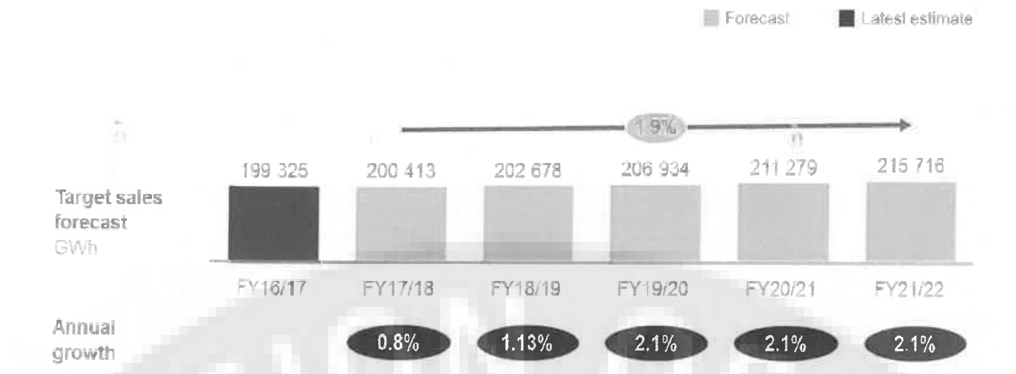
### 11.4.1 Financial and operational targets

Customer Services takes its strategic cue from DTC 2. The strategy reflects Eskom's commitment to South Africa's economic development and requires all Eskom's divisions to make changes which will allow the organisation to meet its objectives. The Group Customer Services operational plan supports Eskom's strategic objectives by addressing local demand and LPUs.

### 11.4.2 Local demand stimulation initiatives

Customer Services set an aspiration to drive the industrialisation of South Africa by stimulating electricity demand. Eskom aims to achieve an average of 1.6% a year local demand growth over the next five years, by focusing on large power users (LPUs) and municipalities (Exhibit 63).

**EXHIBIT 63: LOCAL DEMAND GROWTH TARGETS FY2017/18 - FY2021/22**




**Large power users**

To deliver against the local demand growth target of 1.6% a year, or 17 TWh over the period, Customer Services will drive management of an opportunity pipeline in excess of 33 TWh for LPUs (out of a total pipeline in excess of 45 TWh) through the following actions.

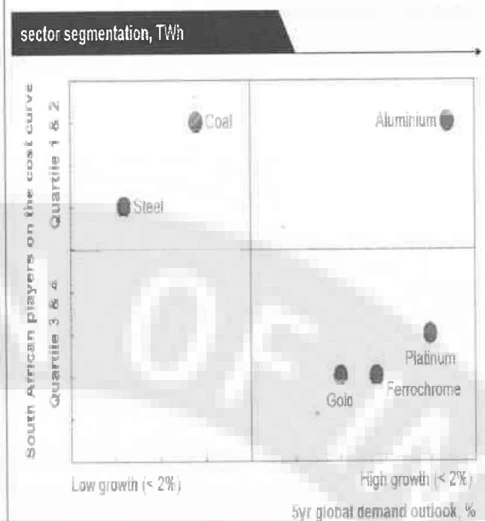
- Proactively communicating the rollback of the Energy Conservation Scheme and the reality of Eskom's excess-supply capacity
- Engaging with customers who have decreased consumption, or are in distress, to understand the challenges at hand, and to help these design initiatives and packages to sustain or turn-around operations
- Engaging with customers who have projects under construction to timely project progression and to avoid bottlenecks and delays, or actions to expedite project completion
- Engaging with customers who have projects put on hold, postponed, or cancelled to understand and quantify the conditions needed to bring these projects back on line, provide assurance of security of supply and support customers in re-structuring these projects where needed
- Proactively seeking opportunities to assist in the development of new industries (e.g. de-salination), the development of Special Economic Zones, and to help create attractive investment conditions for Industrial and Commercial customers
- To drive these priorities Eskom will put in place an engine-room for growth and develop the tools, routines and capabilities of world-class sales and service organisations. Eskom has designed a process to continuously identify priority areas (companies and projects) requiring support; to clearly identify and quantify these customers' needs; to contrast these to macroeconomic and sector trends (demand outlook, pricing, competitiveness); to maintain digital key account plans; and to track progress and delays in a single, consolidated pipeline tool. All along this process Eskom identified the main areas where it could differentiate via digital applications – notably key account management, pipeline tracking, market insights and deal structuring.

Eskom has already started to make trend analysis a formal part of its sales process, by segmenting the opportunities in the pipeline based on forecast demand, and South Africa's competitiveness on the global cost curve, and value at stake – as is shown in Exhibit 64.

**EXHIBIT 64: SECTOR ANALYSIS FOR ESKOM'S HIGHEST ENERGY CONSUMING SECTORS**

High / Medium / Low

| Sector | Share of 5Y target % of 26 Twh | SA competitiveness Cost curve quartile | Price forecasts %, 5Y | Global demand growth %, 5Y |
|---|---|---|---|---|
| Ferro-Chrome | 19 | 3rd & 4th quartile | 3.7% | 2.1% |
| Aluminium | 17 | 1st quartile | 0.95% | 4.2% |
| Steel | 17 | [illegible] | 0.55% | 0.6% |
| Platinum | 11 | 3rd and 4th quartile | 2.9% | 1.9% |
| Coal | 4 | 1st quartile | (1.8)% | 1.4% |
| Gold | 4 | 4th quartile | 2.5% | 3.0% |




In addition to targeting the above growth opportunities, Customer Services will engage with customers at risk of decreasing sales to provide support and work with the Department of Trade and Industry, InvestSA and other critical stakeholders to establish a country platform to foster economic growth and help create a sustainable environment for South Africa's key industries.

**Municipalities**

- Customer Services will also partner with Municipalities to stimulate demand, by focusing on
- Identifying high-growth, low debt municipalities that have headroom for demand stimulation
- Investigating options to increase notified maximum demand
- Jointly engage industrial customers to develop and support strategic plans, and resolve barriers to further growth

To deliver against these opportunities, Eskom will need a suite of new capabilities, tools, and governance routines that will be detailed further in the next section on customer centricity.

### 11.4.3 Customer-centricity

Eskom aims to become a customer-centric organisation that stimulates demand and catalyses South African growth. In a context where customers have greater choice and where technology is changing consumption patterns, Customer Services aims to closely understand its customers' preferences, and to launch a set of initiatives (as shown in Exhibit 65 and Exhibit 66) that will deliver world-class service along key interaction points – in close collaboration with other parts of the organization. Driving value through customer outreach is critical in order to help Eskom's customers, and the country, achieve the best possible solution for long-term growth.

**EXHIBIT 65: CUSTOMER SERVICE BEST PRACTICES TO BE PURSUED**

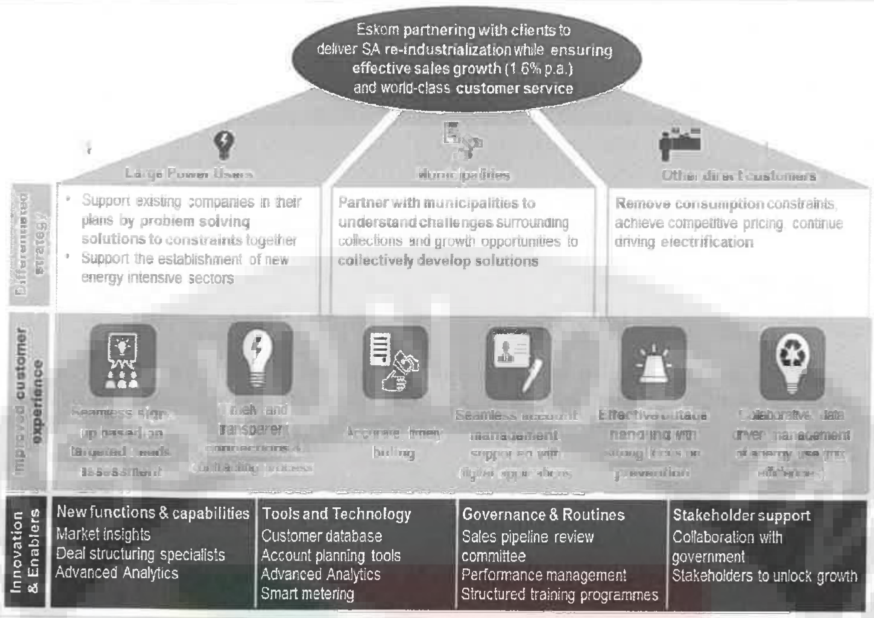



**EXHIBIT 66: ASPIRATIONAL CUSTOMER JOURNEY EXPERIENCE**


To improve the customer experience at the five key touch points in a customer's journey (as illustrated in Exhibit 66), some specific initiatives will be launched:

1. **Sign-up and needs assessment:** To accelerate sign-up of new customers and improve the experience throughout sign-up process, Eskom will review its engagement model for priority segment and re-train its sales that support priority clients. The sales teams will be equipped with digital tools that can quickly deliver relevant and usable insight to get ahead of the customer's needs (e.g., on market insights on the company and global industry trends), and to allow for faster, more transparent, paperless transactions (e.g., app-based account planning and contract management)

2. **Connection**: To improve connection times and avoid delays, cross-functional performance metrics will be set-up across both Customer Services and Distribution divisions. A working group will be set up to drive joint resolution of bottlenecks and delays with members of both divisions

3. **Billing and account management**: To improve billing and account management, Eskom will focus on a number of initiatives including : reviewing the footprint of self-service kiosks; strengthening capabilities in the self-service kiosks in priority (e.g., rural) areas, developing self-service smartphone applications; improving hotline turn-around times and responsiveness via staff training; rolling out SMART meters

4. **Outage handling**: Close collaboration with Distribution to drive Field Force Effectiveness, roll out digital tools to improve response times, outage resolution, and customer communication.

5. **Management of energy use**: Eskom also will further support customers in the management of their energy mix (e.g., for solar PV and small scale storage solutions) and develop tailored packages that reflect customer needs

In addition, reviewed customer feedback tools and KPIs will be defined to get a more accurate picture of customer needs. Eskom will start by launching a diagnostic to better understand its customers' needs and pain points, and based on this develop a revised MaxiCare measurement tool to improve its understanding of customer needs.

### 11.4.4 Debt

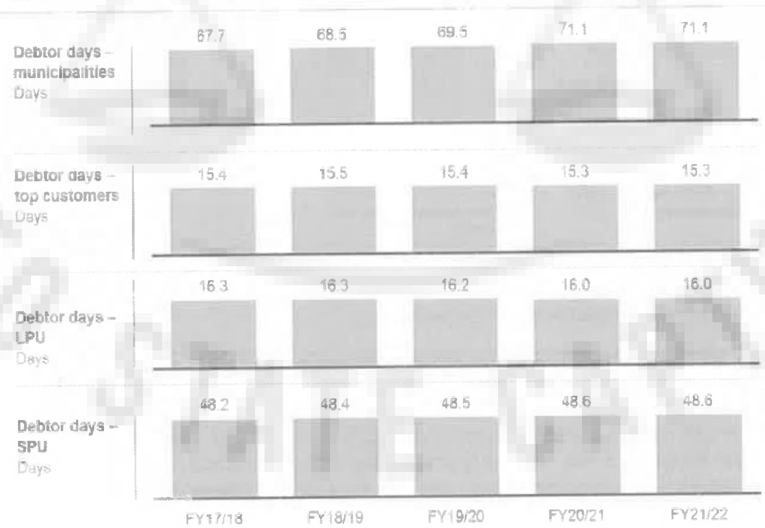
**Debt recovery**

A major step change is required for turnaround of current municipal and other debt levels. The aim is to increase payment levels from 93% to 99%. In order to do this, Eskom will continue to use the Promotion of Administrative Justice Act (PAJA) process to recover debt. This process is expected to reduce additional principal debt from R5 billion a year to R1 billion a year.

In order to achieve this reduction in debt levels, Eskom will:

- Continue the enforcement of credit controls across customer segments
- Operate on an agency basis to improve revenue collection from municipalities
- Implement smart and split-metering technology with protective steel enclosures
- Manage and maintain the debtor days at an acceptable level (Exhibit 67)
- Increase deposits and securities to control potential risks

**EXHIBIT 67: DEBTORS DAYS TARGETS**



**Advanced analytics: Non-technical losses and customer collections**

Customer Services has put in place analytical tools to identify the drivers of non-technical losses and identify main areas at risk. Going forward the division will use Advanced Analytics to step-up these efforts i.e. identify the number of end-users at stake, with greater accuracy.

In order to act against the opportunities identified, Customer Services will strengthen their resource base to implement an execution plan to recover the revenues lost through non-technical losses. Several models to fund the implementation plan will be investigated to ensure effective execution of the opportunities, given the constraints within the business.

Customer Services will also look to advanced analytics solutions to help target further reductions in overdue debtors and arrears (e.g., by developing an early warning system for customers at risk).

The business will leverage the Analytics Centre of Excellence (ACE) to provide analytics support in the implementation of these solutions.

### 11.4.5 Initiatives

Customer Services has identified initiatives to achieve its aims and objectives. Initiatives and associated KPIs and success factors are shown in Table 37.

**TABLE 37: INITIATIVES**

| Year | Actions/Initiatives | KPIs | Critical success factors |
|---|---|---|---|
| **Reduce debt and increase payment rates for municipalities** | | | |
| **Short term** | | | |
| FY2017/18 | • Engage defaulting municipalities to establish suitable payment arrangements to settle overdue debt<br>• Disconnect defaulting municipalities after following PAJA process<br>• Closely monitor and report debt status, payments of current accounts and adherence to debt-repayment plans | • Debtor days – municipalities | • Involvement and alignment of both national and provincial government (Treasury, DPE and Cooperative Governance and Traditional Affairs (CoGTA) on ability to implement PAJA process and execute credit-management processes |
| **Long term** | | | |
| FY2018/19 | • Establish an Eskom-driven agency to support municipalities with collections and meter installations, etc. | • Debtor days – municipalities | • Alignment and support from key stakeholders, i.e. DPE, CoGTA<br>• Commitment to honour payment arrangements and initiatives by municipalities<br>• Stakeholder engagement and buy-in<br>• Leadership support (political and business)<br>• Financial approval |
| **Stimulate local demand** | | | |
| FY2017/18 | • Engage customers on new projects in the pipeline (101 customers with projects identified as high priority) | • GWh consumed | • Collaboration with the Department of Trade and Industry (DTI) and main government |

| | | | |
|---|---|---|---|
| | • Engage all large power users with considerable decline in consumption to understand root-cause of decline and potential to increase consumption<br>• Engage new customers and industries (e.g., de-salination projects, and New Economic Zones) identified to confirm upcoming consumption needs<br>• Prepare a growth roadshow to communicate Eskom's readiness to support SA growth and reliability to supply, targeting:<br>○ Municipalities<br>○ Large power users<br>○ Chambers of commerce<br>○ Industry forums<br>• Support with digital campaign (Twitter, Facebook, etc.)<br>• Set up a governance structure to enable effective against the opportunity pipeline e.g. monthly sales meeting<br>• Execute against a stakeholder engagement plan at country-level for each of the priority sectors to identify constraints required to unlock further growth and investment<br>• Implement process to continuously identify priority areas requiring support; to clearly identify and quantify these customers' needs; to contrast these to macroeconomic and sector trends (demand outlook, pricing, competitiveness); to maintain digital key account plans; and to track progress and delays in a single, consolidated pipeline tool<br>• Set up supporting governance and routines | | stakeholders to develop value propositions for high priority sectors and attract investment<br>• Strengthened sales tools and capabilities (market insights for priority sectors, interview guides, digital account planning and pipeline tracking) |
| **Reduce debt and increase payment rates for residential areas and SPU** | | | |
| FY2017/18 | • Increase number of disconnections to residential/small-power-user (SPU) customers<br>• Target commercial customers in residential areas for collecting arrears, on top of current consumption<br>• Convert installed split meters to prepayment and change the supply group codes to prevent ghost vending<br>• Implement regular meter inspections, replacement of faulty meters and regular billing, and ensure collections or severance as required<br>• Deliver education campaigns to improve payment rates | • Debtor days – SPU (excluding Soweto) | • Integration with Distribution for execution, disconnections and roll-out of prepayment meters |

| | | | |
|---|---|---|---|
| | • Ensure that customers are billed accurately<br>• Reduce electricity theft<br>• Facilitate roll-out of conversion to prepaid | | |
| **Reduce debt and increase payment rates for LPU** | | | |
| FY2017/18 | • Identify non-functioning metering/billing on LPU installations<br>• Identify LPU meter-tampering (correct – prosecute – recover)<br>• Identify installations not being billed (correct – activate – recover) | • Debtor days – other LPU (<100 GWh each year)<br>• Enhanced MaxiCare/ PreCare – total quality index (TQI (12-monthly moving average) | • Secondment of resources to help with revenue recovery<br>• Cross-functional teams to work together to ensure successful results |
| **Reduce non-technical energy losses** | | | |
| FY2017/18 | • Remove/regularise illegal connections<br>• Implement disconnections, tamper fines, revenue recovery, payment arrangements<br>• Ensure legal prosecution of electricity theft and syndicates<br>• Fix customer, network and meter data | • Energy losses | • Both human and financial resources are required in order to carry out the activities as outlined<br>• Manual audit process make audit tracking and reporting resource-intensive |
| **Improve management of top customers** | | | |
| FY2017/18 | • Implement customer-engagement plan<br>• Conclude MOUs with strategic customers on mutually beneficial activities<br>• Implement stakeholder-engagement plan<br>• Ensure that valid electricity-supply agreements are in place for all customers<br>• Ensure that valid NRS048-9 and essential load documents are in place for all customers<br>• Manage customer compliance to notified maximum demands<br>• Assist system operator (weekly forecasting) to ensure system sustainability<br>• Implementation of sales pipeline process and system | • Eskom Key Care –TQI (12-monthly moving average) | • Customer co-operation and buy-in |
| **Improve customer experience and delight customers** | | | |
| FY2017/18 | • Conduct detailed customer needs **diagnostic;** validate key customer touch-points along their journey at Eskom | • Customer care (12-monthly moving average) | • Full participation by employees<br>• Supervisor/management oversight |

| | | | |
|---|---|---|---|
| | • Review and improve initiatives targeting the customer experience along key touch-points (described under section 11.4.2)<br>• Improve **sign-up and needs assessment** process (i.e. deliver staff training on key account management tool and needs assessment guides)<br>• Resolve bottlenecks in **connection times**, agree on cross-functional KPIs and create a working group with Distribution to resolve bottlenecks<br>• Improve **billing and account management** process by adequately resource contact centre as it is a first contact point for customers; moving from current 7 contact centres to 1 digital site plus backup; improving customer service hubs footprint and offering; roll-out smart meters<br>• Pilot and roll-out **outage handling application**; confirm execution and use of field force tools with distribution<br>• Launch **critical enablers** e.g., set up customer experience **transformation office** to coordinate new initiatives; Ensure frontline staff are **trained**; **design and roll-out improved Maxicare survey tool** | | |

## 11.5 Risks and treatment plans

Risks and associated treatment plans are shown in Table 38

**TABLE 38: RISKS AND TREATMENT PLANS**

| | |
|---|---|
| **Increase in Soweto debt, caused by continuing non-payment, leading to revenue loss** | • Convert customers to prepaid metering (old installations)<br>• Focus on debt collection from commercial customers to increase payment levels to 90%<br>• Install split meters with the option of prepaid-enabling<br>• Implement social-marketing campaigns to educate customers on the safe and legal use of electricity |
| **Increase in late payment or non-payment of electricity accounts, caused by municipalities' cash-flow problems** | • Actively engage both national and provincial government (Treasury, DPE and CoGTA) to obtain buy-in to implement payment-improvement initiatives<br>• Apply the Eskom revenue-management process, which includes initiating the disconnection process<br>• Monitor and report debt status, payments of current accounts and adherence to debt-repayment plans<br>• Engage defaulting municipalities to establish suitable payment arrangements to settle overdue debt |
| **Loss in revenue, caused by increase in non-technical losses (electricity theft)** | • Audit meters regularly, especially for LPUs<br>• Quickly attend to problems found in metering and raise billing account<br>• Issue tamper fines where applicable |

| | |
|---|---|
| | • Remove any illegal connections<br>• Prosecute perpetrators<br>• Switch customers to prepaid or install split metering |

# 12 Generation

## 12.1 Summary of the operational plan

### 12.1.1 Overview

Generation's aim is to produce power and consistently meet South Africa's electricity demand at minimal cost. To fulfil this, Generation will continue to improve the availability of all Generation assets whilst reducing usage of the more expensive coal power stations and open cycle gas turbines (OCGTs). The planned maintenance of assets will be executed by the division, together with Group Technology, within the limits of its capital expenditure budget defined by Eskom's DTC 2 strategy.

Generation's key responsibilities and activities are to:

- Roll out effective maintenance across the fleet at optimal value for Eskom
- Economically dispatch power stations, as per merit order, to optimise primary-energy costs
- Complete midlife refurbishment as per the outage plan

### 12.1.2 Financial and operational highlights FY2016/17

In FY2016/17 Generation achieved the following operational performance year-to-date:

- There has been no load shedding for more than a year, enabled by the continually optimised Tetris risk-based maintenance plan. December Year-to-date planned maintenance (PCLF) is at 11.95 % compared to the target of 10 %
- Plant availability (EAF) improved from 70.20% for the nine months to December 2015 to 77.34% for the nine months to December 2016, exceeding the year-end target of 72%.
- Unplanned losses (UCLF) improved from 15.30% for the nine months to December 2015 to 10.11% for the nine months to December 2016, exceeding the year-end target of 16.90%.
- EAF improvements have resulted in lower diesel usage and hence a reduction in costs. Diesel costs decreased from R8 417 million in Q3 YTD FY2015/16 to R49 million in Q3 YTD FY2016/17.
- Relative particulate emissions of 0.29 kg/MWhSO, as at December 2016 versus a target of 0.35 kg/MWhSO.
- Koeberg unit 1 was online for 475 days before its refuelling outage, exceeding its previous record

### 12.1.3 Objectives and five-year targets

**Generation has the following aims:**

- **Operational sustainability:** Achieve 80:10:10 by FY2019/20, supplemented with the continued use of Tetris.
- **Generation cost of production:** Optimise the production plan based on a least-cash dispatch methodology.
- **Security of supply:** Ensure security of supply through operational excellence and reliability
- **Financial sustainability:** Drive cost efficiencies within the business using new approaches (e.g. Advanced Analytics)

**In order to achieve these aims, Generation will:**

- Continue to focus on operational excellence, including training for all operational staff (maintenance and production)
- Leverage Advanced Analytics to further reduce maintenance cost and operational costs

## 12.2 Divisional Overview

### 12.2.1 Mandate

Generation's mandate is to optimally operate and maintain Eskom's generating assets for the duration of their economic life. In addition, Generation will deliver committed energy, with emphasis on assets and production, rather than a sole focus on production.

### 12.2.2 Asset base and facilities

Generation currently operates 44 034 MW of commercial fleet. The bulk of this, 36 441 MW, is coal fired, the rest includes 1 860 MW nuclear, 2 409 MW of gas turbines, 600 MW hydro and 2 724 MW pumped storage.

### 12.2.3 Regulatory environment

Generation's operations are regulated by a wide range of legislation (see Table 39) with key focus on:

- Environment, health and safety, including climate-change regulations.
- Technical governance, including Fossil Fuel Firing Regulations (FFFR).
- Nuclear legislation and regulation.
- National electricity regulatory framework.

**TABLE 39: REGULATORY AND COMPLIANCE REQUIREMENTS**

| Applicable legislation | Policy, regulations and codes | Economic development |
|---|---|---|
| • National Environmental Management Act 107 of 1998<br>• National Water Act 36 of 1998<br>• National Environmental Management Air Quality Act 39 of 2004<br>• National Environmental Waste Management Act 73 of 1989<br>• National Environmental Management Biodiversity Act 10 of 2004<br>• Climate-change regulations on carbon tax, requirements for pollution prevention plans, carbon budgeting and GHG emissions reporting<br>• State Land Disposal Act 48 of 1961<br>• Occupational Health and Safety Act 85 of 1993<br>• NERSA Electricity Regulation Act 4 of 2006<br>• Nuclear Energy Act 46 of 1999, National Nuclear Regulator Act 47 of 1999 | • The South African Grid Code<br>• Fossil Fuel Firing Regulations (FFFR) | • Preferential Procurement Policy Framework Act 5 of 2000 |

*The above list is not exhaustive.*

There are regulations that may have future potential implications for Eskom as shown in Table 40.

**TABLE 40: REGULATIONS WITH POTENTIAL IMPLICATIONS**

| Regulation | Description | Implication for Eskom |
|---|---|---|
| Carbon Budget and Carbon Tax Bill | Legislation to reduce carbon footprint. | Short term: None<br>Long term: Restrictions on carbon emissions will likely affect energy and impact financials. |

| Regulation | Description | Implication for Eskom |
|---|---|---|
| National Environment Management: Air Quality Act update | Stricter limits on particulate emissions (ash), SO2 and NOx, expected to take effect on 1 April 2020. | Eskom has received favourable decisions to historic Minimum Emission Standards compliance postponement applications and hopes for the same in future applications. Eskom will submit an application by 31 March 2019 for all power stations (except Grootvlei) for leniency until 2025. |
| Water usage restrictions | The recent drought has led to low dam levels in the Orange River and Vaal River Catchment and its sub-catchments, resulting in water restrictions on urban and agricultural users. Restrictions have yet to be applied to power generation. | If water restrictions are applied to Eskom, the reduced water available for Generation plants may have a loss of production impact. |
| NERSA Service Quality Incentive Scheme (SQI) | The SQI scheme aims to encourage the utility to earn additional revenue, by improving its performance, and forcing it to pay a penalty if its performance deteriorates relative to the target band or range. The SQI for Generation will be based on Unit Capability Factor (UCF) | If Generation performance is below target, it will incur penalties through the RCA. |

*The above list is not exhaustive.*

Owing to the unique nature of nuclear power, and having learned from international nuclear events, Eskom places a very high premium on ensuring safety through:

- Aligning with the World Association of Nuclear Operators
- Co-operating with respect to performance and nuclear safety with other utilities, especially EdF, with respect to performance and nuclear safety.

## 12.3 Performance review FY2016/17

In FY2016/17 Generation achieved the following operational highlights:

- There has been no load shedding for more than a year, enabled by the continually optimised Tetris risk-based maintenance plan.
- EAF improved from 70.20% for the nine months to December 2015 to 77.34% for the nine months to December 2016, exceeding the year-end target of 72%.
- Unplanned breakdowns (UCLF) improved from an average of 15.53% in the third quarter of FY2014/15 to 10.78% in the quarter to the third quarter of FY2014/15.
- EAF improvements have resulted in lower diesel usage and hence a reduction in costs. OCGT energy sent out decreased from 849.16 GWh in the third quarter of FY2015/16 to 5.29 GWh in the third quarter of FY2016/17, which is a 99.4 % decrease. Diesel costs decreased from R1 686 million in the third quarter of FY2015/16 to R31 million in the third quarter of FY2016/17, which is a 98.2 % decrease in diesel spend.
- Emission performance shows relative particulate emissions of 0.29 kg/MWhSO as at December 2016 versus a target of 0.35 kg/MWhSO.
- Koeberg unit 1 was online for 475 days before its refuelling outage, exceeding its previous record

## 12.4 Aspirations and objectives

### 12.4.1 Operational challenges

Generation is working with the following operational challenges:

- It has an aging coal fleet, on average more than 37 years old, where all fully commercial stations are entering or past the phase where midlife refurbishment is required, i.e. requiring significant modernisation or upgrading
- Water usage at coal-fired stations remains high and requires intensified focus to ensure target performance is achieved. This has been exacerbated by the ongoing drought.

### 12.4.2 Operational challenges

Generation aims at improving asset integrity, aligned with DTC 2 targets, and aspires to achieve 80:10:10 by FY2019/20. This is dependent on the creation of sufficient power capacity available for maintenance and refurbishment while operating the coal plant within load-factor norms. Generation will achieve this target in three steps Exhibit 68: and Table 41). This horizon focus will be rolled out across all stations:

**EXHIBIT 68: SHORT TO LONG-TERM INITIATIVE PLAN**


Four key initiatives enable the implementation of this strategy

**TABLE 41: INITIATIVE TABLE**

| Initiative | Strategy/action | KPI | Target |
|---|---|---|---|
| Improve EAF | Improve and optimize the maintenance plan and reduce partial load losses and boiler tube leaks. | EAF | Achieve 80% EAF by FY19/20 |
| Improve maintenance effectiveness | Roll out maintenance effectiveness assessments across the fleet | Maintenance effectiveness assessment | Complete all power station assessments within 5 years |
| Optimise production plan | Dispatch according to merit-order/least cost | Coal-mix variance | R225 million for FY2017/18 – target based on increase on FY2016/17 projection |
| Improve predictive maintenance | Utilise Advanced Analytics and other efficiency improvements | Net EBITDA savings | R4.4 billion by FY2021/22 |

## 12.5 Operational context

### 12.5.1 Maintenance

Generation will implement two initiatives to ensure effective maintenance: