



SOUTH AFRICAN LOCAL
GOVERNMENT ASSOCIATION

SALGA

Inspiring service delivery

**Portfolio Committee on
Energy
03 October 2017**

**Electricity Distribution
Industry**

Presentation outline

- Macro issues in the electricity distribution industry
- The Current Realities
- Background
- Municipal constitutional powers impasse between Eskom and Municipalities
- Eskom Debt
- NERSA Licensing process
- Eskom proposed revenue management initiative
- Municipalities and renewable energy
- Possible Way Forward

Macro issues

- Eskom is an important national strategic asset and its financial viability is of paramount importance;
- Equally important is that municipalities ***must be able to provide sustainable and affordable services and to collect revenue*** so they can pay creditors such as Eskom and be financially viable;
- The Constitutional, legislative and fiscal frameworks are carefully designed to ensure that local government delivers sustainable services (both in terms of the actual provision of the services and financially);
- The ***current dispensation in the Electricity Distribution industry is subversive of the existing legal frameworks*** which directly undermines municipalities' ability to fulfil their constitutional mandate in the provision of services;
- In parallel, the energy sector is changing at a pace never seen before.

Current Realities

- The electricity distribution industry is currently experiencing rapid structural and behavioral changes:-
 - Energy security threats and rising electricity prices,
 - Increasing unemployment leading to low revenue collections in Municipalities
 - Unavoidable market dynamics – Customer using less energy and becoming their own suppliers of electricity – **Loss of revenue**
- Lack of capacity and skills for
 - Planning
 - Project management and contracting
 - Drafting of bylaws
 - Setting and designing tariffs
 - Revenue management and protection etc.
- These intertwined dynamics have radical implications for local municipalities that are compelled to re-define their role in the electricity value chain and adapt their funding and operating models.
- The dynamics also call for government to review or develop support strategies for municipalities in respect to electricity reticulation.
- Also calls for reviewing of local government funding models.

Background

- In 2010, Cabinet decided to terminate the Electricity Distribution Industry (EDI) restructuring and to discontinue the process of creating the Regional Electricity Distribution (REDS) with immediate effect.
- Although the Electricity Distribution Industry Holdings (EDIH) had made significant progress in the process to establish the REDs, Cabinet approved the recommendation that the Department of Energy takes over the programmes previously executed under the EDIH mandate.
- **Recommended that DoE review the whole electricity value chain with a view to developing a holistic approach to:**
 - **revitalize electricity infrastructure**
 - **energy security as well as the financial implications.**
- An administrator would be appointed to attend to the winding up of EDIH.

Background - Demise of the REDs Model

- **2010 Cabinet abandons REDs model**
 - Notes lack of support for a constitutional amendment
- **After 7 years and the expenditure of hundreds of millions, Cabinet decides to close EDI Holdings**
 - DOE asked to “review the whole electricity value chain with a view to developing a holistic approach to revitalise electricity infrastructure, energy security as well as the financial implications”
- **2011 EDI Holdings transferred to DoE**
- **2012 Presidential Infrastructure Coordinating Commission (PICC)**
 - EDI included in Strategic Investment Priorities (SIPs) - Very Little is happening here to date
 - DoE applies for funds to run pilot exercises in using Approach to Distribution Asset Management (ADAM)

Background - What were the Key Drivers of EDI Restructuring

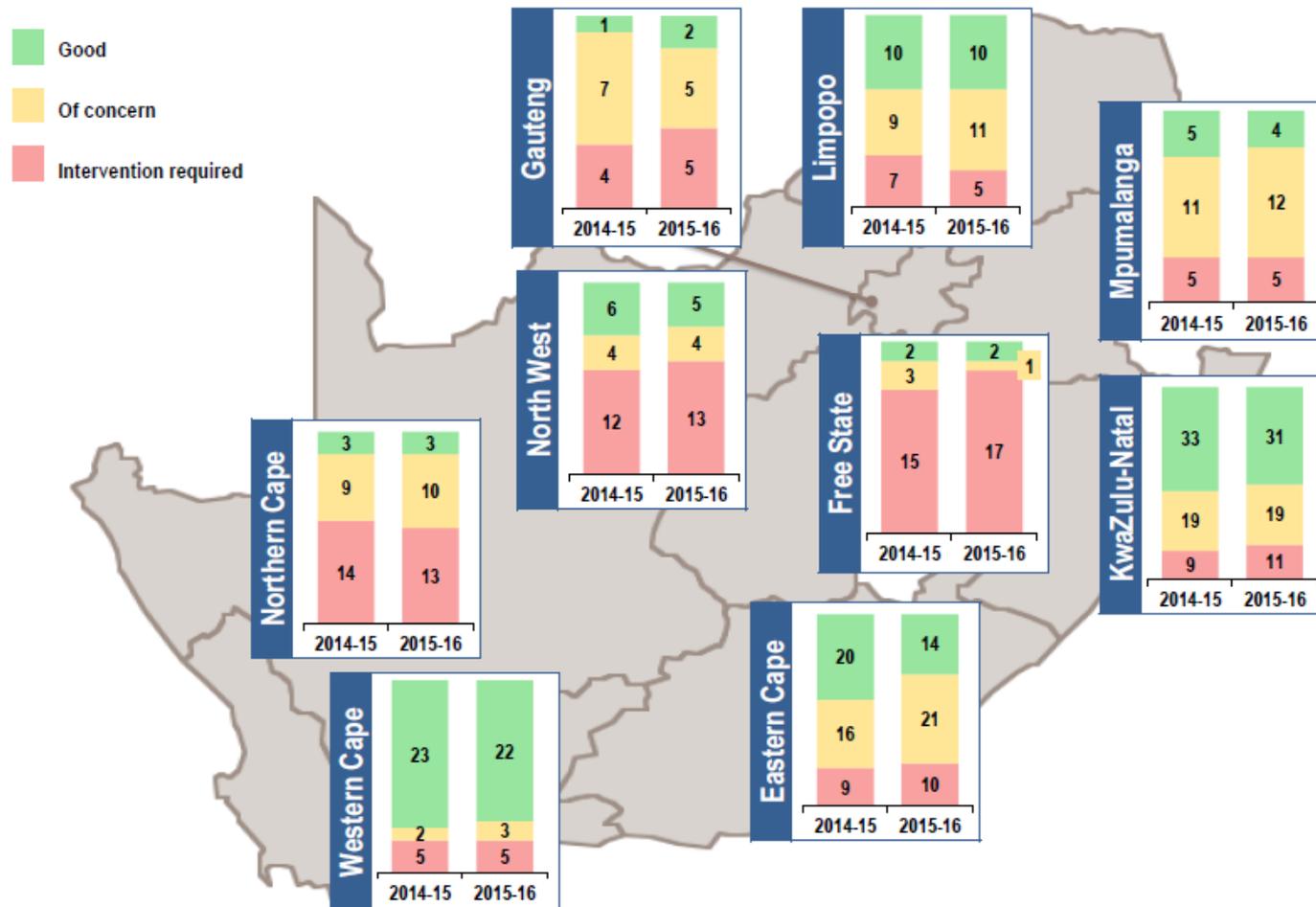
- Fragmentation and inefficiencies: no economies of scale
- Inequitable treatment of customers / tariffs
- Non-rationalised Regulatory frameworks in the EDI
- Financial crisis – many municipal distributors bankrupt
- Non-payment of services rising – loss of revenue
- Lack of critical skills in distributors
- Monopoly model was and is no longer an option
- Inadequate investment in refurbishment and maintenance – **Backlog needed an investment of 25bn at that time (Before 2010)**
- Loss of experience and skills
- Accelerated electrification etc.

Some Key Questions

- Are the issues in the previous slide still relevant? **YES**
- After closing down the restructuring projects, did we have an alternative or plan to rehabilitate infrastructure and strengthening municipal distributors? **NO**
- Are things getting worse? **MOST DEFINITELY**
 - Municipalities owing Eskom over R11bn and its escalating
 - Some may not come out of the Eskom debt situation without any support
 - Municipalities owed over R116bn and most of it irrecoverable
 - Most if not all municipalities are grossly under skilled
 - Theft and infrastructure vandalism is on its record high (Costing the economy over R6bn annually)
- Was the mandate given to DoE to “review the whole electricity value chain and developing a holistic approach to revitalise electricity infrastructure, energy security as well as the financial implications” executed? **NO**
- **What is the game plan now? WE DON'T KNOW**

A need for a new game plan or model from Government

Figure 2: Provincial overview of municipalities with indicators of financial health risks



Contributing Factors to the Crippled EDI

- Constitutional authority of municipalities is undermined by Eskom;
- Municipalities unable to retain employees with critical skills;
- Municipalities in the outskirts of the country have dysfunctional electricity departments , due lack of capacity and skills – e.g. Experienced Engineers generally don't want to work in these areas and these munics cannot attract these skills;
- Government Departments or State Entities concerned do not have Support Strategies for Local Government in accordance with Section 154 of the constitution;
- Record low revenue collection in municipalities but local government funding model remains unchanged;
- Unemployment has a ripple effect to the sustainability of the service delivery institutions;
- Evolving industry with introduction of renewable energy (Prosumers);
- Industry has changed drastically but the model for electricity distribution has not been reviewed by the policy maker.



Examples of Contributing Factors to the crippled EDI:



Municipal Constitutional powers impasse between Eskom and Municipalities

Constitutional Framework

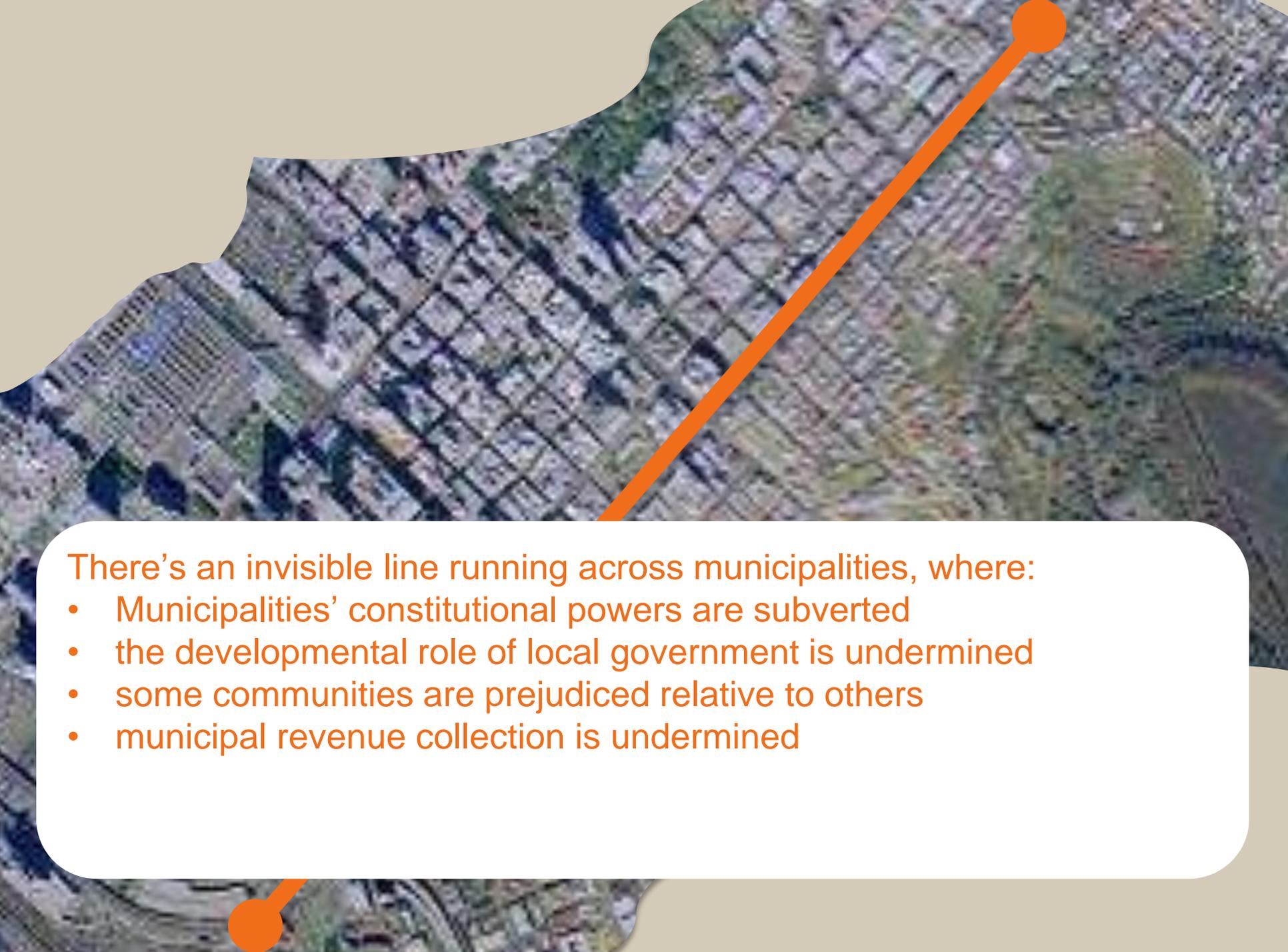
- Section 151(3) of the constitution deals with the rights of municipalities to govern, on their own initiative, the local government affairs of their communities, subject to national and provincial legislation.
- In order to protect the autonomy of local government, section 151(4) prescribes that national and/or provincial government may not compromise or impede a municipality's ability or right to exercise powers or perform functions.
- Section 156(1) of the constitution provides for the executive authority of the municipality and that it has the right to administer the local government matters listed in Part B of Schedule 4, including the reticulation of electricity.
- Provision of electricity is a constitutionally mandated responsibility which cannot be taken away from municipalities by either national or provincial government.

Constitutional Framework (Cont.)

- Chapter 8 of the Systems Act empowers municipalities to regulate the provision of a municipal services through mechanisms of a service provider.
- In terms of Section 76 of the Systems Act, when a municipality provides services through a service provider, it would be required to enter into a Service Delivery Agreement (SDA).
- The Electricity Regulation Act defines municipality as a category of municipality that has executive authority over and the right to reticulate electricity and when municipalities seek to outsource that function to an external mechanism, it ought to comply with section 28 of the Electricity Regulation Act.
- Section 28 of the Electricity Regulation Act, deals with the selection and appointment of external service providers. It enjoins a municipality to comply with Chapter 8 of the Systems Act prior to entering into an SDA with a service provider.

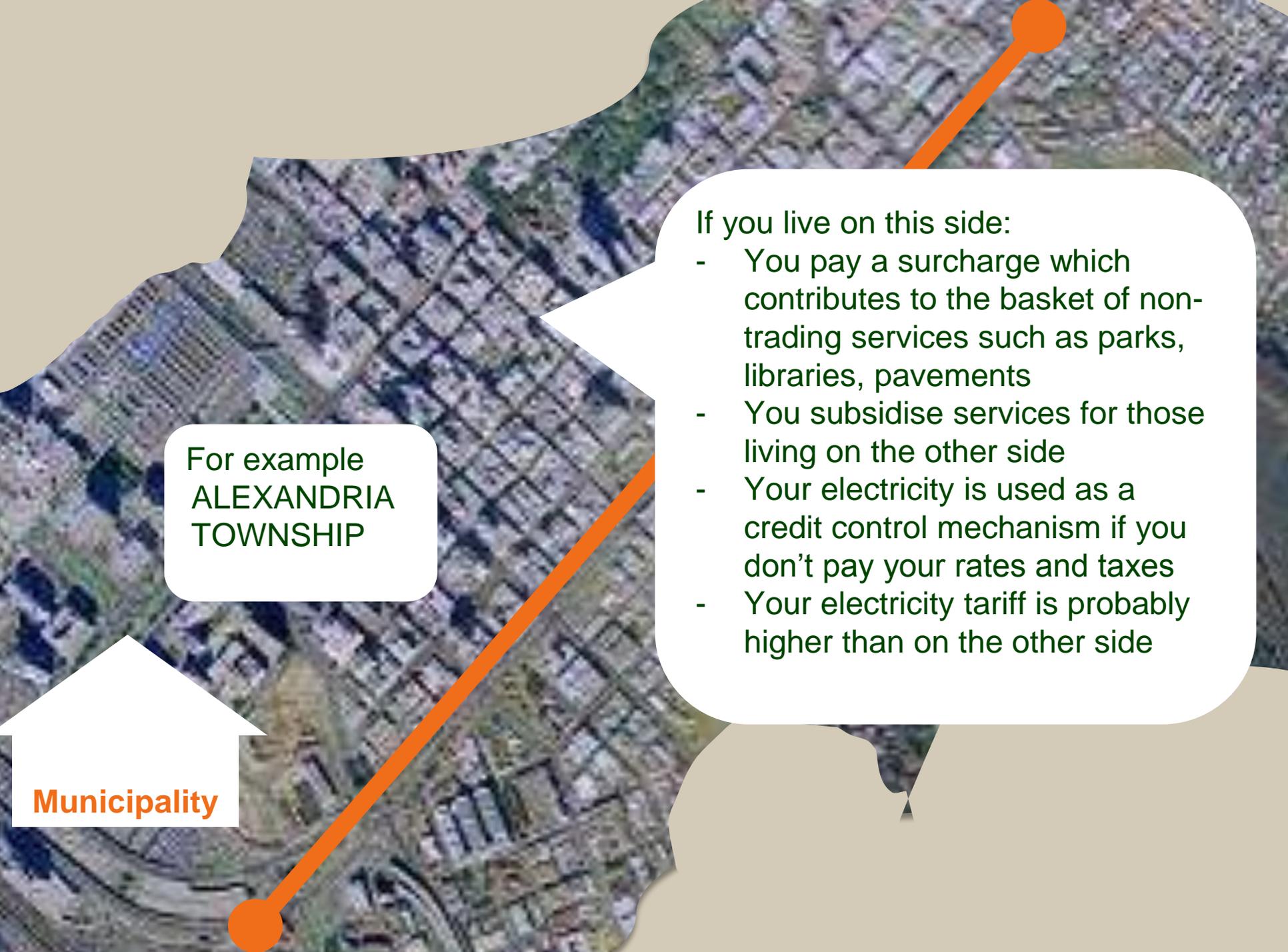
The problem

- Constitutional authority of municipalities is undermined by Eskom
- In the absence of a contracting and regulatory mechanism (SDA) between Eskom and municipalities:
 - Municipalities are unable to levy surcharges in Eskom supply areas
 - Municipalities are unable to exercise credit control in Eskom supply areas
 - Lack of tariff parity between municipal supply areas and Eskom supply areas
 - Conflicts over supply areas
- License issued by NERSA to Eskom to reticulate electricity is defective as it bypasses the executive authority of municipalities
- **Without an SDA, Eskom's service unlawfully encroaches upon the constitutional powers of the municipality**
- There are several **structural** and **systemic** issues arising from the current dispensation

An aerial photograph of a city grid is shown. A thick orange line runs diagonally from the bottom-left towards the top-right. At each end of this line, there is a solid orange circle. The background is a light beige color, with the city grid image cut out to fit the shape of the text box.

There's an invisible line running across municipalities, where:

- Municipalities' constitutional powers are subverted
- the developmental role of local government is undermined
- some communities are prejudiced relative to others
- municipal revenue collection is undermined

An aerial photograph of a city grid, identified as Alexandria Township. A thick orange line runs diagonally across the map from the bottom-left to the top-right. Two white callout boxes are connected to this line by orange lines. One callout box on the left points to the township name, and a larger one on the right contains a list of consequences for living on one side of the line. A white arrow-shaped callout at the bottom left points to the orange line and is labeled 'Municipality'.

For example
ALEXANDRIA
TOWNSHIP

Municipality

If you live on this side:

- You pay a surcharge which contributes to the basket of non-trading services such as parks, libraries, pavements
- You subsidise services for those living on the other side
- Your electricity is used as a credit control mechanism if you don't pay your rates and taxes
- Your electricity tariff is probably higher than on the other side

If you live on this side:

- You don't pay a surcharge and thus contribute less to non trading services
- These services are subsidised for you
- Your electricity can't be cut if don't pay your rates and taxes
- Your electricity tariff is likely to be lower than on the other side

For example
SANDTON



ALEXANDRIA
TOWNSHIP

Alex subsidises
Sandton

SANDTON

Municipality

 Eskom

Examples of collection rates

Municipal collection rates for service charges, rates and taxes in the municipal supply areas are around:

80%

94%

94%

Municipal collection rates for other services (water, waste, rates, taxes etc) in Eskom supply areas are around:

11%

40%

56%

Municipalities cannot exercise credit control in Eskom supplied areas – thus collection rate is lower



Municipality



Therefore in Eskom supply areas, municipalities are deprived of their constitutional and legislative powers in terms of electricity reticulation.

Customers are also deprived of Executive accountability

Lack of tariff parity

- Eskom charges their tariff (bulk tariff) in the Eskom supply areas and municipalities charge their tariff (retail tariff) in the municipal supply areas. This causes lack of tariff parity, for example: Eskom reticulates electricity to Sandton and City Power (Jhb Metro) reticulates to Alexandra township. The tariff for Sandton is less than the tariff for Alexandra.
- The fiscal framework allows municipalities to charge a ‘surcharge’ on electricity tariffs. Customers in the Eskom supply area are not charged this ‘surcharge’ and are thus not adequately contributing to the broader basket of non-trading services

Negative impact on municipal revenue collection

- Municipalities are unable to exercise credit control in Eskom 'supply areas' which has a negative impact on municipal revenue;
- Collection rates in municipal supply areas are in general much higher than in 'Eskom supply areas' as illustrated in the example of Overstrand below:-

ESKOM AREA	TOTAL PLOTS	% PAYMENT
GROTTOBAAI	245	>100%
JAKKALSFONTEIN	161	97.2%
RIEBEEK WES	1106	>100%
RIEBEEK KASTEEL	1433	90.2%
KORINGBERG	433	90.6%
ABBOTSDALE	1125	64.9%
KALBASKRAAL	602	43.9%
CHATSWORTH	1477	42.6%
RIVERLANDS	388	12.7%
TOTAAL:	6970	73.2%
	Comparable average	41.0%

MUNIC AREA	TOTAL PLOTS	% PAYMENT
PPC RIEBEEK WES	118	99.1%
MALMESBURY	3968	97.5%
YZERFONTEIN	2324	99.5%
MOORREESBURG	3625	90.9%
WESBANK	3553	87.3%
DARLING	2968	84.8%
PHOLA PARK	248	63.5%
ILINGE LETHU	1195	63.3%
TOTAAL:	17999	92.9%
	Comparable average	74.7%

STRUCTURAL AND SYSTEMIC CHALLENGES

- **Structural Challenges in Electricity Reticulation:**
 - Legacy issues in the reticulation of electricity, in particular the resultant inequity in terms of tariffs charged ;
 - The provision of public and street lighting in Eskom reticulated areas; and
 - The role of municipalities in renewable energy not clear/ or not considered.
- **Systemic Challenges in Electricity Reticulation**
 - The current reality under ESKOM credit control mechanisms, for municipal bulk accounts and end users services by ESKOM in order to align it to municipal credit control by-laws and cycles;
 - The unsustainability of current payment agreements between ESKOM and municipalities in arrears;
 - The historical debt owed to and by municipalities;
 - Reconciliation of municipal debt to ESKOM; and
 - Eskom Notified maximum demand Penalties.

Eskom Debt

Defaulting Municipalities on Eskom Payment Arrangements

- Debt has escalated for over 2bn in the past four/ five months to over R11bn;
- Adherence to Payment Arrangements is still problematic for a number of municipalities;
- Municipalities with Overdue Balances generally also struggle to pay their Current Account resulting in Overdue balance increasing;
- When the Municipalities receive their Equitable Share Payments the Eskom payments do improve but this is not a sustainable measure;
- Pressure exerted through the PAJA process is not a sustainable solution as it yields
 - Once off payments
 - Re-negotiation of Payment Plans
 - Litigation by Municipality or Individual Customers
 - Impact on Economy
- There is a good correlation between the non-paying municipalities and the AG report on Local Government (Financial Health Status).

Defaulting Municipalities on Eskom Payment Arrangements

- The alarming situation is that only 20 out of the 62 payment arrangements are being honoured with Mpumalanga and Free State being the highest or owing the biggest chunk of the debt;
- A strong Correlation between the list of non paying municipalities and the AG report indicating sustainability of the Municipalities being at risk has been observed;
- Unless systematic and structural issues are resolved, financial recovery plans are developed, implemented and monitored these municipalities will not get out of the situation;
- The challenges in these municipalities cannot just be isolated to governance or administration;
- Fiscal injections are needed in these municipalities and overall restructuring of how municipalities should be funded;
- AGs report confirms municipality's going concern is a problem but not isolating it to bad management, it also raises structural issues; and
- There are also macro factors like, slow economic growth, unemployment and poverty.

The Eskom Concessions

- Eskom committed on the following:
 - Rationalisation of municipal tariffs to reduce tariff options from eleven (11) to three (3);
 - Decrease the interest rate charged on overdue balances from prime plus 5% to prime plus 2.5%;
 - Change the payment period on municipal bulk accounts from 15 days to 30 days;
 - Change Eskom payment allocation policy to allocate payments to capital debts first before allocating payments to interest charged; and
 - Allow municipalities to pay connection charges over twenty-year period at relevant interest rate instead of Cash Up Front.
- At the IMTT meeting of 14 June, Eskom reported that its Board approved all these commitments except the last one on connection charges
- Eskom has reported that these concessions are effective from 01 July 2017
- The writing off of historical debts of municipalities raised by SALGA was not addressed and thus needs a policy intervention.
- The Eskom concessions does not resolve all systemic issues in the industry.
- Other systemic and structural issues have been elevated to the PCC.



NERSA Licensing process

NERSA License application process

- S.28 of the Electricity Regulation Act requires the municipalities to comply with chapter 8 of the Systems Act;
- It recognise the constitutional powers of municipalities as well as the need for service delivery agreements with entities providing a service within their jurisdiction – The agreement that Eskom doesn't want to sign;
- The Act further grants the minister the powers to issue regulations outlining the administrative process to implement S.28;
- So far no regulations have been issued to this effect as a result the conflict between Eskom and Municipalities on areas of supply continues.

NERSA License application process

- NERSA is currently updating their Geographic Information System (GIS) to review the supply areas (Schedule 1) of electricity distribution licenses of Eskom and municipalities.
- This NERSA exercise raise several concerns:
 - Municipalities are concerned that this ‘due diligence exercise’ by NERSA is predominantly increasing reticulation areas of Eskom;
 - It is a consultation exercise that should involve greater participation.
- Allowing this process to continue carries risks as it is:
 - Creating irregular conditions for the determination of electricity supply areas between municipalities and Eskom;
 - Exacerbating the stalemate between municipalities and Eskom in terms of municipal constitutional powers for electricity distribution; and
 - Involves a review of Eskom supply areas without resolving the executive authority of municipalities for reticulation in those areas.



Eskom proposed revenue management initiative

SALGA's position on Eskom proposed revenue management initiative

- Eskom tabled a revenue management proposal which seeks to make the municipalities owing Eskom to sign a service delivery agreement (SDA) to install smart meters and collect on behalf of municipalities.
- SALGA and municipalities have for some years requested that Eskom enter into SDA with municipalities, amongst others to address municipal credit control challenges in Eskom supplied areas. This was not approved by Eskom.
- Should a municipality decide to contract Eskom to provide a revenue collection service, SALGA believe that such an arrangement should be part of a broader SDA (as anticipated in the Municipal Systems Act) and not a separate agreement.
- SALGA maintains that it does not support the approach where only one challenge is addressed in isolation from other challenges.



Municipalities and renewable energy

Current trends in the sector

- Energy supply challenges
- Increasing electricity prices,
- Decreasing technology costs and increasing product quality,
- Increase in the consciousness of the benefits of low carbon sources of electricity

LEADS TO

- reduced electricity demand, as consumers:
 - reduce their electricity consumption (energy efficiency),
 - generate their own electricity from small-scale embedded generation, and
 - sometimes even contemplate moving off the grid (this would be the worst case for the electricity distribution industry).

AS A RESULT

- Sales of electricity in the municipalities have shown a consistent downward trend over the past few years and have, in some cases, plummeted significantly.



Municipalities are proactive

SMALL SCALE EMBEDDED GENERATION

- These dynamics have radical implications for local municipalities which compels them to re-define their role in the electricity value chain and adapt their funding and operating models.
- Municipalities have proactively allowed their customers to generate electricity, mainly through solar panels, and to feed their excess electricity back into the grid.
- To date, almost 1 out of 6 municipal electricity distributors allow their consumers to install such electricity production facility and 18 municipalities have approved tariffs, applicable specifically to these consumers.
- SALGA is working actively to ensure that technical and institutional support is provided to all municipalities and that lessons learnt are shared amongst all our members.



Municipalities are proactive RENEWABLE ENERGY GENERATION

Example of Municipalities generating their own electricity

- **Solar PV on municipal buildings:**
 - Cape Town +/- 250 kWp
 - eThekweni +/- 500 kWp
 - Ekurhuleni: +/- 500 kWp
- **Solar PV in WWTW:**
 - Camdeboo: 10.8 kWp
 - Hessaqua: 33 kWp
- **Greening municipal infrastructure:**
 - Taxi ranks: Cape Town, eThekweni
 - Green buildings
- **Biogas to energy in WWTW:**
 - Johannesburg +/- 2MW biogas to energy
 - Several other projects under appraisal
- **Landfill gas to electricity:**
 - Ekurhuleni: 1 MW
 - eThekweni: 7.5 MW
 - Johannesburg: up to 18.6 MW (11.5 MW connected?) – although these form part of REIPPPP

... and other existing projects and opportunities

However this is small compared to what is needed



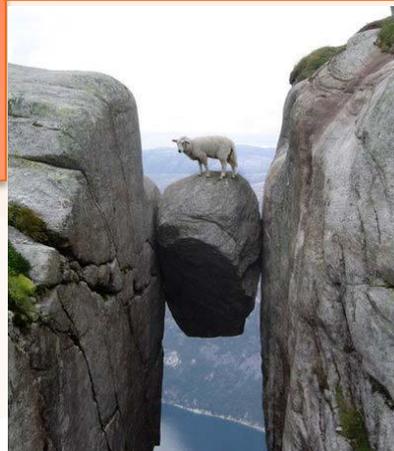
BUT THE CURRENT SITUATION for Municipal Electricity Utilities is...



Limiting electricity regulations and policies which constrains the capacity of the municipalities to turn opportunities into reality, **threatening the sustainability of municipalities**



MUNICIPALITIES



Rapid changes in the industry, Technologies advancement

Market driven: the Uberisation of the electricity sector



Pressure from customers (alternative technology, own generation, theft and non-payment)

Towards a future electricity utility and sustainable municipalities

Municipalities and Renewable Energy PROPOSALS

- Small Scale Embedded Generation: Legislative changes (amendment of ERA and regulatory rules) are urgently needed.
- A dialogue is needed on possible review of the current legislative framework and policy recommendations that will enable municipalities to respond more effectively to this transition. New business models options should be explored and inaction cannot be considered as an option.
- SALGA is willing to lead this national dialogue with the Department of Energy. SALGA is therefore preparing to engage with the department and suggest an initial energy summit as early as February 2018.



**Possible Way Forward:
High level propositions**

Possible Way Forward

- Clarify the issue of Municipal Constitutional Powers for all industry players to prevent further confusion;
- Review the current model for electricity distribution;
- Review of the current funding model for local government;
- Some grants needs review or refocus considering the current realities, e.g. Revenue collection and protection is an issue, why not have grants that allow for projects to improve on this;
- Some policy reviews or shifts maybe needed to enable the industry to adapt to the radical changes e.g. renewable energy roles;
- Sector Department/s must develop local government support strategies and plans in accordance with S.154 of the Constitution, these must be practical and implementable to assist municipalities to conduct their service authority functions;
- Explore the model of WELL CAPACITATED support agencies to provide technical assistance to struggling municipalities e.g. Entity with a pool of well experienced Engineers available to be dispatched to ailing municipalities; and
- Put in place robust programmes aimed at eradicating the maintenance and refurbishment backlogs in municipalities.

Thank you