

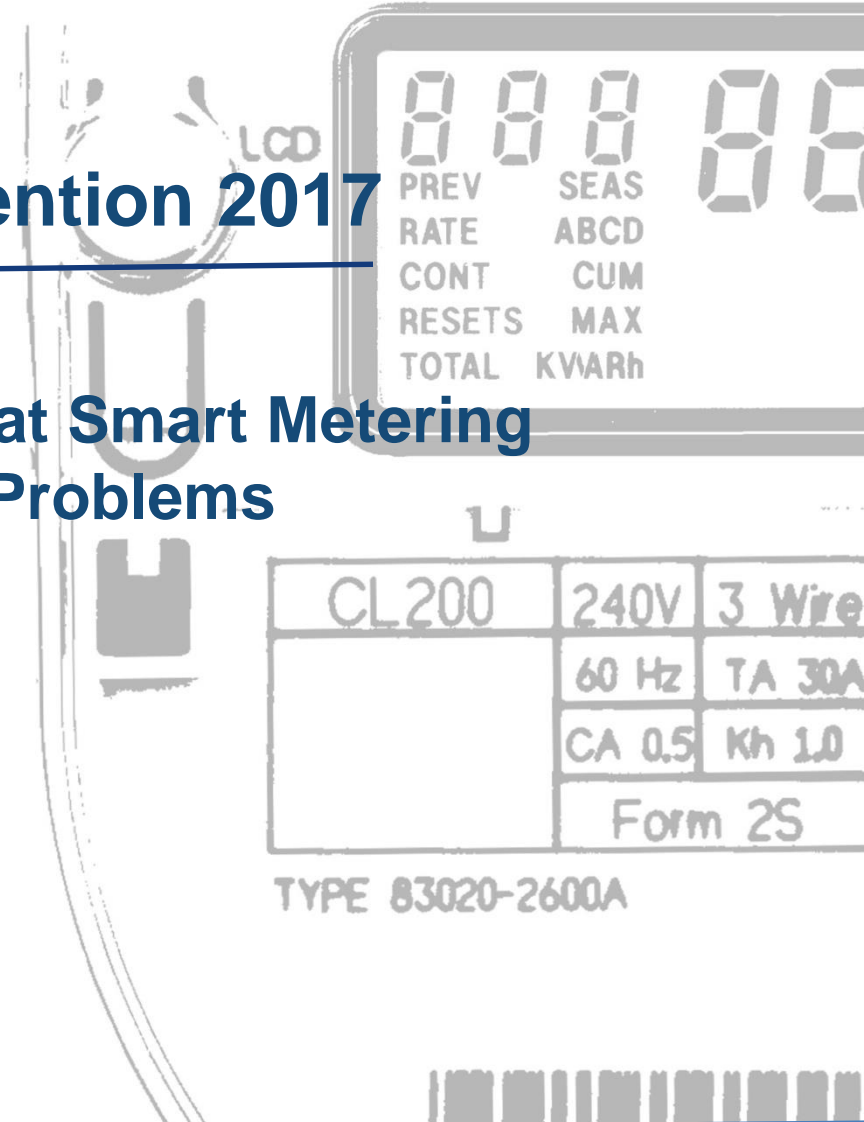
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SARPA 21st Annual Convention 2017

Changing the Perspectives that Smart Metering Alone will Resolve Municipal Problems

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Introduction

- An era where the application of technology is an obvious solution to self-sustainability
 - Details of Smart Grid (SG) technology have become a complex and challenging task for the municipality teams
 - Challenges, e.g.- the *socio-political nature* of the municipal business
 - Silo operation of municipal departments
 - Smart meter projects – departments and the community are not in harmony
 - Deliberate reluctance to implement/adopt the technology
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Introduction

- Few papers: the technology alone is not a solution to revenue issues.
- The realisation: Smart Metering system is merely a tool to infrastructure and revenue management.
- Realistic investment and active participation are needed to reach the 2030 vision.
- Questions to municipalities:
 - How many of the IDP document includes SANEDI's vision 2030?
 - What are the municipal business plans/strategies on the security and supply reliability?
 - How many municipalities have done their smart technology maturity assessment?

Introduction

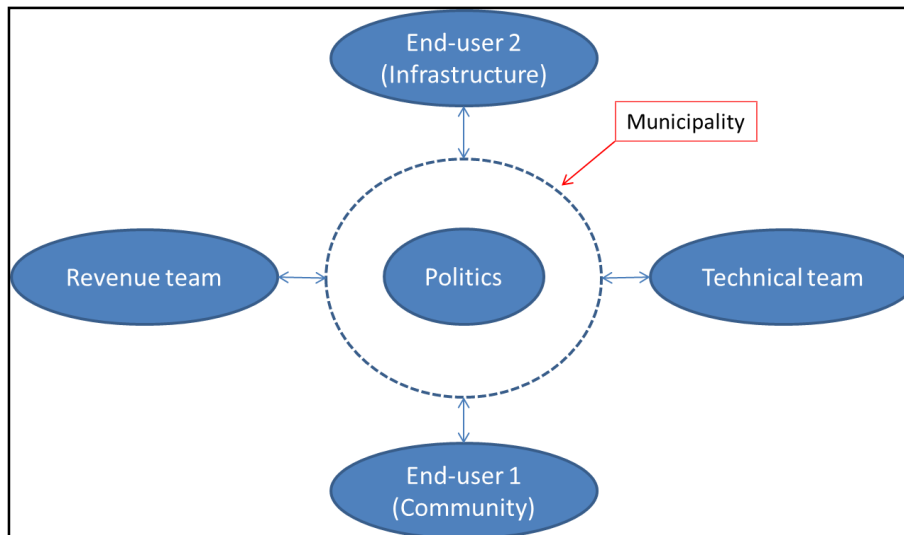
- Eminent: revenue enhancement is in the heart of smart technology at both Eskom and municipal level.
 - The revenue collection strategies present numerous challenges to municipalities especially on the collection of revenue streams.
 - The paper attempts to stir the ground work by municipality and
 - Community engagements
 - Internal Team preparations
 - Full participation of all stakeholders
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Municipal Smart Metering: Current and Envisaged state

- **Observation:** the electricity infrastructure is relatively old, and not enough revenue is collected to improve financial stability.
- The strategy to improve the municipal sustainability is vague
 - majority of the municipal metering projects shy away from the implementation of smart technology
 - the technical contributions of the smart metering systems are not always highlighted
 - revenue team being the custodians of a technical project and socio-politics being the deciding factor.
 - aspect of revenue collection is also not holistic

Municipal Smart Metering: Current and Envisaged state

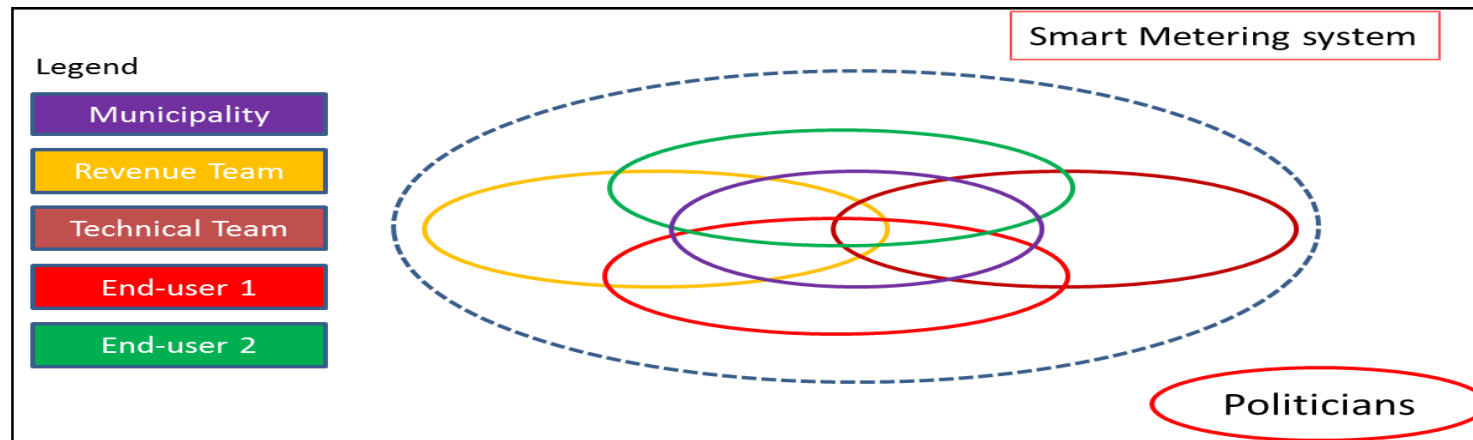
The Current Business Model



- Political influence is in the centre
- The municipality (Chief Financial Officer and Municipal Manager) play active roles
- Revenue and technical teams do not have active roles
- The end-users do not experience (or understand) the benefits.

Municipal Smart Metering: Current and Envisaged state

The Ideal Business Model



- The interrelation of the different stakeholders and the role the politics is expected to play

Municipal Smart Metering: Current and Envisaged state

- **Observation:** majority of municipalities expect to learn from those brave enough to commence with the technology.
- The drawback:
 - Own ability to implement a smart metering project.
 - Understanding on how smart technology address the operation of the municipal distribution grid
 - The development of tailored smart grid roadmap
 - End-user communication

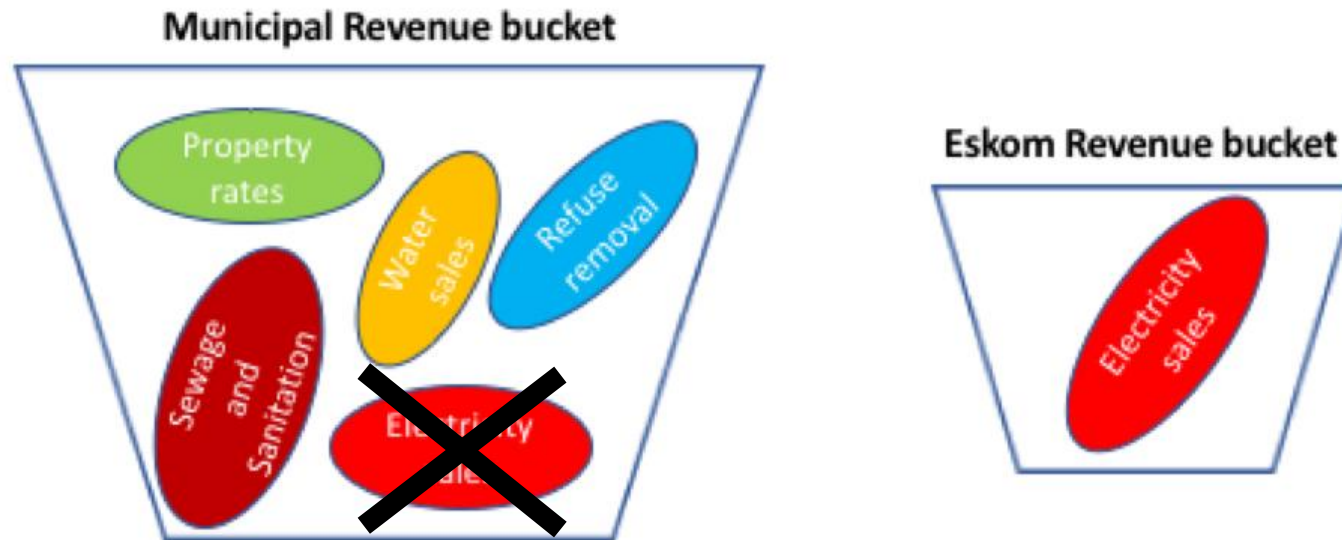
Municipal Smart Metering: Current and Envisaged state

- Some of the SMART GRID projects

Municipality/Metro	SMART Project
Msunduzi and Nelson Mandela Bay	Advanced Asset Management
SANEDI municipalities	Smart Meters: Revenue Enhancement
eThekweni	Active Network Management and ADMS
City Power	City Power Smart Metering Projects: Revenue Enhancement
City of Cape Town	Smart Prepaid Meters: Revenue Enhancement
Various municipalities	Power Quality Monitoring

Revenue Enhancement

- The municipality service delivery differs from that of Eskom.
 - Eskom: Supply electricity
 - Municipality: Multiple services.

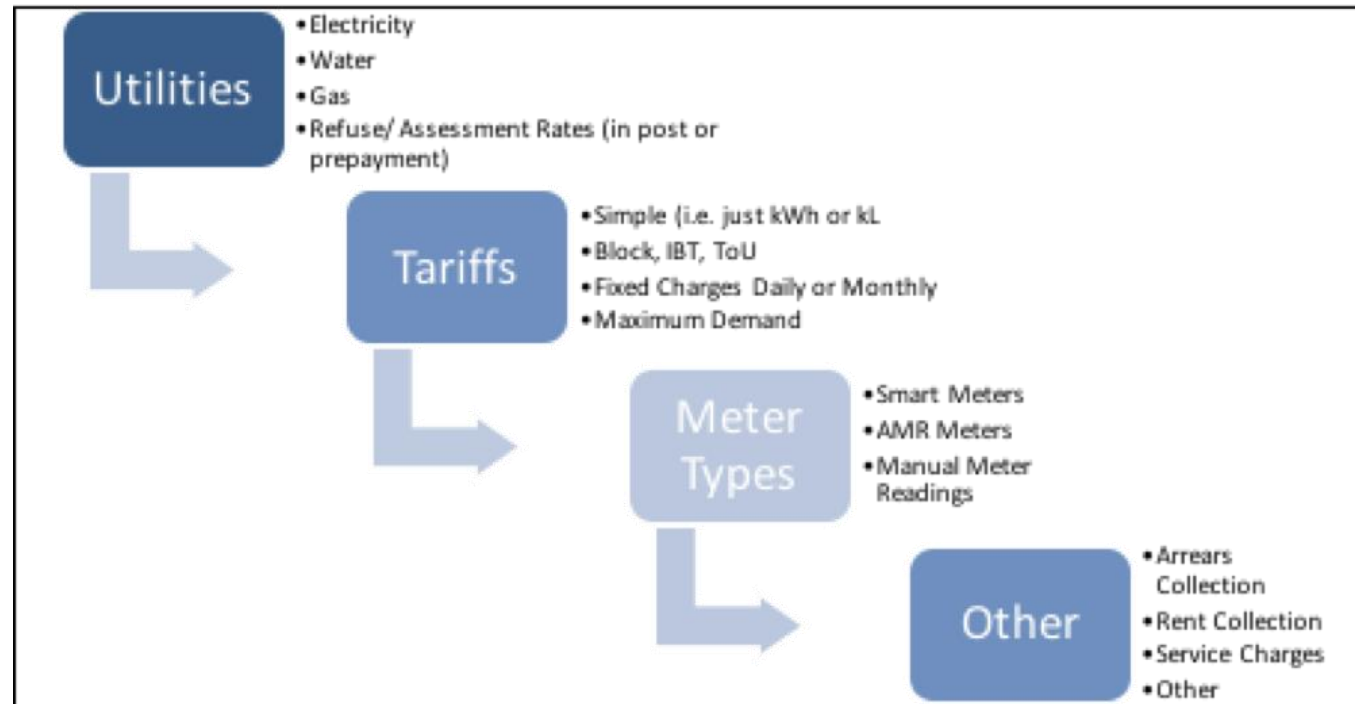


The revenue collection strategy should differ

Revenue Enhancement

- **Observation:** the purchase of electricity as a “vehicle” for the collection of arrears on other services.
- For Eskom, Smart Metering technology is the *perfect* strategy to both Revenue Collection and Protection.
- For municipalities: A strategy is needed for a holistic Revenue Collection and Protection

Revenue Enhancement



Concluding Remarks

- Municipalities ought to be excited about formulating revenue enhancement strategies and share with the community
- The current known internal challenges should be address
- The revenue and technical teams should be working together to enhance the municipal sustainability
- Smart Metering has the potential to address the Value Add services focused on the entire asset and revenue value chain

Thank You

