

## **BITOU LOCAL MUNICIPALITY**

## CASE STUDY: CONVERTING KNOWLEDGE INTO PRACTICE



MR J CUPIDO SNR MANAGER: ELECTRICAL



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# Introducing Bitou

- Bitou Municipality (WC047) is a category B municipality located within the Eden District Municipal jurisdiction in the Southern Cape of the Western Cape
- Bitou is the gateway into the Western Cape from the Eastern part of South Africa

Population 2011 =49 162 and growing at 1.2%



## Introducing Bitou





## **Overview of network**



## 18 041 Total

## Problem Statement: High Energy Losses

- In 2017/18 the electrical technical and non-technical losses was at 13.16%
- This amounts to R 13 837 016 of our actual Eskom Bulk Purchases
- NERSA's acceptable technical and nontechnical losses is below 12%.
- The latest benchmarks carried out by the World Bank put the best performing utilities at 10% and below.

## Challenges contributing to losses

Chaotic approach to Revenue Protection

No Meter Management System

No effective working relations between finance department and electricity

Meters are not registered after hours

**Illegal Connections** 

Tampering

**Incorrect Meter Readings** 

Access to credit meters

## Steps taken to reduce losses

### Step I

 Basic Revenue protection training Step 2
Set up a proper revenue protection team

# Resulted in reduced losses

Step 3Initiated a few projects



## **Basic Revenue Protection Training**

#### REVENUE PROTECTION BASIC COURSE

Rens Bindeman was the course facilitator

2 day course which was free (SnT)

We also invited our neighboring municipalities

We are currently working on a follow up training session since the Finance department was not present







## Setup a RP section

- There was a chaotic approach to metering:
  - Anyone could draw meters from stores!
  - All electricians responded to metering queries, with no one accounting if faulty meters are bypassed
  - The Loss control officer was involved with planning for new service connections - not focused on RP
  - No registrations after hours faulty meters bypassed
- Separating Planning from metering and Revenue Protection to improve our internal operations. Better controls
- Only metering electricians to respond to queries
- SOP was developed for Meter Management
- Created dummy meters already registered for standby purposes – STOPPED ALL BYPASSES!!

# Projects - Audits in informal settlements

- First initiated and RP Community Meeting through ward councilors
- Communities think that it is accepted to connect illegally
- I Pointed out the dangers of illegal connections





Installed AP2 pole boxes with split meters, which mitigate access to meters

## Projects - Changing Proprietary Meters

## Replace Prop Meters

655 Proprietary Meters were replaced with split prepaid

Picked up many tampers

Bypassed Meters

100 meters must still be converted to split meters



We are currently in a disciplinary process, as there were cases where our own staff was allegedly responsible for bypassing these meter!!!



- Tampers are now being discovered during normal operations
- We found that customers started phoning to inform us of possible tampering with meters
- By issuing penalties for tampering, the word is spreading which helps the cause









## The way forward...

- We established a task team where we include, water, electricity, IT, finance
  - Follow up RP training to be arranged for all
- We need to strengthen our reporting Zero and low consumption reports not frequent enough
- Next step is to convert the credit meters to smart meters together with AMI and remove meters to outside
- Install meters in 21 out of our 70 pump stations
- Need to install AMR, Need to get all LPU's on AMR to minimize reading errors – pilot on the way



## The way forward...

- We have found possible Rogue Meters still need to be addressed
- We will set up a hotline for reporting illegal connections



## Conclusion

- After the Basic RP Training, Bitou's Electricity department embarked on a journey to reduce the losses of 13.16%, by:
- Setting up a RP section with effective controls
- Conducted audits where we replaced tampered and bypassed meters with split meters
- Removed illegal connections
- Issued penalties which spread awareness
- Relations with Finance and Electricity has been strengthened
- This we have done even with very little resources!

## And as a result....



## Conclusion

• Bitou's Energy losses at 2018/19 was....



Translating into savings of R 3 697 192



## Thank

• Questions...