

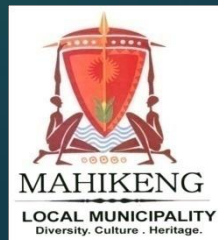
# MAHIKENG LOCAL MUNICIPALITY

1

## MUNICIPAL ENERGY MANAGEMENT PROGRAMME TRAINING

15- 18 AUGUST 2022

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# Data provided by Eskom

2

90 Accounts supplied by Eskom and each had the following information.

- Account No
- Address
- LAT and Long
- Notified Maximum Demand
- Tariff

# Consumption and charges

3

The individual lines of the bill including

- Bill Period
- Description
- TOU ( Time of Use)
- Consumption
- Demand
- Amount Charged

# Preliminary Analysis of Data

4

- From 90 Accounts provided by Eskom 23 did not belong to Mahikeng
- Belong to Neighbouring Municipalities ( Ratlou Munic and Ngaka Modiri Molema District)
- Accounts appear to have no electricity consumption but maintenance charges are present

# Account Categorisation and Review

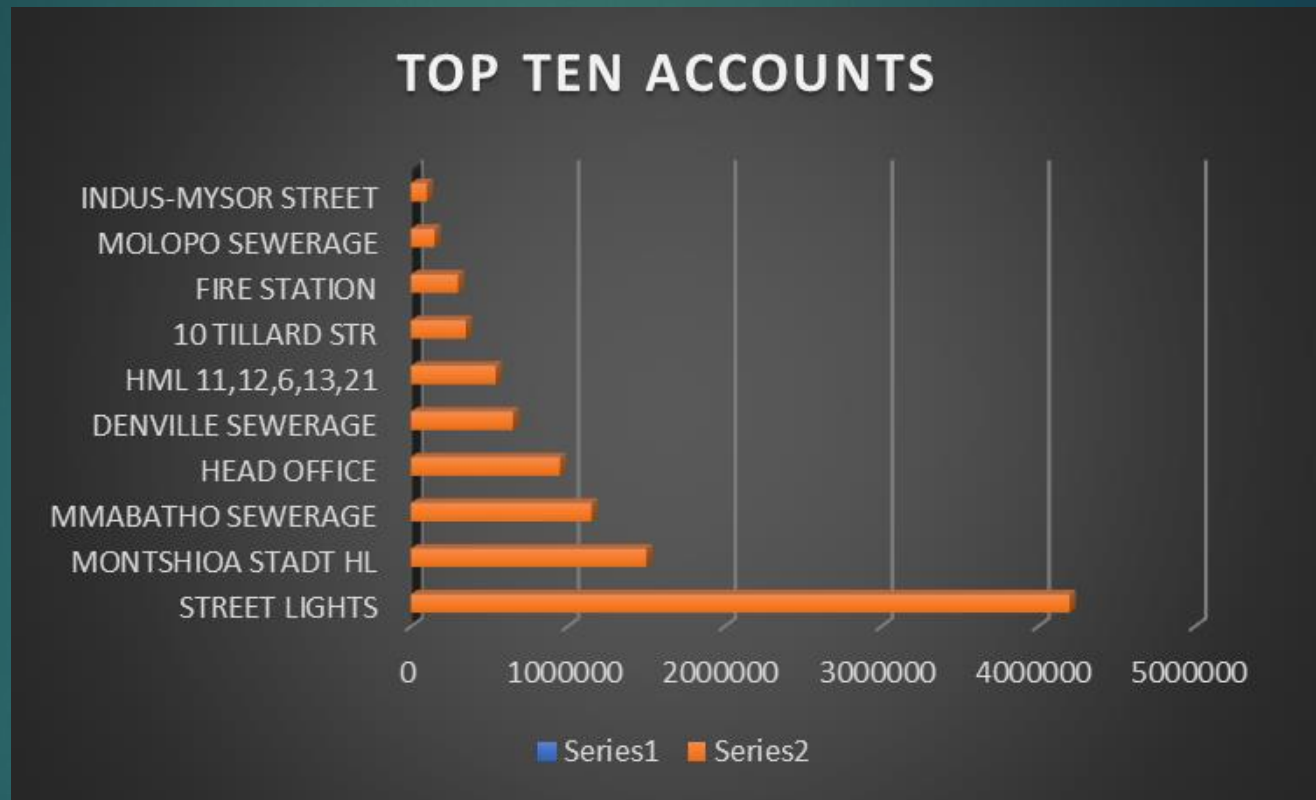
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67 Accounts belong to the Municipality

- 6 x LPU Accounts ( Large power Users )
- 61 x SPU Accounts ( Small Power Users)
- Top ten Accounts( highest consuming Accounts )
- Tariff Comparison
- Energy Audit

# Account Categorisation and Review

6



# Account Categorisation and Review

7

NMD reduction				Tariff Review	
Acc no	Acc name	Current NMD (kVA)	Proposed NMD ( KVA)	Current tariff	Proposed tariff
6862426419	Head office	315	N/A	Nightsave urban	Miniflex
6682157412	Danville WWTW	315	N/A	Nightsave urban	Miniflex
7813553916	Mmabatho WWTW	500	315	Nightsave urban	Miniflex
7951730660	Civic Centre	1000	315	Nightsave urban	miniflex
5291981627	Fire Station	315	N/A	Nightsave urban	Rural Flex
5519067809	Molopo pump	500	100	Rural Flex	Business rate

# Quantifiable impacts

Description of action	Annual saving in Rands ( estimated)	Total saving over five years in Rands
<p>Four accounts being billing to the municipality by Eskom were identified as not being for municipal facilities. Following discussion with Eskom these accounts were closed in March 2021.</p>	<p>Based on existing Eskom account information, one account cost the municipality R 127,538.30 per annum.</p>	<p>R 637,691.50</p>
<p>It was identified that the Notified Maximum Demand (NMD) for the Civic Centre was considerable higher than required. Following discussion with Eskom, the NMD of the Civic Centre was reduced from 1,000 kVA to 315 kVA at the end of 2021.</p>	<p>Using Eskom's tariff comparison tool, it is estimated that the municipality will save R 298,619.00 per annum. These savings are from three areas: Reductions in the Transmission Network Charge, the Distribution Network Charge, and the Service Charge.</p>	<p>R 1,493,095.00</p>
<p>Considerable efforts have been made with users in the Head Office Building and preliminary findings have indicated improved user behaviour in terms of switching off equipment and lights out of office hours.</p>	<p>At this early stage the savings achieved cannot be estimated.</p>	



# Behaviour change

- We embarked on an energy conservation campaign, whereby we encouraged staff to switch off their appliances when leaving the offices and when the office is not in use.
- Our security personnel was also conducting inspections especially at night to check offices with lights on.
- We also handed out corporate gifts for those who adhered to the call off switch off lights
- ( Pens, Bags, squeeze bottles key holders with an energy efficiency message)

# Outcomes of energy conservation

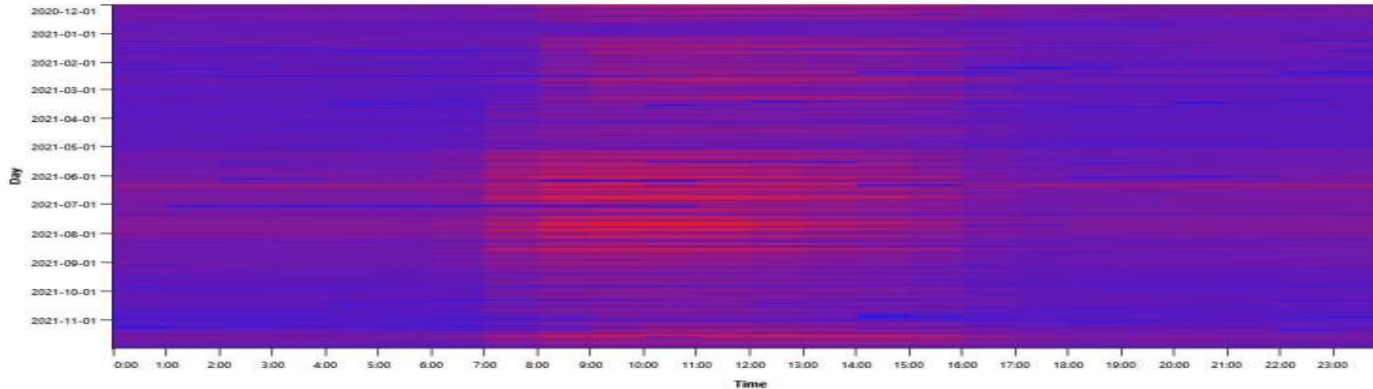


Figure 20 - Time of use map for a one-year period (2021) showing when electricity is used

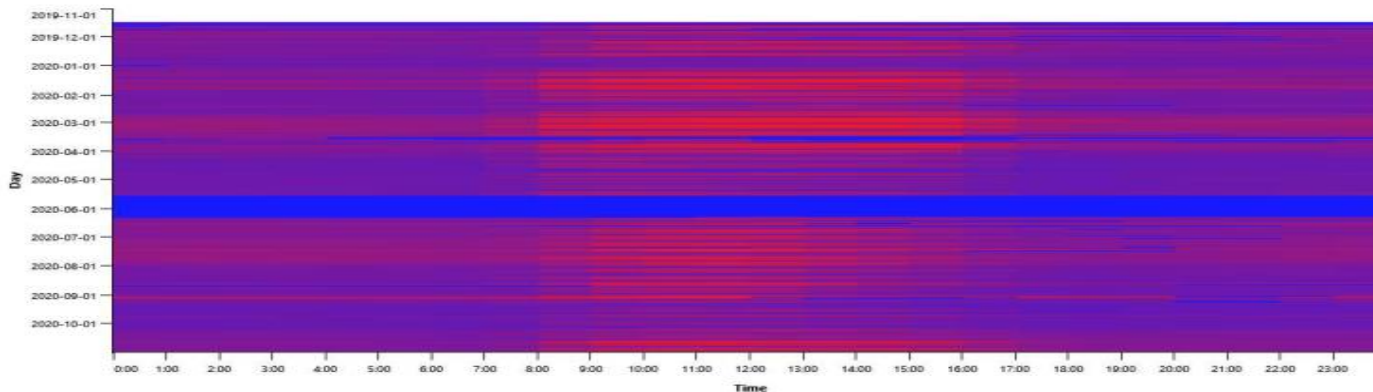


Figure 21 - Time of use map for a one year period (2020) showing when electricity is used

**SWITCH OFF YOUR LIGHTS TO KEEP THEM ON**

**THANK YOU**