



energy

Department:
Energy
REPUBLIC OF SOUTH AFRICA

METRO'S ELECTRIFICATION STRATEGY

Introduction

South Africa has currently six metropolitan municipalities; Johannesburg, Tshwane, Ekurhuleni, Ethekewini, Nelson Mandela and City of Cape Town metros. People move from the small towns and rural areas to seek employment in these metros. These creates development of informal settlements on the outskirts of the metros because the metros and National Government cannot provide houses at the required pace. Electrification is preferably implemented on the formalized areas and long waiting backlogs. The Department of Energy's (DOE)'s informal settlement policy recommends steps to electrify informal settlements and the important guide is to get a commitment from the metro municipality that the areas are safe and there won't be mass relocation on the area concerned.

Background

All these metros are currently actively involved in the electrification programme. There are different and also similar challenges with regards to the electrification of Metros'. This strategy seeks to develop an approach in dealing with metros electrification. The intention is to have a maximization of the programme in metros and deal with the underperformance issue altogether.

All metros have the following similar characteristics;

1. High informal settlement backlogs
 - a. Low conversion rate of informal settlements
 - b. Scarcity of land for relocation and formalization of informal settlements.
2. No formal areas backlogs
3. Breaking New Grounds projects
4. High number of infills
5. Need for Bulk

Performance of Electrification on Metros from 2006 to 2009

Metro	2006/7 Planned	2006/7 Actual	2007/8 Planned	2007/8 Actual	2008/9 Planned	2008/9 Actual
City of JHB	8864	7083	3750	3850	Bulk	Bulk
Tshwane	8065	8072	11250	11250	3 375	2448
Ekhurhuleni	1700	2950	Bulk	Bulk	1 099	668
EThekweni	10 417	13 135	8 725	9 878	13 465	10 686
Nelson Mandela	4797	3538	3020	2368	3482	2571
City of Cape Town	4246	4246	3769	3769	1257	1257

Table 1: Performance of metros

The table 1 above proves that all the metros have enough capacity to implement the electrification programme. Most metros connect more electrification customers than funded for. Where metros do less connections than funded for is because they were electrifying an area where households are currently under construction and the pace is very slow. Where the metro was implementing the bulk programme is mainly due to the fact that the area that the metro is intending to electrify had no bulk capacity available and the metro had to create it.

Informal settlement backlogs

Metro	Total Backlog	Formal	Informal
City of JHB	99 136	0	99 136
Tshwane	69 962	0	69 962
Ekhurhuleni	180 000	65 000	115 000
EThekwini	180 000	0	180 000
Nelson Mandela	18 025	950	17 075
Cape Town Metro	174 791	0	174 791

Table 2 – formal vs. informal backlogs of the metros

Table 2 above is evidence that most metros have high backlog of informal settlements than the formal backlog with the exception of Ekurhuleni metro. This is due to the fact that Ekurhuleni never presented all their information and challenges concisely to the department until recently. Ekurhuleni Metro has performed very badly in the last 3 financial years on the INEP programme. A new approach of dealing with Ekurhuleni will be finalized in due course.

Rate of formalization of informal settlement per metro.

The rate at which informal settlements are converted into formalized areas through methods of relocation or de-densification is very low and most metros do not have the exact figures on this issue. This is due to the fact that formalization of informal settlements depends on few factors; land availability and cooperation by the communities.

Metro	Informal Backlog	Rate formalization	Housing Rate
City of JHB	99 136	Not provided	Not provided
Tshwane	69 962	Not provided	Not provided
Ekhurhuleni	145 000	7 700	8 000
EThekweni	180 000	5 000	16 000
Nelson Mandela	17 075	1 000	3 000
Cape Metro	134 791	(20 settlements) Not clear	1500

All metros have a common challenge of high informal settlement backlogs. The fact that informal settlements are electrification backlog is currently a debatable and complex issue. The rationale is that there are informal settlement that have been existing for a long time without being proclaimed and be converted into sustainable human settlement, number of reasons for that ranges from the safety of the area up to the fact that the settlements being in privately owned land.

The department has a policy on electrification of informal settlements. The policy clearly demonstrates that for the department to electrify informal settlements is highly dependent and guided by the municipality. The municipality has a responsibility to fulfill certain minimum requirements for the department before informal settlements can be electrified. This is mainly to guard against wasteful and fruitless expenditure of government funds.

The challenge of the eradication of informal settlements is a challenge for both a local municipality and the national department of Human Settlement (DHS). DHS have a programme called Eradication of Informal Settlement by 2014. This has caused the DOE to align the universal access to electricity, especially for informal

settlements with this target. Eradication of informal settlement has proven to be a difficult process, especially where the community needs to be relocated to a formal area that has formal houses because once the people are given an RDP house another person (family) moves into that shack.

The main challenges with regards to the electrification of informal settlement are on the planning and budgeting. The electrification on informal settlement's budget is not a separate funding from normal INEP funding. This poses a challenge with regards to prioritization of funds especially since INEP funding is a rurally biased program and informal settlement are more of an urban problem.

We have identified that electrification of informal settlements needs an intergraded approach. The DOE is currently participating in all the known forums that are dealing with this issue. The high level process will be follows;

1. Engage the fully DHS and Metros on the high level plan formulation.
2. Identify priority areas and formulate DOE high level plan
3. Receive more detailed project plan from DHS and Metros
4. Formulate an electrification plan based on the information received and generate projects accordingly
5. Budget for the plan and incorporate into DoRA processes.
6. Implement the programme under the INEP programme

It must be noted that this programme will have to run in a lag approach. This means that electrification will follow as soon as certain processes have commenced. Experience has proven that relying on the plan is quite a detrimental and a costly exercise for electrification.

Conclusion

Metros Electrification programme will be partially isolated from the normal INEP programme and the following process will apply.

- Quantification and finalization of backlog figures.
- Separation of informal and formal backlogs
- Gather all the information of informal settlement eradication strategy data from both the Metros and the Department of Human Settlement.
- Gathering of all the Housing and BNG projects data and timelines from both the relevant active implementers.
- Develop electrification of informal settlement plan based on the acquired data.
- Develop the electrification of BNG and Housing programmes.

It is clear that Universal Access to electricity for all households cannot be clearly realized unless the backlogs issues are unpacked and dealt with in the appropriate manner. Communication of all these strategies is very crucial in order to put all the issues in perspective and project a positive image of the Government in totality.