



Development Bank  
of Southern Africa



*Presentation to the Portfolio Committee on Energy*



**Financing the Electricity Distribution Industry:  
DBSA Perspective**

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# Presentation Outline

- Problem Statement
- Policy Environment
- National Electrification Backlogs
- Distribution Challenges
- DBSA Experience in Distribution Sector
- DBSA Role in Financing Distribution Infrastructure
- Opportunities for Improvement

# Problem Statement

- More than 5.4m households have been electrified by Eskom and Municipalities between 1994 to 2011.
- The rate of electrification slowed down in the past 3 years due to increasing costs as remaining areas became more difficult to electrify.
- Significant infrastructure back-logs remain: to date  $\pm 3.4$  million households have no access to electricity (Informal  $\sim 1.2$  million and formal  $\sim 2.2$  million).
- Deteriorating state of distribution infrastructure affecting rate of electrification rollout.
- Disparities in the state of distribution infrastructure: Eskom (more centrally managed) vis-a-vis Municipalities (fragmented and difficult to manage).
- Municipalities rely heavily on electricity revenue as source of income.

# Policy Environment



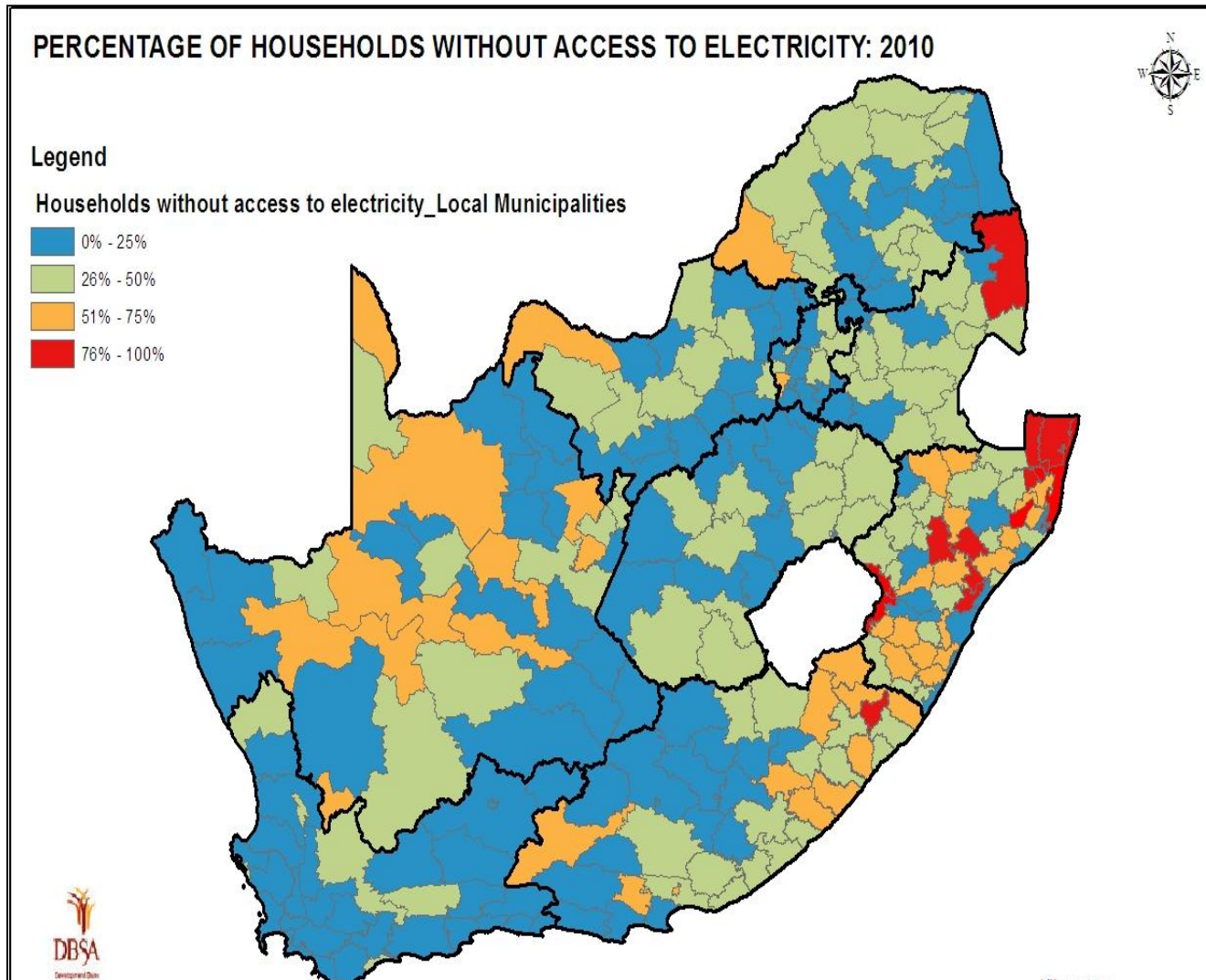
- Government objective of poverty alleviation and job creation through electrification.
- Emphasis on equitable access to basic electrical services rather than reliable quality of power supply.
- Expansion of distribution network vs. maintenance of existing infrastructure.
- Pressures from communities on roll-out and access.
- National Treasury is undertaking budget reforms to provide transparency in electricity budgeting and expenditure.
  - Electricity distribution leads to increased revenue, greater ability to borrow funds and leverage to improve collection of other revenues.
- Free Basic Electricity for low income households.

# National Electrification Backlogs

Province	Total Households	Household Electrification Backlogs	Backlogs %
Eastern Cape	1,703,314	622,616	36.6
Limpopo	1,279,040	296,877	23.2
KZN	2,474,893	827,916	33.5
Mpumalanga	899,920	220,992	24.6
North West	869,105	159,339	18.3
Northern Cape	280,855	53,923	19.2
Gauteng	3,308,924	848,979	25.7
Western Cape	1,378,417	205,246	14.9
Free State	844,848	196,588	23.3
<b>TOTAL</b>	<b>13,039,316</b>	<b>3,432,476</b>	<b>26.3</b>



# National Electrification Backlogs



Largest backlogs in KZN (24%): Gauteng (21%) and Eastern Cape (19%).

# Distribution Challenges

- Characterised by insufficient infrastructure to deliver energy services.
- Deteriorating quality of supply mainly due to:
  - Ageing equipment which requires rehabilitation and/or replacement;
  - Inadequate maintenance; and
  - Low skills base and institutional capacity (planning, engineering, accounting).
- High level of technical and non-technical losses in the distribution system.
- Current shortfall in generation capacity negatively impacting on electrification program.
- Lack of budget for maintenance.
- Poor level of scoping and assessment of infrastructure challenges.
- Poor compliance with service level agreements.
- Vandalism of equipment and theft of conductors.
- Revenue collection challenges.
- Standardisation of equipment & technical specifications required.

# DBSA Experience in Distribution Sector

- **Metros and secondary cities**
  - Ability to undertake project design and implementation.
  - Access to private finance; ability to generation and collect revenue.
- **Rural local and district municipalities**
  - Mainly poor and rural - full dependence on inter-governmental transfers.
  - Inability to attract debt capital.
  - Limited capacity to plan and implement projects and monitor contractors.
  - Project Management Unit's ability to manage Service Level Agreements.
  - Low revenue base.



# DBSA Role in Financing Distribution Infrastructure

- DBSA Exposure to electricity distribution industry ~ R5,094 bn.
- Municipalities are now faced with huge investment funding requirements to address maintenance backlogs, estimated at R27.4 billion for maintenance, refurbishment and strengthening. Moreover, the backlog is growing annually by R2.5 billion. (Dr. W. de Beer, Infrastructure Dialogue 12 May 2011).
- Maintenance backlogs and new infrastructure requirements present opportunities for DBSA to expand participation in the sector.
- Support delivery of access to basic energy services.
- Strengthen capacity and skills in municipalities through partnerships with government.
- Continue to support Integrated National Electrification Programme.

# Opportunities for Improvement

- Support municipalities with the development of a business case in order to raise sufficient capital to close the funding gap.
- Make provisions for replacement of equipment and maintenance budget .
- Consistency on backlog information is required to improve required financial estimates.
- Capacity building –institutional support and skills.
- Improve knowledge sharing among key stakeholders.
- Tariff structuring - electricity tariffs need to be cost reflective of the long-run marginal cost (LRMC) to be able to attract investment.
- Encourage payment discipline by the greatest defaulters.
- Improve revenue collection possibly through the roll-out of prepaid meters.
- Electricity revenue need to be ring-fenced to provide for maintenance.
- Transparent tendering process.
- Increase contribution of non-grid electrification i.e. renewable energy.