



ELECTRIFICATION ROADMAP

Eskom and Duke Energy, with support from various organisations including Global Sustainable Electricity Partnership and the Southern African Power Pool, are developing an Electrification (E°) Roadmap for the Southern African Development Community (SADC), Africa and developing countries. The initiative will focus on the consolidation of existing national electrification plans, assistance with plan finalisation as needed and securing resources for accelerating implementation. The goal is to connect 500 million people to modern energy services by 2025.



The rationale for this focus is based on the situation of the African people as reflected in the following information:

- average electricity costs of US\$0.18 per kilowatt-hour are about double that of other developing countries;
- power outages are responsible for a loss of between 1% and 6% of potential GDP every year;
- almost 42 % of those who lack access to energy live in Sub-Saharan Africa;
- 78% of those living in Sub-Saharan Africa use traditional biomass for cooking and heating
- forecasts "show that more than a 10-fold increase in installed generation capacity would be required to provide for full access to electricity
- an increase in temperature of about 1.5 °C by 2040 could lead to an annual loss in Africa's GDP of 1.7 percent
- African population at risk of water stress and scarcity will increase from 47% in 2000 to 65% in 2025
- Africa's population has been growing at 2.3% per year, more than double the rate of Asia's population

The E° Roadmap will be launched at the Sustainable Energy for All events that are scheduled during the build-up to the Rio+20 in June. During the rest of this year, efforts will be directed towards finalisation

of the E° Roadmap and achieving buy-in from all the required participants. It is intended that the outcome be presented to the Secretary-General Ban Ki-moon at the SE4All closing event that is planned for December 2012.



During 2013 - 2015 we will:

- Use seed funding to forge partnerships and engage with the relevant partners to secure commitment, human and financial resources and finalise plans for the implementation phase
- Analyse the electrification need
- Use existing plans where they exist
- Assist with development of such national plans where needed
- Facilitate training and human and institutional capacity building
- Dynamically match supply and demand while being cognisant of developmental needs
- Encourage and assist with regional electrification strategy formulation, appropriate financing for the implementation and execution of quick hits
- Simultaneous sharing of knowledge and experience with counterparts in the rest of Africa and other developing countries



The following ten years will be a period of increasingly accelerated, electrification actions. The success of the plans will be highly dependent on the monitoring, measurement, verification and reporting of the efforts; a systemic matching of the supply and demand, of the areas in the countries, with the developmental needs and the actual achieved growth; leadership and commitment by all levels of participants and the sustained intent to achieve universal access. While this process of the SADC electrification is being carried out, similar work will be undertaken in the rest of Africa and all other developing countries. The vision remains, firmly, to achieve universal access by 2030.



TIMELINE

ELECTRIFICATION ROADMAP	2012	June	Duke Energy/Eskom Statement - Electrification (E°) Roadmap; SE4All Endorsement Commitment to develop Electrification Roadmap submitted to UN				
		Jul-Aug Jul-Dec	SE4All SADC ^[1] E° Team Consultations; E3A Model ^[2] and GSEP ^[3] efforts integrated into Roadmap Country Analysis / E° Planning for 100m connections Detailed assessment of SADC National Electrification Plans (to Country levels of Municipality/Province) Commitment fully populated with all Partners and Timelines				
		Dec	SE4All Closing Event: SADC E° Roadmap Presented; SG Endorsement; SE4All/SADC Energy Ministers/SAPP/AU Declaration SADC E° Roadmap Ambassadors appointed				
	2013 2014	Jan-Jun Jun-Dec 2014	SE4All SADC E° Team Formalised and Commitments accepted Consultation with African and Developing Country stakeholders SADC Country Plans Finalised Monitoring, Measurement, Verification and Reporting Standards Electrification Standardisation Electrification Training, Capacity Building and Technology Transfer Quick Hits Identified and Implemented Analysis of Country Plans of other African and Developing Countries				
	2015	Jan-Dec	Gear up Electrification Planning Finalised Electrification Teams deployed				
IMPLEMENTATION	2016 2017 2018 2019 2020 2021 2022 2023 2024 2025		Implementation	Monitoring, Measurement, Verification and Reporting	Analysis of Supply and Demand	SE4All SADC E° Roadmap High Level Oversight Group	SE4All Africa E° Roadmap SE4All Developing Country E° Roadmaps

[1] Southern African Development Community

[2] Energy Access Action Alliance (Jeremy Oppenheim - McKinsey)

[3] Global Sustainable Electricity Partnership

