SUSTAINABLE RURAL ELECTRIFICATION PROJECTS

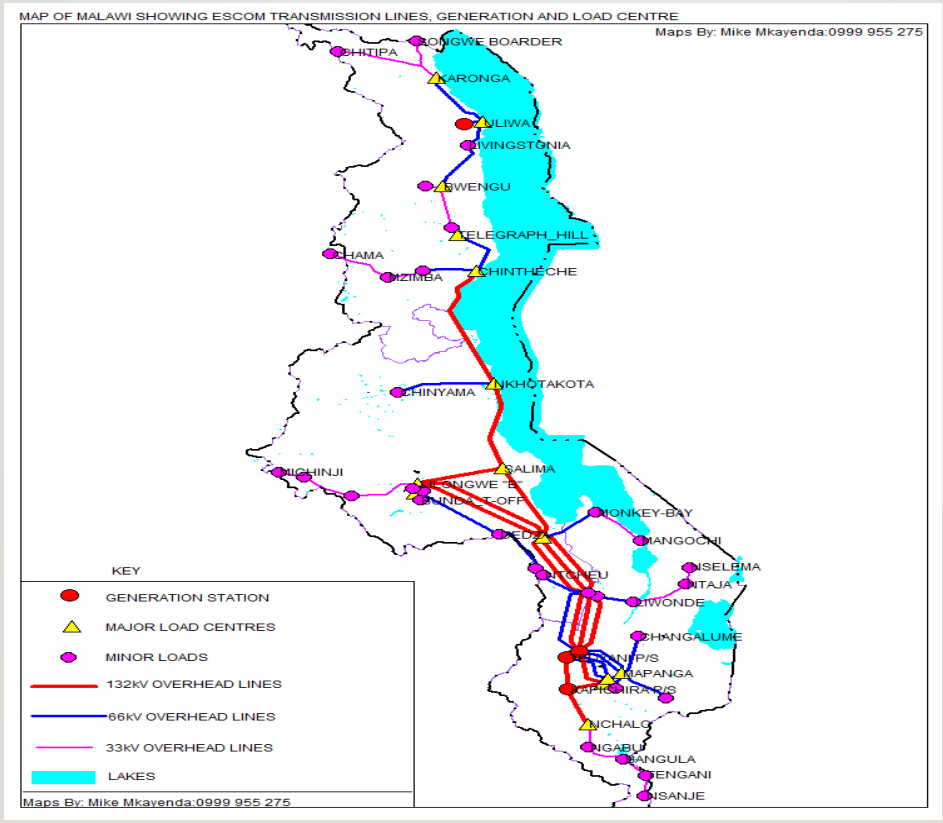
INTRODUCTION

- Malawi is a landlocked country in southeastern Africa, bordered by Zambia to the
- northwest, Tanzania to the northeast and Mozambique to the south, southwest and
- southeast. It lies between latitudes 9° and 18°S, and longitudes 32° and 36°E.
- Malawi's climate is hot in the low-lying areas in the south of the country and temperate in the northern highlands.

INSTALLED CAPACITY

- Total installed capacity of Malawi power grid is 351MW.
- The maximum load of Malawi power grid is 462.32MW and the electricity
- consumption is 2105.9GWh .
- The actual electricity is consumed as disaggregated by the six sectors: Household sector (865.75GWh), Agriculture sector(527.96GWh), Construction sector (5.69GWh), Mining sector (100.45GWh), Manufacturing sector (255.66GWh), and Services sector (350.43GWh).

TRANSMISSION LINES, GENERATION AND LOAD CENTRES



LEGAL AND REGULATORY CONTEXT

- The Malawi Energy Policy (MEP) of 2003 and the energy laws of 2004 are the legal instruments that govern the energy sector.
- There is a new Electricity Act (2016) that has resulted in the unbundling of ESCOM into two companies OF generation while the other one is for Transmission and Distribution.
- The MEP of 2003 has been revised and will soon be adopted and will result in the establishment of an Independent Rural Electrification Agency
- Malawi Energy Regulation Energy regulate the energy sector

OBJECTIVES

- To reduce over dependence on biomass which accounts for more than 90% of energy consumption
- To increase electrification rate which is on average at 10 % for the urban and 1 % for the rural to 50% and 30% respectively
- To integrate the power source which is over 90% hydro with other sources of energy like thermal and other renewable energy technologies

STRATEGY

- Demand side management – Promotion of energy saver bulbs, Construction and maintenance of distribution and transmission lines to reduce transmission losses
- Installation of new power plants, several feasibility studies being under taken
- Installation of Stand-by Diesel Powered Generators

PROJECTS

	Capacity (MW)	Capacity (GWh)	CAPEX (m$)	Current Project Status	Expected Commissioning year
Mpatamanga	350	2,199	639	Feasibility + Design study in progress	2021
Kholombidzo	200	1,242	524	Feasibility study (FS) in Progress	2020
Lower Fufu	140	834	-	Feasibility and Design in Progress	2024
Hamilton Falls	50	240	180	Conceptual level	Not Known
Songwe I	90	349.5	237	Detailed designing	2022
Chizuma	50	240.90	167	Awaiting financing	2019
Mbongozi	41	197.50	100	Off-taker agreement signed between IPP and Utility	2019
RUO	23	110.8	115	Malawi/Mozambique Border Project. Sourcing financing for FS	2023
Tedzani IV	22	170	75	Procuring EPC contractor	2019
Lweya	15	72.3	45	Pre-FS in progress	2019
Nkula A Upgrade	12	57.8	-	EPC contract award	2018
Tedzani III Upgrade	10	48.2	-	EPC contract award	2022

OPERATING MODEL

- For a very long time the country was on post paid meters
- Slowly prepaid meters are being introduced in the country and the plan is to have 100% prepaid meters by the end of the year.
- Split meters are now not only replacing post paid meters but even ordinary prepaid meters

ROLE OF WOMEN

- The role of women in the energy sector is not well pronounced in the current instruments governing the energy sector
- The new Energy Policy which is yet to be adopted has made a deliberate move to mainstream gender in all energy activities

- Thank you for your attention