TNM

MNO Panel

MECS Africa Regional Working Group

Kampala, 29th May 2013

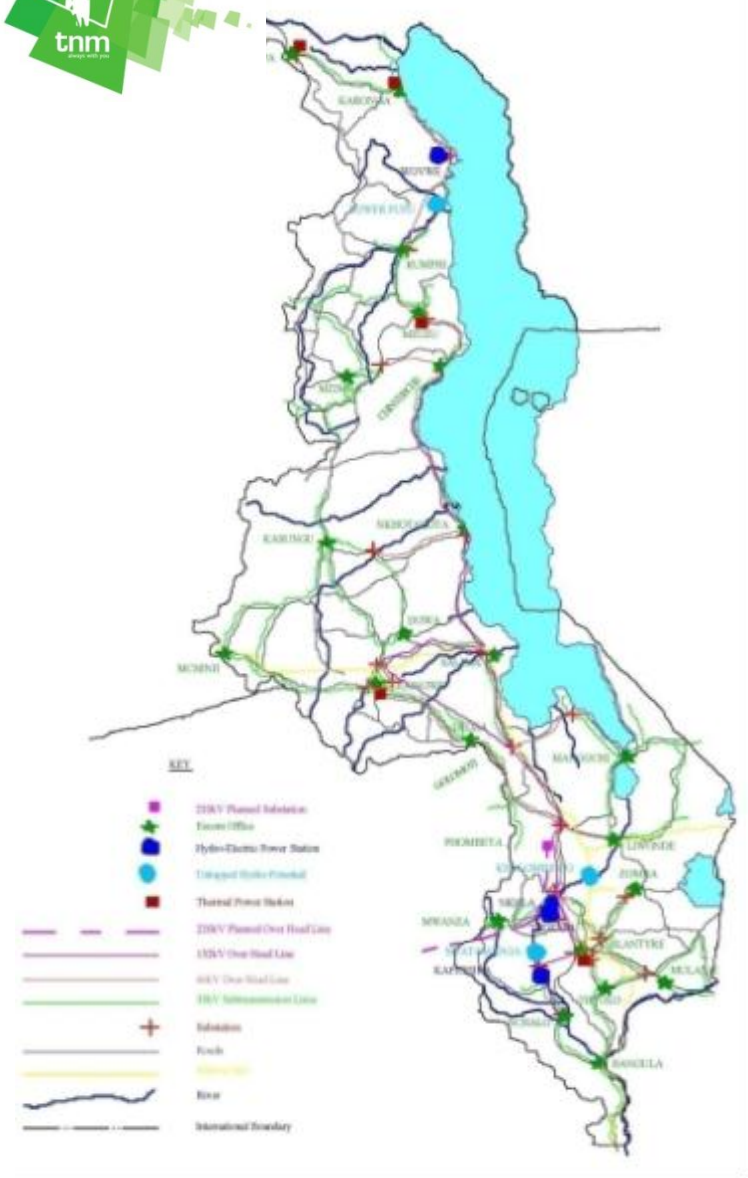
Malawi: Telecom and Energy Access

- Mobile market penetration ~ 20% population by unique subscribers (GSMA)
- Mobile connections are expected to keep rising
  - 32% increase in subscriber growth from 2011-2012 (TNM)



Mobile service coverage available in 90% of Malawi

But 80% of the population is still without formal energy access



Energy in Malawi

On-grid

ESCOM power utility, hydro-power generates over 90% of Malawi's energy, the remaining is from thermal energy

ESCOM's transmission grid is fairly extensive but it has high losses

Off-grid

- Firewood/charcoal: primary fuel for cooking
- Paraffin: Primary fuel for lighting
- Batteries + solar: Phone charging

Opportunity for Improving Community Energy Access in Malawi

- ~ 13 million in Malawi lacking access to energy
- Over 3 million off-grid mobile SIM connections (GSMA)

Many have a phone before they have a place to charge it

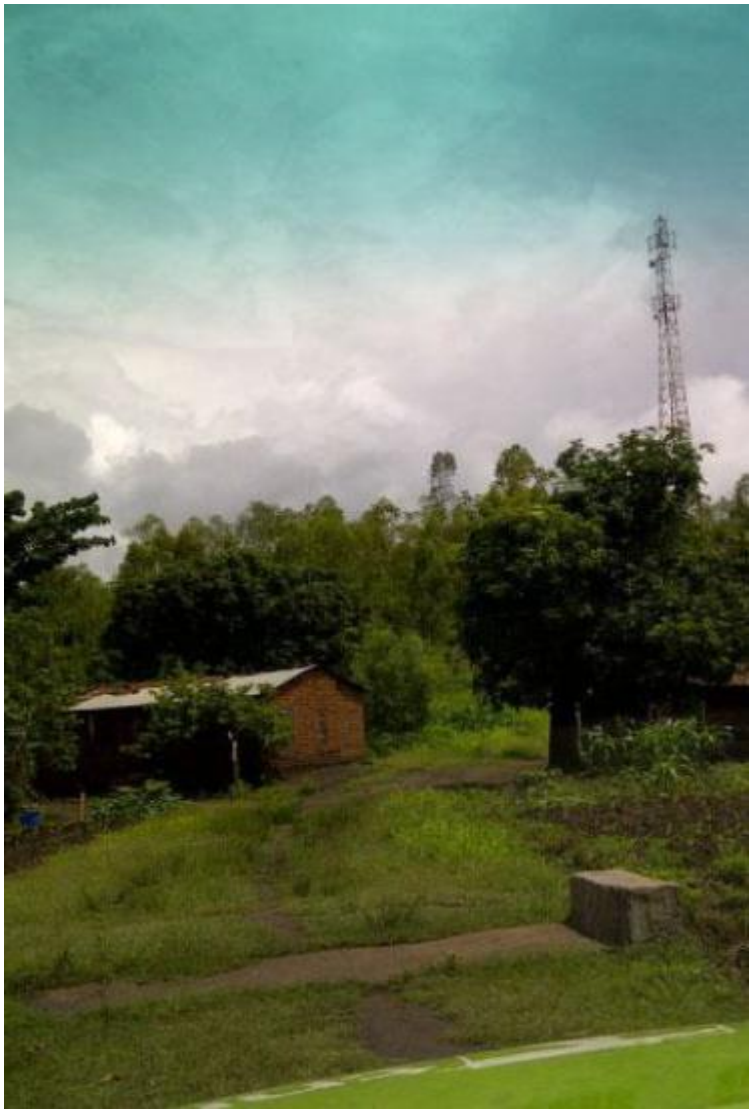
- ~ 7 million in Malawi who could benefit from energy access enabled by mobile technology and mobile networks, majority rural (GSMA)

TNM's Tower Network

Total Number of Sites : 415

Total Off Grid Sites : 55

Potential Grid Connection in next 2 Years = 15



GSMA Feasibility Study established the opportunity for TNM

In 2012, the GSMA with the support of the International Finance Corporation (IFC) worked with TNM to evaluate the opportunity to improve access to energy services. Objectives:

- Use our Tower Sites and Supply Chain Network to Improve community Energy access
- Improve the business case to serve off-grid areas
- To Improve Community Engagement for Site Security

GSMA Feasibility Study highlighted Piloting Opportunities

It was clear that there is an opportunity

1. OPEX saving

2. Improve community energy access, sharing the power infrastructure of the ESCO

3. Use existing agent network in partnerships with energy service companies to distribute household and kiosk services