

**Practical Know-How for Scaling Up Electricity Access in Africa. The Maputo Workshop for SSA Electrification Experts: June 9-12, 2009**

**Day 1: Institutional Issues**

8:30-10:00 *Welcome. Boris Utria, Sector Leader Sustainable Development, World Bank Office, Mozambique.  
Ray Holland, EUEI PDF Manager, Energy for Sustainable Development, GTZ.  
Opening Address by H.E. Salvador Namburete, Minister of Energy of Mozambique.*

10:00-11:15	<b>Session A</b>	<b>1. Grid Extension.</b> <i>An institutional overview of the challenge of rural electrification and how progress has been achieved in SSA and other developing countries. Several illustrative cases will be presented by practitioners, including an analysis of lessons learned.</i>	<b>2. Offgrid Business Models.</b> <i>Many national utilities in SSA are unable to expand their grid fast enough, due to financial, technical and capacity constraints. Even where this is not an issue, social fairness sometimes requires solutions for remote regions with dispersed users who cannot be reached by the grid. The session presents working technology solutions and business models for low-cost offgrid alternatives for such cases, often based on PPPs.</i>
11:30-12:45	<b>Session B</b>	<b>3. Hybrid Models.</b> <i>This session focuses on alternatives to government-led electrification undertaken by ministries, state-owned enterprises or combinations of the two which were the focus of Session 1. These alternatives include private sector operators bidding for large regional concessions, electricity cooperatives buying at wholesale from a national utility and local and regional power companies working with a national utility.</i>	<b>4. REA &amp; REF.</b> <i>Many countries in SSA have established a new institutional framework supporting rural electrification through establishing rural energy agencies and funds. The session will analyze the experiences with this model, compare different institutional approaches for REA and REF and identify key lessons learnt, and challenges. The main question is: what are the key drivers of successful REA/REF programs?</i>

12:50-14:00 *Lunch*

14:00-15:30	<b>Group Work</b>	<b>GW 1.1.</b> <i>How to find the "Best" Institutional Approach for electrification in a given situation?</i>	<b>GW 1.2.</b> <i>What is the best way of involving communities in planning and implementation of grid and offgrid electrification projects?</i>	<b>GW 1.3.</b> <i>How to scale up in countries that have very low RE rates?</i>	<b>GW 1.4.</b> <i>Offgrid business models - how to ensure sustainability?</i>	<b>GW 1.5.</b> <i>How to deal with the political dimension of electrification? What are the minimum sector requirements for successful electrification?</i>
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15:30-18:00 *Plenum: Results  
Video--Vietnam-"The Last Mile"*

**Day 2: Technology and Planning**

8:30-9:00 *Today's Tasks & Overview*

9:00-10:45	<b>Session A</b>	<b>5. Grid Intensification, Innovation and Cost.</b> <i>This interactive 3.5 hour-workshop will discuss technical and management innovations for grid expansion, with a special focus on peri-urban electrification, low-cost technologies and densification of existing networks (also known as intensification). What technical solutions, innovations and business models can be deployed to make access expansion more affordable and sustainable for users and utilities?</i>	<b>6. Offgrid Technology and Lighting Africa.</b> <i>Currently 500 million people in Sub-Saharan Africa are without electricity; 90% of the rural population has no access. Among the poorest of the poor, lighting is often the most expensive item among their energy uses, typically accounting for 10% of total household income. New "breakthrough" advancements in lighting technologies (such as LEDs, cheaper solar home systems, etc.) promise to deliver lower-cost, clean, durable and higher-quality lighting for areas not served by the utility. The 3.5h session will explore the latest technological advancements in offgrid electrification and lighting solutions and explore the opportunities - and challenges - they present for marketing strategies, electrification policies and quality control.</i>	<b>7. Can Masterplans work?</b> <i>What is the application reality of Masterplan planning approaches? Are Masterplans appropriate at all, given that PPI follows price signals and Masterplans are often outdated by the time they are published? Could there be quicker, more flexible, less expensive or more participatory alternatives for RE planning? This session will review cases from different countries and explore the planning processes and subsequent implementation.</i>	<b>9. Effective M&amp;E.</b> <i>Electrification scale-up in Africa will require rigorous, yet low-cost and practical monitoring and evaluation (M&amp;E) to guide the programs, plan and measure impacts, and collect lessons learnt for improvements. The session will present M&amp;E tools and components that work and typical conclusions that can be drawn from evidence-based evaluation.</i>
11:00-12:30	<b>Session B</b>			<b>8. Pro Access Regulation.</b> <b>How can regulation help, rather than hinder, electrification?</b> <i>The two universal tasks of economic regulation are setting maximum and minimum prices and establishing minimum technical and commercial quality of service standards. Since the economics of rural electrification are often precarious, it is generally agreed that regulatory systems applying to electrification activities must be "light handed". This session presents case studies on different approaches to light handed regulation.</i>	<b>10. Enhancing impacts.</b> <i>Electrification programs should pay special attention to the uptake, usage and impacts of new electricity access and include socially and economically productive uses as integral program elements. Complementary services such as access to roads, information technologies, finance or training may increase electrification impacts and demand density in specific cases. The session presents practical ways in which electrification projects have fostered productive uses or complementary services and identify lessons and limitations.</i>

12:30-13:15 *Lunch*

13:15-14:00 *Poster Session & Marketplace*

14:00-15:30	<b>Group Work</b>	<b>GW2.1</b> <i>Are Master Plans necessary? How can they be made more usable? Can GIS planning methods help?</i>	<b>GW2.2</b> <i>How can low cost solutions be integrated into offgrid projects?</i>	<b>GW 2.3</b> <i>Peri-urban electrification - what institutional and business models are appropriate?</i>	<b>GW 2.4</b> <i>How to assess the role of regulators? What is "light handed regulation"?</i>	<b>GW2.5</b> <i>How (and when) do you encourage productive use of electricity? What is necessary to develop an M &amp; E component for a project. Is it worth the cost?</i>
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15:30-18:00 *Plenum: Results*

**GW2.6** *What is necessary to develop and M&E?*

**Day 3: Financing and Subsidies**

8:30-9:00

*Today's Tasks & Overview*

9:00-10:45

<b>Session A</b>	<b>11. Financing (and Subsidies) for Utilities.</b> <i>This session looks at specific cases of utilities and their financial and subsidy issues. The presentations will be very short and to the point, to allow for more contrasting cases.</i>	<b>13. User Financing via MFI and Utility Bills.</b> <i>Affordability of electricity service is a key issue in the Sub-Saharan Africa context. How to close the gap between high costs of the service and low capacity to pay? This session will present promises and limitations of microfinance solutions and utility pre-finance schemes for electrification. It will cover grid extension as well as different offgrid technologies as the design of successful user financing schemes differs from technology to technology.</i>	<b>15. A Subsidy Clinic: How to design and improve access subsidies.</b> <i>This interactive 3.5 hour session will show the practical steps involved in designing and evaluating subsidies in real cases, using a new tool – the Subsidy Matrix. Specific cases for grid and offgrid subsidies will be presented and discussed. In addition, you will have the opportunity to start discussing your own subsidy design questions, for your ongoing or future access programmes.</i>
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11:00-12:30

<b>Session B</b>	<b>12. Financing (and Subsidies) for Small Providers.</b> <i>Small providers face specific challenges: Financial and technical capacity is often low, and regulation frequently overlooks their needs. On the other hand, they are close to the customers and sometimes more flexible than large utilities. At the same time, they often operate minigrids, charge batteries or sell solar home systems - and these technologies have specific requirements. Finally, their customers are usually poor while investment and M&amp;O costs are usually higher than for grid extension. Thus, commercial funding is hard to obtain and subsidies are practically always needed to close the affordability gap for new users. How to improve the access of small providers to financing and subsidies?</i>	<b>14. Climate Change and Access.</b> <i>The purpose of the session will be to (i) demonstrate the existence of CDM/carbon finance opportunities in Africa, (ii) explore some of the recent approaches and methodologies which could facilitate Africa's greater participation in CDM (e.g. Program of Activities approach), with some emerging examples in Africa and worldwide; and (iii) explore other financing opportunities for electricity access arising from the increased global focus on climate change.</i>	
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12:30-13:15

*Lunch*

13:15-14:00

*Webpage Demo etc*

14:00-15:30

**Group Work**

GW3.1 AEI - Financing and subsidies for Utilities	GW 3.2. AEI - Microfinance - Follow up discussions	G4 3.3 Subsidies - Follow-up discussion	GW 3.4. AEI - Moving forward
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15:30-18:00

*Plenum: Results*

*Video - "Lighter Burden, Brighter Future"*

**Optional Day 4: Impromptu Work Groups and Side Events**

10:00-12:30

<b>Group Work</b>	GW 4.1. Carbon finance	GW 4.2. Prepayment Systems	GW 4.3. Alternative service and maintenance models for ongrid/offgrid electrification
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