



DIRECTIONS IN DEVELOPMENT
Energy and Mining

From the Bottom Up

*How Small Power Producers and
Mini-Grids Can Deliver Electrification and
Renewable Energy in Africa*

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From the Bottom Up: How Small Power Producers and Mini-Grids Can Deliver Electrification and Renewable Energy in Africa (Directions in Development)



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Most Sub-Saharan African countries make an effort to promote rural electrification through both centralized and decentralized methods. This guide focuses on the decentralized approach, providing practical guidance on how small power producers and mini-grid operators can deliver both electrification and renewable energy in rural areas. It describes four basic types of on- and off-grid small power makers, as well as several hybrid mixtures that are emerging in Africa and elsewhere. It analyzes whether the option of little power distributors, used broadly in Asia, could be employed in Sub-Saharan Africa, and addresses two often ignored questions: what to do 'when the big grid connects to the little grid' and how exactly to practice light-handed regulation. Among the practical queries addressed is how exactly to design and implement retail tariffs, quality of support standards, feed-in tariffs, and back-up tariffs. Many of the decisions are inherently controversial because they straight affect the economic interests of investors and consumers. It offers a primer for nonengineers on interconnection and working standards for small power makers connected to main grids and isolated mini-grids. The guideline highlights the ground-level regulatory and policy questions that must be answered by power regulators, rural energy organizations, and ministries to market commercially sustainable investments by personal operators and community agencies. Finally, the guide considers the threshold query of when to regulate so when to deregulate tariffs. The guidebook highlights rather than hides these real-globe controversies by drawing upon candid feedback of key stakeholders—In addition, to make the discussion more useful to practitioners, the instruction provides numerous real-world types of effective and unsuccessful regulatory and policy actions used Kenya, South Africa, and Tanzania, along with Nepal, Sri Lanka, and Thailand. The guideline also analyzes the regulatory implementation problems triggered by donor grants and so-called top-up obligations. All these implementation problems are presented with specific ground-level options and recommendations rather than just general pronouncements.nationwide utility managers, mini-grid operators, government officials, and and consumers.



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From the Bottom Up is an excellent overview of the prospect of microgrids to meet the .. From the Bottom Up is a good overview of the prospect of microgrids to meet the electrification needs of communities in energy poverty around the world while integrating renewables!.

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