Mitigating Risk and Strengthening Capacity for Rural Electricity Investment in Africa

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RENEWABLE ENERGY FOR RURAL DEVELOPMENT

Rates of electrification in East Africa are among the lowest in the world, and renewable energy technologies have the potential to provide power in rural areas to alleviate poverty and stimulate economic development. Increasingly, there is consensus that private sector participation can be the engine that delivers energy services efficiently to the rural poor.

However, due to the high risks faced by project developers, few renewable energy rural electrification projects have been brought to fruition. The regulatory, policy, and financial barriers are considered to be a major disincentive to investment. Discussions with key stakeholders in Kenya, Uganda and Tanzania in the private, public and financial sectors led to the development of the MIRREIA project (Mitigating Risk and Strengthening Capacity for Rural Electricity Investment in Africa). The project received endorsements from all three Governments, regulatory institutions, rural electrification and rural energy institutions, private sector developers, power utilities and financial institutions.

PROJECT SUMMARY

The objectives of the project are to:

- Promote and encourage the use of renewable energy as a means to alleviating poverty in sub-Saharan Africa and protecting the local and global environment;
- Identify and define means to mitigate the major financial, policy and regulatory risks to private sector investment in rural electrification; and
- Assist key stakeholders to improve market conditions and set the framework to assist project developers to invest in viable, successful renewable rural electrification projects and activities that lead to significantly improved energy efficiency, both on the supply and the demand side.

The MIRREIA team is working with developers to identify and address the regulatory, policy, and finance risks that projects face. By working with private sector project developers, national and local public officials, and development banks and commercial finance institutions, MIRREIA is heightening awareness of the benefits of private investment in renewable energy rural electrification.

Over its 30-month period (starting from April 2005), the project is catalyzing the process of securing approvals, developing agreements, and facilitating financing for 2-3 potential renewable rural electrification projects in each country. These projects will demonstrate the policy, regulatory, and finance pathways for moving projects forward in the three focal countries. Finance and policy workshops will be held in each country and regionally to facilitate discussion and information exchange.

PROJECT PROGRESS AND NEXT STEPS

- The project kick-off meeting, held in Nairobi, Kenya on 12 April 2005, brought together project partners to discuss the work packages and deliverables.
- The project has carried out most of the initial background activities, including establishing the current state of play in each of the three countries. From this initial review it is clear that there is a strong interest from the respective Governments to attract greater private sector investment in rural electrification and likewise there is a strong interest from the private sector to participate in this sector. In each of the countries, the institutional framework to support rural electrification is either in place or in the process of being developed.
- A review has been carried out of experience in a number of other countries (Cambodia, China, Sri Lanka, South Africa, UK and Denmark) that highlights the key policy frameworks used to support rural electrification and how private sector actors (especially those developing renewable energy projects) can access the grid.
- Work is now complete on identifying the key risks and barriers in each country that are hindering and discouraging private sector investment. This will form the foundation for the major project activities in supporting projects and reviewing finance options.
- The MIRREIA team is now working with private project developers to identify 2-3 projects in each country that would benefit from support.
- MIRREIA has already started to provide support to a community electricity project on the coast of Kenya. Mpeketoni Electricity Project is a community owned and operated mini-grid that is presently working with the e7 Fund to look at the possibilities of applying wind power to reduce the cost of generation and to utilise indigenous and environmentally friendly resources. MIRREIA has provided logistical and technical assistance in accessing Government support and in ensuring compliance with necessary regulatory and environmental requirements.
- Planning is already underway to host a Rural Electrification Workshop in early 2006 to bring together the key stakeholders in the region and strengthen co-operation and sharing of ideas. There are also discussions underway on possible collaboration with a parallel workshop due to take place around the same time with similar aims and objectives.
- The assessment of financial barriers to the development of renewable rural electrification projects will begin in January 2006 and will lead to a regional workshop and ultimately an investors' guide.









ACTIONS TO MITIGATE RISK IN RENEWABLE ENERGY RURAL ELECTRIFICATION

WORK		
PACKAGE	DESCRIPTION	DELIVERABLE
1	State of play review in each country. Overview of electricity sector (important agencies and parastatals, rate of electrification and major efforts and projects) and summary of recent developments (deregulation, tariff reform, new policies and legislation) in Kenya, Uganda, and Tanzania to better understand existing situation.	D1.1 Reports for each of the three countries (now available on http://mirreia.energyprojects.net)
2	State of play internationally. Assessment of efforts to encourage private investment in renewables-based electrification in the U.K., Denmark, China, Vietnam, South Africa, and Cambodia to better understand strategies and options available to East African countries.	D2.1 Report on European and developing country experience relevant for the investors, financiers, governments, regulators and other stakeholders in the three countries (now available on http://mirreia.energyprojects.net)
3	Initial assessment of the risks and barriers to investment and finance in renewable rural electrification. For each focal country, an assessment of the major policy, regulatory, and finance risks facing project developers, based on information gathered from developers and other stakeholders.	D3.1 Initial assessment of the risks and barriers to investment and finance in RE in each of the countries, with reference to how these barriers are being addressed in each, and in leading RE countries internationally.
4	'Learning by doing' support for 6 to 10 key project developers. For 2-3 projects in each country, provide support to enable projects to move forward. The kind of support depends on the needs of specific projects, and could include guidance in securing permits, developing a plan for winning regulatory approval, and identifying sources of project financing. The concerns and perceptions of project developers will be communicated to government agencies.	 D 4.1 List of key investors and potential projects for each country D4.2 Project review report highlighting progress of associate projects, implementation status and the major hurdles faced and overcome during the project period D4.3 Proceedings of Regional Investor Forum in Nairobi
		D 4.4 Closure/implementation of at least four associate projects, with at least one in each country.
5	Detailed assessment of policy and poverty alleviation aspects. Assessment of policy framework for renewable rural electrification project approval in each country and gap analysis to identify ways to streamline regulatory/permitting processes to encourage the development of more projects. Determine the poverty alleviation potential of renewable rural electrification projects.	D5.1 Government and institutional partner list and list of services and support available.D5.2 Country level policy reports with recommendations for policy and regulatory actions
		D5.3 Workshop proceedings
		D5.4 Project development guidelines
		D5.5 Summary report
6	Finance risk assessment, mitigation and development of investor manual. Since financing a renewable rural electrification project is a key challenge, the project will assess finance risks in particular, identify mitigation strategies, and produce a manual for potential investors to assist them in financing their projects.	D6.1 Report on finance risk mitigation, highlighting the major risks for both investors and also developers and a package of solutionsD6.2 Investors manual on 'financial options for rural electricity investment
7	Dissemination. To ensure that project activities and the key findings are reported to a wide audience, key outputs and summaries will be shared through meetings, publications, presentations, and a website.	D7.1 Establishment and operation of project web site (http://mirreia.energyprojects.net)
		D7.2 Articles in appropriate journals and presentation of results at relevant conferences and workshops
		D 7.3 Dissemination report
8	Common Dissemination Activities. Produce information on MIRREIA activities in response to Commission requests as part of COOPENER dissemination activities.	

PROJECT TEAM

Energy for Sustainable Development (ESD), based in the UK, is leading the project team, working with Danish partner Rambøll. Local and regional subcontractors include Energy for Sustainable Development Africa (ESDA) in Kenya, Power Networks in Uganda, and the Transport Resource Centre Limited (TRCL) in Tanzania. Sustainable Transactions, a South Africa-based consultancy with expertise in renewable energy project financing, will assist with the finance work package. The project aims to build upon and work with existing programmes and projects in the three focal countries and is working closely with regional, national, and local decision-makers in the private and public sectors.

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Management







