STEPs—Sustainable Thermal Energy Service Partnerships 2013—2016

Introduction

The Sustainable Thermal Energy Service Partnerships (STEPs) project aims to address the challenge of thermal energy service delivery in rural areas of developing countries, where it is projected that more than 2.6 billion people could remain without service in 2030.

The research will study the existing experience in providing thermal energy for cooking, space heating and sanitation using different approaches, in particular the 'fee-for-service' model (where users pay for the energy service delivered) and different energy delivery options.

The fee-for service approach relies on the delivery of a service by a private provider for a small monthly fee, where private provider makes the initial investment and the end-users can benefit from the service without having to pay a large up-front lump sum. This is of particular importance in rural areas, which can generally be categorised as having low income and access to capital.

Research and Goals

The project aims to develop a technology neutral, thermal energy service public-private partnership enterprise model, which is sustainable and scalable in rural areas of developing countries.

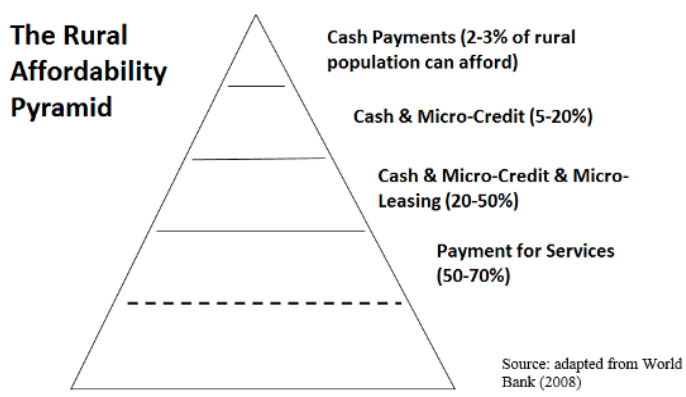
Two key options will be explored in the process of this: that STEPs models are technology-neutral and service-oriented (hence similar to electrical service models), and that STEPs models are linked to the technology used and product (hence thermal technologies require a different approach to electrical technologies).

Various specific research questions will be addressed in the course of the project, including:

- What shall be the institutional arrangements for STEPs, and how best to scale -up efforts?
- What is the range technologies and applications to be included in the energy service options, and how best to customise these to specific needs?
- What will be the financing requirements, instruments to be developed and incentives needed?
- What are the business models and key variables for viability?
- What facilitating regulations/policies are needed?
- What are the roles for the governmental, private and public sectors?
- Which other services and economic activities can the STEPs enterprise support? And,
- What is the best approach for end-user service delivery and financial transactions?

First Outputs and Current Work

- Business Models for Off-Grid Electricity and Lessons for Thermal Energy (UCL)
- Case Studies on PPP Frameworks based on Energy Sector Experience in Sub-Saharan Africa (Restio)
- Business Models for the Delivery of Modern Thermal Energy Services—The Case of Ghana and Tunisia (Econoler)
- Rural Business Models in Asia—A Literature Review (SEA)



Co-Leaders

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Website—http://www.stepsproject.net

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