

ENERGY LENDING:

Microfinance and access to modern, alternative energies

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Summary

A lack of access to modern, alternative sources of energy in rural areas compromises the quality of life, health and economic opportunities of countless households in developing countries. While a vanguard of microfinance institutions is making loans available to increase access to alternative sources of energy such as solar, biogas, micro hydropower and LPG, obstacles remain in convincing potential partners and funders as to the economic and financial benefits of energy lending. As a non-traditional microfinance product, energy lending, like other microfinance innovations before it, challenges stakeholder perceptions and attitudes towards what microfinance can achieve. To increase the engagement of MFIs, energy suppliers, public agencies and investors in energy lending programs, the development of energy microfranchises and unique, innovative, funding mechanisms should be considered.

Introduction

Just as the microfinance industry continues to try to match the huge unmet demand for financial services, so too there is an unfulfilled demand for safe, clean, cheap and income-generating sources of energy. An estimated 1.6 billion people in developing countries do not have access to modern energy services for basic cooking, heating and lighting. This lack of access compromises both quality of life and health, and places significant limitations on the productive capacity of microentrepreneurs.

The productive use of energy sources for things such as lighting for businesses, irrigation, refrigeration, telecommunications, education, agricultural and retail/street vending, has significant implications for poverty alleviation and economic growth. 'Energy lending' - the use of microfinance to expand access to modern, alternative energy systems - is increasingly providing energy to many clients in developing countries. While the resolution of some key challenges remains, the scope for innovation is wide.

Energy and Microfinance

The failure of governments to achieve significant levels of rural electrification in many developing countries has meant that modern, off-grid energy sources, such as solar photovoltaic lighting systems, biogas, micro hydropower, wind and LPG cook stoves, have become important sources of alternative energy. These energy sources provide an alternative to both centralised energy infrastructure and the use of biomass such as firewood, animal dung, charcoal, as well as kerosene, which adversely affect both human health and the environment. While the focus in developed countries is increasingly directed towards employing clean or renewable energies to limit the emission of greenhouse gases, the use of these alternative energy sources in developing countries is first and foremost about access to safer, cleaner, cheaper and more reliable energy.

Despite the typically low operating costs of these alternative energy sources, prohibitively high upfront costs have proven to be one of the main obstacles for the poor in accessing alternative energy. By making microfinance loans available to pay for modern energy services, microfinance institutions (MFIs) are overcoming this problem by expanding access to loans for many people living in rural areas. However, while access to micro-energy loans is already underway in several countries, much needs to be done to realise the potential of such loans on a larger scale.

Two factors are central to this aim; firstly, the establishment of partnerships with energy suppliers and, secondly, innovative financing mechanisms.

Partnering with Energy Suppliers

Energy lending success stories in developing countries have thus far been primarily based on partnerships between MFIs and energy suppliers in Asia and Africa. These have employed a variety of models, from partner-agent arrangements to fully integrated energy loans-sales-service ventures. This being the case, finding partners is often difficult due to the lack of technical knowledge on the part of MFIs regarding alternative energy systems; the perceptions and attitudes of energy suppliers regarding the microfinance industry; as well as a poor depth of understanding on both sides regarding the market and the financial and energy needs of clients.



Energy lending - selling the product to partners

There is an inherent difference between traditional financial products (such as credit and insurance) and energy loans. For MFIs, the collection of loans or insurance premiums based on traditional financial products are not necessarily dependent on the use or sustainability of end-user technologies. Energy loans, as products aimed at a specific suite of technologies, add a layer of complexity and pose additional challenges in demonstrating the economic value of these loans to potential formal partners.

Just as microcredit loans are fungible, energy is used for a variety of reasons, many that may not be directly related to 'productive' use. However, the experience of several MFIs currently issuing energy loans is that their range of clients includes both those that have the capacity to pay for loans for energy consumption (such as home lighting), as well as microentrepreneurs capable of enhancing their economic prospects through the utilisation of energy loans. In convincing investors and energy companies of the value of energy partnerships with the microfinance sector, the challenge for MFIs is to demonstrate both the productive potential of energy loans and the capacity of the consumers of consumptive energy loans to repay.

The increased engagement of the private sector in the microfinance industry has led to partnerships between MFIs and commercial banks, insurance companies and money transfer agencies which, in turn, has resulted in a variety of new financial products being made available for the world's poor. These precedents were all based on challenging the perceptions and expectations of the formal partners and in this sense energy partnerships are no exception. MFIs wanting to establish energy lending portfolios must also challenge rigid attitudes towards what microfinance can achieve and be used for.

Demonstrating the economic value of energy products in rural areas has to be done by overcoming some of the obstacles to expanding markets into rural areas. One of the key obstacles is that energy providers are normally urban-based. Not being located in rural areas has implications for the installation, servicing and maintenance of energy technology; essential ingredients for the sustainability of energy lending. Due to the remoteness and dispersion of rural customers, both energy suppliers and MFIs face the prospect of high costs in accessing these, especially in relation to after-sales service. So while agreement on warranties and service guarantees are an essential ingredient, these have the potential of adding significant costs, thus making partnership agreements unattractive or overly onerous to energy suppliers.

Microfranchising – a model for increasing outreach?

Microfranchising holds the potential for overcoming the lack of rural penetration of energy suppliers, retailers and service agents. Microfranchising is the use of scaled-down business ideas that are easily replicable, are directed at helping the poor, and require low start-up costs, making them suitable to low income entrepreneurs. Several successful franchising models are emerging in the health and retail sectors, however the energy industry is yet to produce any breakthrough examples of successful microfranchising. This provides a potentially exciting challenge for both the industry and MFIs.

Partnerships which result in the joint development of microfranchising models will facilitate rural penetration, while both expanding the energy skills base in rural areas and providing avenues for additional lending. Microfranchises centred on the sale of cheap, portable LED technologies, rental of energy technologies, microleasing, construction of energy systems (such as biogas/stoves), delivery as well as service and technical support, all provide opportunities in this area. Franchise models might also be expanded to include storefront supply of alternative energy technologies in locations not traditionally considered by energy suppliers.

Microfranchising limits the risk of lending by taking some of the guesswork out of establishing microbusinesses. Microfinance packages include business plans, training in technology, bookkeeping, marketing, branding, established supply chains and a clear price/profit structure. MFIs have a role to play in offering credit for franchise start-up, the development of microfranchise models with energy partners, and facilitating the implementation of training. Opportunities also exist to build on the kinds of established microbusinesses already incorporating alternative energies, such as the solar charging of mobile phones and other innovative microfranchising models, with the aim of limiting the risk of lending to microentrepreneurs.

Financing Energy Lending

It has been widely recognised that public sector provision of centralised energy is insufficient to meet the growing demands of developing countries, and that private sector involvement is a necessity. This is also reflected in the microfinance energy lending sector. As a consequence, understanding, identifying and realising the economic opportunities of modern energy systems for low income clients is essential for attracting financing for energy lending. MFIs must demonstrate that the cost of energy systems can be recovered through end-user payments, and consequently attract private sector investments in energy enterprises.

Light in Dark Corners: Public and Private Funding

Rural energy projects have hitherto been primarily public-funded, and room still exists for maximising the use of government funds by buying-down the rate of return required by financiers through subsidising interest rates, or providing seed funding for research, development and innovation. Additionally, MFIs implementing renewable energy loan programs may be able to leverage government funds that are increasingly being allocated for renewable energy applications. However, as is being found across other sectors such as insurance and remittances, attracting private sector financing is essential in increasing outreach, portfolio diversity and economic impact.

While the World Bank, UN agencies such as the Global Environment Facility, and other international financial institutions provide large-scale funding, this too has often been in the form of end-user subsidies and has focused on centralised energy provision. Attracting financing from sources such as green or alternative energy microfinance investment funds, which have the flexibility to fund decentralised energy lending projects, provides opportunities for MFIs that might not be so readily accessible from other sources.

Also, engagement from commercial and development banks can help to overcome deficits in program start-up funding and the meeting of research and development costs by providing grant funding for the provision of guarantees or other credit – such as long term loans, short term bridging finance and cash equity.

A win-win situation: Carbon Offsets

Opportunities also exist for MFIs within an emergent carbon trading market. An increasing number of large-scale cleaner and renewable energy projects in developing countries are being directly linked with measured reductions in CO₂ emissions. Mechanisms which allow for the trading of carbon emissions have resulted in an acceleration in the number of companies and investment funds investing in these renewable energy projects by buying carbon credits from organisations undertaking renewable energy projects.

Partnerships between MFIs and energy providers that can provide a scale of project measurable under the voluntary carbon emissions scheme have the opportunity to attract financing to subsidise interest rates or provide guarantees for more risky and innovative lending. The carbon credits purchased from renewable energy projects are sold to provide individuals or companies with a means of offsetting their own carbon emissions by purchasing them (often online). These are referred to as 'hard' offsets as they neutralise a measurable and independently verified quantity of CO₂.

MFIs, especially NGOs looking to expand their funding base, should also consider offering 'soft' carbon offsets to donors and contributors. 'Soft offsets' consist of a financial contribution that supports an organisation working to tackle climate change through the funding and implementation of renewable energy projects. An organisation or MFI undertaking renewable energy projects is able to raise funds by encouraging individuals or companies to contribute based on the prospect of offsetting personal greenhouse gas emissions.

Conclusion

Energy lending by MFIs is in its formative stages. In order for it to become a mainstream product within the microfinance industry, MFIs and their energy industry partners must continue to identify and implement least-cost technologies that add value for clients. At the same time, gaps in financing models specific to the energy sector must be identified and mechanisms established to address them.

This being the case, many of the obstacles faced by MFIs wanting to establish energy lending programs are variations of those encountered by MFIs that have established partnerships with other private sector industries. Along with accessing rural markets and financing, such issues include; the types of products and methodologies employed; the weak capacity of MFIs to engage the industry; portfolio security and issues of sustainability; legal and regulatory environments; competition; and building market awareness and demand.