

Financing sustainable energy for all

17 November 2014
IIED, London

Workshop report

Financing sustainable energy for all

Workshop report and research priorities

Contents

Summary	2
1. Key issues highlighted in the workshop	3
1.1 Effective use of public funds to leverage private investment	
1.2 Targeted support for different market segments	
1.3 Understanding how to build investor confidence in the business model	
1.4 Where the market doesn't reach	
1.5 Influencing global processes	
2. Potential future research themes	5
2.1 Political economy of public sector spending on energy access	
2.2 Public finance for building markets	
2.3 Mechanisms to ensure GCF and other funds are distributed equitably	
2.4 Stimulating local economic development: what is the evidence?	
2.5 Social protection, humanitarian assistance and energy access	
Annex 1 Agenda	8
Annex 2 Participants' list	9

Summary

On Monday 17th November 2014 IIED, ODI and IDS co-hosted a one-day workshop 'Financing sustainable energy for all' held at IIED's offices in London. The aim of the meeting was for researchers to engage more actively with investors, donors and practitioners and use this engagement to inform a future research agenda. Thirty-three participants attended the workshop, ranging from practitioners (working in Haiti, Bangladesh, Peru and Kenya), to investors, to researchers and advocacy NGOs (see Annex 2 for a list of participants).

The Agenda for the meeting is attached as Annex 1. There were three sessions in the morning on:

- Financing of the power sector for access (led by ODI);
- Decentralised energy access (led by IIED); and
- Reaching the poorest (led by IDS).

These were followed by a set of breakout groups on comparable themes in the afternoon. Different opinions in the room were reflected in the lively debates in the plenary sessions and breakout groups. Participants acknowledged the value of bringing together people with diverse perspectives, as well as the need for more shared understanding of the terminology. There are many support instruments out there, represented by a whole range of acronyms, which participants repeatedly referred to as 'alphabet soup', but not enough common understanding of what these are; how to use them; or of the terminology used in these processes. The workshop provided an opportunity to share different perspectives and build shared understanding and familiarity with different worlds – investor, donor, practitioner, NGO and researcher. The workshop presentations can be found [here](#)

An important point raised was that much more could be done to understand gender as it relates to the financing of energy access, particularly at the decentralised level and reaching the poorest.

The day after the workshop a smaller group met to talk through the results of the meeting and draft some ideas for research questions. Key issues highlighted in the workshop and key research priorities that were developed over the two days are presented below. We aim for these to be used as a guide for further research and for further discussion with donors, investors, governments, practitioners and civil society organisations.

Key issues highlighted in the workshop

1. Effective use of public funds to leverage private investment

Much of the power project financing in Africa today relies on philanthropic, donor, or public finance, rather than private investment. Private investors claim that ‘the finance is there’, but there is a lack of financeable business models with adequate risk-adjusted returns for the different types of investors. Participants discussed how public funds can be used most effectively to attract private investment into decentralised and pro-poor energy access – given the predominant political economy of public sector focusing on large-scale grid access and despite high demand coming from rural, off-grid areas.

Public finance needs to target the financing viability gaps – by reducing risks, lowering the cost of capital, or providing seed capital. The use of public capital to close the gap will vary case by case but these are all ways that public capital can be leveraged in a smart way so that private capital is mobilised and the public funds can stretch further. One interesting question on large-scale power projects was whether donor and public money in specific contexts was ‘crowding in’ or conversely ‘crowding out’ private investment. Is public finance always necessary in certain contexts? There are areas (for example, in parts of Kenya) where the off-grid market is becoming commercially viable – yet the existence of soft finance may mean entrepreneurs seek it anyway (or else their competitors will reap advantage from it).

In fact commercial capital is moving much faster than people think into off-grid lighting because there is now a critical mass of companies with strong business models, for example based on ‘pay- as- you- go’ incremental approaches and leveraging mobile phone networks. This is helping to shift some of the energy access approach from a ‘beneficiary’ model (e.g. ‘here’s a light’) to a ‘consumer’ model (e.g. ‘here’s a compelling value proposition to buy a light that is better quality, cheaper, and has features you actually want such as mobile phone charging’).

This provoked discussion around the need to distinguish between: i) commercially viable markets (where the regulatory framework is sufficient); ii) near commercially viable markets; iii) non-commercially viable contexts, and the need for public finance to be nimble enough to withdraw from segments as markets evolve. The internal barriers to donors financing a lot of small-scale projects came up, for instance, with pressure to ‘get large amounts of money out of the door’ in short time frames and keep transaction costs low (for the taxpayer).

2. Targeted support for different market segments

Two key conclusions were that finance is only one of many key success factors and that the discussion needs to become much more granulated about the different finance, regulatory and other support measures across different markets (household/commercial; on-grid/off-grid; electricity/thermal, etc.). One speaker (from the EUEI PDF) provided a list of five sequential success factors: enabling environment; technical capacity; information and networks; knowing what delivery models work; and finally, finance. However, public sector funds can be invested into all of these areas in order to help stimulate private sector investment at the end of the chain.

There is a need to understand not only the technology market segments, but also understand highly diverse local contexts and the needs/behaviours of people in those contexts, for example depending on whether they belong to low-income, subsistence or extreme poverty categories.

3. Understanding how to build investor confidence in the business model

The discussion highlighted the diversity of business models, their variation according to technology, market and country, and the need for different types of investors at different phases of business development and market evolution. The degree of interest in the business model varies: equity investors want to understand the business model and how financially robust it is; social investors want to know about impact as well as returns; online crowd funders are interested in supporting individuals and communities with inspiring stories to tell, and so on.

The diversity of business models raises the question of whether there are ‘structures’ that could allow public finance instruments to bridge the gap between large-scale finance and highly diverse, local-level

businesses. There was discussion in one break out group around the efficacy and ethics of using donor/public *research* money to support individual businesses – for instance, to conduct market research or resource mapping surveys with the results made publicly available.

4. Where the market doesn't reach

There was a lot of interest in looking at those areas that markets *can't* reach (disaster relief, the very poorest urban and rural communities, and so on.) and investigating the role of social protection (as an established system for addressing food security, education, health) trying to bring together social protection experts, development experts, energy and other sector experts (urban planners, education authorities) to sort out the challenges together. There is a need to track practical examples of how this does and could work in order to demonstrate the potential, so as to enhance understanding.

It is critical for such efforts to use a gender lens to appreciate challenges and opportunities for women (and men), girls, youth and other marginalised groups. Practitioners also noted that good intentions and donor targets on gender equality can be challenging in the light of commercial pressures, for example, the 'reach' of female salespersons may be restricted to family and friends; men may have more experience in sales. Targeted financing mechanisms – such as microfinance, social protection, lifeline tariffs – may be required for female-headed households, which are disproportionately represented in poor and vulnerable populations, and may lack collateral or credit to pay for energy services or related equipment. In some countries women are responsible for paying household bills; and there is evidence that microfinance and community savings groups perform better if they are run by women. Access to capital for women working in the energy sector (entrepreneurs, sales agents) is also important to explore.

5. Influencing global processes

A key area to watch is how the funds from large-scale global funds, notably the Green Climate Fund (GCF), will be distributed, and how to ensure these funds will reach SMEs, decentralised energy access initiatives and the poorest. One suggestion put forward was that the GCF could help provide working capital for SMEs – a key gap identified by many present – and use blended finance instruments to do this (public, philanthropic, private). Another key area is the post-2015 agenda, and thinking around what will be the best way to frame energy access, both as a separate goal and also embedded within other goals (e.g. health, education) and how to measure the impacts of such global interventions. If public policy (e.g. via post-2015 interventions) included better-articulated outcome-based targets for access to energy services (poverty, jobs, livelihoods etc.), rather than simply numbers of connections or kWh, this could help steer public finance.

Potential future research themes

1. Political economy of public sector spending on energy access

Some of the key barriers to scaling up financing for decentralized energy are connected with preferences, ideologies and political economy dynamics within spending bodies (governments, donors). Not enough research has explored these factors in detail in particular contexts. A key question is: *Why isn't development finance already delivering energy access for all?*

Possible research questions:

- Why is there more focus on the grid rather than decentralised energy services and how could this be overcome?
- What are the internal barriers among donors (transaction costs, staff capacity and knowledge, spending volumes and timeframe) and external barriers (recipient country preferences)?
- Why do national governments prioritise large-scale and where are the leverage points within governments?
- What are the national and local government decision points/mechanisms to get the money to SMEs, decentralised energy access, reaching the poorest?

Target audiences and products:

- Case studies for governments/donors/philanthropists/advocacy groups working on energy finance (e.g. case studies taking a political economy approach to understanding financing and decision-making processes; country case studies analysing decision points and mechanisms of energy planning and finance, comparing with a theoretical guide/good practice).
- Practical government guidance (e.g. a decision-tree approach to walking people through processes; a practical good practice guide for government experts).

2. Public finance for building markets

Currently a lot of public finance for decentralized energy access appears to focus on supporting individual companies, rather than building broader markets (either through policy, capacity-building, information networks). This means that 'winner' companies have an advantage, and there is a risk that competition will be restricted; the evidence for how supporting front-runners helps create markets is also not clear. A key issue is understanding the specific impact of different approaches to public sector financing for market-building across specific technologies, socio-cultural contexts and consumer profiles. One option might be to develop a framework for comparative study of different 'success factors' for market-building in different contexts.

Possible research questions:

- What kind of sector-wide information should be made available, how and for what purposes? e.g. on resource mapping, consumer demand/ willingness to pay.
- What is best practice in terms of use of public funding to support building energy markets in different market segments? Can we map how public funds have been used so far (across different markets/contexts) to identify what innovation support models could be relevant?
- Where and when should public funds be targeted on research with and for the private sector relating to business models, market research, consumer information? What are the positive synergies and where are the conflicts of interest or risk? When has this been done well and why?
- What are the lessons from other, non-energy markets that are relevant? To what extent is the mobile phone sector a valid comparator and how was soft money used to develop this sector in Africa?
- Innovation hubs, business incubators and climate innovation centres are an interesting target of research – why are these effective and what combination of public and private funds should go

to support them? How to ensure they become self-sustaining in the longer term? (Or should there be an ongoing public subsidy?)

- Where is the best place to use public funds to build the success factors and to attract private finance at the end of the chain of 'success factors' (enabling environment, technical capacity, information and networks, knowing what delivery models work, and finance) relating this to commercial/non-commercial/last mile/building markets.

Target audiences and products:

- Guidance for research support bodies and donors that also support research (ESRC, EPSRC, DfID, GIZ and others) – provide an analysis paper with recommendations
- Entrepreneurs – two way engagement to build understanding on market-building needs
- Governments: guidance on policy support for building markets

3. Mechanisms to ensure GCF and other funds are distributed equitably

As noted above, a key area to watch is how the funds from large-scale global funds, notably the Green Climate Fund, will be distributed, and how to ensure these funds will reach SMEs, decentralised energy access initiatives and the poorest.

Possible research questions:

- What mechanisms are going to ensure the money reaches small-scale enterprises, decentralised energy access and the poor. Evidence of what works. What delivery models already exist on the ground?
- Explore how GCF could help provide working capital for SMEs
- Explore feasibility of using blended finance instruments to provide working capital (public, philanthropic, private).
- Regulation and legal frameworks; what mechanisms/legal frameworks/regulations?
- How to measure success effectively? Why are so many of the current evaluation methods inadequate, e.g. done too soon after the project ends; by parties with vested interests; by underqualified people; with insufficient resources to allow enough time on the ground; no clarity over the evaluation goals (financial/ gender/poverty/employment/environment, etc.)

Target audiences and products:

- GCF and other funds, investors, governments – evidence of models that work, including successful and sustainable business models, positive development impacts and how these are achieved most effectively, how they are assessed, and so on
- Fund managers, governments, investors: a methodology for assessing the success of interventions, developed through a participatory process and with a robust review by experts, and a testing period.

4. Stimulating local economic development: what is the evidence?

Building the evidence base around types of investment and what economic impacts they have, including who benefits (gender). Combining this with on-the-ground support to enhance economic development impacts.

Possible research questions:

- What kinds of intervention have what kind of economic impacts? What business support services are needed to different types of enterprises, including both enterprises providing energy services and those using energy, and different scales of enterprises
- How to measure success effectively?

Target audiences:

- Donors, governments, investors – case studies with evidence of economic development impact
- Energy users – working with energy users to increase understanding of benefits, e.g. how to use stoves, be efficient with electrical power, etc.
- Fund managers, governments, investors: create a methodology for assessing the economic development benefits of interventions, developed through a participatory process and with a robust review by experts, and a testing period.

5. Social protection, humanitarian assistance and energy access

There is a need to overcome barriers of understanding between humanitarian, development and energy experts, including urban planners, social protection experts in governments, etc. The challenges range from delivering access to the most vulnerable in society and the most isolated poor communities, to meeting the energy needs of refugees and internally displaced persons in the context of humanitarian assistance.

Possible research questions:

- How to reach the most vulnerable whose voices aren't heard? What approaches are there to subsidise, support, enable? Do you have to get the 80% of coverage before targeting the last 20% (the 'last mile' of the most vulnerable) or can you do it at the same time?
- Need to promote experimentation and learning in (a) energy services for people without capacity to pay; (b) redirecting skills and technology to target the poorest most effectively. Focus on energy as a service not KW hours. Entry points e.g. urban planning, etc.
- What role could social protection play? These are established systems in some countries or contexts, already addressing needs in terms of food security, education outcomes, health etc. Could they also be appropriate for energy access? What examples currently exist (e.g. Mexico, Brazil) and what is known about their impacts? What are the barriers to using social protection (e.g. lack of established systems)
- What is the existing experience around meeting the energy needs of the most vulnerable and hard-to-get communities and how do these vary across contexts e.g. slums (where people don't have an identity) and displaced people.
- How can the energy needs of refugees and internally displaced persons (IDPs) be met in ways which are effective, efficient and environmentally sustainable? What role might private sector and markets play in meeting these needs?

Target audiences and products:

- Government agencies delivering social protection, urban planners, social development experts, energy access experts – case studies to illustrate potential approaches to reaching the poorest; workshop opportunities to engage across the energy-humanitarian divide
- Global networks (e.g. SE4ALL, climate finance) – briefings and case studies to raise awareness.

We hope this report provides a contribution to the ongoing debates around energy finance and we welcome comments and further discussion about these research priorities. We would also be delighted if the report is used in any way to stimulate engagement between donors, governments, investors, practitioners, researchers and civil society organisations and would be very interested to hear more about how it has been used and any feedback from those discussions.

Annex 1: Agenda

Financing sustainable energy for all

Workshop: Monday 17th November 2014, 9.00am - 5pm

At: International Institute for Environment and Development (IIED)
80-86 Gray's Inn Road, London WC1X 8NH

Organised by the Institute of Development Studies (IDS), the Overseas Development Institute (ODI) and IIED

Agenda

09.00	Registration and coffee
09.30	Welcome and opening words
09.45	Session 1: Financing the power sector for access (led by ODI) Camille Astier, Berkeley Energy Michael Franz, EU Energy Initiative Partnership Dialogue Facility
10.45	Session 2: Financing off-grid energy access (led by IIED) Chhavi Sharma, Ashden Steve Andrews, NewLight Africa Nazmul Haque, Infrastructure Development Company Limited (IDCOL), Bangladesh
11.45	Coffee
12.00	Session 3: Reaching the poorest (led by IDS) Julio Eismann, Acciona Microenergia, Peru Raffaella Bellanca, International Lifeline Fund, Haiti Sam DUBY, Access Energy in Kenya
13.00	Lunch
14.00	Break-out groups: <ol style="list-style-type: none"> 1. Where the market can't reach: the role of public finance and development assistance in providing access for ALL 2. Stimulating the market: using public finance to leverage private investment 3. Building confidence in the business model: what evidence are investors looking for?
15.30	Tea
15.45	Feedback from break out groups, with commentary from: Alison Doig, Christian Aid and Abyd Karmali, Bank of America Merrill Lynch
16.30	Conclusions and recommendations from the day
17.00	Close

Annex 2: Participants list

First Name	Surname	Organisation
Abyd	Karmali	Bank of America Merrill Lynch
Alastair	Livesey	Africa Power Ltd
Alison	Doig	Christian Aid
Alistair	Wray	Department for International Development (DfID)
Ana	Pueyo	Institute of Development Studies (IDS)
Andrew	Scott	Overseas Development Institute (ODI)
Andrew	Barnett	The Policy Practice
Anne	Wheldon	Ashden
Beck	Wallace	CAFOD
Bernard	Tembo	University College London (UCL) Energy Institute
Boris	Lopicich	London School of Economics (LSE)
Bruce	Davis	Abundance Generation
Camille	Astier	Berkeley Energy
Charlie	Miller	Solar Aid
Chhavi	Sharma	Ashden
Diego	Martinez-Schutt	CAFOD
Emma	Wilson	IIED
German	Canzi	Renewable Energy and Energy Efficiency Partnership (REEEP)
Glada	Lahn	Chatham House
Ilmi	Granoff	ODI
Julio	Eismann	Acciona Microenergia
Michael	Franz	EU Energy Initiative Partnership Dialogue Facility (EUEI PDF)
Nazmul	Haque	Infrastructure Development Company Ltd. (IDCOL), Bangladesh
Paula	Rolffs	e3g
Rachel	Singh	Shell Foundation
Rachel	Godfrey Wood	Consultant/IDS
Raffaella	Bellanca	International Lifeline Fund Haiti
Rob	Byrne	Science Policy Research Unit (SPRU), University of Sussex
Robert	Nash	Oxfam
Sam	Duby	Access Energy in Kenya
Sarah	Best	IIED
Steve	Andrews	NewLight Africa
Tara	Shine	Mary Robinson Foundation

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Event Materials

Theme

Keywords:
Sustainable markets, Energy



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