



# Results Based Financing in the Off-Grid Lighting Sector

Report of the side-event organized during the 4th International Off-Grid Lighting Conference and Exhibition, 26th - 29th October 2015, Dubai (GOGLA / Lighting Global)

The Results Based Financing (RBF) Side-Event was organized by SNV in collaboration with the global Energising Development (EnDev) program and held at conference room Sheikh Maktoum B at the World Trade Centre in Dubai on Thursday October 29<sup>th</sup> 2015. For the agenda of the RBF side-event, see Annex 1.

The side-event was one of four sessions that were held at the same time on the morning after the GOGLA conference had officially been closed. Still the number of people in the audience reached 60 at the highest point. Moderator of the event was Drew Corbyn, who works for Practical Action Consulting in Malawi. He started the event by outlining the agenda and introducing the speakers.



Figure 1: The RBF Side-Event, stage and audience

## **Round 1 - Presentations**

Round 1 of the event (09:00-10:45) was reserved for presentations from two representatives of organisations that are involved in the overall introduction of RBF in the energy sector (DfID & EnDev) and three organisations involved in implementation of RBF projects at country level (CLASP, MESPT & SNV).

## Steven Hunt - DflD

The first speaker was Steven Hunt, Energy advisor and Deputy Team Leader at DfID in London. DfID has funded ( $\leq$ 45 million) the three tranches of the RBF programme through EnDev.

Steven Hunt said that the RBF facility started four years ago, with a strong focus on results. EnDev was chosen to implement the programme, since it already had implementation and capacity in the target countries. RBF was intended as a part of the scaling of existing projects, not as funding for new projects.

## Some of characteristics of the EnDev RBF programme:

- Help offset upfront costs that companies face when entering a new market
- Firms decide how to spend the money and are given freedom to choose a business model
- RBF helps firms to raise capital
- Through incentives, the RBF can be used to target specific areas
- It should lead to a sustainable market situation where no donor funding is needed
- · Within EnDev, funds can be shifted from non-performing projects to successful projects
- RBF is part of a toolkit not a silver bullet
- · Quality assurance through Lighting Global for the case of solar
- RBF is not a subsidy but an incentive
- Monitoring and Evaluation is an integral part of the programme

#### Challenges so far:

- From approval of the project proposal to actual project implementation requires more effort than expected
- Funding for complementary activities is not always available





## Gunnar Wegner - GIZ/EnDev

Gunnar Wegner, Energy Advisor at GIZ/EnDev, introduced EnDev and its approach to implementing development projects in developing countries around the world. He then gave an overview of all 17 RBF projects currently implemented and showed the general implementation structure of any RBF project. He stressed that DfID cofinanced a running programme and that RBF could not work as standalone. He also sees the RBF facility as a whole as a 'learning programme'. Private sector trust and quick turnaround time are essential for smooth operations of an RBF project.

#### Successes of the RBF programme:

- · Companies use RBF experience to obtain national & international debt
- Fosters experimentation: no predetermined pathway to change

#### Challenges:

- RBF behaves differently in different markets:
  - o early development: more TA (for investors & FIs), higher incentives needed
  - o more mature markets: less TA, lower incentives needed
- Financial institutions in some countries are not as interested as hoped
- RBF projects are "front-loaded": upfront investment is required
- · Monitoring and verification: sometimes costlier than expected and it may violate privacy regulations

### Matt Jordan - Senior Manager, CLASP

In the 3<sup>rd</sup> tranche of the RBF in 2015, a proposal by CLASP was approved for 'increasing availability of quality appliances for off-grid systems'. The focus of the program is the development and market entry of 'super-efficient off-grid appliances' (specifically TVs, fans and, with additional funding, refrigerators), which support markets for off-grid (solar) systems by delivering more off-grid energy service while requiring less energy and lowering consumer costs. It is the only RBF project that focusses on appliances and the only RBF project that is being implemented by the US-based NGO CLASP. The RBF mechanism is coupled with the Global LEAP Awards (led by the US Department of Energy), an international competition to identify and promote the world's best off-grid appliances. A new round of Global LEAP Awards was announced by CLASP at the White House in the week leading up to the International Off-Grid Lighting Conference 2015 in Dubai—33 different TV and fan Global LEAP Awards nominations, by 11 different manufacturers, have already been committed, which is a significant increase over the previous Global LEAP Awards. The RBF project is aiming to incentivize solar companies to buy award winning appliances at scale, thus demonstrating proof of concept to appliance manufacturers and inspiring increased offgrid market activity while delivering enhanced and new energy access benefits. The test methods for evaluating these products were developed by CLASP in support of Global LEAP. First launch of this RBF will be in Bangladesh, and is tentatively scheduled for 28th February 2016. Kenya will follow in later stages of the project. In the initial stages of the project, CLASP will serve as the financial institution for the fund. There will be a strong focus on offgrid appliance market knowledge development through monitoring & evaluation. According to Matt Jordan, the project would be a success if it manages to spark the global market for these appliances.

#### Six months into the project, CLASP found the following challenges:

- Track record or examples of successful RBFs are scarce, slowing project inception and launch
- Structure of the donor funding all-but necessitates co-funding—the source(s) and structure(s) of the cofunding may complicate administration and management of the program

## Eliud Wachira - Senior Credit Officer, MESPT Micro Enterprises Support Programme Trust

MESPT is a Kenyan quasi commercial financial institution that offers financial services as well as institutional capacity building. Out of the 17 RBFs, three projects (mini-grids, ICS and pico-solar) are implemented in Kenya, while two multi-country RBFs (biogas and efficient appliances) include Kenya. MESPT plays fund management role in two tranche 2 RBF projects of EnDev that target acceleration of market entry via sustainable credit line creation, for ICS (with SNV) and pico-solar (with GIZ). Financial Institutions such as Banks, MFIs and SACCOS are incentivized to provide loans to last mile entrepreneurs and end-consumers for buying certain approved multifunctional solar technologies while solar distributors are incentivised to provide flexible payment mechanism for end users via PAYG and credit guarantee to last mile entrepreneurs.

The incentive rate was calculated through private sector participation where applicants were given the opportunity to suggest the rates appropriate to them and an average percentage was developed for the upper limit. The value of the RBF incentive is determined by the credit value extended to the end user or LMEs and the county incentive







rate in which the sale takes place. Less developed and less urbanized counties receive higher RBF incentives based on the following factors:

- County Poverty Index
- · County Development Index
- County Population Density
- Proportion of population in major towns/urban population in a County.

## Martijn Veen -Sector Leader Renewable Energy Tanzania, SNV

SNV implements four EnDev-funded RBF projects, of which the tranche 1 RBF for Pico-Solar project in Tanzania's Lake Zone was showcased during this event. Martijn Veen gave a presentation about this project, starting off with explaining how the RBF is different from other projects that SNV traditionally implemented: 'a shift in practice and thinking is required'. The basis for the RBF Tanzania project was a detailed market intelligence study that had been conducted previously. A solid understanding of the corresponding market is an essential element to design a RBF incentive scheme that can be successful. In this project, suppliers and retailers of Lighting Global approved pico-solar products are incentivized by cash payments and bonus products respectively. The financial institution that was competitive selected to host the RBF incentive fund is the Tanzania Investment Development Bank TIB. Through two competitive calls, ten different import-suppliers were selected to participate in the RBF initiative. Results after one year of implementation are promising, with three new offices opened in the Lake Zone, more than 15 new energy products/services available in the market, over 300 new employments created and 23,000 people with access to clean energy services (this number is expected to go up to 50,000 by the end of 2016). Despite these positive outcomes and the good publicity that the RBF project has received, Martijn warned people not to be too optimistic and remain patient. The project has only just started to show results and the sustainability of impact can only be measured some years from now.

#### Opportunities:

- Liberates the private sector
- Limited costs for the donor in case the implementing parties (solar suppliers) fail to transact (sell picosolar products and claim incentives for these sales)
- Exit-graduation from classically based programming
- Provides means for private sector scaling through mainstream banking

### Risks:

- Transaction is not mandatory
- No control of implementation speed or success (financier)
- Limited possibility to support TA shortfalls in private/financial sector
- Leverage can be challenging as RBF is foreign to traditional finance

## **Round 2 Panel Discussions**

Round 2 of the event (11:00-12:45) was reserved for two separate panel discussions, one private sector and one institutional.

## **Private Sector Panel Discussion**

Participants in this panel discussion:

Jodie Wu - Global Cycle Solutions

• Klaus Maier - Mobisol

• John Keane - Solar Aid/Sunny Money

Hamis Mikate - Ensol

• Graham Smith - Off-Grid Electric

In the private sector panel, all five companies that have thus far submitted claims to the RBF fund in Tanzania participated.







Figure 2: Private Sector Panel Discussion

## Jodie Wu – Global Cycle Solutions (GCS)

GCS is one of the five round 1 suppliers in SNV's RBF project in Tanzania's Lake Zone, selling Lighting Global approved Greenlight Planet products through a network of village level entrepreneurs. GCS has to date been the most active supplier in the project with five claims submitted and the highest selling in terms of units sold.

Jodie explained that the RBF project in Mwanza allowed GCS to setup operations in the Lake Zone of Tanzania. Previously the company was only selling pico-solar products from Arusha and Morogoro and would not have had the means to move to the Lake Zone anytime soon. Through the RBF project GCS has managed to leverage two rounds of debt financing, both worth \$50,000. This financing came from Sun Funder and one other debt financer and was specifically used to fund operations in the Lake Zone. Jodie commended the SNV team for its support and short turnaround time in processing RBF claims. Payment is received within 30 days after claim submission. A challenge of the RBF has been that retailers are now less eager to sell other GCS products like cookstoves and water filters, as they do not receive a bonus payment for these.

#### Klaus Maier - Mobisol

Mobisol is one of the five round 2 suppliers in the RBF Tanzania project, offering Lighting Global approved Mobisol solar home systems - including TV - to rural customers in three years monthly instalments using a Pay-as-you-go modality.

Maier mentioned that Mobisol's participation in the RBF project was severely delayed, because the Lighting Global approval for their system took a long time to come in. Right after the approval documents were received, Mobisol submitted a claim − currently being verified by the independent verification agent − for 2,000 systems that would upon acceptance by SNV deplete their initial RBF share of €80,000. Even though Mobisol was already in the process of opening an office in the Lake Zone before being allowed to take part in the RBF, the project has been helpful in accelerating Mobisol's growth in the area. Maier assumed that Mobisol will be able to continue operations in the Lake Zone sustainably once the RBF funding has expired. Mobisol's detailed customer data management system could be used to analyse the benefits of the RBF. He also mentioned that SNV and Mobisol have been working together closely in Rwanda and Tanzania in the Opportunities for Youth Employment (OYE) programme, through which SNV supports training and job placements for youth.

#### John Keane - Sunny Money/Solar Aid

Sunny Money is one of the five round 1 suppliers in the RBF Tanzania project, offering Lighting Global approved d.light and Greenlight Planet products to rural customers through their school teachers programme.

Keane told the audience that Sunny Money has sold 900,000 pico-solar products (mostly d.light S2) in Tanzania so far; many of which in the Lake Zone. Given these sales volumes without RBF in place, Sunny Money was initially sceptical about the need for this RBF modality. During implementation it turned out that the per product incentive level for the d.light S2 was low. The project further requires full customer sales information (including name, phone number and location) for all sales. Customer sales data was not recorded by Sunny Money before entering the RBF project and it turned out that the benefits of making the claim (i.e. receiving the incentive) did not cover the costs of making the claim (i.e. registering client data). Because of this only a relatively small number of sales could be approved in the one claim that was submitted by Sunny Money so far.





#### Hamis Mikate – Ensol

Ensol is one of the five round 1 suppliers in the RBF Tanzania project, offering Lighting Global approved Omnivoltaic products to rural customers through a network of SACCOS.

Hamis Mikate co-founded Ensol in 2001 and has been selling solar products in the Lake Zone for many years, yet always from the head office in Dar es Salaam. The RBF allowed Ensol to open up an office in the Lake Zone and expand operations in that area significantly. Ensol used the RBF to leverage debt financing worth \$100,000 from Sun Funder; the full amount has already been repaid. Mikate mentioned that the RBF monitoring results were a trigger for the debt financing to be approved. Furthermore, the RBF has allowed Ensol to access larger scale solar projects that required presence in the Lake Zone: a \$400,000 street lights project in Kigoma and a \$100,000 solar water pumping project in Shinyanga Region. He is confident that Ensol will continue its operations in the Lake Zone after the RBF project is over, as Ensol's success has never fully depended on project funding.

## Graham Smith - Off-Grid Electric (OGE)

OGE is one of the five round 1 suppliers in the RBF Tanzania project, leasing out their own M-Power system, a modified version of the Lighting Global approved Fosera system, to customers through a Pay-as-you-go modality.

Graham Smith described the RBF as a 'catalytic financing mechanism'. OGE moved to the Lake Zone because of the RBF project and it has allowed the Lake Zone to become OGE's fastest growing and best performing area. He complimented SNV, saying that: 'dollar for dollar it is a well-designed programme'.

## **Institutional Panel Discussion**



Figure 3: Institutional Panel Discussion

#### Participants in this panel discussion:

Matt Jordan – CLASP

• Arthur Itotia – IFC Lighting Africa

Martijn Veen – SNV

Gunnar Wegner - GIZ/EnDevEliud Wachira - MESPT

During this panel discussion, the participants that had already presented before the break answered questions from the moderator about the RBF projects in which they are engaged, while Arthur Itotia from Lighting Africa joined the panel as well to provide his experience from a finance point of view. Steven Hunt from DFID closed the session with some final remarks As most key statements of the presenters are already included in the section presented above, only the comments from Arthur Itotia and Steven Hunt are mentioned here.

## Arthur Itotia - IFC Lighting Africa

Since the beginning of the RBF Tanzania project in 2013, Arthur Itotia has been involved through his membership of the project's advisory board. He stated that the RBF is a great concept and a good modality for supporting young companies. He stressed that the M&E framework (or RBF verification) should be implemented in a cost effective way by the implementing agency. And the diversity of solar suppliers' business models should be respected. To optimize the outcomes of the RBF, the donor could consider also financing additional activities such



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as training of solar installers and entrepreneurs and demand creation campaigns. Finally, he urged the audience to be patient as market transformation takes time.

#### Steven Hunt - DfID

The closing remarks were given by Steven Hunt. He indicated to be cautiously optimistic about the RBF programme, mentioning the Tanzania case as a clear success story, but warned that the Tanzania RBF is only a limited percentage of the overall RBF portfolio financed by DFID. It is 'music to the ears of donors' that different finance institutions (like Sun Funder) stepped in to finance suppliers because of the RBF project. He says that by now there is a group of people who have experience with implementing an RBF project and they could be very helpful in supporting others. He concluded by saying that the RBF is scalable: 'could there be a Global RBF Fund'?





# Annex 1. Agenda for the RBF side-event

# Results Based Financing in the Off-Grid Lighting Sector

Side-event during the 4th International Off-Grid Lighting Conference and Exhibition, Dubai, UAE

Date: Thursday 29th October, 09:00 - 12:30

Venue: Conference Room - Sheikh Maktoum B, Dubai World Trade Centre

The side event will give a realistic overview of the current status of Result Based Financing (RBF) as a market development instrument in the off-grid lighting sector. First evidence of success will be presented and the private sector, together with donors, financiers and practitioners will also assess the potential of RBF as a new instrument for wider and scaled dissemination in energy sector market development.

Moderated by Drew Corbyn from Practical Action, the panel will bring together the following experts:

- Steven Hunt, Energy Advisor and Deputy Team Leader, DFID
- Matt Jordan, Senior Manager, CLASP
- Jodie Wu, CEO, Global Cycle Solutions
- Graham Smith, Executive, Off Grid Electric
- Hamis Mikate, Managing Director, EnSol
- John Keane, Development Director, Sunny Money / Solar Aid
- Thomas Gottschalk, CEO, Mobisol
- Eliud Wachira, Senior Credit Officer, MESPT
- Gunnar Wegner, Energy Advisor, EnDev-GIZ
- Arthur Itotia, Program Manager, IFC Lighting Africa
- Martijn Veen, Sector Leader Renewable Energy Tanzania, SNV

Agenda		
When	What	Who
09:00 – 09:10	Welcome & Introduction	Drew Corbyn, Practical Action
09:10 - 09:20	DFID and the introduction of RBF in the energy sector	Steven Hunt, DFID
09:20 - 09:30	Overview of the RBF portfolio under the Energising Development (EnDev) programme	Gunnar Wegner, EnDev-GIZ
09:30 – 09:50	RBF incentives to catalyse off-grid markets: Early observations from Global LEAP Awards & RBF off-grid appliance program	Matt Jordan, CLASP
09:50 – 10:10	Building sustainable and affordable credit lines for small solar systems: Experiences from Kenya	Eliud Wachira, MESPT
10:10 – 10:30	RBF for pico-solar market development: Experiences from Tanzania	Martijn Veen, SNV
10:30 – 11:00	Tea break	
11:00 – 11:30	Panel: RBF and scaling business operations in the off-grid lighting market. Experiences from the private sector.	Jodie Wu, Global Cycle Solutions  Graham Smith, Off Grid Electric



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		Hamis Mikate, EnSol
		John Keane, SunnyMoney
		Thomas Gottschalk, Mobisol
11:30 – 11:45	Q&A from audience	Drew Corbyn, Practical Action
11:45 – 12.15	Panel: Opportunities and challenges for RBF	Gunnar Wegner, EnDev-GIZ
	approaches in the off-grid lighting sector. Some topics for discussion:	Matt Jordan, CLASP
	Access to finance / pre-financing	Eliud Wachira, MESPT
	<ul> <li>RBF design in response to specific market conditions / BoP awareness</li> </ul>	Martijn Veen, SNV
	Product quality assurance	Arthur Itotia, IFC Lighting Africa
	<ul> <li>Policy environment (customs, VAT and tax)</li> <li>Monitoring and verification requirements</li> </ul>	
	Additionality of RBF to other mechanisms     Success factors	
	Success factors	
12:15 – 12:30	Q&A from audience	Drew Corbyn, Practical Action
12:30	Closure	Steven Hunt, DFID

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