

30 July 2020

RBFF webinar series: #2 of 4

# Reaching the bottom of the pyramid with RBF – wishful thinking or reality?



# Agenda

Time	Agenda item	Presenter
10:00 – 10:10	Welcome remarks: Rationale and overview of pro-poor approaches in the RBF Facility	Barbara Richard, EnDev HQ (GIZ)
10:10 – 10:25	Pro-poor solar RBF Rwanda: Socio-economic targeting for reaching the base of the pyramid	Sarah-Melissa Leitner – EnDev Rwanda (GIZ)
10:25 – 10:40	PAYGO solar in Tanzania: Reaching last-mile customers using a Vulnerability Access Index	Inga Brill – EnDev Tanzania (SNV)
10:40 – 10:55	Improved cookstoves (ICS) in Malawi: Access to modern cooking energy for poor and vulnerable groups	Mayamiko Minofu – Partner of EnDev Malawi (United Purpose)
10:55 – 11:25	Q&A and Discussion	
11:25 – 11:30	Conclusion	

# Today's Presenters



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# Overview of pro-poor approaches in the RBFF

## South America

Peru

## West Africa

Benin

## East Africa

Ethiopia  
Kenya Pilot  
**Malawi**  
Mozambique  
**Rwanda**  
**Tanzania**  
Uganda Pilot

## South East Asia

Bangladesh  
Nepal  
Cambodia  
Laos  
Vietnam



Cooking energy



Solar



Pro-poor

17

RB  
PROJECTS

46

MILLION €  
VOLUME

DURATION  
12/2012

12/2020



30 July 2020 – Sarah-Melissa Leitner

# Pro Poor Solar RBF Rwanda

Socio-economic targeting for  
reaching the base of the  
pyramid



# Pro Poor Solar RBF Rwanda

## Context:

- Universal electricity access target for 2024 (off-grid target: 48%; off-grid status: 13%)
- Rural Electrification Strategy with strong focus on private sector engagement
- Solar market stagnation around 2017 – 2018
- Main issue identified by companies:

**Affordability**

# Pro Poor Solar RBF Rwanda

## Objective:



**To accelerate access** to electricity for **low-income households** in selected off-grid areas as defined by the *National Electrification Plan* by using targeted subsidies to **increase the affordability** of SHS.

**Implementation period:** November 2019 – March 2021

**Funded by:** DFID & USAID / Power Africa Rwanda

**Implemented by:** EnDev Rwanda, REG / EDCL & Urwego Bank

**Target:** 30,000 households



# Pro Poor Solar RBF Rwanda



**Approach:** Companies incentivised to reach out to lower income households within their existing business models, but receive higher incentive for eligible customer after sale, which is reflected in lower endprice



**Target population:** Ubudehe 1, 2 and 3 households who are

- Living in areas not being connected to the grid by 2024 in 5 pilot districts
- Do not have access to electricity
- Have not owned a SHS prior to the start of the programme



**Incentive level:**

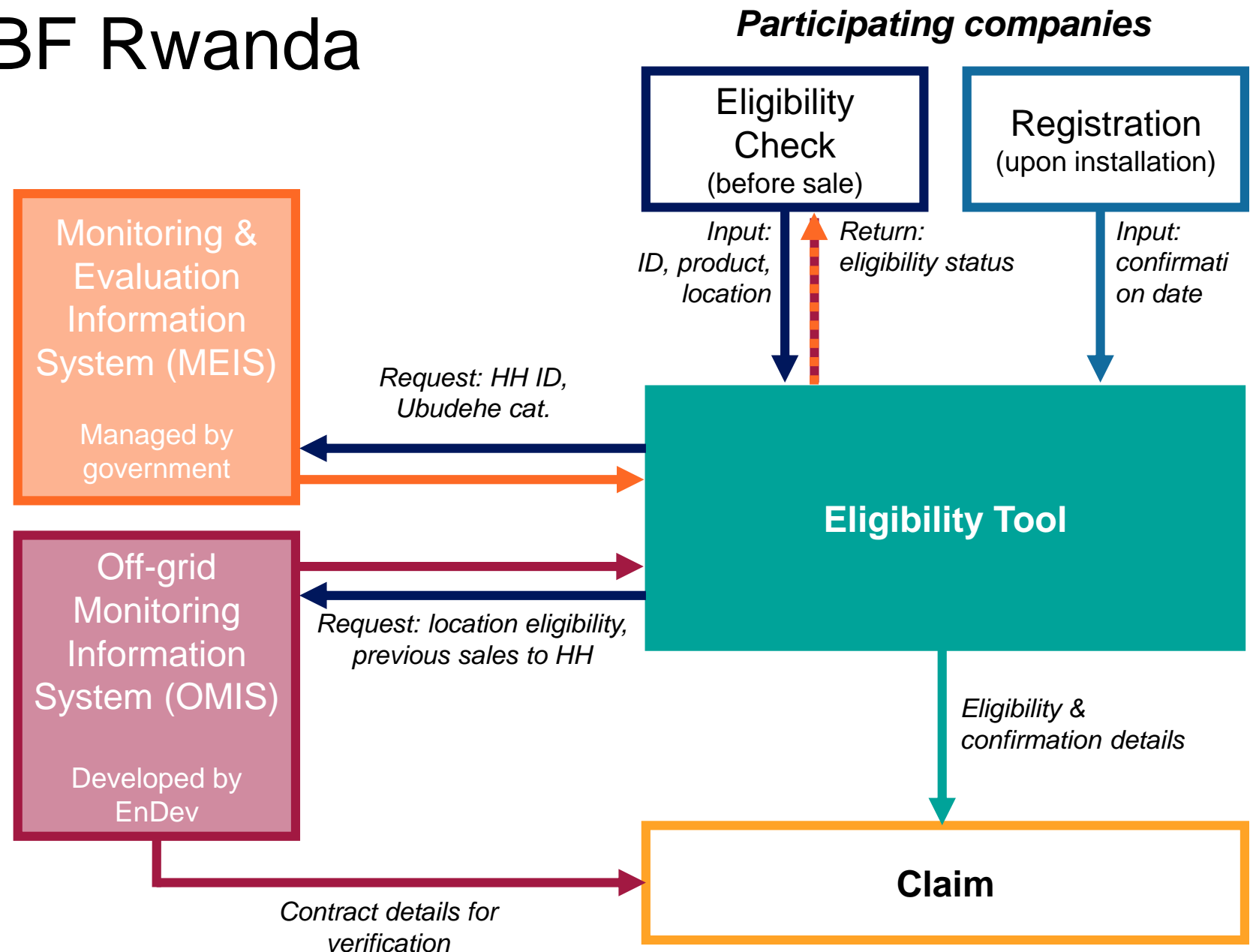
- Varies based on Ubudehe category and product chosen
- Takes into account ability to pay and price of basic SHS



# Pro Poor Solar RBF Rwanda

## Eligibility Tool

- Purpose: check customer eligibility & track subsidised sales
- Developed by EnDev



# Impact to date



**>10.000** SHS registered



**> 47.000** people reached



**>85%** low-income  
Ubudehe 1 households



**>EUR 920.000** in  
incentives committed



**5** companies contracted  
**3** signing contracts

# Challenges & lessons learned

## Challenge

- Avoiding oversubsidisation of lower cost or larger systems
- Programme complexity
- Transferability to other context due to required data

## Lessons learned



- Setting incentive level as both relative (%) and absolute (EUR)



- Capitalising on IT systems



- Possibility to use voucher system and use voucher IDs instead of national IDs for eligibility check

# Key Takeaways for Implementers & Donors

- **Alternative to market-disrupting free giveaways**, but ownership of local government depends on overall policies and priorities (short-term, quick low cost access for households vs. medium to long-term market development)
- **Effective for reaching target market** based on data driven approach, while promoting competition
- Real sustainability to be assessed during programme reviews and at end of pilot
- Pro Poor design is **data driven** requiring consideration of **local data protection regulation** and available data
- **Disbursement schedule design can emphasise different aspects** e.g.
  - Upfront disbursement : lowest price possible
  - Multiple disbursement: focus on continued maintenance and repayment



Thank you for  
your attention!

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30 July 2020 – Inga Brill

# PAYGO Solar in Tanzania: Reaching last-mile customers using a Vulnerability Access Index



# RBF for Rural, Remote and Vulnerable Solar Market Development in Lake-Central Zones of Tanzania



Improve access to quality solar systems through a results-based financing (RBF) mechanism working with the private sector to stimulate the first level of solar growth in more remote interior markets.



Avails financial incentives to quality solar distributors upon the verified sales of Lighting Global approved solar products to rural consumers.



550,000+ people with access to clean energy services (113,000+ systems) through 2.585 Million EUR transacted to the Private Sector over the two Stages (RBF 1: 2013-2018 and RBF 2: 2019-2020).



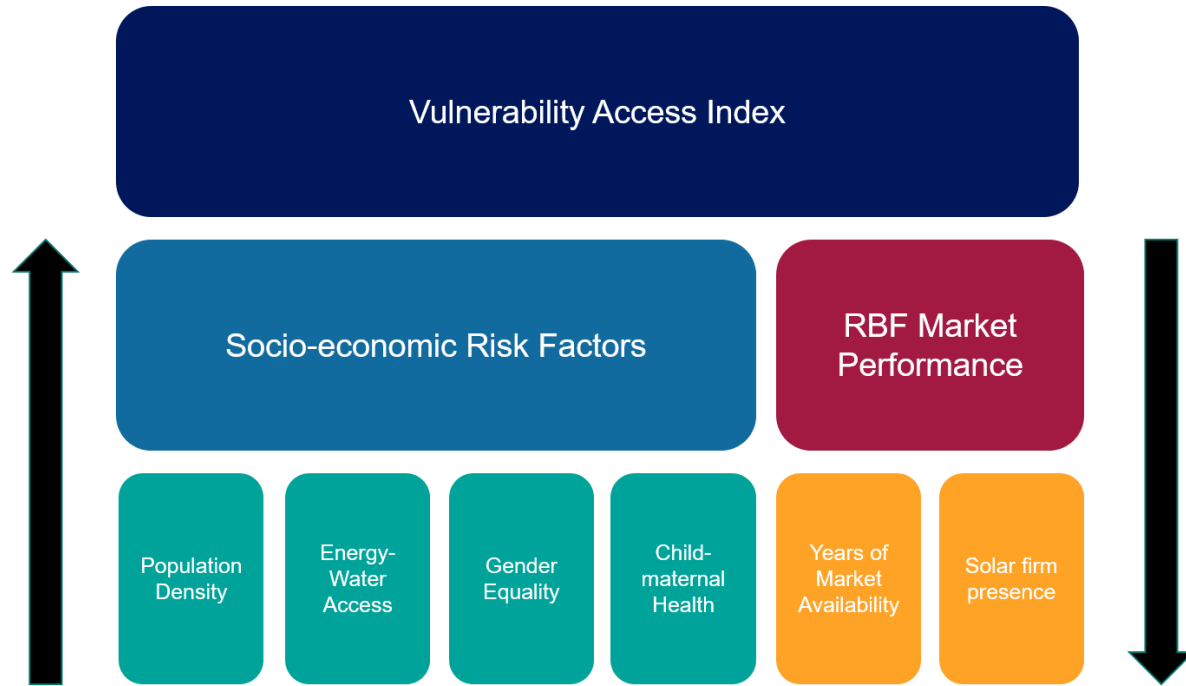
# RBFF in Tanzania

	RBF Stage 1	RBF Stage 2
Timeframe	2013 - 2018	2019- 2020
Incentives deployed	EUR 1.9M	EUR 600K (to date)
Persons gaining access to solar electricity	390,000	160,000
Participating firms	11 firms	9 firms
Market context	Market assessment showed two zones with high latent demand	With high population areas penetrated, focus on more remote markets
Design elements	Fixed incentive values across regions based on Lighting Global (LG) brightness and duration specs	Incentive values based on LG specs and a new Vulnerability Access Index (VAI)
Verification	Independent Verification Agents (IVAs) using phone and onsite	IVAs plus an added Sustainability Verification Agent (SIVA) – 60 Decibels





# What goes into the VAI?

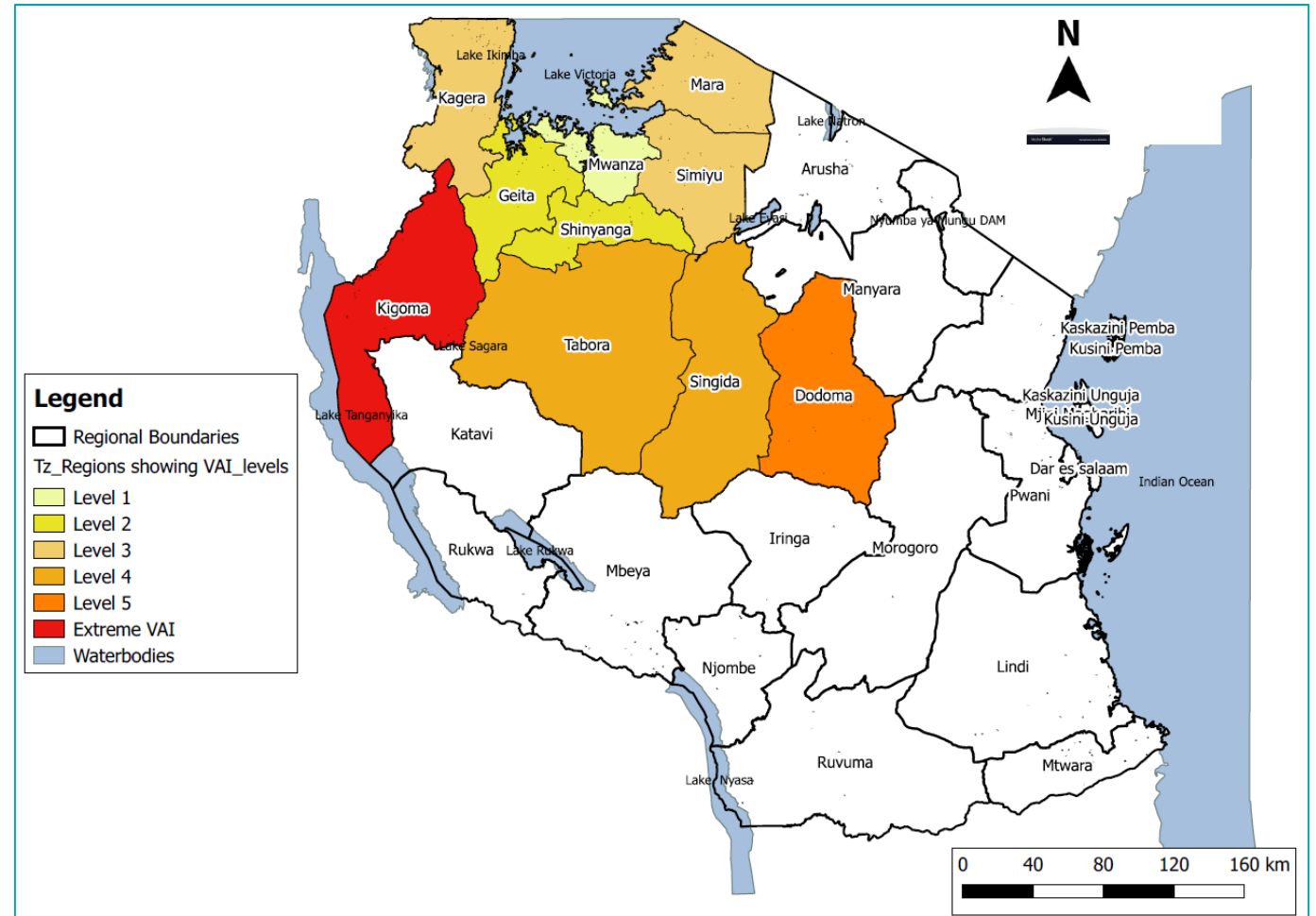


*Regions with the greatest level of socio-economic vulnerability and the lowest level of historical RBF market activity by firms have higher VAI scores.*

# How are the RBF incentives valued? – a twofold approach

## A twofold approach to RBF incentive level calculation:

- **Focus on benefit for people:** RBF Energy Service Units (RESUs) are based on the quality assurance values published by IFC-LA (now Verisol).
- **Focus on remote markets:** The VAI score, corresponding to the regional market where the product has been sold, is then applied to each product's base RESU to calculate the per unit incentive.



# Pulling sales to more vulnerable markets

VAI Level	% Sales RBF 1	% Sales RBF2	Change % Sales RBF 1 v RBF2
1	25.96%	13.91%	-12.05%
2	25.49%	13.41%	-12.08%
3	40.43%	45.28%	4.84%
4	5.73%	16.08%	10.35%
5	2.39%	8.52%	6.14%
EV	0.00%	2.80%	2.80%

- After the switch to the RBF 2 incentive valuation method we see a clear and significant shift in sales numbers from lower-VAI level regions to higher-VAI level regions.
- This is a strong indication of the approach being effective in fulfilling its role as a pro-poor approach.

# Implementing the VAI – Lessons Learned

**A key barrier to pro-poor market development is private sector risk-appetite:**

- Firms are looking for the “Goldilocks” market conditions (balancing opportunity and risk)

**Incentives can be set strategically to support firms to overcome this barrier:**

- VAI incentive valuation may provide risk reduction to engage in more vulnerable markets
- Data from the Sustainability Verification (SIVA) analysis indicates that sales by RBF firms are reaching customers at higher poverty levels compared to the East Africa benchmark

**Incentives with pro-poor targeting need other supporting design elements to succeed:**

- Paired with the Sustainability Verification (SIVA) approach firms learn how they can adjust their strategy to meet customer needs in these nascent markets
- The VAI can only go so far – extremely vulnerable markets need more than after sales financial incentives to accelerate (example: Kigoma humanitarian setting)





“It has helped us to get good light in my house, and my children can study well especially during this time when the schools have been closed due to this pandemic. They get quality time to study during the night since it is always available”.  
– *RBF Supported PayGo customer*

Thank you for  
your attention!

Inga Brill  
Energy Sector Leader, SNV Tanzania  
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## ACCESS TO MODERN COOKING ENERGY FOR POOR AND VULNERABLE GROUPS

30 July 2020  
Mayamiko Minofu



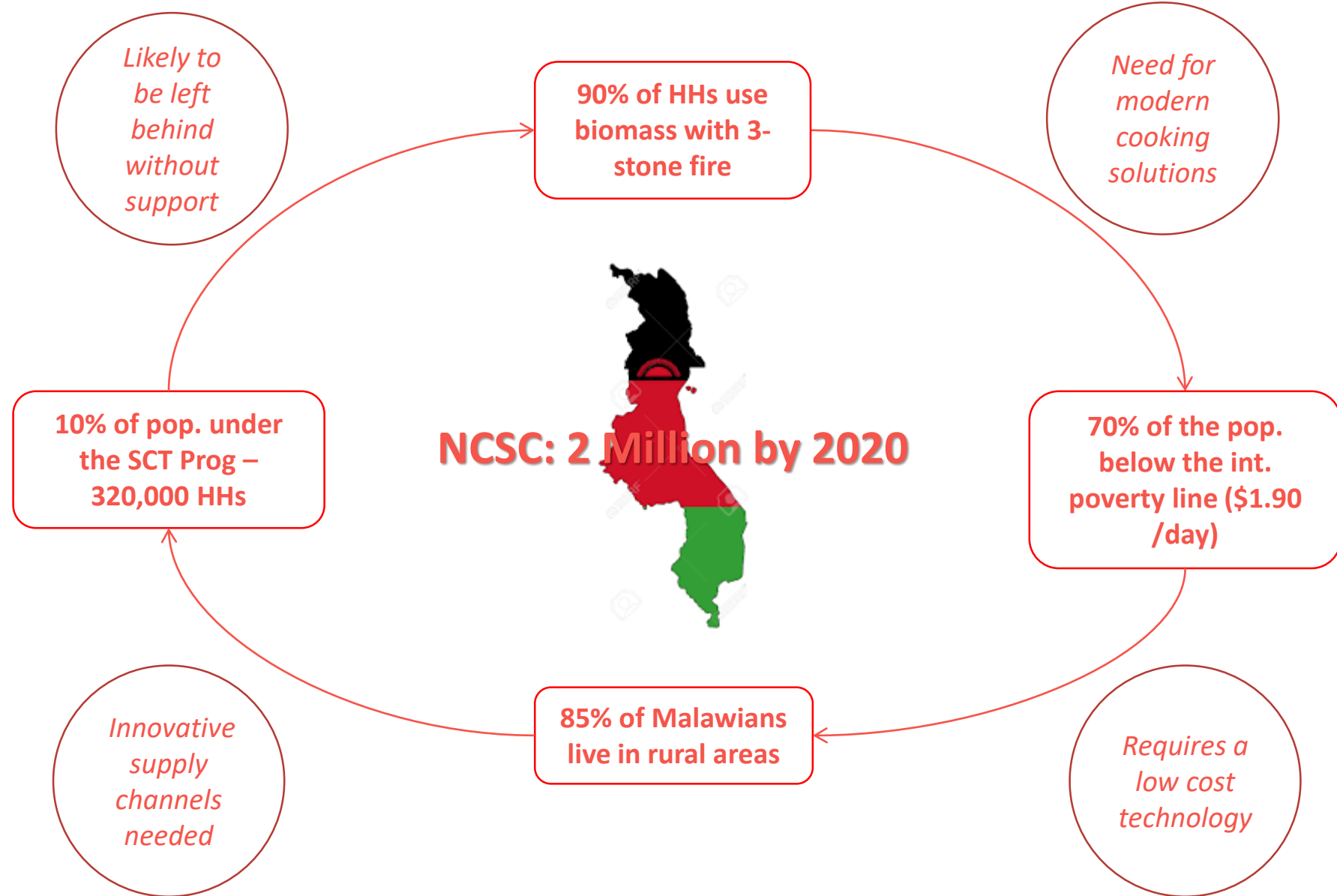


# CONTENTS

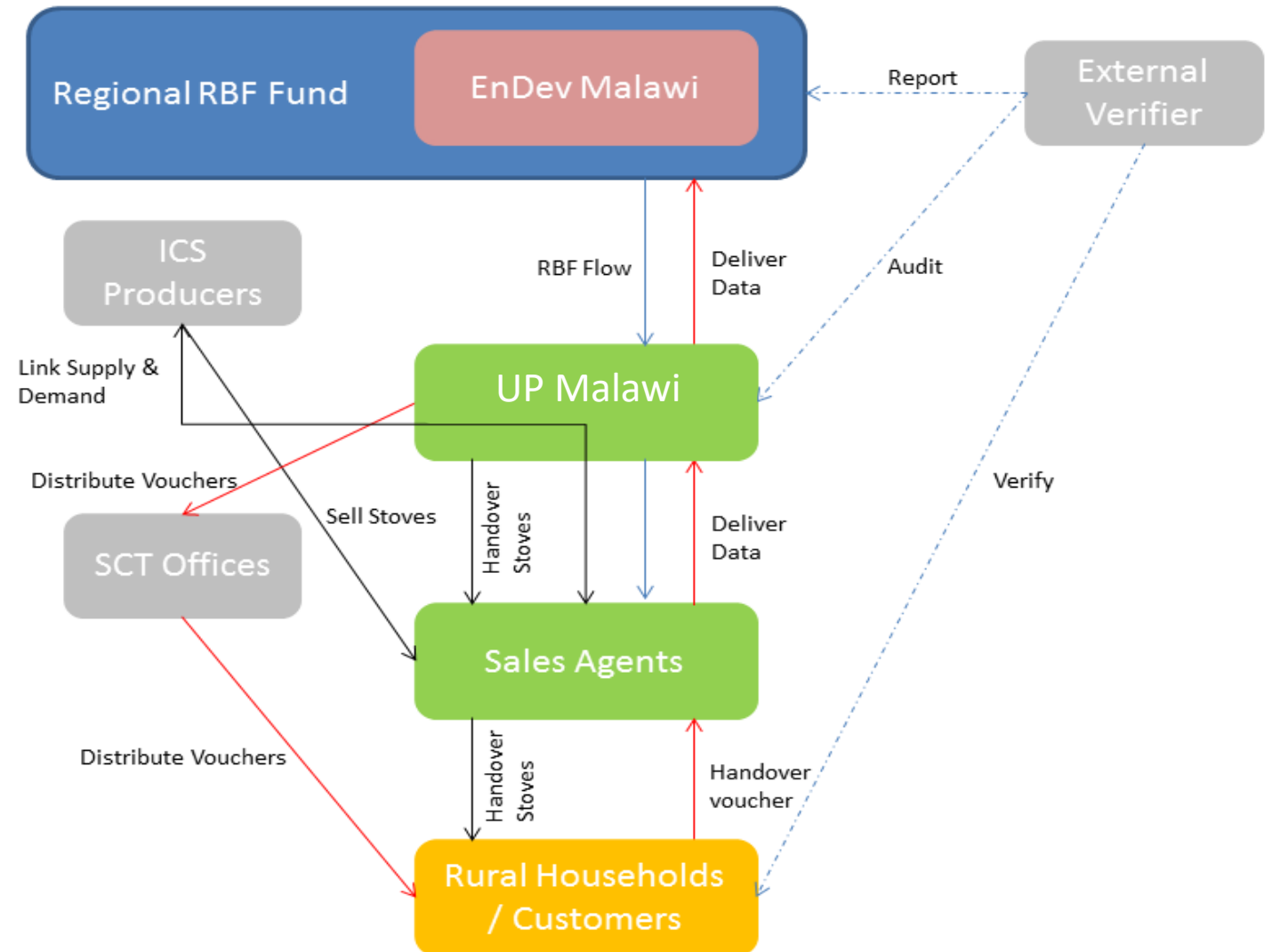
- Context and Design
- Pre-Project Scenario
- Post-Project Scenario
- Actionable Learning
- Key Challenges



# CONTEXT



# PROJECT DESIGN



# PRE-PROJECT SCENARIO

- Distribution of stoves focused on urban and peri-urban areas
- 1 of 18 districts were covered with this approach
- Rural stove production groups saturating local markets
- Weak rural distribution channels for last mile distribution
- Negative user Perceptions of the stove: Not durable, heavy, expensive

Parameter	% Response
Own a Chitetezo Mbaula	3%
Know of Chitetezo Mbaula	60%
Know where to buy	7%
Preference for 3-stone	56%

# POST-PROJECT SCENARIO

- 12 out of 18 districts covered
- 135,000 rural households with stoves
- Increased and sustained production of stoves
- Improved distribution channels:  
Network of agents across districts
- Private sector replicating approach
- Over €115,000 earned by MSMEs

Parameter	% Response
Own a Chitetezo Mbaula	10-15%
Know of Chitetezo Mbaula	93%
Know where to buy	59%
Preference for CM	89%





# ACTIONABLE LEARNING

- Structured and efficient way to provide pro-poor energy access subsidies
- Guaranteed market drives production volumes and improves quality
- Word of mouth from users is best way to increase awareness
- Uptake and sustained use has been high
- Reaching low income rural households, requires higher incentives
- Commercialisation Chitetezo stove in this approach progresses slowly, requires more time and resources





# CHALLENGES

- Submission, verification and payment of claims takes time, resulting in cashflow challenges
- Implementation highly affected by changes to SCT programme
- Distribution between producers and retailers still requires support
- Once stove exceeds useful lifetime, distribution will have to be done again



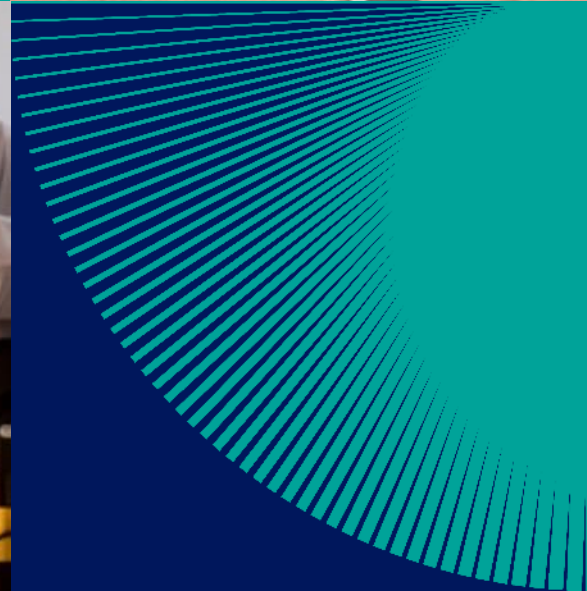
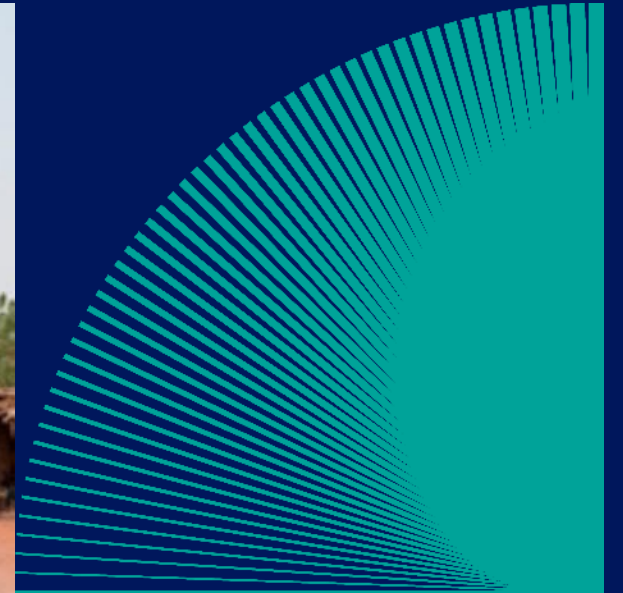
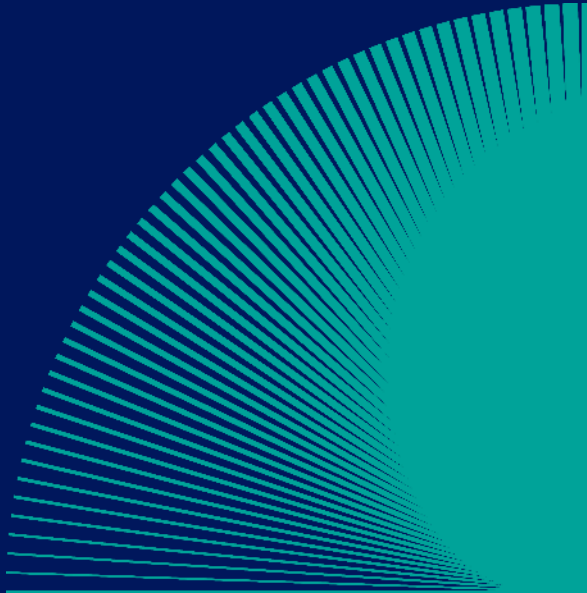
**United  
Purpose**   
**Beyond aid**

## Q&A and Discussion

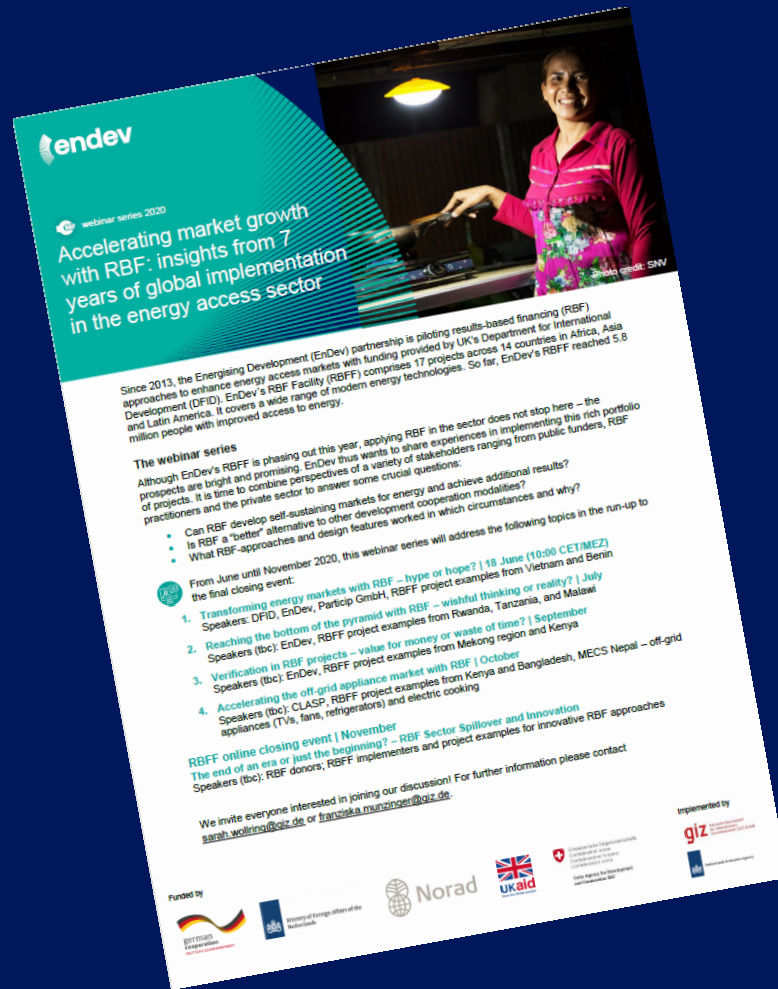
Reaching the bottom of the  
pyramid with RBF— **wishful  
thinking or reality?**

- Please ask questions in the chat box.
- Indicate name/organisation and who it is addressed to.

# Conclusion



# Thank you for joining us today!



Next webinar:

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