SMART RBF
for achieving radical scale-up of Minigrids in Africa

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Overview

- Background
- Key Principles
- Why we need this facility
- Experienced Developers
- Subsidy and simplicity
- SMART RBF

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Background on Previous RBF Programs:

- Previous RBF programs in Kenya and Tanzania pioneered by DFID, SIDA & others helped companies in “learn by doing”

Key learnings and challenges emerging from these included:

- Average time from announcement of subsidy programs to first deployment is >3 years
- Companies (especially small ones) can’t sustain their business while waiting for concessional funds to be deployed
- Payment challenges also created uncertainty for investors that these programs were meant to be crowding in.
- While waiting for concessional money it is very hard to hard to raise funding and build sites (it’s common for developers to spend 2+ years to raise funding for 2-3 sites. This will not scale)
- Due diligence was heavy and at times incredibly cumbersome, as was time spent helping consultants design the program

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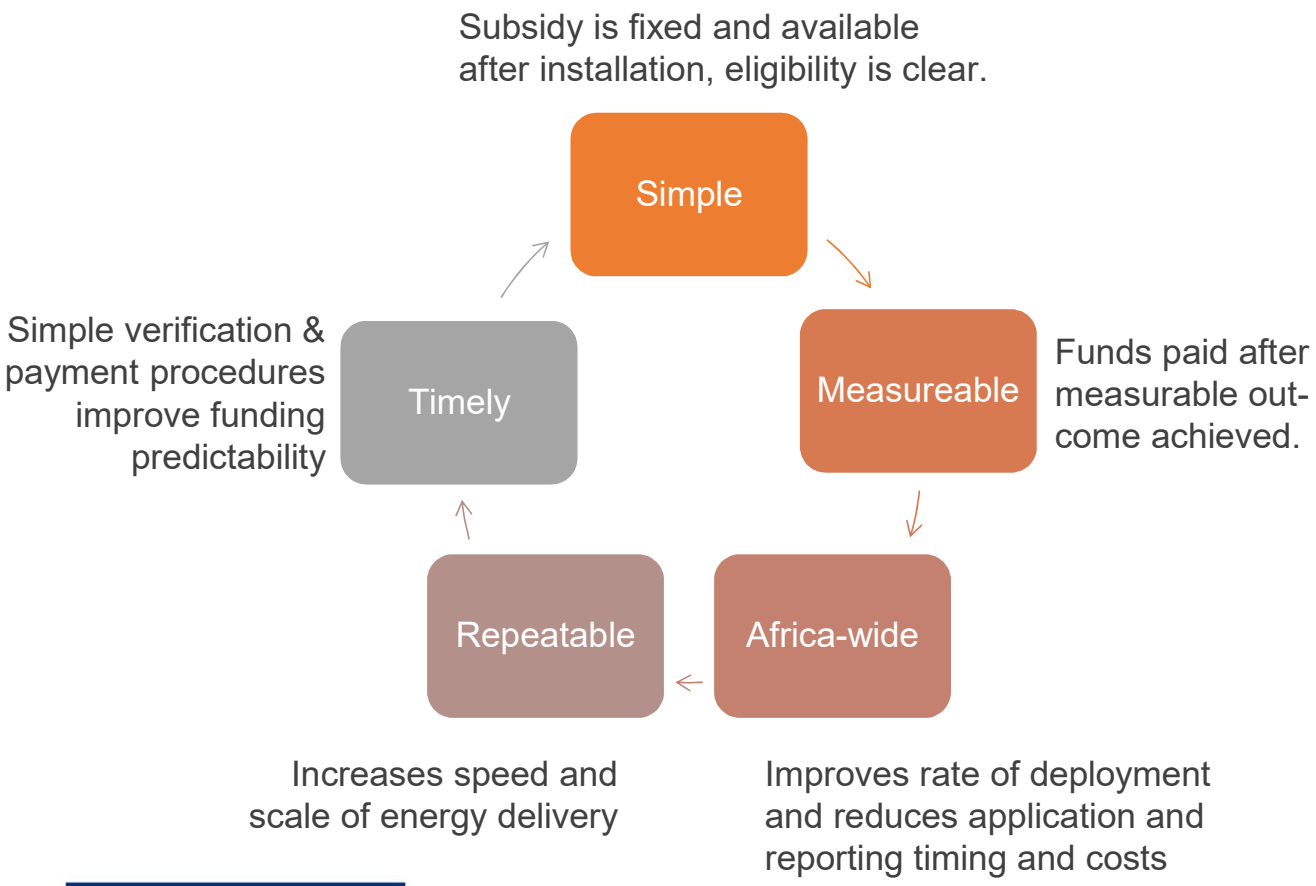
Principles of SMART RBF



Truly results-based – no funding until the connection has been made

Specifically scale-up subsidy, so developers need a technically-sound, operating site to pre-qualify

SMART RBF aims to leverage smart technology to reduce costs and provide transparency

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WHY DO WE NEED THIS?

Rural Energy Access requires subsidy. ***Universal Electrification has never been achieved without it.***

Current Subsidies in Africa are slow, uncertain, & non-repeating – which deters private investment

Predictability on how & when funds will be deployed provides confidence to investors

To create radical scale, funds funds need to be at scale as well, and must be long term and reliable to unlock private capital.

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Why Experienced Developers

MG companies and concessional support to them are both locked in a never-ending “pilot” phase.

We need to move to portfolio sizes > 50. A subsidy fund that can do that will be different than a fund that supports market entry.

We need to scale up with companies and infrastructure that have already been proven

We still need early stage subsidy but they need to be managed differently. Existing programs should be part of a continuum of finance that is need to scale.

SECTOR SUPPORT EVOLUTION

1. **Company creation**: Own capital / angel capital and TA for new companies
2. **Proof of concept**: Seed grants / early impact investors for pilots
3. **Growth/scale**: Debt needed for scale but not available = systemic grants required to unlock this capital in new/risky sectors.
4. **Maturity**: risk reduces as sector matures, grants become less necessary

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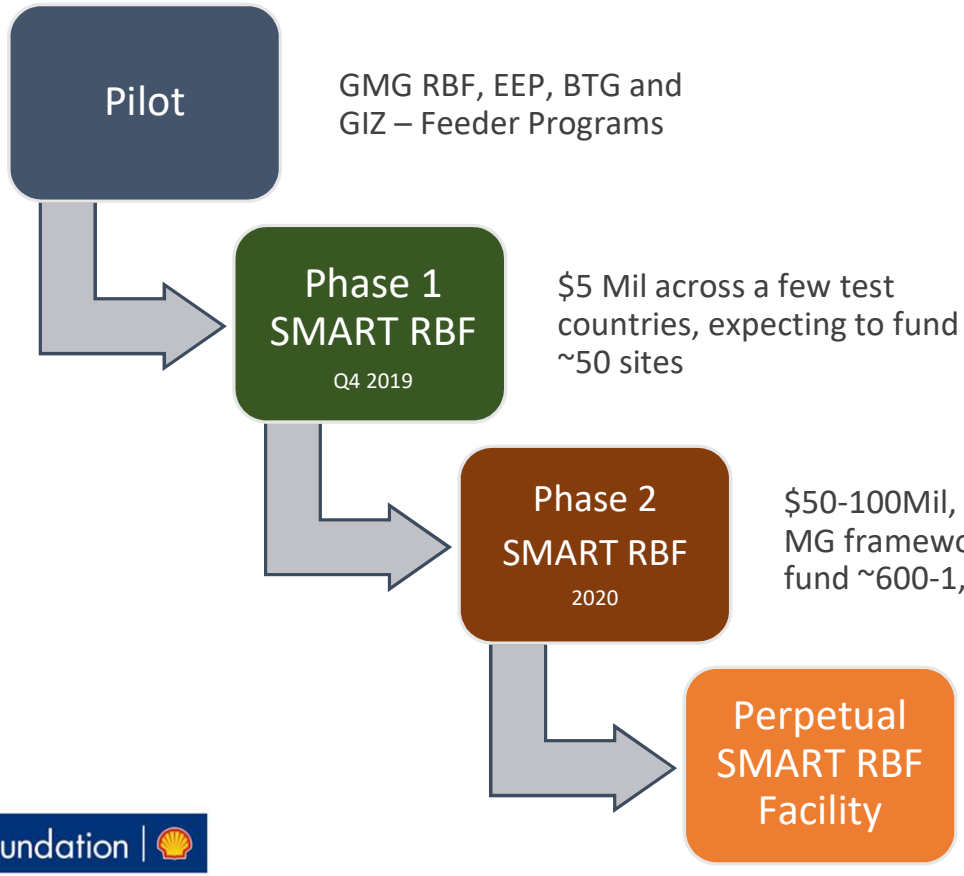
Fund Evolution



GMG RBF, EEP, BTG and GIZ – Feeder Programs

$5 Mil across a few test countries, expecting to fund ~50 sites

$50-100Mil, all countries with MG frameworks, expecting to fund ~600-1,200 sites

Ongoing fund of $XYZ million. Developers agree to share data to inform subsidy evolution and crowd in other financiers.

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Subsidy simplicity

SMART RBF will start at $500 per connection – based on prior amounts & reflective of modeling by RBF Task Force.

Amount will be modified as market data improves (economies of scale, Company IRR's, Tariff Pricing & regulatory risk)

This imperfect amount will be a smaller % of CAPEX for some sites and larger for others, but its consistency is important for simplicity and scale

As more sites are built, improved data will allow complexity and refinement to promote minigrids in even the hardest to reach areas.

Cost reduction will be built in with pre-scheduled reductions to create discipline but allow developers time to refine business models

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How it works

Scale-up Subsidy – The initial fund is only for experienced developers

The facility would like to partner with earlier-stage subsidy programs who will help first-time developers qualify for SMART RBF. (GIZ, EEP)

Subsidy is managed through a web portal with smart meter integration

Pre-Qual

Operating Existing sites (where possible verified through smart meters)

Legally registered in the application country(s)

Regular Calls for Proposal (for initial Phase 1&2)

Scored on Facility Rubric (currently being finalized)

Once the fund is sufficiently large enough this will become a rolling application

Award and Earmarking

Developers have a limited period of time to implement

New connections will be remotely verified through smart technology

The Facility will conduct random audits on connections

The Facility will have zero-tolerance policy for fraud by subsidy recipients

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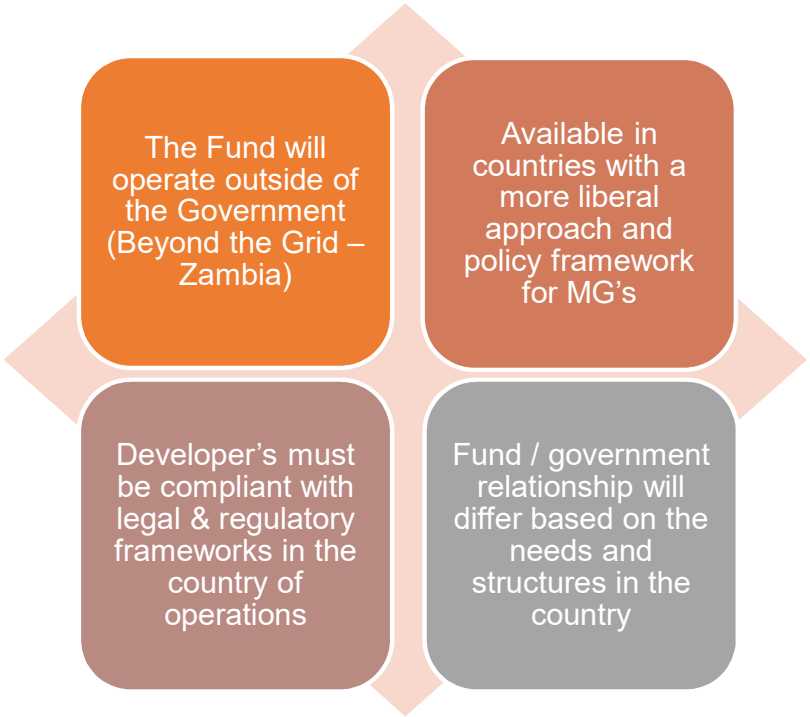
How SMART RBF works with Government



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Thank you

Why Pan-Africa RBF

(and not country specific)

- Developers work regionally and have expansion plans beyond a single country
- Consistency in how concessional money is deployed improves the rate at which sites are developed and provides consistency in the application process
  - This in-turn helps ensure technical consistency and standards across the continent

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WHEN WILL LOW COST TENDERS BE VIABLE?

- When there is data to better understand the real costs of operating and deploying sites in these markets (particularly to rural customers)
- Predictability in the policy and licensing (so developers have predictability in revenue's to support a bid)

What you have in traditional Utilities Low Cost Tenders

- Historical Cost Data
- Government Offtake Guarantees
- Forex Risk Adjustment
- Reliable information on Offtake(s)

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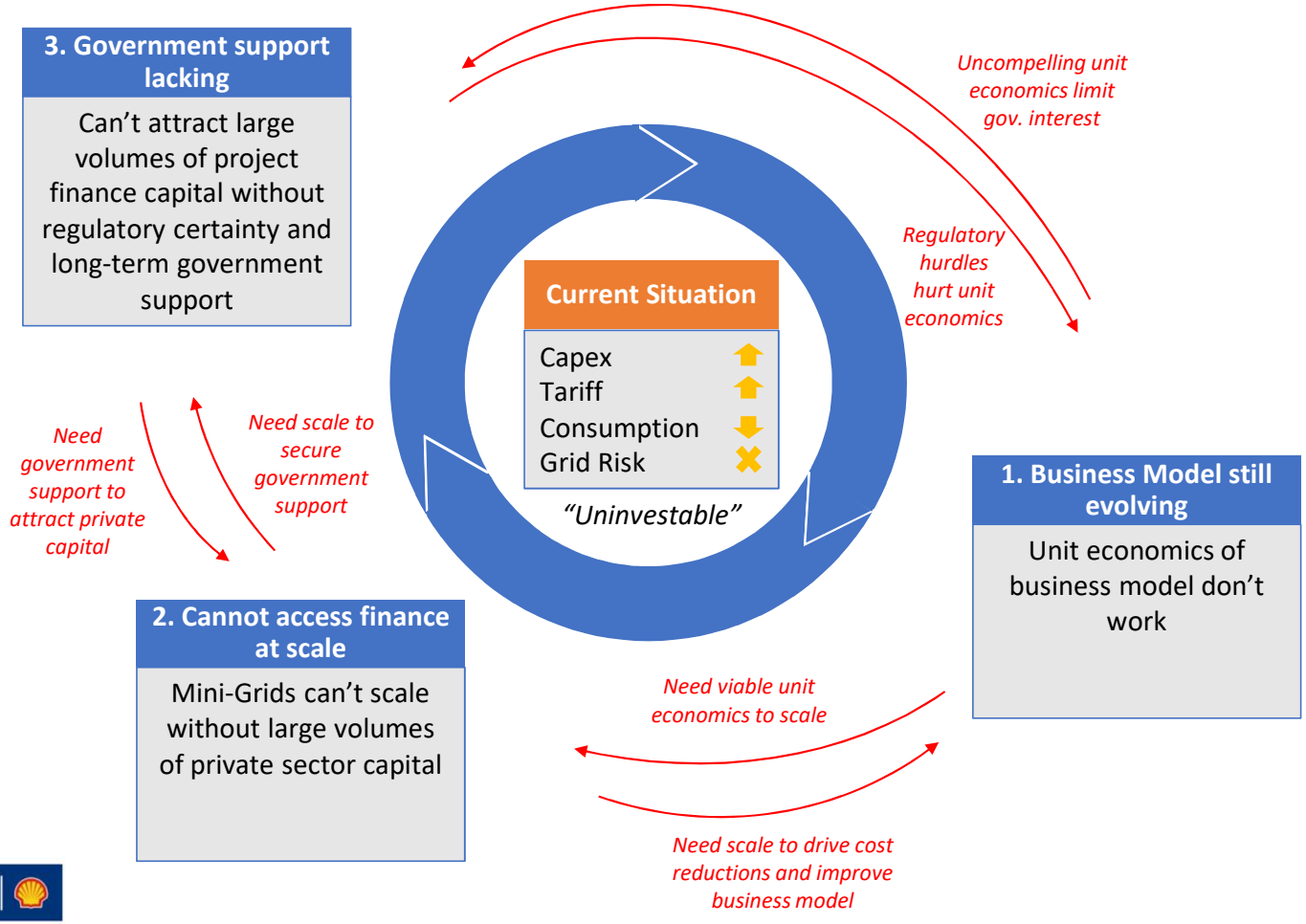
Mini-grids are currently stuck in a ‘doom loop’: need (i) improved unit economics, (ii) finance to scale and (iii) government support to thrive



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