Sustainable Energy Fund for Africa

Structuring finance for GMGs: An MDB perspective

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SEFA is a multi donor 'special fund' administered by the AfDB, with a focus on private sector led renewable energy deployment

Objective Contributing to universal access to affordable, reliable, sustainable, and modern energy services for all in Africa, in line with the AfDB New Deal on Energy for Africa and the Sustainable Development Goal 7

Green baseload Increasing the penetration of renewable energy in power systems, with a focus on power system stability and alternatives to fossil-fuel baseload generation options.

Green mini-grids Accelerating electricity access to underserved populations through private-sector led isolated/independent mini-grid systems.

Energy efficiency Improving the efficiency of energy services through enabling frameworks and new business models, also including clean cooking and small-solar technologies.

Technical Assistance

- Policy Advisory
- Program Design
- Project preparation
- Capacity Development

Concessional finance

- Grants
- RBFs
- Risk mitigation
- Concessional debt
- Equity type investments

SEFA mini-grids support is being provided at country level programmes (TA and investment), and into 'investment platforms'

SEFA GREEN MINI-GRIDS STRATEGY

Country level programmes

Technical assistance

- Technical assistance provided to support countries to develop appropriate enabling environments for **private sector led GMGs**

Concessional investment

- Concessional investment typically viability gap financing in the form of grants
- Potential to offer other products, e.g. concessional debt or other interventions (e.g. risk mitigators)

Platform investments

Concessional investment

- SEFA unable to fund at a developer level (transaction sizes too small)
- Aiming to provide catalytic finance to intermediaries, or platforms aiming to catalyse GMG funding
- Concessional investment in the form of junior, or concessional products. Often grant, or low cost, junior debt

Africa Mini-grid Acceleration Programme

- 4 year, $7m TA programme
- Focus on developing enabling environment, identifying sites, designing financing packages, supporting procurement processes
- Supporting 8 countries through range of engagements

DREAM programme, Ethiopia

- Pilot programme of 9 GMGs designed **to couple irrigation loads with household electrification**
- Provision of c.$7.5m in concessional debt alongside GEAPP VGF
- 9 GMGs, 2MW, 2,500 connections
- 1,000 tCO2eq GHG emission reductions per year

Don't invest in individual GMG developers – transaction costs too high

Private sector GMGs are still very nascent, and despite our best efforts, we're struggling to get projects off the ground

Private sector led GMGs still very nascent

78.000 — **Total number of connections installed**

Of which **nearly 26,000 were built in 2021**

81 million — **Households**

Requiring mini-grid connection across sub-Saharan Africa

Not enough pipeline

- Simply not enough pipeline of private sector led projects for us to invest our de-risking pipeline
- Our existing projects take a very long time
  - Burkina Faso Yeleen – over 3 years
  - DRC Metro-grids – over 3 years
  - DREAM – over 2 years
  - Togo GMGs – over 3 years

What's going on?

Key barriers which plague private GMG roll-out are well known, but can be traced back to Governments' starting positions on GMGs

Key barriers to GMG roll out…

Unclear regulatory environment for the private sector (licencing arrangements, tariff structuring, technical standards, performance standards, arrival of the grid approaches)

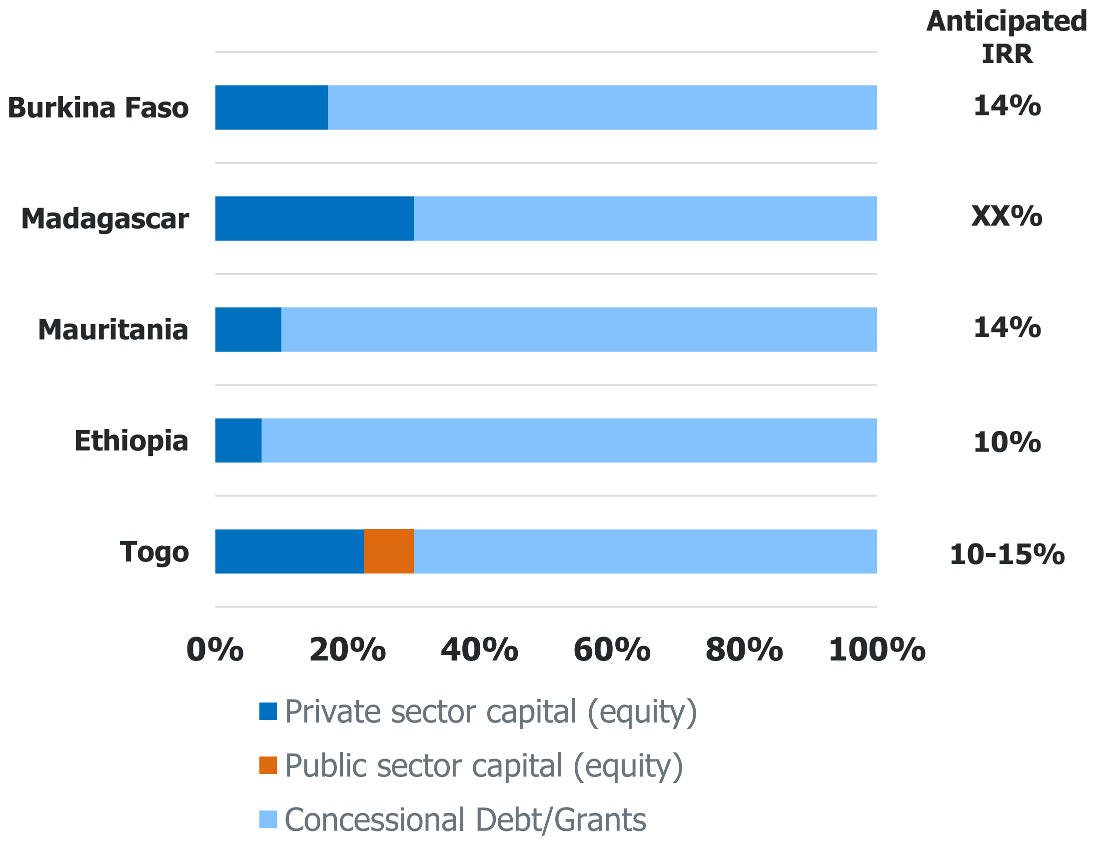
Lack of commercial viability – lack of tariff flexibility combined with low abilities to pay, low demand environments, lack of productive use

…can be traced back to Government strategy

- Government scepticism of the private sector participation
- Limited awareness of the potential advantages of private sector participation i.e. the potential for leveraging of private capital to accelerate roll out, the technological and business model innovations which improve performance and service delivery
- Government espousal of heavily subsidized tariffs as part of the historical approaches to service delivery
    - Energy is a public benefit
    - Political ramifications of differentiated tariffs,
    - Genuine local abilities to pay

This typically results in limited scope for private sector participation in GMG programmes

Typical capex structuring in GMG programmes…



…shows limited scope for private capex

- Desire for managing tariffs means
  - Private sector investment is typically limited to 10-20% at most
  - Typical IRRs for private capital are anywhere between 15-20% - any higher and there's no scope for the private sector to participate
- SEFA being called upon to provide concessional funds to 'platforms' so that the private sector can be competitive at a project level

Our focus is therefore on structuring programmes which promote the private sector – we're not concerned by margin

So how is SEFA trying to promote private sector participation?

Coaching 'TA'- Increasingly trying to provide 'coaching' services to government beneficiaries upstream of programme development. Includes embedded advisors

Standardised market development approaches - Standardized approaches to enabling environment (regulatory texts, concession contracts, tariff models) and site identification (GIS, AI based) – AMAP library, SMG library, GetTransform…

Evolving our finance offering to cover the viabilty gap – Combination of pure grant, RBF, concessional debt, and starting to think about de-risking finance for demand, currency etc. And don't worry about over-subsidy

Get the private sector in, no matter how small their participation – 20-30% capex is often as good as its going to get

Focus on quality of service delivery – making sure procurement approaches focus on track record

Focus on ability to promote ARPUs – demonstrated ability to stimulate demand within networks by deploying consuming business models – for commercial viability, and economic development

Some recommendations for regulators

Some potential recommendations for regulators

Don't redraft regulatory tools and models from scratch – often because 'country A' is unique. Doesn't leverage a lot of the learning that's been done to date, and often results in unbankable models which have to be revisited. Enough best practice available. E.g. AFUR tariff settlement tool

Don't worry about the private cost of capital - is it within a realistic range? In which case, all good

Use the first projects to learn about costs – The only way to get a strong understanding of the cost of operations is to build experience. Whilst some benchmarks are available, accept that the first 50 mini-grids are for learning, and will build up the database on knowledge

Don't squeeze the margin – Focus on the sustainability of the developers. Affordability can then be addressed through subsidy

Focus on quality of service delivery – Procurements need to focus on ensuring quality installements, and future price reviews need to focus on how the site has performed