

# **Beyond the Grid Fund for Africa (BGFA) – Burkina Faso**

STAKEHOLDER CONSULTATION WORKSHOP OUTCOME REPORT

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## CONTENTS

<b>INTRODUCTION</b>	<b>3</b>
<b>1 BACKGROUND</b>	<b>4</b>
<b>2 WORKSHOP PROCEEDINGS</b>	<b>6</b>
2.1 Opening statements.....	6
2.1.1 Swedish Embassy in Burkina Faso .....	6
2.1.2 Ministry of Energy .....	6
2.1.3 Renewable Energy and Energy Efficiency Partnership .....	7
2.2 Setting the scene .....	8
2.2.1 Cooperation programmes supported by the Swedish Embassy .....	8
2.2.2 Initiatives promoting off-grid electrification .....	8
2.2.3 Current and future regulatory frameworks for off-grid energy access .....	9
2.2.4 Business models for the construction of biodigesters .....	10
2.2.5 Main challenges and opportunities for the private sector .....	11
<b>3 GROUP DISCUSSIONS</b>	<b>11</b>
3.1 Group 1: Micro/Mini-grids .....	11
Key outcomes, issues and concerns .....	11
Recommendations for BGFA .....	13
3.2 Group 2: Solar kits and solar home systems .....	14
Key outcomes, issues and concerns .....	14
Recommendations for BGFA .....	15
3.3 Group 3: Bioenergy and clean cooking methods .....	15
Key outcomes, issues and concerns .....	15
Recommendations for BGFA .....	16
3.4 Group 4: Social and development issues.....	17
Key outcomes, issues and concerns .....	17
Recommendations for BGFA .....	18
<b>4 CONCLUSION AND NEXT STEPS</b>	<b>18</b>
<b>Annex 1: Workshop Agenda</b>	<b>20</b>
<b>Annex 2: List of Attendees</b>	<b>22</b>
<b>Annex 3 - Discussion group questions</b>	<b>24</b>
Theme 1: Mini-grids, business models and financing requirements. Implications for YiiteFaso .....	24
Theme 2: SHS, business models and financing requirements. Implications for YiiteFaso	25
Theme 3: Bio-energy and clean cooking, business models and financing requirements. Implications for YiiteFaso .....	26
Theme 4: Social & Development Issues .....	27
<b>Annex 4 - Presentations</b>	<b>28</b>

## INTRODUCTION

This report presents the proceedings and outcomes of a **Stakeholder Consultation Workshop (the “Workshop”)** held in Ougadougou at the Splendid hotel on the 7<sup>th</sup> of November 2019 to complement and inform the Market Scoping Phase of the Beyond the Grid Fund for Africa (BGFA).

BGFA has an initial funding target of €48 million. The programme is funded by the Government of Sweden through the Swedish International Development Agency (Sida). It seeks to create sustainable markets for distributed and stand-alone off-grid energy services in rural and peri-urban Africa. BGFA is based on the successful model of Beyond the Grid Fund for Zambia (BGFZ), which in 2.5 years of operation has helped connect over 150.000 Zambian households, businesses and institutions to clean, affordable energy. These connections are deployed by private sector energy service providers through solar powered mini-grids, solar home systems and cookstoves supported by innovative PAYG business models and financing schemes. Replicating this approach, BGFA is now targeting 1 million new connections through first funding rounds in Burkina Faso, Liberia, Mozambique and a second round in Zambia. Further countries are expected to be added in 2020. BGFA is managed by the Nordic Environment Finance Corporation (NEFCO) as Facility Manager and implemented by the Renewable Energy and Energy Efficiency Partnership (REEEP) as Implementation Manager.

The Workshop in Ouagadougou was an integral part of the Market Scoping Phase, which is assessing the opportunities and risks for the Fund in Burkina Faso and the other BGFA countries. Starting in June 2019 this activity is planned for a 9-month period and includes desk research, literature review and stakeholder consultations with key government departments and agencies, donors and multilateral organisations as well as civil society and the private sector. This interactive Workshop constituted the first major engagement with the private sector and was conceived to be interactive and participatory. The Workshop was principally targeted at private sector enterprises, both local companies already active in Burkina Faso, and international companies interested in potentially entering the market. Invitations were sent to a database of companies and contacts compiled through the BGFA Scoping Phase activities and complemented through the networks of the Swedish Embassy, NEFCO, REEEP, PFAN, GOGLA, AMDA, AfDB etc.

The workshop brought together stakeholders from public institutions, the private sector and other technical and financial partners in the renewable energy (RE) and off-grid sector in Burkina Faso to present the programme to participants, gather information on the local energy market, and generate ideas for the design and development of a first funding round tailored to Burkina Faso. One hundred participants took part in the workshop, representing companies from a large range of sectors including solar homes systems, mini-grids, clean cooking fuels, improved cookstoves, as well as commercial banks, a microfinance institution, consumer goods distributors, agri-inputs suppliers and others. The businesses included both companies already active in Burkina Faso and some companies considering entering the market. The Ministry of Energy, the Rural Electrification Agency (ABER), the National Agency for Renewable Energy and Energy Efficiency (ANEREE), the Regulatory Authority (ARSE), the National Programme for Biodigesters (PNB), and the Chamber of Commerce represented the public sector. Development partners and NGOs also attended the workshop. The workshop agenda is available in Annex 1, a list of participating companies and institutions can be found in Annex 2.

This report provides an overview of the proceedings of the workshop as well as a summary of the principal outcomes and recommendations of the various working groups. These recommendations will complement the information and insights gathered during the Scoping Phase and will flow into the analysis that will in due course result in recommendations for the design of the Funding Windows for the Fund in Burkina Faso and the other BGFA target countries. Similar activities have been carried out in all the BGFA target countries to ensure due process, maximum transparency and open access.

## 1 BACKGROUND

Nearly two out of every three people in sub-Saharan Africa live without access to electricity, and are unlikely to be connected to central utility grids in the foreseeable future. Decentralised renewable energy (DRE), delivered by market actors directly to consumers, has been proven in nascent and emerging markets across Asia, Africa and Latin America to be more efficient and effective in quickly expanding energy access to underserved rural and peri-urban areas than traditional approaches such as centralised power grid expansion.

Against this background, the **Beyond the Grid Fund for Zambia (BGFZ)** was launched in 2016 at the initiative of the Swedish Government. BGFZ is implemented by REEEP and forms part of the Power Africa initiative, which is supported by a number of donor governments, including Sweden. BGFZ contributes to progress towards *Sustainable Development Goal 7 (SDG7) – Ensure access to affordable, reliable, sustainable and modern energy for all.*

Initial results of the Beyond the Grid Fund for Zambia (BGFZ) have shown that innovative results-based financing can be a powerful instrument to guide, support and incentivise early private sector movers to accelerate market development and scale up business ventures in frontier off-grid energy markets. By providing smart incentives for firms to provide high volumes of energy services over a defined period of time, such instruments can empower companies to rapidly mobilise private investment and scale operations to accelerate development of markets otherwise perceived as too high risk.

### **Incentives and Procurement**

The cornerstone of BGFZ is a public procurement approach to market-based electrification, in which private sector bidders offering the best “value for money” – capable firms offering a credible business plan, high quality services and customer care, reaching as many customers as possible with the lowest demands on public finance – are awarded results-based contracts to deliver specified outcomes. In the Zambian experience, these contracts have proven to be catalytic in creating new markets and attracting equity investment and impact debt (including crowdfunding), in addition to other forms of financing.

BGFZ provides early working capital in the form of start-up grants and predictable results-based revenue streams that contribute to the sustainable growth of a company. It bridges a key gap between early-stage innovation capital, such as that provided by challenge funds, and concessional-to-commercial capital provided by impact investors, development banks, DFIs and others.

## **Platform for Market Change**

In Zambia, the programme also provides significant technical assistance to support internal reform and capacity building. Based on the experiences of the contracted companies, the programme identifies market risks and challenges. These are addressed together with government, development partners, financial and private sector stakeholders in an Off Grid Energy Task Force, which meets regularly.

## **Market Intelligence and Analytics**

Finally, the programme collects and analyses critical data and information on deployments of connections from contracted service providers, delivering a high degree of security in verification of results, and contributing to efforts to help market stakeholders improve investment and other development-related decision making.

The implementation of the first BGFZ round (Zambia I) began in July 2017. Overall, the four contracted companies are currently ahead of their set schedule and as of December 2019 have deployed over 150,000 Energy Service Subscriptions (ESS) in total, reaching around 780,000 Zambians in rural and peri-urban areas.

## **From BGFZ to BGFA**

Based on the promising results of the approach in Zambia, the Swedish Government is seeking to expand the programme to three additional countries with energy access challenges – Liberia, Burkina Faso and Mozambique – and implement a second financing round in Zambia. To allow for rapid programme expansion, REEEP has joined forces with the Nordic Environment Finance Corporation (NEFCO), an established international financial institution with significant expertise in managing trust funds on behalf of public donors. NEFCO will manage the envisaged multi-country BGFA, and REEEP will implement.

The first phase of this multi-country expansion is a 9-month Market Scoping period, during which the BGFA team is exploring the opportunities for applying the Beyond the Grid approach in the new markets, producing a matrix of ongoing energy access programmes and initiatives, assessing key challenges and risks, and developing high-level scenarios for funding rounds in all four focus countries. The market scoping in Burkina Faso includes interviews with key stakeholders in the energy sector such as government actors, donors, energy access programmes and financial institutions; as well as the private sector stakeholder consultation workshop described in this report.

## 2 WORKSHOP PROCEEDINGS

The workshop consisted of three parts:

- Opening Statements by the Swedish Embassy in Burkina Faso and the Ministry of Energy;
- An information session during which key stakeholders from Burkina Faso set the scene by providing a summary of the policy and regulatory backdrop and an overview of existing programmes and activities. This included presentations by the Swedish Embassy, the Rural electrification agency (ABER), the Regulatory authority (ARSE), the National programme for biodigesters (PNB-BF) and the Association of professional of renewable energy (APER-BF);
- A discussion session during which the participants were divided into four working groups to discuss key issues (proposed by BGFA) and make recommendations to BGFA for further consideration.

The full agenda for the workshop is provided in Annex 1. The following sub-sections provide an overview of the Opening Statements and Information Sessions. Section 3 provides the summary of the group discussions.

### 2.1 OPENING STATEMENTS

#### 2.1.1 SWEDISH EMBASSY IN BURKINA FASO

Ms. Mia Rimby, Chargé d'affaires at the Swedish Embassy in Burkina Faso, opened the workshop and stressed Sweden's commitment to supporting the Government of Burkina Faso in developing its energy sector and achieving its target to increase the rural electrification rate from 3% today to more than 50% in 2030. This support from the Swedish Government will be channelled through the Renewable Energy and Climate Adaptation Technologies (REACT) project and the Beyond the Grid Fund for Africa. These two programmes are complementary and target the provision of sustainable and clean energy services in rural and peri-urban areas of Burkina Faso, in order to improve the living conditions of rural communities, in particular women and children. The Swedish Embassy noted that the implementation of these initiatives will benefit from the strong political will demonstrated by the Burkinabe Government through, for example, its commitment to renewable energy and the new regulatory framework which protects mini-grids through long-term concessions.

#### 2.1.2 MINISTRY OF ENERGY

The representative of the Ministry of Energy, Mr. Issaka Nongnogo, reminded participants of the socio-development impacts of low electrification rates, such as limited economic activity and reduced access to information and education, which result in a poverty trap. The Ministry of Energy stressed the long-standing relationship between Sweden and Burkina Faso and welcomed the programme with enthusiasm, highlighting that BGFA will support the Government in its efforts to change the focus of the energy sector from the delivery of public services through the grid to a more decisive adoption of decentralised renewable energy through private sector stakeholders. The Ministry of Energy reiterated its commitment to addressing the existing challenges and barriers in the energy sector as this is one of the priorities of the presidential programme. The Ministry also highlighted that BGFA will be key in complementing the current

policy reforms, as it is expected to catalyse private sector investment in the sector whilst accelerating the deployment at scale of energy services in rural areas.

### 2.1.3 RENEWABLE ENERGY AND ENERGY EFFICIENCY PARTNERSHIP

Esméralda Sindou, Senior Project Manager for West Africa at REEEP, presented the experience of the Beyond the Grid Fund in Zambia and outlined the thinking and process behind the expansion of the Beyond the Grid Fund to other countries, including Burkina Faso. In Burkina Faso, the fund will be known under the name YiiteFaso (“light up the motherland/the homes” in Bambara and Fula languages) and has a budget of €10 million, of which €7 million will be awarded as results-based financing (grants/free-equity) to energy service providers in order to scale up the delivery of off-grid energy services. In order to be supported by BGFA, firms will be requested during the tender stage to submit a robust and financially viable business model clearly highlighting their proposed financing structure (equity, debt and grants) and the number and the quality of services that can be deployed over the 5-year implementation period of the fund.

Questions from the floor led to the following clarifications:

- In Zambia, the grants awarded ranged from €1.8 to €3 million, and the maximum amount companies could bid for was €5 million. The size of the grants to be made available to companies in Burkina Faso will depend on the conclusion of the undergoing market scoping phase, in particular the absorptive capacity of established stakeholders and the overall maturity level of the different sub-segments of the market (mini-grids, SHS, and bioenergy).
- The success of the Zambian approach hinged on the fact that BGFA did not impose a specific business model, but rather let companies propose innovative, financially viable and credible business plans.



Figure 1: Burkina Faso Private Sector Stakeholder Consultation Workshop

## 2.2 SETTING THE SCENE

### 2.2.1 COOPERATION PROGRAMMES SUPPORTED BY THE SWEDISH EMBASSY

Mr. Amadou Barry, Programme Officer at the Swedish Embassy, gave an overview of the cooperation between Sweden and Burkina Faso since its beginning in 2004, highlighting the priorities of Swedish development programmes, namely improving livelihoods and reducing poverty. The current cooperation programmes funded by Sweden are deployed by the Swedish International Development Agency (Sida), the Swedish Embassy in Ouagadougou or a collaboration of both organisations.

In Burkina Faso, cooperation programmes focus on human rights, institutional capacity development, resilience and sustainability. They are structured around two main sets of goals: 1) strengthening human rights, democracy, the rule of law and gender equality; and 2) building resilience, preserving the environment, climate change mitigation and adaptation, and increasing energy access and energy production through the promotion of renewables. Two programmes funded by Sweden are currently targeting increased access to renewable energy: BGFA and the Renewable Energy and Adaptation to Climate Technologies programme – Efficient Electrification Project (REACT-EEP), implemented by the AECF. This latter programme was launched earlier this year and is a two-year pilot project worth € 8.4 million that will provide an opportunity for households and small- and medium-sized enterprises (SMEs) in urban and peri-urban areas of Ouagadougou to access solar technology for primary or back-up energy provision.

### 2.2.2 INITIATIVES PROMOTING OFF-GRID ELECTRIFICATION

Mr. Ismael Nacoulma, Director General at the Burkinabe Rural Electrification Agency (ABER), presented ABER and its mandate, the challenges related to rural electrification in Burkina Faso, as well as the major initiatives in this space. ABER aims to contribute to the development of a regulatory framework for the provision of electricity access in rural areas, accelerate investment in reliable, affordable and appropriate technologies, foster private sector investment through strategic and regulatory incentives, and support rural communities in the development of local and regional electrification plans.

ABER highlighted that the off-grid sector could take advantage of structural opportunities, such as new technologies, a growing demand for energy services and a strong political will from the Government for rural electrification, demonstrated by its commitment to increase the rural electrification rate to 20% by the end of 2020. Challenges hampering the deployment of energy services at scale in rural areas include the limited ability to pay and disposable income of households, the lack of trained professionals and maturity of local enterprises, the reputation of solar products in Burkina, which suffered from an early penetration of low-grade products, as well as the increasing security risk. In this context, ABER welcomed the BGFA initiative and stressed the importance of catalysing private investment for innovative economic models tailored to the off-grid ecosystem. Related projects aiming to support the private sector in this space include partnerships with:

- SINCO, €12 million funded by the EU, targeting the development of solar on and off-grid mini-grids in 65 rural villages;
- IRENA: €11.4 million funded by the Abu Dhabi Fund for Development to finance the installation of a total 1.5 MWp of solar generation capacity in 42 rural villages;

- The African Development Bank, the Green Climate Fund, the European Union, and the French Development Agency (AFD) for the implementation of the YELEEN project, which targets 50,000 new connections through the construction of 100 solar powered mini-grids and 100,000 new connections through solar home systems. The total cost of this programme is estimated at about €53 million.

## 2.2.3 CURRENT AND FUTURE REGULATORY FRAMEWORKS FOR OFF-GRID ENERGY ACCESS

Mr. Damba Ouoba, Head of the Legal Studies Department at the Energy Sector Regulatory Authority (ARSE) presented the current regulations applicable to the off-grid energy sector, both for SHS and mini-grids, and the thresholds at which different procedures (authorisation, declaration, concession) apply to new generation capacity.

In Burkina, the Law 014-2017/AN dated 20/04/2017 structures the energy sector and provides an overarching framework applicable to the off-grid sector.

Technical rules, procedures, specification, norms and standards are defined in the following texts:

- Decision n°17-118/ME/SG dated 3/10/2017 defining technical rules and safety procedures for the installation of generation capacity and production of electrical energy;
- Decree n°2018-0569 dated 10/07/2018 adopting specifications applicable to electricity distribution concessionaire;

Before 2003, electricity retail tariffs in off-grid areas were unregulated and rural distribution operators, such as the COPELS, sold electricity to the end-customer at a price between 200 and 350 FCFA/kWh. In order to regulate retail tariffs, the Government adopted:

- Decision n°09-018 dated 20/11/200, which enacts the principle of a unique tariff structure at the national level and defines the applicable tariff levels.
- Decree n°18-0568 dated 10/07/2018, which sets regulatory principles for future tariff setting for the production, transport and distribution of electricity in areas outside of SONABEL's concession area. Notably, it defines the methodology underpinning the setting of cost-reflective tariffs.

In order to operate in rural areas, different procedures apply depending on the market subsegment (production or/and distribution) and applicable thresholds defined in the regulation. These are detailed in the Decree n° 2017-1011 dated 26/10/2017.

- **Production:** the thresholds depend on the generation technology (thermal/ renewable energy) and the overall installed capacity.

	RE capacity	Thermal capacity
Declaration	≤ 250 kW	≤ 500 kW
Authorisation	> 250 kW and ≤ 1,000 kW	> 500 kW and ≤ 2,000 kW
License	> 1,000 kW	> 2,000 kW

- **Distribution:** Different thresholds apply depending on the coverage radius of their distribution network. Solar PV stand-alone systems require an authorisation.

	Coverage radius
Authorisation	≤ 1 km
Concession	> 1 km

- **Self-production** is the category applicable to SHS and solar kits. It is regulated as follows:

	RE capacity	Thermal capacity
Free	≤ 5 kW	≤ 100 kW
Declaration	>5 kW and ≤ 500 kW	>100 kW and ≤ 1,000 kW
Authorisation	> 500 kW	> 1,000 kW

Following a question from the floor, ARSE highlighted that the implementation of the 2012 law on duty and VAT waivers for solar equipment relies on a list with a coding system, but that the list has not been updated to take into account technological progress. A challenge in the implementation of this regulation is that custom agents are trained to use the list but not to assess the technical specifications of the products.

## 2.2.4 BUSINESS MODELS FOR THE CONSTRUCTION OF BIODIGESTERS

Ms. Dothié Soma, Private Sector Development and Credit Officer at the National Programme for Biodigesters (PNB), gave an overview of the context in which the programme operates, followed by a presentation of the programme's objectives, activities and results. The programme, which falls under the supervision of the Ministry of the Environment, aims to foster the deployment of biodigesters in Burkina Faso to tackle some of the challenges related to energy access, food security, deforestation and poverty. It is partly financed by the Government of the Netherlands and aims to support professionals (masons, home builders, etc.) to establish a viable and sustainable business model for this technology.

Biodigesters are mainly used for cooking and to a lesser extent for lighting with the use of biogas lamps. However, these lamps are relatively fragile and many biodigester installers propose complementary solar lighting for households. The bio-digestate resulting from the methanisation process can be used effectively as fertiliser in the fields and this by-product helps convince households to maintain biodigesters.

The PNB started supporting the sector in 2010, and since then has contributed to the installation of 13,000 biodigesters. Its objective is to reach 17,000 biodigesters by the end of 2020. Initially, the PNB contributed to the establishment of three cooperatives, which have reached scale over time and evolved into small and medium enterprises. Today the PNB supports 14 SMEs specialised in the construction of biodigesters, five appliance suppliers and one importer of biogas lamps and appliances. It supported firms in formalising their operating model by providing daily support and training for the establishment of their operations (accounting, etc.), and required the implementation of an after-sales service mechanism (call centre and a maintenance visit 6 months after construction). The PNB provides a subsidy amounting to FCFA 160,000 (i.e. €240) per biodigester, irrespective of the installed capacity. The subsidy represents about 50% of the cost of a 4 m<sup>3</sup> biodigester and 33% of the cost of a 10 m<sup>3</sup> biodigester. Since 2010, the PNB has contributed to the creation of:

- 90 direct jobs (masons) and 150 indirect jobs
- a €3,7 million total market size for biodigester construction companies and a €800,000 market size for appliance suppliers

## 2.2.5 MAIN CHALLENGES AND OPPORTUNITIES FOR THE PRIVATE SECTOR

Mr. Moise Sorgo from the Renewable Energy Industry Association in Burkina Faso (APER-BF) provided some background on the historical context behind APER's formation and presented the objectives of the association. APER-BF was created in May 2016, directly after the foundation of APER at the ECOWAS level. Today, APER-BF has a membership of 118 professionals and is mandated to promote the economic interests of its members and more generally of the entire RE community.

Concretely, APER promotes the adoption of norms and standards to ensure the quality of products on the market, supports technical and management training and research and innovation, and contributes to building a network of renewable energy professionals in the ECOWAS region and beyond. The association also intends to facilitate investments in the renewable energy sector through, for example, advocating for tax exemptions with the Government and for the financing of green projects and the implementation of consumer credit at concessional rates with financial institutions. However, the private sector still faces significant challenges in accessing commercial debt.

## 3 GROUP DISCUSSIONS

The discussion groups were designed to encourage in-depth discussions on specific topics, to obtain information from the participants' different perspectives on different themes. At the end of the discussions, each group made a presentation on its theme and gave recommendations for the BGFA-YiiteFaso programme in Burkina Faso.

### 3.1 GROUP 1: MICRO/MINI-GRIDS

Some 35 attendees participated in the mini-grid discussion group. The majority were representatives of small local mini-grid and micro-grid operators or local companies engaged in the supply and support value chain. One of the participants represented an internationally active company looking to enter Burkina Faso (Flexgrid). Other notable participants included senior representatives from ABER as well as from the African Development Bank and the EU. The group also included representatives from civil society and NGO groups but none directly from the financial sector.

### KEY OUTCOMES, ISSUES AND CONCERNS

The discussion commenced with a general introduction and a number of interventions about existing mini-grid operations experience, and continued to cover gaps and opportunities, regulations, tariff considerations, operational and logistical considerations, development impacts as well as financing opportunities and constraints. Due to time limitations, the group did not extensively address the issues of subvention models, energy efficiency, productive use or gender.

The questions prepared for the mini-grid group (see Annex 3) were used as a general guide to the discussion.

- Experiences were shared by Sinco, Sahelia Solar, Manga and YeleenBa. The shared experiences were primarily negative and indicated the following issues and problem areas:
- It was emphasised that pure private sector experience is still very limited and that the companies in this market are still very young and small. To date, most projects and mini-grids have been implemented under the aegis of the Ministry and/or ABER.
- All the operators present saw significant opportunities and growth potential for mini-grids as a viable means for rural electrification in Burkina Faso and are positioning themselves accordingly, also in light of the likely influx of donor funding to the sector in the coming years.
- Technical specifications were too onerous and not appropriately matched to the real load / demand scenarios meaning that often a surplus of generation capacity was installed, increasing capex and making commercial operations within a reasonable timeframe impossible without significant subsidies;
- Fulfilling technical standards and norms to comply with ABER, ARSE or SONABEL standards was also quoted as problematic. Participants stated that these standards were often not tailored to the specifics of the operating environment;
- Rural demographics in Burkina make it very difficult to serve all households within any given community with a mini-grid. Some households remain out of reach or need to be catered for with standalone systems, such as SHS;
- In one case however, consumption proved higher than the stipulated generation capacity and this led to far fewer households being connected than originally planned – only 400 households across 7 micro-grids;
- In another specific case, an unnamed operator claimed very good commercial viability for captive off-take grids for hotels and commercial off-takers, quoting a 2-year payback on full commercial terms;
- Incomplete, unclear or untested regulation was cited more or less universally as a major barrier to development in the sector. ABER countered that there are essentially 4 models for regulation in the off-grid sector for both mini-grids and SHS:
  - Projects financed by government subsidy and / or under the aegis of ABER are subject to the approval and tariff regulations as outlined by ARSE in their presentation and as outlined above in section 3.3.2;
  - Fee-for-service models as demonstrated by YeleenBa are considered as distribution and therefore regulated by ARSE as presented in their Setting the Scene presentation and summarised above;
  - SHS for own use are also essentially unregulated as long as their generation capacity is under 5 kW;

- For private grids operating outside the ABER or Ministry frameworks, a project-by-project system of derogation applies: essentially these projects need to apply for an operating approval from the Ministry, which has the right to accept and support a private tariff or to impose the public tariff under advice from ARSE. It is anticipated that mini-grids / micro-grids financed by BGFA would essentially fall under this framework.
- Estimating the load was cited as being very difficult as there is little reliable data on usage and consumption. By a number of estimates, this increases capital costs by up to 30% due to both the cost for upfront studies to establish probable consumption and the cost of reserve capacity to cater for uncertainty. Participants emphasised that they would be very sceptical of third-party studies predicting load and would always prefer to perform their own studies. There was general agreement that different business models and technical approaches could significantly affect design capacities for the same location.
- Based on information provided by the Ministry and ABER, it was confirmed that the electrification plan is being updated but there is currently no firm target date for completion. Participants complained of negative experiences with poor coordination between the Ministry, ABER and Sonabel and cited instances where mini-grids had been commissioned and built in communities only for the grid to arrive shortly after. It also appears that the electrification plan such as it is, is implemented in a very inconsistent and non-transparent way. At present, no clear framework exists for dealing with grid arrival in places where mini-grid investment has already been committed;
- In addition, ABER and the EU confirmed that GIS data on off-grid locations is being gathered and prepared for general publication and will be made available imminently. ABER have also commissioned detailed market and consumer usage studies for the communities covered by the Yeleen concessions; these are likely to be ready by the end of Q1 2020.

Based on the points summarized above, the group identified the major challenges facing the mini-grid sector as follows:

- Uncertainty around the legislative framework and lack of a clear tariff plan;
- Absence of information and studies, and outdated electrification plan;
- Uncertainty of demand;
- Lack of replicability between villages and communities.

## RECOMMENDATIONS FOR BGFA

The group made the following recommendations to BGFA for consideration in the design of the funding window:

- BGFA should not stipulate minimum capacity or technology requirements to potential applicants but should rather stipulate / measure and monitor overall quality and availability of service against certain desired levels;

- Applicants should have maximum flexibility of format to describe and demonstrate the viability of their respective business plans; the application template should not impose too many formalistic constraints;
- The level of subsidy should be linked to the quality and availability of service rather than to an arbitrary generation or energy capacity;
- BGFA should try as far as possible to stipulate eligibility criteria that reflect the realities of local Burkinabe companies and providers;
- BGFA should as far as possible retain an open mind on technology and be open to new technologies and business models and hybrid approaches.

## 3.2 GROUP 2: SOLAR KITS AND SOLAR HOME SYSTEMS

The SHS working group consisted of approximately 30 participants, mostly from local and international private sector companies and some other value chain stakeholders and observers (e.g. a representative of the Power Africa Initiative). Most of the local companies are either solar systems integrators and installers or distributors selling their products in cash, as consumer credit schemes require access to finance and additional skill-sets. Only two companies participating in the group reported that they extended credit to customers, and it was indicated in the discussions that there are some banks and microfinance companies in Burkina Faso that support the private sector in the implementation of their projects. The international companies were represented by Oolu.

### KEY OUTCOMES, ISSUES AND CONCERNS

A lack of customer ability and willingness to pay was cited by many participants, both in the SHS and mini-grid discussion groups, as a significant obstacle to market growth. Again, there is little hard data or experience that can be used to establish thresholds. Based on anecdotal evidence, the group thought that rural households could typically spend up to US\$ 4 - 5 per month on energy products and services. There is probably some latent potential to charge more for better quality and more reliable services than currently available. However, it was also emphasised that disposable income is very much linked to agricultural cycles and that agricultural productivity in the Sahel is generally much lower and much more precarious than in other SSA countries.

Based on its experience, YeleenBa quoted a required subsidy rate for capex of 65%; other actors appeared to agree with this figure. Both ABER and AfDB also corroborated this based on a 30% – 35% equity contribution from the SHS and/or mini-grid operators. It was however emphasised that this contribution can vary greatly depending on the required technical specifications and the business model.

Other key barriers identified and discussed by the group in the discussions include the following:

- Lack of data on customer ability to pay data to inform company expansion to rural and peri-urban areas;
- Difficulties collecting payments;
- Lack of government support for private sector actors;

- Lack of standards and quality certification for solar kits and a lack of professionalism of some actors.

Among key opportunities in the market, the group discussed the strong demand at household level for SHS and the need to substitute traditional and obsolete energy solutions in rural and peri-urban areas. The group also highlighted some market demand for productive use technology, such as small solar pumps for irrigation.

## RECOMMENDATIONS FOR BGFA

The group made the following recommendations to the BGFA programme:

- Auxiliary support from the public sector is required to help promote high-quality products and raise awareness of the benefits of such high-quality SHSs;
- Avoid incentive schemes that encourage companies deploying their products in the market at price levels below system and service costs. This would be a harmful practice for the private sector players in the market;
- Incentive schemes should enable the private sector to build and keep stock and develop a network of local agents;
- The incentive scheme should target companies and not NGOs;
- The participants were not in favour of a concession model mixing SHS and mini-grids;
- Companies should be free to decide on the regions/areas in which they wish to conduct their activities.

## 3.3 GROUP 3: BIOENERGY AND CLEAN COOKING METHODS

The bioenergy discussion group was comprised of 13 participants. These included representatives of one small local producer of clay cookstoves (a REACT awardee), different local SMEs and cooperatives involved with biodigesters, one IPP specialised in biogas, one commercial bank with some experience in renewable energy, a consultancy specialised in supporting local RE firms in securing commercial debt, and two players in the solar PV space. Public institutions were represented by Ms. Dothié Soma from the PNB and Mr. Issaka Nongnogo from the Ministry of Energy.

### KEY OUTCOMES, ISSUES AND CONCERNS

All private sector stakeholders active in the bioenergy sector in off-grid areas are local micro- or small-sized enterprises. These face tremendous challenges in their attempts to scale up, mostly due to a lack of access to the financial resources (both equity and debt) required to increase their working capital. Raising commercial debt poses a significant challenge, as these enterprises usually do not own land to use as collateral, as required by commercial banks. MFIs do not require collateral but interest rates can reach 24%, i.e. twice the interest rate charged by commercial banks. With increased access to finance, bioenergy enterprises would also have an opportunity to diversify their activities and strengthen their business models: for example, biodigester

companies are increasingly involved in distributing solar lamps and improved cookstoves, and would be interested in offering agricultural inputs, such as animal feed and seeds.

The limited customer ability to pay in rural areas, combined with the lack of access to finance also experienced by households, forms a barrier to the deployment of biodigesters as in most cases households need to secure a loan with an MFI to afford the technology. High interest rates and the limited collaterals that households dispose of also limit the amounts that can be borrowed. These issues also affect customers' ability to invest in other articles that would make the biodigester more valuable to them (e.g. additional cattle). A solution could be to favour investment in communal biodigesters using pooled resources. However, evidence from past projects shows that communal biodigesters are less likely to be well-maintained. Another option would be for banks to accept collateral that is more likely to be available to rural households, such as vehicles and animals.

Producers of improved cookstoves struggle to combine the production and the distribution of their products. A solution would be to create partnerships with established distributors at the national level or to establish common distribution channels with SHS distributors. However, this remains challenging and the current options for distribution mostly rely on women's associations and word of mouth.

## RECOMMENDATIONS FOR BGFA

The participants agreed that all companies active in the bioenergy sector in Burkina lack scale, and support will be needed to enable growth in the sector, particularly to facilitate access to commercial debt.

- Creation of a first-loss guarantee mechanism to enable local bioenergy firms to directly access commercial debt, or of an escrow fund (“Caisse de dépôt et de consignation”) to be used for guarantees the rural electrification sector. Such a fund already exists in Senegal (Fonrid);
- Creation of a line of credit to MFIs, in order to promote access to finance for households;
- Support to enterprises that could extend their business models to provide financial services to households (similar to micro-credit solutions for SHS);

Other recommendations included:

- Technical support for the development of credible, structured and viable business plans;
- Allowing groups of companies (“groupements”) to apply;
- Support companies in the certification process for the Clean Development Mechanism; information campaigns would be necessary.

## 3.4 GROUP 4: SOCIAL AND DEVELOPMENT ISSUES

The social and development issues group comprised 18 participants, including representatives of some small private sector companies and consultants, government cooperating partners, NGOs and civil society. The discussion covered issues including youth development and education and training, gender aspects and poverty reduction, and paid specific attention to demographic challenges and opportunities.

### KEY OUTCOMES, ISSUES AND CONCERNS

Geographical equity is particularly important in a country like Burkina Faso, where the incidence of poverty in rural areas is close to 50% (Source: World Bank data<sup>1</sup>). All participants agreed on the necessity to incentivise the deployment of clean energy services in remote rural areas in order to maximise social and development impacts for the population at the bottom of the pyramid. In these areas, however, private sector stakeholders face a number of structural challenges, including low ability to pay on one hand, and high costs of deployment and operations (e.g. after-sales services) on the other hand, due to both the low population density and the lack of infrastructure (e.g. roads, storage capacity, etc.) in remote areas.

In order to balance programmatic objectives, such as reaching close to a million Burkinabè within 5 years through YiiteFaso/BGFA, and the need for inclusiveness, participants recommended that the programme should allow companies to deploy services in both rural and peri-urban areas, in order to set up decentralised distribution hubs. This would enable companies to achieve scale and profitability through sales in peri-urban and relatively highly densely populated rural areas, where the demand and ability to pay for energy services is high, whilst using the decentralised hubs as a base to reach surrounding remote areas. Participants presented this as one possible approach to establishing viable business models that could be sustained after the end of the programme. Including peri-urban areas would also allow companies to deploy higher-tier energy services and maximise the economic impact of the programme, as these areas have a high potential for the development of income-generating activities and productive use.

The discussion also focused on gender. The programme needs to consider women not only as beneficiaries but also as primary actors of the deployment of clean energy services on the ground. For example, energy service providers have the opportunity to work with women's groups, women's producer networks and village networks, and rely on them for the distribution of their products and after-sale services. Targeting the deployment of energy services to communal infrastructure often operated by women, such as multi-functional platforms, grinding mills, phone charging points, shea butter transformation machinery, or grilling stands often found in front of video clubs, was mentioned as a possible way to maximise the gender impacts of the programme.

Participants from the bioenergy sub-sector highlighted that a focus on bioenergy would maximise the impact of the programme on the livelihood of women and could significantly contribute to improving the bargaining power of women within a household. Biodigesters can reduce the need for women to collect firewood and/or cow dung for cooking<sup>2</sup>, freeing time for women to use for income-generating activities (e.g. handicrafts or activities in the biodigester value chain, such as milk production). Participants also reported women with access to a biodigester spend more time

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<sup>1</sup> Source: <https://databank.worldbank.org/source/world-development-indicators>

<sup>2</sup> Without a biodigester, cattle is often taken further out into the grazing land.

looking after their family. This, along with improved hygiene conditions for both men and women through the provision of hot water for washing, was said to increase cohesion within households.

## RECOMMENDATIONS FOR BGFA

Recommendations to the programmes included:

- Striking a balance between the deployment of energy services in remote areas to include the bottom of the pyramid, and in peri-urban areas, so that business models can achieve scale and be viable in the long term.
- Raising awareness of private sector stakeholders of the regulations applicable to their sub-sectors.
- Incentivising business models that consider women not only as beneficiaries but as economic actors who have a role to play in the value chain.
- Working with banks and microfinance institutions to support them in providing loans to rural customers and, if possible, set up daily collection systems (e.g. “tontines”).

## 4 CONCLUSION AND NEXT STEPS

The inputs and recommendations gathered from participants during the workshop will feed into the design of the BGFA programme for Burkina Faso. Overall, several key lessons can be drawn from the workshop:

- The BGFA approach is triggering significant interest from the private sector, both from local and regional companies, as evidenced both by the number of participants and the high quality of discussions.
- The challenges posed by low consumer ability to pay and regulatory barriers, primarily for mini-grids, are key concerns, but nevertheless companies see significant growth potential in coming years.
- Local companies tend to still be operating at a limited scale, as they face significant challenges in accessing the financing required to scale up. A number of these companies are not currently in a position to compete for large RBF funding, as they have different financing needs and require technical assistance to formalise their business models. Donors and government should consider how these companies could be supported to scale up.
- Programmes like BGFA need to incentivise the growth of markets that can achieve long-term sustainability, and reduce the risk of market distortion. Financing schemes need to be designed in such a way that companies will continue to serve the market long after the initial subsidies have been withdrawn.
- Private sector stakeholders in all sub-sectors (SHS, mini-grids and bioenergy) highlighted the need for flexibility and openness in not dictating / imposing technology or business model constraints in the eligibility criteria for the procurement.

- A suggestion was also made to link the subvention model to service and availability levels / coverage rather than energy output or installed generation capacity.

Some of the recommendations made by the workshop participants fell outside the scope of the planned BGFA funding window. These recommendations will be considered by the BGFA team in the context of stakeholder coordination and engagement, specifically in the context of the Platform for Market Change.

In conclusion, BGFA is achieving good visibility and traction in Burkina Faso, and has inspired a high level of anticipation in the market. The workshop was successful in bringing together key market players and other stakeholders and the discussions were useful in framing some of the challenges and opportunities for the design of the envisaged funding window. While it can be concluded that the markets and local companies are still relatively immature and it will be challenging to scale quickly, there is nonetheless considerable potential as well as international interest in entering the market. The situation in Burkina Faso bears many resemblances to the situation in Zambia before the launch of BGFZ which on the whole bodes well for the continued development of BGFA in the country.

BGFA is planning to release a request for bids at the end of the second quarter 2020, and will share this news with all stakeholders who participated in the workshop and/or engaged with the team during subsequent B2B sessions. We look forward to receiving your bids!

If you would like us to keep you up to date with the latest BGFA developments, **including the release of the BGFA call for proposals**, please sign up to our mailing list here: <http://eepurl.com/gIMJcn>.

**ANNEX 1: WORKSHOP AGENDA**

**BEYOND THE GRID FUND FOR AFRICA  
(BGFA)**

**YiiteFaso, le Fonds pour l'énergie hors réseau au Burkina**

**Private sector stakeholder consultation workshop**

Thursday, 7<sup>th</sup> November 2019

Splendid Hotel, Avenue Kwame Nkrumah, Koulouba, Ouagadougou

**Agenda**

<b>YiiteFaso, Beyond the Grid Fund for Burkina Faso</b>	
8:30 – 9:00	<b>Registration</b>
9:00 – 9:20	<b>Welcome and Keynote Addresses</b> <ul style="list-style-type: none"> <li>• Ms. Mia Rimby, Chargé d'affaires, Swedish Embassy in Burkina Faso</li> <li>• Mr. Issiaka Nongnogo, Representative of the Ministry of Energy</li> </ul>
9:20 – 9:40	<b>Overview of the Workshop Programme and Beyond the Grid Fund for Africa (BGFA)</b> Ms. Esméralda Sindou, Senior Project Manager for West Africa, REEEP <ul style="list-style-type: none"> <li>• The BGFA concept</li> <li>• Objectives of the workshop/ Expected Outcomes</li> <li>• Lessons learned from private sector market creation in Zambia</li> <li>• Expanding the Beyond the Grid Fund to other countries</li> <li>• Timeline for Burkina Faso</li> <li>• Q&amp;A</li> </ul>
9.40 – 9.50	<b>Introduction of the participants</b>
9:50 – 10:40	<b>Setting the Scene</b> <ul style="list-style-type: none"> <li>• Presentation of Sweden's development projects in Burkina Faso and the region, Mr. Amadou Barry, Programme Officer, Swedish Embassy</li> <li>• Initiatives promoting off-grid electrification and definition of expectations towards YiiteFaso, Mr. Ismael Nacoulma, Director General, Rural Electrification Agency of Burkina Faso (ABER)</li> <li>• Current and future regulatory frameworks for off-grid energy access. What business models could be considered by the private sector? Mr. Damba Ouoba, Head of the Legal</li> </ul>

	<p>Studies Department, Energy Sector Regulatory Authority (ARSE)</p> <ul style="list-style-type: none"> <li>• Questions &amp; Answers</li> </ul>
10:40 – 11:00	<b>Coffee Break and Networking</b>
11:15 – 11:50	<p><b>Introduction of groups discussion</b></p> <ul style="list-style-type: none"> <li>• Main challenges and opportunities for the private sector, Moise Sorgo, Secretary for quality, Association of Renewable Energy Professionals</li> <li>• Business models for the construction of biodigesters promoted by the National Biodigester Programme and links with YiiteFaso, Ms. Dothié Soma, Private Sector Development and Credit Officer, National Programme for Biodigesters</li> </ul> <p>Introduction of discussion themes by the Beyond the Grid Fund for Africa Team</p> <ul style="list-style-type: none"> <li>• <b>Theme 1:</b> Mini-grid: Business models and financing. Implications for YiiteFaso</li> <li>• <b>Theme 2:</b> Solar kits: business models and financing. Implications for YiiteFaso</li> <li>• <b>Theme 3:</b> Bioenergy and clean energy for cooking: business models and financing. Implications for YiiteFaso</li> <li>• <b>Theme 4:</b> Social and Development Issues</li> </ul> <p>Formation of 4 break away groups.</p>
11:50 – 13:00	<p><b>Break-Out Sessions</b></p> <p>Each theme is discussed by participants in small groups.</p>
13:00 – 14:00	<b>Lunch and Networking</b>
14:00 – 15:00	<p><b>Continuation of Break-Out Sessions</b></p> <p>Each theme is discussed by participants in small groups</p>
15:00 – 16:15	<p><b>Report Back from Breakout Groups</b></p> <p>moderated by Ms. Kadija Simboro, Consultant, REEEP</p> <ul style="list-style-type: none"> <li>• Each group reports back on its discussions, findings and recommendations in max. 10 minutes</li> <li>• General discussion / comments on each of the findings, key challenges and opportunities</li> <li>• Recommendations for the BGFA programme</li> </ul>
16:15 – 16:30	<p><b>Conclusions and Next Steps</b></p> <p>Ms. Esméralda Sindou, Senior Project Manager for West Africa, REEEP</p>
16:30	<b>End of Workshop</b>

## ANNEX 2: LIST OF ATTENDEES

#	Organisation	Representatives
1	ABER	3
2	AEC SA	1
3	AFRICA ENERGY SOLAIRE	1
4	African Development Bank	1
5	African Network of Engineer for Development	1
6	AFTECH	1
7	Agence Baali Inovation	1
8	AMI Sarl	1
9	ANEREE	1
10	APER	1
11	Association professionnelle des banques	1
12	Autorité de régulation du secteur de l'énergie (ARSE)	2
13	Banque commercial e du BF	1
14	Bleu vert d'Afrique.sarl	1
15	Burkina Énergies et technologies Appropriées	1
16	Cabinet ICDE	1
17	CEAS Burkina	1
18	Chambre de Commerce et de l'Industrie (CCI-BF)	1
19	Coris Bank International	3
20	ECC	1
21	EGO-SERVICES	1
22	ENERGIVO SARL	1
23	Energy and Services	1
24	ENTREPRENEURS DU MONDE	1
25	Entreprise SETHI	1
26	ETSY	2
27	European union	1
28	Extra services bf groupe sarl	1
29	Farafina Eco-Engineering	1
30	FASOBIOGAZ	1
31	Flex-grid	1
32	GGGI/CO	1
33	Green Engineering Services	3
34	Greentech Solar	1
35	GreenYellow	1
36	Groupement ASEMI	1
37	Jackson Prestation et Prestation	1
38	L.S.K	1
39	Magificat Business Center	1
40	MicroSow	3

#	Organisation	Representatives
41	MicroStart Action des Femmes pour le Developpement	1
42	Ministère de l'énergie	2
43	Nafa Naana	2
44	NELSON SOLAR	1
45	OOLU SOLAR Burkina	1
46	ORANGE MONEY	1
47	PFAN	1
48	PNBF-BF	1
49	POCERAM	1
50	Power-Africa off-grid	1
51	PPI	2
52	Producer international SARL	1
53	Programme National de Biodigesteurs du Burkina Faso	1
54	Projet Production Solaire	1
55	REA	1
56	REEEP	4
57	REFLEX SARL	1
58	Réseau africain des ingénieurs pour le développement RAID	1
59	Sagemcom Energy & Telecom	1
60	Sahel Vert	1
61	Sahelia Solar	1
62	SEB	3
63	SINCO	1
64	SIPE	2
65	SOGETEL	1
66	SOIER Sarl	1
67	SOLARIST	2
68	SONABEL	1
69	SOS ÉNERGIE BURKINA	1
70	Swedish Embassy	2
71	Sysaid Faso	2
72	TOTAL	1
73	Trina Solar	1
74	UNICOM SA	1
75	Victron Energy	1
76	VOLTATIC	1
77	YANDALUX BF	1
78	ZCSE	1
	<b>Total participants</b>	<b>100</b>

## ANNEX 3 - DISCUSSION GROUP QUESTIONS

### THEME 1: MINI-GRIDS, BUSINESS MODELS AND FINANCING REQUIREMENTS. IMPLICATIONS FOR YIITEFASO

Business Models - what are the business models already operating in the market and where are the opportunities for private sector?

- How are mini- and micro grids being deployed and financed? Where are the opportunities? What are the revenue streams and how are they being collected?
- What are the opportunities for working with the COPELs? How can private operator ESPs be integrated into the existing COPEL structure / framework?
- What levels of connection / qualities of service are being provided?
- What are the affordability levels and what are the price points?
- What are the opportunities for productive use?
- What are the key barriers which prevent customers subscribing for an energy service / utility approach?
- How is after sales service and quality being assured?
- Where are the centres of opportunity? Are there different geographies for different models?
- What is the potential for scale? What are the barriers for scale?
- How can incentives be structured to help companies to get to scale?
- What is the potential total addressable market for BGFA and what is the realistic share over the commitment period? (i.e. how many connections should we be aiming for in BF?).

Investment & Financing: what is procured and how are the number and quality of connections monitored?

- What are the financial constraints on business model deployment / rollout?
- Which sources of financing are most required: equity, long term debt, working capital, equipment finance, customer finance?
- What payment and collection mechanisms are used? How can these be improved?
- What would an ideal incentive structure look like? How can incentive models be structured and deployed??
- Pre-financed RBF or Smart subsidy? Are ESPs able to mobilise capital quickly in the context of a Smart Subsidy? Is a pre-financed RBF required (pre-financed activities/milestone/results-based payments) or some combination of the two?
- What is the right incentive level and how should it be targeted and deployed?
- What milestones and KPIs can be tracked? How can quality be calibrated / measured? How should the mechanism be monitored, and tracked? Which KPIs (technical, financial, environmental / social)?
- What is the RBF link to value for money and quality of service / connection (kWh / connection tiers / equipment standards / appliances / availability)?
- What are the required subsidy levels to enable sustainable operations? When can operations be expected to reach breakeven?
- How can subsidies / grants be deployed to avoid market distortion?

## THEME 2: SHS, BUSINESS MODELS AND FINANCING REQUIREMENTS. IMPLICATIONS FOR YIITEFASO

Business Models - what are the business models already operating in the market and where are the opportunities for private sector?

- How are SHS being deployed and financed? Where are the opportunities? What are the revenue streams and how are they being collected?
- What is the experience of SHS providers? What systems are being sold? How are they being sold and supported? What is the revenue model?
- What levels of connection / qualities of service are being provided?
- What are the affordability levels and what are the price points?
- What other off-grid, energy service business models / technology solutions are being deployed?
- What are the opportunities for productive use?
- What are the key barriers which prevent customers subscribing for an energy service / utility approach?
- What are the distribution networks? How is after sales service and quality being assured?
- Where are the centres of opportunity? Are there different geographies for different models?
- What is the potential for scale? What are the barriers for scale?
- How can incentives be structured to help companies to get to scale?
- What is the potential total addressable market for BGFA and what is the realistic share over the commitment period? (ie how many connections should we be aiming for in BF?).

Investment & Financing: what is procured and how are the number and quality of connections monitored?

- What are the financial constraints on business model deployment / rollout?
- Which sources of financing are most required: equity, long term debt, working capital, equipment finance, customer finance?
- What payment and collection mechanisms are used? How can these be improved?
- What would an ideal incentive structure look like? How can incentive models be structured and deployed??
- Pre-financed RBF or Smart subsidy? Are ESPs able to mobilise capital quickly in the context of a Smart Subsidy? Is a pre-financed RBF required (pre-financed activities/milestone/results-based payments) or some combination of the two?
- What is the right incentive level and how should it be targeted and deployed?
- What milestones and KPIs can be tracked? How can quality be calibrated / measured? How should the mechanism be monitored, and tracked? Which KPIs (technical, financial, environmental / social)?
- What is the RBF link to value for money and quality of service / connection (KwHrs / connection tiers / equipment standards / appliances / availability)?
- What are the required subsidy levels to enable sustainable operations? When can operations be expected to reach breakeven?
- How can subsidies / grants be deployed to avoid market distortion?

## THEME 3: BIO-ENERGY AND CLEAN COOKING, BUSINESS MODELS AND FINANCING REQUIREMENTS. IMPLICATIONS FOR YIITEFASO

Business Models - what are the business models already operating in the market and where are the opportunities for private sector?

- How are bioenergy solutions being deployed and financed? What are the revenue streams and how are they being collected?
- What and where are the opportunities for biomass, biogas and clean cooking?
- What levels of connection / qualities of service are being provided?
- What are the affordability levels and what are the price points?
- What are the opportunities for productive use?
- What are the key barriers to adoption?
- How is after sales service and quality being assured?
- Where are the centres of opportunity? Are there different geographies for different models?
- What is the potential for scale? What are the barriers for scale?
- How can incentives be structured to help companies to get to scale?
- What is the potential total addressable market for BGFA and what is the realistic share over the commitment period? (ie how many connections should we be aiming for in BF?).

Investment & Financing: what is procured and how are the number and quality of connections monitored?

- What are the financial constraints on business model deployment / rollout?
- Which sources of financing are most required: equity, long term debt, working capital, equipment finance, customer finance?
- What payment and collection mechanisms are used? How can these be improved?
- What would an ideal incentive structure look like? How can incentive models be structured and deployed??
- Pre-financed RBF or Smart subsidy? Are ESPs able to mobilise capital quickly in the context of a Smart Subsidy? Is a pre-financed RBF required (pre-financed activities/milestone/results-based payments) or some combination of the two?
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- What is the RBF link to value for money and quality of service / connection (KwHrs / connection tiers / equipment standards / appliances / availability)?
- What are the required subsidy levels to enable sustainable operations? When can operations be expected to reach breakeven?
- How can subsidies / grants be deployed to avoid market distortion?

## THEME 4: SOCIAL & DEVELOPMENT ISSUES

- How can local companies be involved and incentivised by BGFA? What is the opportunity for international entrants to Burkina Faso to work with local service providers? How can the inclusion of local service providers be specifically incentivized by BGFA?
- What customer segments constitute a specific opportunity for ESPs (urban, rural, peri-urban / men and women)?
- What are promising ESP product and service offerings? How do they meet the needs of women and men?
- Are there any gender specific RE / off-grid interventions in Burkina Faso?
- What are opportunities for women's employment across the SHS value chain? Are there significant business models / opportunities which focus and meet the needs of women and children and which are structured in such a way as to ensure the active participation of women in the management and implementation / rollout of the model?
- What is the opportunity for ESPs to enter remote rural areas? What are barriers, challenges and risks in servicing customers in remote areas?
- How would ESPs define and approach the affordability / profitability gap?
- What are the ESPs' strategies to manage risks related to servicing customers with low purchasing power/ability to pay?
- What are incentive mechanisms that could help companies target remote rural areas and/or customer with low ability to pay? Who should be incentivised? How should the money flow through the program?
- How can funding be targeted to ensure that it doesn't distort the market especially vis a vis existing players and new entrants?

## ANNEX 4 - PRESENTATIONS

Accessible on the Beyond the Grid Fund for Africa website:

- <https://beyondthegrid.africa/news/outcomes-stakeholder-workshop-ouagadougou/>