## Danish Support to the Beyond the Grid Fund for Africa (BGFA)

#### Key results:

- The Danish contribution will seek to connect up to 500.000 people without access to electricity in Uganda to basic offgrid solar power
- At least 300 decent jobs created in the off-grid solar energy sector, incl. targeting youth and gender equality.
- Targeted effort to pilot skills development in the Uganda solar energy sector.
- Increased presence of private Energy Service Providers (ESP) in energy poor regions of Uganda and leveraging of private financing.

### Justification for support:

- Closing the energy access gap in Africa is a priority in the Danish Strategy for Development Cooperation and Humanitarian Aid and has been reconfirmed as a priority by the current government, (cf. the long-term strategy for global climate action and the political goal to provide on access to clean energy for 5.8 million Africans).
- Climate and environment are listed as priorities under the first strategic objective of Denmark's Country Policy Paper for Uganda 2018-2022.
- Access to electricity is a national priority in Uganda due to current low levels and the important economic, social and environmental benefits.
- The Danish contribution will increase focus on jobs and skills development in the BGFA, which is another Danish government priority.
- BGFA Uganda is expected to prioritize regions with displaced people and host communities, indirectly supporting local, durable solutions to displacement.

#### Major risks and challenges:

- Lack of ESP's with adequate financing and implementing capacity.
- The economic impacts of Covid19 could impose a risk of consumers' ability to pay for energy connections.
- Public framework condition to accelerate off-grid connection are important to develop off-grid solar service providers in Uganda.
- Corruption and other non-compliance with NEFCO policies and safeguards could affect the planned roll-out of the incentives to accelerate access to off-grid renewable energy.

File No.	2020 - 29493					
Country	Ugand	Uganda				
Responsible Unit	GJL					
Sector	Energy					
Partner	NEFCO – Beyond the Grid Fund for Africa					
DKK mill.	2020	2021	2022	2023	2024	Tot.
Commitment	37,5					37,5
Projected ann. disb.	3,5	8,5	8,5	8,5	8,5	37,5
Duration	5 years					
Previous grants	DKK 11.7 mill. for project in Georgia					
Finance Act code	§06.34.01.40					
Head of unit (dep.)	Adam Sparre Spliid					
Desk officer	Morten Blomqvist					
Reviewed by CFO	Marie Gro Svenstrup					
Relevant SDGs						

	•		1		
Relevant	t SDGs				
1 min	2 west (() No Hunger	Good Health, Wellbeing	4 man distinstruction  Quality  Education	5 man Gender Equality	Clean Water, Sanitation
Affordable Clean Energy	Decent Jobs, Econ. Growth	Industry, Innovation, Infrastructure	10 Reduced Inequalities	Sustainable Cities, Communities	Responsible Consumption & Production
13 runti III  Climate Action	Life below Water	15 III.	Peace & Justice, strong Inst.	Partnerships for Goals	

### Strategic objectives:

The strategic objective of BGFA is to create access to basic and affordable renewable energy services for energy poor people living outside the national electricity grid and to accelerate private sector growth in energy generation and distribution.

### Justification for choice of partner:

The pilot programme in Zambia and the off-grid solar industry in Africa has demonstrated solid results to provide high quality energy services and products targeted off-grid customers in rural and peri-urban areas. The business models with provision of financial incentives (DKK 300 on average) allows the companies to reach scale and sustainability in regions outside the grid. This results-based model has shown that it can incentivise roll-out and scaling up in areas that would not represent viable markets for the sector without financial incentives.

### Summary:

The Beyond the Grid Fund for Africa (BGFA) aims to incentivize the private off-grid energy enterprises to provide energy access to underserved people in rural and peri-urban areas in Sub-Saharan African countries. This will be done by offering financial incentives to selected private companies to provide high quality and affordable energy services to regions outside the grid. The Danish support to BGFA will support the Uganda window and be targeted provision of access to primarily off-grid solar home systems. Further, a Danish priority will be to support technical skills development for the off-grid solar sector in Uganda.

#### Budget (DKK):

Output 1: Delivery of new access to off-grid renewable energy	29.750.000
Output 2: Creation of green jobs and skills development	4.000.000
Output 3: Programme management and contingencies	3.750.000
Total	37.500.000

Ministry of Foreign Affairs of Denmark

## Danish Support to the Beyond the Grid Fund for Africa (BGFA)

Off-grid renewable energy and green jobs in Uganda
October 2020

File: 2020 - 29493

# **Table of Content**

Abbreviations:	3
1. Introduction	4
2. Strategic considerations and justification	4
2.1. Context	4
2.2. Strategic considerations and justification for support	5
2.3. Results and lessons learned	7
2.4. Synergies to bilateral and multilateral engagements	8
3. BGFA business model and eligible energy service providers	8
3.1. Overall business approach	9
3.2. Phases of implementation and overall timeline	10
3.3. Eligible Energy Service Providers and sustainable exist	11
4. Objective and summary of results framework	12
5. Theory of change and key assumptions	14
6. Partners and Management arrangement	15
7. Financial Management, planning, M&E and reporting	17
7.1. M&E, reporting	17
7.2. Financial management	18
7.3. Steering committee	19
8 Budget, financial management and Danish contribution	19
9. Risk Management	20
Annex 1: Context Analysis	22
Annex 2: Partners	31
Annex 3: BGFA Results Clusters (framework) and ToC	34
Annex 4: Detailed Indicative Budget	39
Annex 5: Risk Management Matrix	40
Annex 6: List of supplementary materials	43
Annex 7: Communication Plan	44
Annex 8: Process Action Plan (PAP)	45
Annex 9: Summary of recommendations of the appraisal	46
Annex 10: Multitier framework on access to energy	51
Anney 11: ToR for Steering Committee	52

## Abbreviations:

BGFA: Beyond the Grid Fund for Africa
BGFZ: Beyond the Grid Fund for Zambia

EBRD: European Bank for Reconstruction and Development

EDISON: Energy Data and Intelligence System for Off-Grid Networks

ESMAP: Energy Sector Management Assistance Program

ESP: Energy Service Providers

IFI: International Finance Institution

IRENA: International Renewable Energy Initiative NEFCO: Nordic Environment Finance Cooperation

PAYG Pay-as-you-go energy solutions

OECD: Organisation for Economic Co-operation and Development

REEEP: Renewable Energy and Energy Efficiency Partnership

SDG: Sustainable Development Goals

SEFA: Sustainable Energy Fund for Africa (AfDB TF)

SEforALL: Sustainable Energy for All

SHS: Solar Home System

SIDA: Swedish International Development Cooperation Agency

TOC: Theory of Change

USAID: United States Agency for International Development

## 1. Introduction

This project document presents the Danish support of DKK 37.5 million to the Beyond the Grid Fund for Africa (BGFA) for the period 2020 to 2024. BGFA is a results-based initiative established to accelerate the private off-grid renewable energy sector to provide affordable clean energy services in rural and peri-urban areas of Sub-Saharan Africa. Financial incentives are paid out in return for a number of established energy service connections. The Danish contribution will only be targeted towards Uganda.

The Danish support is expected to reach up to half a million people with basic electricity services for lighting, charging phones and running small appliances such as fans, radio, etc. In some cases, renewable energy installations can also used to power larger appliances such as water pumps, power tools and refrigerators. Another objective will be job creation and skills development in the off-grid solar industry, which can demonstrate new pathways for a just green transition and growth in Uganda.

BGFA was set up as a separate financing facility in 2019 and is managed by the Nordic Environment Finance Corporation (NEFCO). It is designed to catalyse and accelerate provision of affordable energy access at scale, to poor and marginalized regions. BGFA particularly supports the objective of Sustainable Development Goal 7 (SDG7), which aims to ensure access to affordable, reliable, sustainable, modern energy for all by 2030, the Paris Agreement on climate change and Uganda's country priorities.

In 2020, progress towards addressing the energy access objective has been jeopardised by the Covid-19 pandemic, which threatens to slow down, or even reverse, progress on achieving universal access to energy. The nascent off-grid solar energy sector is affected as their clients face limitations to pay for its services during the crisis. The BGFA will provide much needed financial incentives to continue the off-grid energy expansion and particularly connecting the poorest regions of Uganda with off-grid renewable energy, and promote a green recovery by consolidating the off-grid solar market in Uganda<sup>1</sup>. Hence, the engagement is also an element in green recovery and "Build Back Better and Greener".

The Danish contribution to BGFA originates from the DKK 150 million additional earmarked funding to climate change which formed part of the 2020 Finance Bill and complements the Danish development assistance of 0,7% of GNI. The additional funding forms part of an enhanced Danish commitment to tackle the global climate crisis, support developing countries in their transition towards low-carbon inclusive growth, and the Danish Government's goal to provide access to clean energy for 5.8 million people in Africa..

## 2. Strategic considerations and justification

### 2.1. Context

Over 70% of all Ugandans lack access to modern energy services and it is one of the 20 countries with the largest access to electricity deficit in the world. Expansion of the national utility grid to reach a majority of the population is in the near term neither economically nor technically feasible. Even in peri-urban areas, the expansion of the grid and last mile connections is slow and costly. However, Uganda is one of the countries

<sup>&</sup>lt;sup>1</sup> The energy provision will often be in the form of solar home systems or solar-based mini-grid but can also include other renewable energy technologies. In this document, reference will mainly be off-grid solar power.

that has demonstrated progress since 2010 and expansion of access to electricity has managed to keep pace with population growth<sup>2</sup>.

Off-grid energy solutions are often the quickest path for the most vulnerable and remote communities to obtain increased access to modern energy services. There is already a nascent and active market for off-grid renewable energy products in Uganda, including standalone solar home-systems and small micro-utility grids. If used to its full potential this could revolutionise the energy sector just as mobile phones revolutionised the telecommunications sector and turned the purchase of a phone into an affordable commodity even in remote and poor geographic areas.

The Uganda Vision 2040 outlines the national development pathways and strategies. It includes a target of ensuring 80% of Uganda's population access to electricity by the year 2040. For achieving the universal access goals in Uganda, both expansion of the grid connections and off-grid connections of electricity are needed. Government and international development funding will not suffice for the required investments and private capital will therefore also be required.

The Government of Uganda is currently working on several grid extension projects but for most rural populations, the grid will not be an option for access to electricity in the decades to come. Areas for which the off-grid and mini-grid option is most viable include: West Nile (Adjumani, Arua, Zombo), Northern Uganda and western Uganda (Bundibugyo, Ntoroko). The BGFA will be aligned with the rural electrification master plan of Uganda, which identifies areas of grid extension and standalone solutions for the different regions.

## 2.2. Strategic considerations and justification for support

The proposed Danish support to the BGFA demonstrates solidarity with some of the poorest populations in the world and delivers accelerated scale to the SDG7. The proposed engagement is aligned with the ambition of the additional climate funding that was provided on the 2020 Finance Bill. The engagement clearly targets the 'energy poor' populations by providing basic access to electricity based on renewable resources. The Danish grant to BGFA is estimated to contribute to connecting up to half a million people in Uganda to mainly off-grid solar power. The planned scoping studies will assess different regions, including geographic regions hosting large refugee populations. This will allow targeting some of the most vulnerable and poorest populations living in fragile situations, including displaced people and host communities in the regions of origin.

An accelerated rollout of off-grid solar energy will be critical to achieve the goal of universal and affordable access to energy. Off-grid solutions have proven to be a leapfrogging technology to expand energy access to millions of people. The off-grid solar industry is already a proven technology and a billion dollar industry that has reached 420 million users around the world in the past decade. Furthermore, prices have dropped 15% alone the last two years and have allowed the industry to operate on commercial terms many places.

Yet, affordability is still an issue in order to reach the 550 million people in Sub-Saharan Africa who lack access to electricity today. Therefore, closing the financing gap will be essential to accelerate the deployment of offgrid solar solutions in the poorest areas of the world. The 2020 off-grid solar market trends progress report estimates that to achieve universal access, the off-grid solar sector would require between USD6.6 billion – USD11 billion in additional financing. Of this, up to USD3.4 billion represents public subsidies to bridge the

-

<sup>&</sup>lt;sup>2</sup> Source: Tracking SDG7 – The energy progress report 2020

affordability gap. The BGFA is a facility that will contribute to closing this financing gap by providing financial incentives to attract private operators/investors where a subsidy is provided to close the gap for the poorest populations' ability to pay for the energy service.

Off-grid solar energy is also a key enabler and accelerator to achieve many of the other SDG's. Renewable energy can reduce the work burden for particularly women and girls, reduce food losses by providing access to cooling storage, ensure energy access to health clinics, increase access to water and create new decent jobs. Further, possibilities of building stronger synergies with clean cooking is currently being explored by many off-grid energy service providers.

The support for BGFA is also well-aligned with the Danish Government's new long-term global climate strategy. It emphasises that Denmark should continue its leadership on SDG7 to raise the global ambition, including closing the access to energy gap. Further, the project will also be a flagship project to deliver on the target of Danish Government's goal to provide access to clean energy for 5.8 million people in Sub-Saharan Africa, which was recently announced by the Danish Minister for Development Cooperation. In addition, the Danish development assistance will also increase focus on job creation and developing a skilled workforce for the green transition. The Minister for Development Cooperation has also launched the ambition to train 10.000 skilled workers in Africa, and the BGFA aims to pilot sub-component on skills development for the offgrid solar sector. This engagement will inspire and demonstrate the job potential in green transition.

The current Danish Strategy for Development Cooperation and Humanitarian Action 'The World 2030' identifies Sustainable Development Goal (SDG) 7 on affordable and clean energy as one of the five overall SDG priorities. The Strategy adopts a differentiated and context specific approach to support the different SDG7 indicators depending on the geographic context. Universal access to energy in low-income and fragile countries is a priority..

Climate and environment are also listed as priorities under the first strategic objective of Denmark's Country Policy Paper for Uganda 2018-2022 and the project is aligned to the 'Uganda 2040 Vision' aiming to connect 80% of the population with access to electricity by 2040. This engagement will seek to build synergy to other existing Danish engagements in Uganda. The Danish embassy in Uganda has been involved in the initial meetings and further synergies will be established during scoping and implementation of the BGFA in Uganda.

Also, the BGFA in Uganda will support other Danish priorities such as technical skills development, job creation and gender equality. A stronger effort to build skills and create new green jobs in the off-grid solar sector will be a specific Danish footprint for further development of the BGFA approach. An initial scoping study for Uganda will be undertaken, financed jointly by Denmark and Sweden. A particular priority for the Uganda window will be to support women and youth in accessing employment opportunities in the off-grid energy sector, which is subject of a separate scoping study.

BGFA has a solid gender approach. As part of the Market Scoping, a gender assessment will be conducted, a Gender Action Plan implemented, and gender will become an integrated part of the targets and results framework. A rights-based approach is visible in the "social impact procurement" approach clearly targeting the poorest and most marginalized regions without access to energy today. Moreover, environmental sustainability is integrated into the Call for Proposals process, which also includes specific requirements for an e-waste management plan.

### 2.3. Results and lessons learned

The past few years, renewable energy has become cheaper than conventional fossil fuel energy sources and innovative business models such as Pay-As-You-Go (PAYG) solutions have been transformative. This is now allowing to accelerate deployment of off-grid solar home systems and mini-grid at scale.

Denmark has been engaged in the access to energy agenda for many years. Access to electricity has been targeted through different channels such as multilateral trust funds (e.g. Sustainable Energy for All) but also through bilateral programmes, government-to government technical assistance programmes and more private sector oriented investments. Danish development assistance has also supported mobilisation of private capital to de-risk private investment in high-risk markets or with limited market potential. The support for BGFA is a similar case, where the financial incentives provided by Denmark will leverage a ratio 1:3 in private capital while still protecting a sustainable market-driven approach to expand off-grid energy in Uganda<sup>3</sup>.

BGFA builds on the experience and success of the PAYG business model. It is a relatively new but proven business model enabling primarily rural, low-income populations to access modern clean energy solutions. In less than five years, PAYG companies have improved livelihoods of approximately eight million people—primarily in Sub-Saharan Africa—by bringing clean energy and financing to customers without access to electricity. PAYG companies provide clean energy services but is also combining its services with retailers and financial institutions that provide leasing that makes access affordable for low-income customers. Many of these companies operate a "lease to own" model. Denmark has through support to ESMAP and Lighting Africa supported the development of the business model.

The BGFA is the scale-up of the pilot programme Beyond the Grid Fund for Zambia (BGFZ), which commenced in 2016 with a core EUR 20 million financing from Sweden. The early positive experiences in terms of connecting new customers, mobilised private capital and strong social and gender outcomes to date have been encouraging. BGFZ has within a few years connected almost 884.000 people with basic electricity, connected 2.000 businesses and created 1.375 jobs while mitigating 375.000 kg CO2 emission annually. The average financial incentive in Zambia has been below DKK 300 per connection and covers approximately 25% of capital investment costs for companies to establish themselves at scale, operate commercially sustainable businesses and target poorer districts and populations in Zambia.

The lessons learned from Zambia can in several ways be compared to conditions in Uganda as both countries are considered semi-mature off-grid markets in terms of installed off-grid energy base, active investors/operators and level of consumer interest<sup>4</sup>. Hence, the BGFZ demonstrates that results-based and social-impact procurement model can accelerate access to electricity to marginalized regions while still mobilising private investments and a sustainable private sector approach. BGFZ demonstrates that when financial incentives are made available, it is possible to provide electricity to even hard-to-reach-rural-areas. The BGFA is now scaling the approach from Zambia to Burkina Faso, Liberia, Mozambique and Uganda but is

<sup>&</sup>lt;sup>3</sup> The leveraging ratio is based on BGFZ experience. USD 11 million committed in grant by Sweden and mobilized USD 41 m in additional funding (a ratio is 1: 3.7). Since the PAYG has matured as a business model and prices on SHS has dropped since, this is considered a conservative estimate.

 $<sup>^4</sup>$  This will be investigated further in the market scoping study but an indicator is that 400 000 SHS were sold in 2019

also building on the broader experiences from the renewable off-grid energy sector in Africa, which is currently booming with innovation to scale the off-grid energy sector.

## 2.4. Synergies to bilateral and multilateral engagements

The BGFA is a good opportunity for Danish development cooperation to promote a more holistic approach that builds stronger synergy between Danish multilateral and bilateral development assistance related to SDG7, in line with Doing Development Differently principles. On the one hand, the Danish contribution the BGFA window in Uganda allows Danish development assistance to gain hands-on experience in designing a country-specific engagement on scaling access to off-grid energy. On the other hand, it also allows Denmark to connect BGFA closer to other multilateral organisations that are also supported by Denmark and to feedin the specific experiences from the BGFA window. Particularly, the country experiences on gender, e-waste, and skills development could provide innovative experiences that can be scaled up by other multilateral organisations.

Uganda is a bilateral priority country for Danish development assistance and several opportunities exist to build synergy to existing bilateral engagements. For example, synergy can be made to establishing synergy to Danish engagement to farmers and savings groups of Northern Uganda Resilience Initiative (NURI and the Agricultural Business Initiative (aBi). Particular, the productive energy pillar of BGFA would be relevant for creating a direct collaboration. Collaboration with "building stronger universities" (Aalborg University and Gulu university) with focus on innovation and entrepreneurship could also be strengthened as well as synergies with relevant Danish NGO's present in Uganda.

The Danish support to BGFA Uganda will leverage hands-on and innovative approaches to scale energy access to energy poor communities. Experiences of using financial incentives to bridge the financing gap, develop skills development for youth and female employment in the off-grid sector, and managing e-waste are some of the expected innovative take-aways from the project. These experiences and lessons learned should inform some of our other multilateral engagement with organisations such as ESMAP, SEforALL and IRENA.

Denmark will early into project implementation seek to build alliances between BGFA and multilateral agencies such as ESMAP and SEforAll but also more investor-related funds such as SEFA and the Nordic Development Fund. So far, dialogue with BGFA has been very open to strengthen collaboration with multilateral and bilateral cooperation. BGFA is already coordinating with several multilateral alliances and agencies such as Power Africa, who has already committed considerable in-kind contribution to the BGFA. As a first engagement with multilateral agencies could be MFA of Denmark and NEFCO organising an external webinar with ESMAP, Googla or SEforALL (see annex 8)

## 3. BGFA business model and eligible energy service providers

An increasing number of companies in Sub-Saharan Africa already offer solutions that employ innovative consumer payment schemes, often via mobile money, to ensure that the daily cost of clean energy is lower than that of candles and other traditional energy sources. However, despite great demand and lower prices on solar home systems, the off-grid solar market is still nascent and the off-grid energy services not affordable to populations in the poorest regions.

BGFA aims to help private businesses overcome these challenges with the goal of contributing to inclusive and sustainable development in five African countries by providing energy access to underserved areas and new forms of jobs creation. Denmark will support this work with a targeted focus on BGFA's Uganda window.

### 3.1. Overall business approach

The BGFA aims to stimulate a new sustainable business model, which incentivises and accelerates the private sector to offer affordable and clean off-grid energy access at scale in Africa. The core function of BGFA is to provide financial incentives for selected private companies to provide high quality energy services and products, under sustainable and inclusive market conditions, for rural and peri-urban people in participating countries. It will do so by leveraging public financial incentives to bring private finance to bear on business ventures, supporting them to reach scale and sustainability.

BGFA will apply its four-phased approach to roll out its operation in Uganda as outlined in Figure 1. Financial incentives paid to the Energy Service Providers (ESP) are not expected to exceed 25% of capital investment costs for companies to establish themselves at scale and operate commercially sustainable businesses.

Figure 1: BGFA phases of operations



In addition to the four phases, a pilot component will be included in the Uganda window aiming at enhancing opportunities for green job creation and skills development. This component is proposed by Denmark and fits with Danish priorities to train at least 10.000 skilled workers. This component is also of high interest to Sweden as the founder and other main donor of the BGFA Uganda window.

A scoping study has already been initiated which will lead to the design of a small job-creation sub-programme. The scoping study will provide a comprehensive, up-to-date overview of the off-grid energy market in Uganda, including the demand for and availability of training institutions. The jobs and skills development component will aim to develop vocational and/or tertiary level training for the off-grid sector with selected local partner institutions and promote local job creation through inclusive business development, particularly focusing on opportunities for women and youth. The specific timeline for the job-creation component will be developed once the scoping study is finished.

## 3.2. Phases of implementation and overall timeline

The period of implementation of BGFA Uganda window is 5 years, which will follow the four overall stages of the BGFA applied in the other countries<sup>5</sup>.

The first scoping phase will include a market scoping study and a scoping study on jobs and skills development. The latter is a pilot activity for BGFA proposed by Denmark. The two studies will provide the background information for the preparation of the implementation plan, which will be led by Renewable Energy and Energy Efficiency Partnership (REEEP). The two studies are expected to be completed by the end of January 2021.

- The market scoping study include exploration of market size and demographics, customer segmentation and trends, cultural and socioeconomic aspects of energy consumption, willingness and ability to pay, supply chain robustness, maturity of off-grid energy services, access to financing, as well as existing and anticipated framework conditions. An output of this stage will be a refined Theory of Change, results framework, and action plan.
- The jobs and skills development scoping study sets out a dual objective. First to review experiences with job creation and skills creation in the African off-grid energy sector. Secondly, to assess the potential of the off-grid job market in Uganda, explore the pool of potential labour available, and map potential service providers that could carry out vocational training. Based on the findings from the study, a pilot component will be designed focusing on job creation and technical and vocational training to build up a skilled workforce, which will be important for off-grid energy sector in Uganda.

The scoping studies are the first set of activities to be carried out under the BGFA Uganda window. The purpose of the scoping phase is to gather and process the evidence and actionable intelligence required for the development of a cohesive strategy and implementation plan that maximises BGFA impact within the context of current market conditions in Uganda, while aligning activities to Sweden and Denmark's thematic and geographic priorities.

The results of the market scoping will directly inform the design of the incentive/procurement approach and technical assistance activities, theory of change, results framework, stakeholder engagement, knowledge management, market information and analytics, as well as mitigate observed risks and barriers in the market. Due to the importance of the scoping phase to finalize the design of the Uganda window, the Danish MFA and the Embassy in Lusaka will follow the scoping phase closely.

The second stage is the detailed design and launch of the procurement and incentive scheme. The procurement is managed by NEFCO through a Call for Proposals. A tailored tender process will be developed for Uganda to "procure" energy services, which, under existing circumstances, would not be affordable to end users or profitable for Energy Service Providers as a purely commercial activity. It will also include exploring service providers for the skills development component.

The concrete tender application process is divided into two stages: a Pre-Qualification stage and a Final Application stage. The purpose of the Pre-Qualification stage is to check whether interested off-grid energy companies meet basic BGFA eligibility criteria and minimum technical and financial capacity requirements.

10

<sup>&</sup>lt;sup>5</sup> NEFCO expects an additional year to ensure a sustainable exist which so far is financed by SIDA but it is agreed that the Danish support will be targeted the operational phase.

Only applicants passing the Pre-Qualification stage will be invited to take part in the Final Application stage. During the Final Application stage, applicants will be required to submit a full project proposal, including a detailed business plan, financial model(s) and comprehensive supporting documentation. The tender process is expected to be launched in Q2, 2021.

The *third stage* is the evaluation, due diligence and contracting of the ESP's. This will entail an eligibility check followed by a detailed third party evaluation based on a value for money assessment and qualitative assessment of the business plan to allow a ranking of proposals. This will be followed by donor approval and due diligence of qualifying ESPs.

Final applications will be evaluated according to a number of evaluation criteria and requirements such as technical and commercial feasibility, management capacity and financing leverage, gender equality, consumer protection and e-waste management. Applicants meeting these minimum requirements will be included on a long-list and invited to submit final applications. The final application stage will focus on the quality of the business plan and the requested price per weighted energy service calculation, resulting in an overall value for money. The scoring will incorporate a reverse auction approach in which projects are ranked and awarded based on overall value for money to BGFA.

The *fourth stage* will be the actual project implementation by the contracted ESPs, which will be subject to monitoring and evaluation by NEFCO with support from REEEP. Disbursement will be made against achieved milestones. This will also include the provision of important technical assistance to institutional capacity building, as well as support to required technical skills development.

The overall budget for capital investment into market development, mainly in form of financial incentives for selected Energy Service Providers (ESPs), is not expected to exceed 25% of capital investment costs for companies to establish themselves at scale and operate commercially sustainable businesses.

Monitoring of progress will be made on the respective agreed business plan roll-out. Quarterly progress reports will be prepared monitoring the milestones, deliverables, and disbursement schedule included in the contracts between the ESPs and NEFCO. Verifications and results will be tracked via The Energy Data and Intelligence System for Off-Grid Networks (EDISON) database. EDISON tracks customers' use of the energy services directly from the ESPs. EDISON connects to the monitoring systems of each of the ESP's contracted and can extract real-time information on energy service subscriptions sold, payments, number of jobs created, female customers, upgrades and warranty events, among other data points. This allows continues learning and adaptation throughout project implementation.

### 3.3. Eligible Energy Service Providers and sustainable exist

BGFA aims at supporting ESP's to accelerate there service delivery to areas otherwise not attractive on commercial terms. Thus, to be eligible for BGFA funding, applicants needs to be for-profit entities or project consortia where the lead applicant is a for-profit company. Applicants shall be legally incorporated and included in the register for-profit companies in Uganda or commit to be registered as such by the time of a possible contract.

Non-profit entities, public institutions, community-based organisations or other non-commercial entities are eligible to participate as consortium members, significant sub- contractors, or partners if they apply for funding through a for-profit subsidiary or as a member of a consortium with a for-profit entity as lead applicant.

During programme implementation, a sustainable exit strategy for BGFA in Uganda will be developed. First and foremost, the target is to build sustainable off-grid ESP's that will continue operations and establish adequate skills to ensure local maintenance services. Further, a concrete plan and timing for the transfer of programmatic ownership for Platform for Market Change will be handed over to local government institutions and other involved stakeholders. The Danish grant covers the period of the operational of the current planned BGFA Uganda window, and Sweden has committed funds for a final exist strategy for the programme.

## 4. Objective and summary of results framework

The strategic objective of BGFA is to "create access to basic and affordable renewable energy services for energy poor people living outside the national electricity grid and to accelerate private sector growth in energy generation and distribution with a particular focus on job creation". The Danish contribution will mainly target the "access" to energy through installation of standalone solar home systems<sup>6</sup> and the pilot component on job creation and skills development.

BGFA has identified four overall results clusters (see annex 3) as their regional results framework. Furthermore, in Uganda an additional results cluster will be added on jobs and skills development.

- 1. Increased availability of high quality energy services to meet demand affordably and sustainably and improved economic capacity of targeted population (women and men) to secure needed critical energy services.
- 2. Enhanced policy and regulatory ecosystem for ensuring access to energy services for all
- 3. Increased public and private investment into sustainable energy and energy ecosystem
- 4. Advanced data-driven market intelligence and blended financing models stimulate influx of efficient, targeted capital to ecosystem.

Particular results cluster 1 on increasing availability of energy services is of high importance for Denmark where the majority of the budget is targeted. The pilot jobs and skills development component is also considered strategic added value from the Danish contribution.

Based on experiences from Zambia, the Danish contribution is expected to reach up to half a million people with basic electricity services for lighting, charging phones and running small appliances such as fans, TV and radio. Based on ESMAP's multitier framework on access to energy, in most cases it will be Tier 1 (10-50 watts) or Tier 2 energy access (50 - 200 watts)<sup>7</sup>. In some cases, off-grid energy can be other forms of renewable energy and through mini-grids. Further, BGFA's ability to accelerate and scale its social impact business model for the private energy sector is also expected to leverage additional private and public financing.

\_

<sup>&</sup>lt;sup>6</sup> The energy provision will often be in the form of solar home systems or solar-based mini-grid but can also include other renewable energy technologies.

<sup>&</sup>lt;sup>7</sup> See also annex 10 for further details on the multi-tier framework

In addition, the Uganda BGFA window has also been identified to pilot more in-depth focus on job creation and skills development in the off-grid solar industry, particular for youth and women. Based on experiences from Zambia, it is likely that Danish contribution can create up to 300 direct jobs in the off-grid solar energy sector. Furthermore, the Danish contribution will also explore opportunities to identify national institutions that can lead to a skills development initiative in the sector. The new focus on jobs is a specific Danish proposal in response to the Covid19 crisis by Building Back Better and Greener. It is expected that the experience on skills development can lead to similar support in other BGFA priority countries.

### Indicative selected indicators and results framework for BGFA Uganda window\*

Results clusters	Indicator	Target	Means of verification
Increased availability of high quality energy services to meet demand affordably and sustainably and improved economic capacity of targeted population (women and men) to secure needed critical energy services.	# of people, men and women, benefiting from new or improved access to energy services.     Customer satisfaction and perceived benefits by consumers in each target country by energy service and by gender     # of full time jobs created at the level of contracted ESPs (disaggregated by gender)	<ul> <li>500.000 beneficiaries reached.</li> <li>90% customer satisfaction</li> <li>300 direct jobs created</li> </ul>	EDISON (and regular independent verification)  ESP reporting to BGFA and external socio-economic impact assessment  ESP reporting to BGFA and external socio-economic impact assessment, gender disaggregated.
Enhanced policy and regulatory ecosystem for ensuring access to energy services for all	Stakeholder satisfaction rating of the platform for market change in Uganda.     Platform for markets change in Uganda is self-sustaining and run by local actors (by 2024)	<ul> <li>70% above average rating</li> <li>One self-sustained market platform for off-grid energy in Uganda (or contribution to other similar multistakeholder forum).</li> </ul>	Periodic surveys with platform members  Independent mid-term and end of program evaluation
Increased public and private investment into sustainable energy and energy ecosystem	<ul> <li># of qualifying ESP's responding to BGFA published tenders in the off-grid RE sector.</li> <li>Amount of finance provided to ESPs in each target country- by type of finance (debt, equity, grant, other)</li> </ul>	<ul> <li>5 ESP's qualify for final application stage in the published tenders</li> <li>Leverage ratio of private financing to the Danish contribution is 1:3</li> </ul>	Long-list of ESP's invited to submit final applications ESP reporting to BGFA
Uganda pilot vocational training component has contributed to train a skilled work force and job creation	<ul> <li># of people trained</li> <li>Satisfaction rating of the trained people</li> </ul>	<ul><li>TBD</li><li>80% above average rating.</li></ul>	Participants' evaluation at end of training courses, gender and age disaggregated.

<sup>\*</sup>The results framework will be subject to adjustment when the scoping studies will be finalized in Q1 2021.

The final results framework, targets and indicators will be informed by the Market Scoping Assessment but will also be based on the results clusters presented in annex 3. A Danish priority will be to introduce clear gender disaggregated targets in the results clusters.

## 5. Theory of change and key assumptions

BGFA aims to improve and expand inclusive and sustainable markets for critical energy services in Africa. Basic market condition is a central element in accelerating access to energy services in the off-grid sector. Innovative technological development and business models are key to drive change towards low-carbon economies.

BGFA is designed as a holistic approach building and accelerating the development of inclusive and sustainable markets for critical energy services. It does so via activities across the three pillars:

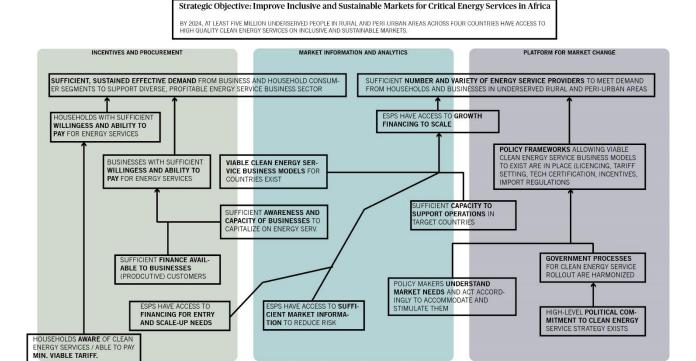
- **Incentives and Procurement:** BGFA is a tailored, results-based incentive scheme for private sector early movers in risky frontier off-grid energy markets. The approach is phased, beginning with a direct incentive scheme to temporarily bridge the demand gap for affordable energy services.
- The Platform for Market and institutional capacity building: BGFA works in parallel to improve
  market ecosystem conditions, utilising a combination of capacity building and technical assistance,
  stakeholder outreach and market intelligence development in a "Platform for Change" approach<sup>8</sup>.
  This can e.g. be issues related to unclear taxation regulations, recycling systems for e-waste, or new
  forms of licencing for renewable mini-grids.
- Market Information and Analytics: BGFA combines detailed market analysis with data and information on deployment gathered via a rigorous monitoring and evaluation framework, yielding valuable insights and metrics on "frontier" markets and end-customer preferences.

The BGFA builds on the assumption that markets often represent the swiftest and most cost-efficient mechanism to bring off-grid solar energy to underserved areas. At the same time, markets can generate new jobs, income opportunities and entrepreneurship. Further, current market gaps - such as limited ability to pay for energy services and limited availability of private capital – can be overcome by providing market-based financial incentives and other services provided by ESP's.

The BGFA problem statement highlights a number of barriers that the social impact procurement approach aims to address. The barriers include lack of data and information in rural and peri-urban markets, undeveloped policies, limited customer awareness of off-grid energy service in frontier markets and low-income levels. All together, these barriers remain a challenge for targeting regions where the markets is not operating today.

To address these barriers, BGFA Theory of Change (ToC) aims to improve framework conditions for off-grid energy markets by catalysing private investment and collecting better data to accelerate access to basic and affordable renewable energy services. In addition to existing ToC, the Danish contribution will also strengthen synergies between the scaling of a new off-grid solar sector and the creation of new inclusive green jobs in Uganda.

<sup>&</sup>lt;sup>8</sup> The Platform for Market Change is inspired by the national Task Force established in Zambia bringing together government, private sector actors, and development partners and donors to address market risk related to the delivery of the energy services.



## 6. Partners and Management arrangement

As result-based procurement mechanism, the BGFA has a fairly simple management set-up where the Nordic Environment Finance Corporation (NEFCO) has overall responsibility as facility manager. In February 2019, a Framework Facility Management Agreement of the Beyond the Grid Fund for Africa was signed by Sweden (SIDA) as the first donor of the BGFA. As responsible for the management and administration of the BGFA, NEFCO will apply their own policies, procedures and standards for fund management which meets EU's extensive requirements for delegated funds. NEFCO as an International Finance Institution (IFI) will make it easy to extend the donor basis for the BGFA.

In May 2020, NEFCO signed a long-term technical advisory service agreement with REEEP, which should be understood as a continuation of the pilot phase of Beyond the Grid Zambia where REEEP was selected in an open tender process. REEEP is a specialized organisation on sustainable energy as their core mandate and will ensure access to the capacity needed to successfully implement the BGFA.

All other tasks, services and equipment will be contracted through open public tenders. In this sense, the BGFA is considered as a nimble and lean project set-up focusing on scaling off-grid energy services through an inclusive market-based procurement approach.

#### **NEFCO**

NEFCO is an international finance institution established in 1990 by the five Nordic countries. Denmark is represented in NEFCO's board by the Danish Environmental Protection Agency and the Ministry of Foreign Affairs. NEFCO provides loans and makes capital investments in order to generate positive environmental effects of interest to the Nordic region. As such, NEFCO acts as a specialist Fund Manager for a number of climate and environmental funds. It has 30 years experience as an

international financial institution working for 30 years with environment and energy projects on behalf of the Nordic governments initially in eastern Europe and former Soviet Union and in China but since 2008 its mandate was extended to Africa and globally.

NEFCO has the requisite technical, administrative and EU approved fiduciary skills to manage BGFA in a skilled and cost effective manner. The capacity of NEFCO is proven by its completion of the European Commission's Pillar Assessment and it also holds accreditation by the Green Climate Fund.

As an international financial institution (IFI), NEFCO has the legal status and competence to conclude contracts for fund management services, and the ability to accept the fiduciary responsibilities of administering such funds. It has undertaken over 120 such agreements globally in the climate change field alone and NEFCO has been engaged in over 50 climate related projects in all regions of the African continent. Of specific experience, it is worth highlighting:

- Fund management of the Nordic Project Fund (Nopef) aiming at strengthening the international competitiveness of small and medium-sized enterprises by providing loans on favourable terms for co-financing feasibility studies. Established in 1982, Nopef has to date co-financed over 3,100 feasibility study projects, of which over 140 have been in Africa.
- From 2010 2018, NEFCO implemented on behalf of the Nordic Development Fund (NDF), the first four Calls of the Nordic Climate Facility (NCF). The NCF is a grant financing instrument with co-funding requirements funding innovative climate adaptation and mitigation projects in Africa, Asia and Latin America.
- NEFCO is also managing two carbon facilities, the NEFCO Carbon Fund (NeCF) and NEFCO
  Norwegian Carbon Procurement Facility (NorCaP) on behalf of public and private sector investors.
   NeCF and NorCaP currently represent a portfolio of 18 ongoing Clean Development Mechanisms
  (CDM) projects spread across different sectors in 9 countries, including some in Africa.

NEFCO also has a track-record of managing Danish funds. NEFCO was the fund manager for the Danish neighbourhood programme in Georgia for the Energy Efficiency and Sustainable Energy project which aimed at strengthening Efficiency Building Codes. Where the Danish funding contributed to grant-based technical assistance and capacity building, NEFCO and EBRD loans financed the implementation of the energy saving measures in the public buildings. Similar to the BGFA, the project in Georgia was defined by clear quantitative targets. Currently, the Danida Sustainable Infrastructure Finance is also planning another agreement with NEFCO for a renewable energy project in Ukraine.

### REEEP

For technical advisory, analytics, monitoring, evaluation and verification, the BGFA programme is implemented in partnership with the Renewable Energy and Energy Efficiency Partnership (REEEP). REEEP is an international multilateral partnership, constituted as a Quasi International Organisation under Austrian Law that works to accelerate market-based deployment of renewable energy and energy efficient systems in low- and middle-income countries. REEEP is responsible for the continuous technical dialogue and capability development with partners and service providers in Uganda. REEEP also supervises the day-to-day implementation work and builds on a similar role in the separate pilot BGFZ programme.

#### ESP's

Though not pre-defined partners, the selected ESP's will be important delivery partners for the BGFA. The ESP's will be selected through open, competitive and transparent tender processes and it is expected that most ESP's will use one form of the PAYG business-model. The PAYG model is fairly new and emerged when widespread use of mobile payment technologies and declining solar PV and battery costs became an opportunity. The PAYG model is mainly based on solar energy and often consists of a Solar PV (incl- modules, inverter, cables, etc.), battery, mobile payment system, information and communications technology and power-consuming appliances such as LED bulbs or mobile phones. ESP's applying PAYG can provide either a "lease-to-own" model or a "usage-based payment" model. The payments are usually made via mobile credit, by sending a text message. The systems can feature a remote monitoring system that can be activated via mobile network connection. There are PAYG solar home systems without remote monitoring systems, but they still have a SIM card built in to allow ESP's to shut them down remotely if payments stop<sup>9</sup>.

Finally, **Power Africa**, an initiative administered by USAID, is providing a considerable in-kind technical assistance contribution (EUR 4 million over three years), and several other donors have shown interest in joining the programme.

## 7. Financial Management, planning, M&E and reporting

NEFCO is responsible for the management and administration of the BGFA. BGFA will be based on the application of NEFCO's standards and fund management procedures. This will create the required basis for attracting other financiers to the BGFA, since NEFCO's procedures comply with EU's high management requirements for delegated funds. NEFCO will be responsible for all reporting and accounting towards Denmark.

Due to the pending scoping studies, most of the first year of implementation will be considered scoping phase, which will result in informing and designing specific TOC and results frame for the BGFA Uganda window. A stocktaking review of the scoping phase will be conducted within the first 6-12 months after signing of the agreement and is likely to be combined with the appraisal of the second Danish contribution (pending final approval). These milestones provide early learning and adaptation opportunities.

### 7.1. M&E, reporting

NEFCO will be responsible for commissioning scoping studies, managing the Call for Proposals, overseeing due diligence, signing contracts with selected companies and with support from REEEP monitoring timely progress with contracted ESPs. In terms of M&E reporting, NEFCO will provide semi-annual progress reports to the Danish MFA. The reports will cover the overall status of the BGFA as well as locally achieved results, challenges and impacts (including gender aspects). These reports will inform learning and dialogue in the steering committee and feed into required adjustments and adaptation. Given the innovative nature of the engagement and partnership, a strong focus on learning and adaptation will be applied, not least when it comes to the training component which is a pilot.

Disbursement of funds will generally follow the results-based outputs. This means that the majority of the disbursement will follow the progress of the instalments of off-grid solar home systems or skills development

<sup>&</sup>lt;sup>9</sup> For further information, see IRENA (2020) Pays-as-you-go models – innovation landscape brief.

planned in the project. At least 75 pct. of the budget is expected to be programmed for financial incentives to companies, service providers or consortiums selected in public tenders for either the energy access component or the jobs/skills development component. NEFCO is responsible for all contracts and payments, incl. payments to REEEP. Payment of invoices for the agreed services will follow timelines and budgets in Terms of References, budgets and contracts. REEEP will be responsible for on the ground monitoring and verification of the quality of the instalments and other services provided but report to NEFCO and not directly to the MFA of Denmark.

## 7.2. Financial management

The activities of the BGFA programme shall be subject to reporting as well as accounting, financial control and auditing in accordance with Danida's Guidelines for Accounting and Auditing of Grants channeled through Governmental, Parastatal and International Organisations. The financial year of the BGFA programme shall be the same as the financial year of NEFCO (which runs from 1 January to 31 December). The first financial year may be extended to cover a longer period, including the calendar year following the year of the establishment of the BGFA, by written notice to the Ministry.

NEFCO shall prepare annual financial statements with respect to the BGFA programme and forward these to the Ministry no later than by 28 February each year. The accounting principle to be applied by NEFCO is the cash method of accounting. NEFCO shall cause such annual financial statements to be audited by the same auditors as are engaged by NEFCO from time to time to review NEFCO's own accounts. NEFCO shall send the auditors' report to the Ministry as soon as available and in any case no later than within 180 (one hundred and eighty) days after the expiry of each financial year.

Within three (3) months of the completion of the fund activities in accordance with this Agreement, NEFCO shall account for the use of the Contribution in a final report to be submitted to the Ministry. The Ministry may request that NEFCO complements and/or clarifies the final report and NEFCO must promptly comply with all such requests.

The representatives of the Ministry shall at all times at their own cost be allowed to undertake control measures solely to verify that the Contribution is being used in accordance with this Agreement. The representatives shall hereunder be permitted to visit premises and examine records, goods and documents requested, and have access to NEFCO's auditors and the auditors' assessment of all information pertaining to the final recipients and the project activities implemented with the Contribution. Confidentiality obligations on the part of NEFCO's auditors shall not hinder such access. Any access shall, however, not prejudice the confidentiality of other information which is not related to the Contribution<sup>10</sup>.

NEFCO shall apply the NEFCO Policy on Anticorruption (available on NEFCO website) and Compliance which includes taking appropriate measures to prevent the occurrence of Prohibited Practices. NEFCO shall investigate and report to the Ministry any credible allegations of Prohibited Practices involving activities funded with the Contribution. In the event a case of Prohibited Practice is reported to the Ministry, the Ministry may request that the project activity be suspended, if the final recipient or another contracting party is credibly suspected of Prohibited Practice, or terminated if the final recipient or another contracting party has been found to have committed an act of Prohibited Practice.

<sup>&</sup>lt;sup>10</sup> Further details on financial management and anti-corruption measures included in signed agreement template.

## 7.3. Steering committee

Denmark will participate in the BGFA Steering Committee which constitutes a forum, where the Facility Manage (NEFCO) will present to the Danish MFA draft progress reports, semi-annual work plans and budgets (for approval) with an outlook for the next half year. The BGFA Steering Committee will meet twice a year, including one meeting in one of the BGFA countries to enable field /site visits. This will be critical to ensure continues learning and adaptation in line with the Doing Development Differently approach. The semi-annual meetings will tentatively be held in June and December.

As the Facility Manager, NEFCO will present semi-annual progress reports, work plans, financial reports and budgets (for approval) with an outlook for the next half year at the Steering Committee meetings. NEFCO will also seek no-objections from the Steering Group members before contracting selected ESPs.

The BGFA Steering Committee will also serve as an informal forum to discuss, seek input and coordinate between donors and implementing agencies. This could be related to the following topics.

- General guidance and advice on overall strategic directions, issues and priorities
- Discuss best ways to proceed to achieve BGFA programme objectives
- Advise on long-term strategic objectives
- Input to market scoping and final decision for the Uganda window
- Guidance on overall procurement requirements and plans before launch.

## 8 Budget, financial management and Danish contribution

The Danish contribution amounts to a total of up to DKK 37.5 million earmarked to the Uganda BGFA window. This complements the Swedish contribution of SEK 130 million<sup>11</sup>. Currently, no other donors are funding the Uganda window, but expressions of interest have been received from other donors towards the BGFA.

The Danish contribution includes the payments to ESP's and the technical assistance components as well as all management fees and costs (for NEFCO and REEEP) and other costs. A specific pilot component on green jobs and skills development creation have been included in the Uganda Window and is reflected in the below budget. A detailed output based budget will be elaborated according to the Aid Management Guidelines and NEFCO policies during the scoping phase. The majority of the project is based on a 'results-based financing' approach where service providers are paid when services and infrastructure have been delivered and verified. This fits with Danish requirement of an output-based budget<sup>12</sup>.

19

<sup>&</sup>lt;sup>11</sup> The BGFA is a multi-donor facility. Sweden continues to be the core donor and active in all country windows. Germany expects to join the BGFA to support the Zambia window (Q4, 2020) and the Danish contribution earmarked to Uganda. Interest has been shown from Norway. The USA through its Power Africa programme will provide an inkind contribution worth approx. EUR 4 million (USD 4.5 million) over the next three years in order to help operationalise the initiative and develop a pipeline of commercially viable projects within the framework of BGFA.

<sup>&</sup>lt;sup>12</sup>The budget is indicative and be adjusted upon completion of scoping phase.

Indicative overall budget	DKK	EUR
Output 1. Delivery of access to renewable energy		
Output 1.1: Production of market scoping study and project design	500.000	67.114
Output 2.2: Delivery of off-grid renewable energy installation	24.375.000	3.271.812
Output 2.3: Provision of TA and capacity building	4.875.000	654.362
Output 2: Green jobs & skills development		
Output 2.1: Production of scoping study and training module	250.000	33.557
Output 2.2.: Design and content of vocational training	250.000	33.557
Output 2.3.: Delivery of pilot training programme	2.500.000	335.570
Output 2.4: Provision of TA and capacity building	1.000.000	134.228
Programme management		
Management fee (6%)	2.250.000	302.013
Contingencies (5%)	1.500.000	201.342
TOTAL	37.500.000	5.033.557

## 9. Risk Management

The MFA of Denmark will focus its risk management on key contextual, programmatic, and institutional risks, based on BGFA's own identified risk for the Uganda window.

The contextual risks are mainly related to the risk of corruption that always exists when building new infrastructure. Uganda is no exception. To mitigate this risk, the Call for Proposals process will be managed directly by NEFCO and evaluation criteria include a thorough screening of the selected entities and the capabilities to prevent corruption. This risk is considered 'likely' but lower than in large-scale infrastructure projects. The risk of political instability should also be considered due to the up-coming presidential election. Also, the impacts of COVID-19 could also disrupt the off-grid energy sector in Uganda and cause delays or change the business case.

The programmatic risks include lack of ESP's with adequate financing and implementing capacity. This risk is considered 'unlikely' as the Ugandan market is semi-mature with several operators active in the market. However, the market scoping study will tailor the Call for Proposals to the market conditions and a pro-active outreach will target both national and international operators. Further, different risks for delayed implementation will be monitored closely, including the impacts of post COVID-19, which influence consumers ability to pay for the energy service. Finally, the job creation and skills development component is a pilot sub-component which includes some higher risks as it has not been tested before by the BGFA. However, the Danish MFA will be deeply involved in development of this specific component and continuously take stock of progress and potential required adaptation.

Main institutional risks include the new set-up for NEFCO in Uganda. BGFA's experience is based on the separate pilot programme in Zambia. Uganda is different and a successful implementation will depend on public framework conditions to accelerate off-grid connection and on the quality of the energy service providers in Uganda. This risk is considered 'likely' if not managed adequately. Coordination between the

Danish and Swedish embassies in Kampala is already established and a thorough scoping study will be conducted by qualified national experts. This risk will be mitigated by engaging pro-actively with relevant public authorities and adjusting the public tender to the local context.

## Annex 1: Context Analysis

### 1. Overall development challenges, opportunities and risks

The Uganda vision 2040 is in line with the objectives of SDG7 and the vision targets 80% of Uganda's population should access electricity by the year 2040. For universal access goals in Uganda, both grid supply and off-grid supply of electricity is required. Investments need to also be made to achieve better efficiency and system flexibility. Government and international development funding will not suffice for the required investments. Private capital is therefore also required.

Presently, it is estimated that only 28% of Ugandans have access to electricity. The government of Uganda has been supported by several development partners to increase electricity generated through the GETFit programme. The Government is also working on grid extension projects as well as upgrading and adding new power transmission infrastructure. New generation is expected from large hydro power schemes at Karuma (600MW), Isimba (180MW) and Ayago (600MW). Several small hydro projects are also under development while the potential for Geothermal power is also under geo-scientific study (Kibiro and Panyimur prospects). Uganda also recently unveiled solar power projects in Soroti, Tororo and Nakasongola which are expected to collectively add 30MW onto the grid.

However, according to modelling forecasts made by the UN in 2012, for at least 10 % of the Ugandan population, the grid will not be an option for access to electricity in the decades to come. Instead, there shall be more reliance on off-grid and mini-grid solutions. Areas for which the off-grid and mini-grid option is most viable include: West Nile (Adjumani, Arua, Zombo), Northern Uganda and western Uganda (Bundibugyo, Ntoroko) (see map below). This is according to the rural electrification master plan which show areas of grid extension and standalone solutions for the different regions.

The National Development Plan (NDP) stipulates the Country's medium term strategic direction, development priorities and implementation strategies. In addition, it details Uganda's current development status, challenges and opportunities. The thrust of the NDPII is to propel the country to middle income status in the next five years through prioritizing investment in five key growth drivers with the greatest multiplier effect as identified in the Uganda Vision 2040. In line with the country's Vision, the theme for the NDP is "Strengthening Uganda's Competitiveness for Sustainable Wealth Creation, inclusive Growth and Employment." Access to clean energy serves at least a dual purpose (i) increase sustainable production and value addition in key growth sectors; and an increase the stock and quality of strategic infrastructure to accelerate the country's competitiveness.

In July 2013, the Cabinet of Uganda approved the new Renewable Energy Strategy and Plan (RESP) 2013 - 2022. The overall objective of this plan is "To position the electrification development program on a path that will progressively advance towards achievement of universal electrification by the year 2040, consistent with the existing policy of the Government, while ensuring the displacement of kerosene lighting in all rural Ugandan homes by 2030". The plan targets to achieve 26% rural electrification rate (i.e. consumers who will be utilizing electricity in their homes, businesses or institutions) by 2022 from the current 7%. This is planned to be achieved using long-range service territory plans and financial forecasts for the service territories under logical, sequential allocation of investment and capacity-building resources. This will be met by electricity service expansion of up to 1.28 million on grid new service connections and 140,000 additional installations of Solar PV Systems and Mini-Grid Distribution Service Connections for off-grids making a total of 1.42 million connections.

To address the challenge of energy access, the government has begun a master planning process to determine which rural areas are appropriate for grid expansion and which areas are better suited to offgrid solutions. Similarly, households with access to the grid have the opportunity to use off-grid solutions. Off-grid and PayGo companies exist in Uganda but are often not professional enough to attract commercial capital and loans. They do not reach the 'hard-to-reach' customers, for example refugee settlements, and they do not always offer affordable solutions to households, farmers or public institutions as they do not receive subsidies as the state-owned utilities. Access to electricity beyond the grid will require solutions that can suit the initially low demands and limited paying ability among different groups. Yet, evidence from other countries demonstrate that in most cases demand will grow as people climb the energy ladder. The off-grid businesses can capitalise on meeting social and economic development needs, providing new and innovative solutions for e.g. irrigation, cooling, welding and others. These businesses can also create new jobs and address youth un-employment or the unequal job opportunities for women in the traditional energy sector.

In view of the PayGo model being mostly viable it can be a way forward to incentivise the off-grid power supply businesses to also expand into the area of cooking. Sustainable cooking solutions are very important for Uganda, especially in the West Nile area where there are refugee settlements and deforestation rates are high. The current potential for new business models to become viable based on cooking as the core business is however not convincing with a few players like Shimoshi which can not address the existing demand.

### List the key documentation and sources used for the analysis:

## Are additional studies / analytic work needed? How and when will it be done?

BGFA will complete a market scoping study, and a jobs and skills development study, both due end Jan 2021, and both funded jointly by Denmark and Sweden

### 2. Fragility, conflict, migration and resilience

The overarching objective of the BGFA programme in Uganda is to create access to basic and affordable renewable energy services for energy poor people living outside the national electricity grid and to accelerate private sector growth in energy generation

BGFA is expected to reach out to deep rural areas and vulnerable regions with weak social contract, weak institutions and inadequate capacity among public institutions such as parts of northern Uganda. Thus, there may be outbreaks of violence and other conflict-related risks that can threat the ability to implement activities. There may also be security risk for the involved companies and for NEFCO/REEEP staff.

Understanding of conflict dynamics, conflict sensitivity and risks in each country is expected to be addressed in the market scoping study and in the due diligence review of the ESP companies, and will involve recommendations for risk mitigation measures and may have an impact on the proposed geographic targeting in the country.

Up-coming elections could also impose a risk for increased levels of conflicts and instability of the country.

List the key documentation and sources used for the analysis:

Are additional studies / analytic work needed? How and when will it be done?

BGFA will complete a market scoping study, and a jobs and skills development study, both due end Jan 2021

### 3. Assessment of human rights situation (HRBA) and gender

### **Human Rights Based Approach**

BGFA takes a rights perspective into account in the intervention in terms of the four principles, non-discrimination, participation, openness and transparency and accountability. On a strategic level, this is supported by the link with SDG 7 on universal access to modern energy.

While access to affordable, reliable, sustainable and modern energy for all is a Sustainable Development Goal (SDG7), access to renewable energy is not a human right in its own right. However, given the role of sustainable energy as a broader enabler of human and economic development, it is strongly interconnected with basic rights such as the right to life, food, health, shelter, education and social inclusion. The BGFA will specifically target the inclusion of populations without access to the basic service.

BGFA will address this by enabling investment of private sector energy service providers (ESPs) to expand energy access in previously underserved areas, and by capacity development, including better understanding of the socio-economic benefits also in end-use sectors. This will enable the duty bearers (i.e. the political decision makers and public authorities) to be mindful of the needs and priorities of end-users and ultimate beneficiaries, e.g. at the household and enterprise level (the rights holders). The human rights principles of participation, accountability, non-discrimination, and transparency will thus be supported.

#### **Transparency**

Openness and transparency will be safeguarded through reporting requirements, and through publicly sharing of results via the EDISON data tool (based on the SDG monitoring methodology). The scoping process for each procurement window will be broadly participatory and involve consumer perspectives (including as appropriate, use of energy user groups to gain an understanding of energy needs and preferences). In addition, the due diligence and sustainability-screening process for the bidding companies will explicitly address consumer rights.

The results-based financing model is based on open and public tenders where ESP's will be selected through transparent competitive selection process.

The Platforms for Market Change, a key feature of the BGFA, will be set up in each country of operation building on the approach to set up the Task Force for Off-grid Electrification in Zambia. The Platform for Market Change works to improve market ecosystem conditions utilizing a combination of capacity building and technical assistance, stakeholder outreach and market intelligence to address issues e.g. related to unclear taxation regulation or enforcing, recycling systems for e-waste or new forms of licensing for renewable mini-grids that have to be developed to support a new type of market.

#### Gender

Adopting a Gender Focus and Promoting Women's Economic Empowerment NEFCO has always required that beneficiaries of its financing adhere to the highest standards as regards equal treatment and gender equality. To emphasize NEFCO's commitment to the shared goals and objectives of its Nordic owner countries in actively promoting gender equality and the Nordic countries'

role as a leading example of delivering on the SDGs, in particular Goal 5 - Achieve gender equality and empower women and girls, NEFCO's Board has approved a Gender Policy, which is applicable to all of NEFCO's activities.

The main method to mainstream gender issues under the Gender Policy is to conduct a Gender Assessment for all new programmes and/or project proposals considered for financing by or through NEFCO regardless of type, size or sector. The Gender Policy foresees that the Gender Assessment as a rule is carried out at an early stage (in connection to the market scoping and implementation plan) with a view to improving opportunities for women and girls.

A basic Gender Assessment is incorporated into the market scoping study and the implementation plan. This work includes complementing the gender indicators in the Results Framework to meet the characteristics of specially structured windows for each country. A separate Gender Action Plan for the BGFA will also be developed in order to document concrete actions on how gender is mainstreamed in the programme and how gender equality will be actively promoted in the context of the BGFA.

A basic Gender Assessment is incorporated into the market scoping study and the implementation plan. This work includes complementing the gender indicators in the Results Framework to meet the characteristics of specially structured windows for each country. A separate Gender Action Plan for the BGFA will also be developed in order to document concrete actions on how gender is mainstreamed in the programme and how gender equality will be actively promoted in the context of the BGFA.

#### Youth

BGFA Uganda will leverage hands-on and innovative approaches to scale energy access to energy poor communities. Using financial incentives to bridge the financing gap, develop skills development for youth and female employment in off-grid sector and managing e-waste are some of the expected innovative take-aways from the project

The off-grid businesses can capitalize on meeting social and economic development needs, providing new and innovative solutions for e.g. irrigation, cooling, welding and other. These businesses can create new jobs and address youth un-employment.

Off grid energy is still a largely untapped opportunity for creating jobs for youth. BFGA is conducting a scoping study financed jointly by Denmark and Sweden, which will lead to the design of a small job-creation sub-programme. The scoping study will provide a comprehensive, up-to-date overview of off-grid energy market in Uganda, including the demand for and availability of training institutions. The jobs and skills development component will aim to develop vocational and/or tertiary level training for the off-grid sector with selected local partner institutions and promote local job creation through inclusive business development, particularly focusing on opportunities for women and youth. The specific timeline for the job-creation component will be developed once the scoping study is finished

### **Employment**

The off-grid sector is emerging as a significant employer in emerging economies that suffer from high rates of joblessness as surveyed by Power for All. Although nascent and just beginning to scale, it has already grown a workforce comparative to the utility power sector and can have a wide, positive impact in Uganda through formal, informal and productive use jobs. Distributed renewable energy is an engine for creating good, skilled jobs in emerging economies through formal employment, with 2 to 5 times more jobs being created through informal work and productive use. Estimates of productive use jobs stimulated through new or improved electricity access in 2017–18 show 65,000 jobs in Kenya and 15,000

in Nigeria – five times the size of the sector's direct, formal workforce. Pico-solar appliance and Solar-Home-System companies are the jobs engine of this sector, though employment from mini-grids is likely to grow, match and potentially exceed in some regions. Importantly, off grid energy is still a largely untapped opportunity for creating jobs for women and youth. At present, less than 25% of the off-grid workforce are women but increasing this is an area of focus for BGFA. Women's participation brings proven benefits, especially in sales and distribution. Employment generation a performance indicator monitored through the BGFA and reported via the public dashboard.

### List the key documentation and sources used for the analysis:

https://www.nefco.org/sites/nefco.org/files/pdf-files/nefco\_gender\_policy\_february\_2018.pdf.

### Are additional studies / analytic work needed? How and when will it be done?

In the scoping phase, BGFA will conduct a market scoping study with will include an assessment of social results and impacts including peace and conflict and human rights. This includes an analysis of challenges and opportunities relating to gender considerations, and an assessment of social results and impacts including peace and conflict and human rights perspectives

In addition, BGFA will make a jobs and skills development study, which included the potential for women and youth

Both studies are due end Jan 2021

### 4. Inclusive sustainable growth, climate change and environment

### **Climate change and environment**

The support to BGFA is aligned to new Danish Government's long-term global climate strategy. While the main aims of the BGFA are to support energy access in line with SDG 7, the BGFA will have notable and mostly positive impacts on climate change mitigation and enhanced resilience (e.g. in the context of reduced use of kerosene lighting or sustainable use of bioenergy and reduced deforestation). Other environmental impacts are likely to be minimal given the nature of the technologies supported by the Fund. NEFCO will ensure that at a minimum, projects and contracted ESPs comply with relevant national laws regulating Environmental and Social Impact Assessment requirements, but also NEFCO's Environmental Policy and Guidelines and Sida's approach for safeguarding sustainability in support to the power sector in sub-Saharan Africa. E-waste will specifically be addressed.

### Sustainability

NEFCO recognizes that sustainability is dependent on local ownership, since in most cases results will not be sustained over time if they are not supported by local key stakeholders and correspond to a genuine local demand and generate tangible benefits to the final beneficiaries. Hence, country engagement and dialogue with the demand side, the customers, are critical for accelerating the creation of a true market. Likewise, sustainability also depends on how assets, knowledge, skills and resources financed by the BGFA will be managed after the completion of the BGFA. In addition to the nurturing of self-sustaining private businesses in Uganda, considerable focus will therefore be put on the institutional capacity development aspects and aimed at creating local capacity that will last beyond the lifetime of the BGFA initiative. Likewise, when optimizing the BGFZ concept efforts will be made to strengthen the demand side in understanding and expressing its real needs and preferences for different energy services in an effort to stimulate a more vibrant market, where demand side drives innovation in business models and product available on the market (including gender preferences).

A well-developed exit strategy is essential for sustainability. During programme implementation, an exit strategy for BGF Uganda will be developed, whereby a concrete plan and timing for the transfer of programmatic ownership for BGF and Platform activities to local government institutions (e.g. the Rural Energy Agency) will be elaborated. This plan will be complemented by tailored capacity building of the identified agencies such that at the appointed time they will be in a position to assume the management responsibility for BGF Uganda.

More broadly, NEFCO's own policies will form the basis for the operational integration of social and environmental aspects, gender, human rights, as well as policy and practices for anti-corruption, disclosure and transparency. In addition to this NEFCO will also maintain an on-going dialogue with the Danish Embassy and Danida to ensure compliance with latest policies and requirements, and (jointly with REEEP) coordination with other Denmark funded initiatives in Uganda.

### List the key documentation and sources used for the analysis:

Projects will be followed up and reported with regard to environmental performance according to NEFCO's Environmental Policy and Guidelines

https://www.nefco.org/sites/nefco.org/files/pdf-files/nefco\_environmental\_guidelines\_2017.pdf

If this initial assessment shows that further work will be needed during the formulation phase, please list how and when will it be done?

N/a

## 5. Capacity of public sector, public financial management and corruption

The BGFA is managed by the Nordic Environment Finance Corporation (NEFCO). As responsible for the management and administration of the BGFA, NEFCO will apply their own policies, procedures and standards for fund managements which meets EU's extensive requirements for delegated funds. NEFCO as an International Finance Institution (IFI) will make it easy to extend the donor basis for the BGFA.

For technical advisory, analytics, monitoring, evaluation and verification, the BGFA programme is implemented in partnership with the Renewable Energy and Energy Efficiency Partnership (REEEP). REEEP is an international multilateral partnership. REEEP is responsible for the continuous technical dialogue and capability development with partners and service providers in Uganda. REEEP also supervises the day-to-day implementation work.

NEFCO's own policies will form the basis for the operational integration of policy and practices for anticorruption, disclosure and transparency. In addition to this NEFCO will also maintain an on-going dialogue with the Danish Embassy and Danida to ensure compliance with latest policies and requirements as well as (jointly with REEEP) coordination with other Denmark funded initiatives in Uganda.

The Energy Service Providers (ESPs) will be contracted through open public tenders. In this sense, the BGFA is nimble and lean project set-up focusing on scaling of off-grid energy services through an inclusive market-based procurement approach.

Capacity building will form an important element of the technical assistance as described to create an enabling environment in Uganda to support the market creation and roll out the analytics to support a robust and accessible monitoring, evaluation and learning system. Another important part of this work

will be aimed at increasing public and private investment into sustainable energy ecosystem by engaging domestic and international energy service providers and financial actors.

BGFA will also set up a Platform for Market Change with multiple stakeholders, including the public sector. The members of the Platform will meet regularly and will work towards:

- Clarifying and improving import regulations for solar energy products and appliances designed for use with solar home systems
- Drafting a policy to regulate the construction and operation of mini-grids, in consultation with the private sector.
- Clarifying land rights regulations to de-risk investment in mini-grids.
- Identifying approaches to improving the affordability of off-grid energy technology.
- Improving the sharing of market Intelligence.

On BGFA procurement and investment level, there are general principles for the procurement and procedures for due diligence and integrity check of the bidding companies, based on clearly communicated and transparent assessment criteria and evaluation process.

### List the key documentation and sources used for the analysis:

https://www.NEFCO.org/sites/NEFCO.org/files/pdf-files/NEFCO\_procurement\_guidelines\_12\_dec\_2013\_0.pdf

**Are additional studies / analytic work needed? How and when will it be done?** n/a

### 6. Matching with Danish strengths and interests, engaging Danish actors, seeking synergy

The Danish policies emphasize that Denmark should continue its leadership on SDG7 to raise the global ambition, including closing the access to energy gap. The announcement of the Danish Minister for Development Cooperation that Denmark will aim to provide access to clean energy for 5.8 million people in Sub-Saharan Africa demonstrates the level of ambition.

The Danish development assistance will also increase focus on focus on job creation and developing a skilled workforce for the green transition. The Minister has launched the ambition to train 10.000 more skilled workers in Africa.

The current Danish Strategy for Development Cooperation and Humanitarian Action 'The World 2030' identifies Sustainable Development Goal (SDG) 7 on affordable and clean energy as one of the five overall SDG priorities. The Strategy adopts a differentiated and context specific approach to support the different SDG7 indicators depending on the geographic context. Universal access to energy in low-income and fragile countries is a priority. The planned new Strategy for Development Cooperation is expected to reconfirm the Danish commitment to SDG7.

Climate and environment are also listed as priorities under the first strategic objective of Denmark's Country Policy Paper for Uganda 2018-2022 and the project is aligned to the 'Uganda 2040 Vision' aiming to connect 80% of the population with access to electricity by 2040. This engagement will seek to build synergy to other existing Danish engagement in Uganda, such as e.g. post-harvest activities in the agricultural sector, and the Danish private sector engagement and cooperation with the financing sector. Danish companies have already shown interest for participating in the BGFA Uganda tendering process.

The Danish embassy in Uganda has been involved in the initial meetings and further synergies will be established during scoping and implementation of the BGFA.

Further, opportunities for Denmark to build alliances between BGFA and multilateral agencies such as ESMAP and SEforAll, Danish supported institutions such as GGGI, and also more investor-related funds such SEFA and Nordic Development Fund. So far, dialogue with BGFA has been very open to strengthen collaboration with multilateral and bilateral cooperation. BGFA is already coordinating with several multilateral alliances and agencies such as Power Africa, who has already committed considerable in-kind contribution to the BGFA.

Also, the BGFA in Uganda will support other Danish priorities such as technical skills development, job creation and gender equality. A stronger effort to build skills and create new green jobs in the off-grid solar sector will be a specific Danish footprint for further development of the BGFA approach.

## ${\it List the key documentation and sources used for the analysis:}$

n/a

### Are additional studies / analytic work needed? How and when will it be done?

BGFA will make a jobs and skills development study, which included the potential for women and youth. The study is due end Jan 2021

### 7. Stakeholder analysis

The BGFA, through the foreseen initial country scoping/stakeholder consultation and the considerable institutional capacity-building component, will adhere to the principles of local ownership, and the respect of Uganda's own priorities. The BFGA country specific implementation plan for Uganda will demonstrate alignment to the partner countries' own objectives, related to poverty reduction and energy access and follow up mechanisms, inclusive partnership, transparency, prevention of corruption and accountability, as well as donor coordination and harmonization.

NEFCO and REEEP recognize that ownership and sustainability of the action are critical success factors and depend on the support or the counteraction from specific groups, institutions or individuals within as well as outside the Fund. The BGFA in Uganda will operate in a complex stakeholder landscape, engaging with institutions of the Government, such as ministries and regulatory authorities; international aid agencies and Development Finance Institutions (DFIs); international organisations and non-governmental organisations (NGOs); businesses and private sector financial institutions; and others.

The BGFA will have a number of direct beneficiaries in Uganda. These include: small and medium-sized enterprises (SMEs) aiming to serve rural energy markets; households, businesses and institutional energy users (energy poor women and men) served by the BGFA-supported companies - which may be considered the primary beneficiaries. Other important stakeholders are policy institutions and government agencies engaged in the Platform for Market Change, and possibly local financial institutions looking to support renewable energy business models that are de-risked through the BGFA intervention.

Productive uses of energy are identified as an area that few donor-funded activities address in Uganda. Denmark could support that e.g. farmers are supported to express their demands and preferences/hindrances for investing in renewable energy, including for post-harvest production. This kind of customer or end-user support would be complementary to supporting the suppliers. Farmers appear to be a relevant group for starting and other income bringing activities can stem from this. The

districts to focus on should be discussed with Rural Electrification Agency (REA) and the Ugandan National Farmers Federation (UNFFE).

The demand dialogue and customer support could be discussed with The Ministry of Energy, the Private Sector Foundation of Uganda (PFSU), UNIDO and UNCDF. Apart from UNFFE and REA, it is advisable that the Ugandan National Renewable Energy and Energy Efficiency Alliance (UNREEE) and its member associations are engaged and given tasks in the dialogue. Further to productive uses of energy, net-debit business models would be in the interest of Ugandan Solar Energy Association (USEA), UNREEEA and these organisations could be involved as responsible for pilots and demonstration projects that demonstrate the opportunity of the net-debit business model within the area of productive uses of energy and wider.

Supporting the energy end-users is a new perspective in Uganda for creating demand growth and economic development. One recommended way of launching a sustainable and result oriented end-user dialogue could be to support Buyers' Groups. For examples, small industries' branches or specific types of farming can aggregate and be supported to formulate their needs and join forces to impact the suppliers to deliver more appropriate and valuable energy services. Another highly relevant end-user category is the agricultural sector and other productive/service sectors. Without doubt, the modernization of agriculture will entail energy use. It is paramount to understand that energy end-users that started off as off-grid later can become important players in the grid. If Denmark supports farmers in business development and to become productive users of energy, it can be added to regard the possibility of selling excess electricity to the grid. Activities that support this can be demonstrational pilots, general awareness, capacity development, networking and research cooperation

The Uganda Rural Electrification Authority (REA) has been created and mandated to design and implement rural electrification programmes, support and effect grid extension and / or provide alternate electricity infrastructure and services to rural areas in order to increase energy access, thereby increasing productivity and contributing to improved quality of life. The specific engagement approaches of the BGFA programme with REA will be adapted to the specific needs and requirements with a view to strengthening their capacity. Depending on the local circumstances at hand, the REA could be involved in the actual project evaluation. In all circumstances, efforts should be made to coordinate and avoid overlap with grid extension activities to ensure optimization of the BGFA investments. The REA could also be beneficiaries of TA support and advice to facilitate implementation of their own procurement rounds or targeted capacity building to assume responsibility and programmatic ownership of the BGFA in the long term and it is proposed that this will form part of the "exit strategy" of the BGFA.

List the key documentation and sources used for the analysis:

Are additional studies / analytic work needed? How and when will it be done? n/a

## **Annex 2: Partners**

BGFA is a result-based procurement mechanism that was set-up with funding by Sweden. The Nordic Environment Finance Corporation (NEFCO) was selected as the facility manager. In February 2019, a Framework Facility Management Agreement of the Beyond the Grid Fund for Africa was signed with Sweden (SIDA) as the first donor to the BGFA. As responsible for the management and administration of the BGFA, NEFCO will apply their own policies, procedures and standards for fund managements which meets EU's extensive requirements for delegated funds. NEFCO as an International Finance Institution (IFI) will make it easy to extending the donor basis for the BGFA.

In May 2020 NEFCO signed a long-term technical advisory service agreement with REEEP which should be understood as a continuation of the pilot phase of Beyond the Grid Zambia where REEEP was selected in an open tender process. REEEP is a specialized organisation on sustainable energy as their core mandate and will ensure access to the capacity needed to successfully implement the BGFA.

All other tasks, services and an energy services will be contracted through open public tenders. In this sense, the BGFA is considered as a nimble and lean project set-up focusing on scaling of off-grid energy services through an inclusive market-based procurement approach.

The BGFA has a nimble and simple management set-up where majority of the implementation will be implemented by Energy Service Provides (ESP). The ESP's will be selected through open and competitive tender processes.

### Summary of stakeholder analysis

An informal mapping for potential institutions/partners to deliver scale on SDG 7.1 (access to energy) and the Minister's target to deliver access to 5.8 million people in Africa. The mapping were made in Q1 and Q2 2020 by making a call for proposals to embassies and MFA departments but also mapping the landscape for relevant multilateral and inter-governmental proposals.

Despite the rapid expansion of off-grid solar power in Sub-Saharan, relatively few dedicated trust funds or facilities targets a roll-out of the off-grid renewable energy sector in Africa. Larger funds appeared slow before implementation would begin or with a broader energy access mandate. The mapping identified three potential funds/facilities: Beyond the Grid Fund for Africa (BGFA), Energising Development (EnDev) and the Energy and Environment Partnership Trust Fund (EEP).

### Criteria for selecting programme partners/BGFA

BGFA is managed by NEFCO as an intergovernmental International Finance Institution with Denmark as a member, which has a range of advantages and also opens up for direct selection of grantee. However, the selection was also based on a mapping. The mapping was based on a number of selection criteria which reflected the target of Denmark contributing to provide 5.8 million people in Africa with access to clean electricity within the term of the current Government.

- Deliver extensive scale on access to electricity in Africa
- Rapid execution of projects
- Target the under-deserved communities without access to energy today

- Leverage private financing
- Potential for becoming a Danish flagship contribution on SDG7 in Africa
- Ability to influence design to establish links to other Danish priorities, e.g. green jobs, skills development and displaced people.

The Beyond the Grid Fund for Africa was the best match as it aims to scale access to energy rapidly, targets the under-deserved communities in Africa through financial incentives and will still be able to leverage private financing. It clearly had established quantities targets to and a monitoring system in place to deliver on the target of Danish development assistance contributing to provide 5,8 million people in Africa with renewable energy. Further, the BGFA was about to start up the Uganda window in a priority country for Danish development cooperation which allowed Denmark to participate almost from the beginning in the country.

### Brief presentation of partners and multilateral coordination

The BGFA has two main partners:

- NEFCO as the overall facility manager of the BGFA. It is an international finance institution established in 1990 by the five Nordic countries. Denmark is represented in NEFCO's board by the Danish Environmental Protection Agency and the Ministry of Foreign Affairs. NEFCO provides loans and makes capital investments in order to generate positive environmental effects of interest to the Nordic region. As such, NEFCO acts as a specialist Fund Manager for a number of climate and environmental funds. It has considerable experience as an international financial institution working for 30 years with environment and energy projects on behalf of the Nordic governments initially in eastern Europe and former Soviet Union and in China but since 2008 its mandate was extended to Africa and globally.
- REEEP has been contracted to provide technical advisory, analytics, monitoring, evaluation and
  verification. REEEP was selected in a competitive tender during the first phase. REEEP is an
  international multilateral partnership, constituted as a Quasi International Organisation under
  Austrian Law that works to accelerate market-based deployment of renewable energy and energy
  efficient systems in low- and middle-income countries. REEEP is responsible for the continuous
  technical dialogue and capability development with partners and service providers in Uganda.
  REEEP also supervises the day-to-day implementation work and builds on similar role in the
  separate pilot BGFZ programme.

Once selected through open and competitive tenders, the selected ESP's will be an important delivery partner for the BGFA. The ESP's is expected to use one form of the PAYG business-model. The PAYG model is fairly new and emerged when widespread use of mobile payment technologies and declining solar PV and battery costs became an opportunity.

The BGFA has also established a formal collaboration with Power Africa. Power Africa, a U.S. Government-led partnership, is providing support to the Beyond the Grid Fund for Africa (BGFA). It will provide an in-kind contribution worth approx. EUR 4 million (USD 4.5 million) over three years in order to help operationalise the initiative and develop a pipeline of commercially viable projects within the framework of BGFA.

The BGFA programme is also in constant contact with relevant industry stakeholders, e.g.

- GOGLA, the global association for the off-grid solar energy industry. Established in 2012, GOGLA
  now represents over 180 members as a neutral, independent, not-for-profit industry association.
  Our services assist the industry to build sustainable markets and profitable businesses delivering
  quality, affordable off-grid electricity products and services to as many customers as possible
  across the developing world.
- Africa Minigrid Developers Association (AMDA). AMDA was created by developers and is supported
  by donors, governments and financiers to ensure that we reach the goal of universal electrification
  in the next 15 years

BGFA is also in close dialogue with broader multilateral landscape working to accelerate access to energy in Africa and SDF7, e.g.

- ESMAP and the World Bank,
- African Development Bank
- SE4AII
- Global Clean Cooking Alliance.

Denmark will furthermore aim to establish synergies to Danish bilateral engagements in Uganda and to the work made by other multilateral agencies supported by Denmark.

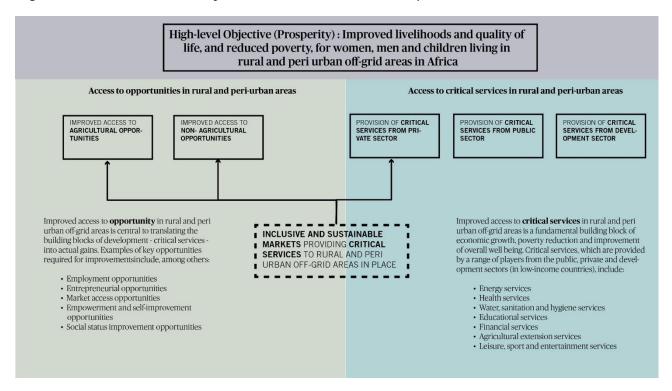
# Annex 3: BGFA Results Clusters (framework) and ToC

Results Clusters	Indicator(s) DRAFT	Source of Information / Means of	
		Verification	
	# of BGFA procurement/funding windows/rounds implemented	Procurement documents	
Result Cluster 1	Robust and effective mechanisms and systems in place in four target	Independent Mid-term and End of Program	
	countries for results-based procurement/incentive schemes	evaluation	
	# of projects originated and contracted (thereof # of women-led	ESP contracts	
Result Cluster 1: Increased availability of high	businesses)	Documentation of procurement evaluation	
quality energy services to meet demand	# of people, men and women, benefiting from new or improved access to	EDISON (and regular independent	
affordably and sustainably and improved	energy services	verification)	
economic capacity of targeted population	# of ESP operating at scale (serving > X% of addressable market) in each	ESP reporting to BGFA	
(women and men) to secure needed critical	country	BGFA reporting to Sida	
energy services.	# of full time jobs created at the level of contracted ESPs (disaggregated	ESP reporting to BGFA	
By 2024; BGFA procurement mechanism	by gender)	External socio-economic impact assessment	
developed and implemented providing	Customer satisfaction and perceived benefits by consumers in each target	ESP reporting to BGFA	
tailored incentives and financial security to	country by energy service and by gender	External socio-economic impact assessment	
selected Energy Service Providers (ESPs) to	Impact on customer economic situation (expenditures and income)	External socio-economic impact assessment	
enter the rural electrification markets in target countries (Zambia, Mozambique, Burkina Faso,	Impact on macroeconomic conditions in country (employment+, FDI+,	Independent Mid-term and End of Program	
	GDP+, etc.)	evaluation	
Uganda and Liberia) and scale the sales of off-	Relevant climate adaptation and mitigation indicators (e.g., tCO2e per	EDISON; based on methodology develop by	
grid solutions to reach at least five million	year mitigated against business-as-usual) in each target country	external experts (e.g. the Swedish Energy	
people (women and men).		Agency)	
	ToRs approved and annual work plans developed by key stakeholders of	Terms of References	
	the platforms in each target country	Stakeholder platform minutes	
Result Cluster 2	Amount of funding available and leveraged for platform coordination and	BGFA reporting to NEFCO	
	selected platform activities in each target country	Stakeholder platform minutes	

Results Clusters	Indicator(s) DRAFT	Source of Information / Means of	
		Verification	
Enhanced policy and regulatory ecosystem for ensuring access to energy services for all	Total number of institutions represented in the platform - government, donor, private sector, financial institutions, NGOs, CSOs etc. in each target country	BGFA Customer relationship management system (CRM)	
By 2024, Platforms for Market Change in Zambia, Mozambique, Burkina Faso, Uganda and Liberia are developed and appropriate to national context; they are self-sustaining, owned and operated by local actors, and interacting with each other;	Stakeholder satisfaction with the platform in each target country - per stakeholder category and benefits perceived	Annual surveys with platform members	
	Number and summary descriptions of platform activities in each target country - meetings, round tables, events, establishment of market knowledge base, donor coordination, analysis of systemic market challenges and opportunities, policy analysis, recommendations to improve ecosystem for off-grid RE sector in the target countries	BGFA Customer relationship management system (CRM) BGFA reporting to NEFCO Stakeholder platform minutes	
	Platforms in each target country are self-sustaining and run by local actors (by 2024)	Independent mid-term and end of program evaluation	
	INDICATOR for platforms interacting with each other	TBD	
	XX mEUR of BGFA public finance disbursed to selected ESPs	BGFA reporting to NEFCO (PC)	
Result Cluster 3	# of additional public donor institutions supporting BGFA, and amount of additional funding provided	TF documentation	
Increased public and private investment into sustainable energy and energy ecosystem	# of concessional or private investors supporting energy access and low- carbon development via investments into off-grid market activities in target countries	Annual country level surveys  Independent Mid-term and End of Program evaluation	
By 2024 increased engagement of domestic financial sector and international financial institutions in target energy service sectors in Zambia, Mozambique, Burkina Faso, Uganda and Liberia	# of national and international, public and private, financial institutions providing finance to ESPs in the off-grid RE sector in each target country - debt, equity, grant, other and by SHS and mini-grid sector	Signed finance agreements; confirmation by relevant stakeholders	
	Amount of finance provided to ESPs in each target country- by type of finance (debt, equity, grant, other) and by SHS and mini-grid sector	ESP reporting to BGFA	
	# of public and private banks and/or micro-finance institutions providing consumer finance to ESP customers in the off-grid RE sector in each target country- by type of consumer finance and by SHS and mini-grid sector	Annual country level surveys Independent Mid-term and End of Program evaluation	
	Amount of consumer finance provided by ESPs in off-grid RE power sector Amount of consumer finance provided by ESPs in off-grid RE power sector - by type of consumer finance and by SHS and mini-grid sector	ESP reporting to BGFA	

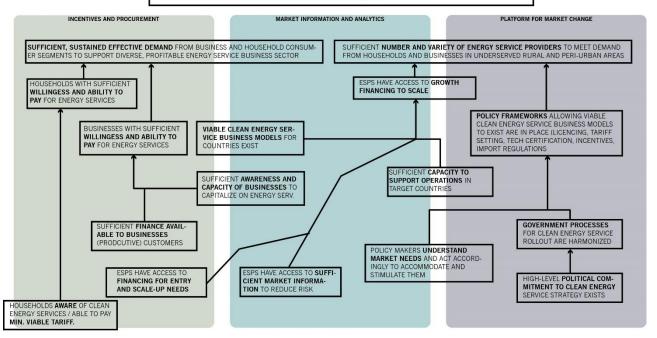
Results Clusters	Indicator(s) DRAFT	Source of Information / Means of
		Verification
	Key outcomes of round tables with financial institutions in each target country	Round table meeting minutes
Result Cluster 4	By Q4 2019, a robust, secure and effective integrated data system in place to effectively support result based procurement / incentive schemes in Zambia, Mozambique, Burkina Faso, Uganda and Liberia	Technical acceptance of the data system (as per requirement specification) Security testing report External ESS verification report
Advanced data-driven market intelligence and blended financing models stimulate influx of efficient, targeted capital to ecosystem	By Q4 2019, an appropriate legal setting for a data processing and analytics centre has been established and security of data system is tested on a regular basis	BGFA reporting to NEFCO and Sida Security testing report
By 2024, an effective data collection and analysis effort, including IT systems, has collected relevant data from the deployments of at least 1 million high quality energy services in Zambia, Mozambique, Burkina Faso, Uganda and Liberia; utilized for: 1) monitoring the delivery of results under RBF incentive	By Q2 2020, data collected and analyzed has been processed into # tailored intelligence products (e.g. contributing to GIS mapping layers and other spatial planning datasets, data-driven recommendations for policy and regulatory stakeholders, etc.)	Intelligence products Platform meeting minutes
schemes; 2) demonstrating impact transparently and in real-time to the public; 3) analyzing and processing data into intelligence products which contribute to improved planning, increased investment and additive impact on energy services for beneficiaries.	Stakeholder satisfaction with the public facing of the BGFA data system	Independent Mid-term and End of Program evaluation

A specific ToC will be developed for the BGFA Uganda window during the scoping phase. It is expected to follow key elements of the regional ToC but also include job creations and skills development.



#### Strategic Objective: Improve Inclusive and Sustainable Markets for Critical Energy Services in Africa

BY 2024, AT LEAST FIVE MILLION UNDERSERVED PEOPLE IN RURAL AND PERI-URBAN AREAS ACROSS FOUR COUNTRIES HAVE ACCESS TO HIGH QUALITY CLEAN ENERGY SERVICES ON INCLUSIVE AND SUSTAINABLE MARKETS.



### Annex 4: Detailed Indicative Budget

This is the indicative budget for the six year programme period. The final budget will informed by the two scoping studies and the budget will be revised accordingly to final decisions together with adjustment of the results framework and the theory of change. The years 2025 and 2026 are expected for completing the energy service provisions and final evaluation.

	DKK	2020	2021	2022	2023	2024
Delivery of Access to Energy Component						
One market scoping study and project design	500.000	500.000				
Delivery of targeted installation access to energy	24.375.000		6.093.750	6.093.750	6.093.750	6.093.750
Delivery of agreed TA and capacity building	4.875.000					
- Delivery of institutional capacity building	1.218.750	243.750	243.750	243.750	243.750	243.750
- Field monitoring and verification	2.437.500		609.375	609.375	609.375	609.375
- Technical assistance to ESPs	1.218.750		304.688	304.688	304.688	304.688
Creation of jobs and skills component						
Production of scoping study and design	250.000	250.000				
Design of vocational training programme	250.000	250.000				
Delivery of pilot training programme	2.500.000		625.000	625.000	625.000	625.000
TA and capacity building	1.000.000		250.000	250.000	250.000	250.000
Programme management						
Management fee (6%)	2.250.000	450.000	450.000	450.000	450.000	450.000
Contingencies (4%)	1.500.000	300.000	300.000	300.000	300.000	300.000
Total	37.500.000	1.993.750	8.876.563	8.876.563	8.876.563	8.876.563

## Annex 5: Risk Management Matrix

Risk		Risk level	Comments/mitigation measures
Low interest among potential Energy Service Providers		Low / Medium	The procurement will be widely disseminated and supported through in-country activities given that ESPs should be either present in country (or region) or are actively scoping that market for possible entry.
Lack of expertis	required consulting se	Low	The use of REEEP own resources and networks, as well as the PFAN network of advisers and consultants in the region should mitigate this risk.
Lack of absorption capacity in Uganda		Low	Institutional capacity development will be undertaken as part of the scoping and implementation phases of the BGFA, in particular specific Platforms for Market Change in each country.
-	during implementation		
a)	Project proponents do not fulfil the criteria	Low	a. It is possible that some proposals received via open calls will not fulfil the project criteria and will thus not be selected for financing. However, strict screening and evaluation processes as undertaken in Zambia (and improved upon) will mitigate this rick.
b)	Project owner does not have the required capacity to implement the project	Medium	<ul> <li>improved upon) will mitigate this risk.</li> <li>b. The tenders set high requirements. The assessment of potential bidders and business plans will take into account the technical capacity to deliver the outcomes. Capacity building is considered.</li> </ul>
c)	There is insufficient interest from the private sector	Low-medium	c. Uganda is an active market. The market scoping study will attempt to gauge interest in attracting investors to the market. Once BGFA entry into market has been agreed, a proactive outreach effort will be undertaken by REEEP both in the country, region and internationally.
d)	Lack of own financing among ESPs	Low-medium	d. The assessment of potential bidders and business plans will take into account the financial capacity to deliver the outcomes.
e)	Inability to mobilise additional funding		e. Careful screening of bidders and the financing plans e.g. seeking evidence of funding applications will mitigate this risk.  Additionally, PFAN and other advice may be offered, including access to Nordic financing if appropriate.
f)	The regulatory environment concerning project implementation is underdeveloped and in continuous change	High	f. This risk is related to the long and complicated project approval procedures, market barriers, lack of commercial financing, uncertain regulatory structures etc. This can be partly mitigated by providing institutional support to address identified gaps via the technical assistance component of BGFA.
g)	Corruption	High	g. Corruption in sub-Saharan Africa is endemic and widespread. NEFCO and REEEP will oversee procurement processes of services and during implementation which leaves little room for project related corruption. Other

				political and administrative processes interacting with the project have the potential increase the risk of corruption and result in a negative impact on the project implementation and results.
	ns for Change not leading ded results:			
a)	Private sector stakeholders do not buy into process and Platform(s)	Low	a.	Private sector entities – with the exception of advantaged incumbents – are typically very positive toward the platform concept and the intended objectives and outcomes of public-private stakeholder engagement and donor coordination, which increases transparency and reduces investment and business risks for firms.
b)	Public sector stakeholders do not buy into process and Platform(s)	High	b.	Public sector entities must be convinced that the Platform concept can yield positive outcomes and benefits for communities, and that proactive engagement in the concept will improve chances for development cooperation programming and higher levels of foreign direct investment in their economies. The stakeholder outreach and mobilization strategy will be developed with experts intimately familiar with the political economies and personalities of BGFA countries. Where appropriate and beneficial, the case of the Zambia Task Force can be leveraged as an example of a successful approach.
c)	Platform(s) negatively influenced by political pressure	Medium-high	c.	An effective Platform for Change will be a natural target for influence-peddling and corruption; as such REEEP will seek to maintain transparency and openness in the administration of the Platforms, to the extent possible given political circumstances in each country.
d)	Platform(s) ineffective at influencing ecosystem due to other factors	Medium	d.	In any such broad coordination and engagement venture, there is always a high tendency toward inertia. REEEP will seek to push participants toward meaningful decisions and action, and leverage the opportunities from private investment into local economies as a key driver of this action
	ented projects do not lead ded results:			
a)	ESPs are unable to make sufficient ESS connections	Medium	a.	Proactive monitoring by REEEP such as regular progress calls with contracted ESPs will act as an early warning system. Corrective actions and technical support can be mobilised as appropriate.
b)	Projects do not target peri- urban and rural customers	Low-medium	b.	Customers in rural and peri-urban areas often do not represent the ideal target segments for energy services. REEEP will ensure that any geographic and demographic aspects of incentive schemes are sufficiently documented, understandable and verifiable, such that ESPs will incorporate high-need areas into target segments.

c)	Projects do not result in intended environmental, social and gender benefits	Medium	C.	The project appraisal process covers potential environmental, social and gender benefits and impacts. Consulting support / coaching during project implementation mitigates the risk and improves quality and certainty of delivery of outcomes.
d)	Environmental, social and gender benefits are not sustainable	Medium	d. e.	The Social impact procurement model sets requirements for cost effectiveness through competitive bidding. Financial feasibility is assessed during project due diligence, including ensuring that ESPs have not underbid. Environmental, social and gender impacts are monitored through project owners' environmental reporting to REEEP.
e) f)	Lack of ownership at ESP			
g)				

## Annex 6: List of supplementary materials

#	Document / Material	Source
1	BGFA Programme document Uganda Window	NEFCO
2	First BGFA tender: call for proposals (Burkina Faso, Liberia, Mozambique and Zambia)	NEFCO
3	BGFZ Socio-Economic Impact Study	REEEP/NEFCO
4	TOR market scoping study Uganda	NEFCO/REEEP
5	TOR Jobs and Skills scoping study Uganda	NEFCO/REEEP
6	SDG7 Tracking report 2020	ESMAP
7	World Energy Outlook Report 2020	IEA
8	2020 off-grid solar market trends progress report	GOGLA/ESMAP
9	Pays-as-you-go models – innovation landscape brief (2020)	IRENA

### Annex 7: Communication Plan

What?	When?	How?	Audience(s)	Responsible
(the message)	(the timing)	(the mechanism)		
Selection of project by Danish Government	When do we want to communicate these messages? Communication made by start of project formulation	Selected project will be described with clear justification and expected outcomes.	Danish media and engaged political parties	MFA comms team
Flagship project in the announcement of the target of providing access to energy for 5,8 million people.	When the Minister of Development Cooperation announced the target	Clear communication plan developed by GJL	Broader Danish populations	GJL and MFA comms team
Announcement of the public tender for ESP's	Q2 2020	NEFCO preparation and announcement of fund	Relevant ESP's	NEFCO
First training of off- grid energy training module	2021	Selected service provider	Danish media story	GJL/REEEP
First instalment of SHS equipment	2021	Media story about the first families benefitting from the SHS instalment	Danish media story	GJL/REEEP

## Annex 8: Process Action Plan (PAP)

Timeline	Activity	Documentation	Responsible
28 Marts – 10 April	Selected project proposals	List of project proposals	GJL
	presented to the Minister		
17 April	First presentation of project	Minutes from meeting and	GJL
	proposals to be financed – political	long list	
	discussion		
17 May	Final approval of four project, incl.	Minutes from meeting and	GJL
	BGFA – political discussion.	extended descriptions of	
		projects.	
25 May – 26 June	Dialogue with NEFCO, SIDA,		GJL
	Embassy of Uganda and relevant		
	offices.		
15 July – 26 August	Drafting concept note and internal		GJL
	consultation		
27 August	Submission of Concept Note to	Concept note	GJL
	Programme Committee		
18 September	Programme Committee discussion	Chairman's conclusions	FRU
	of concept note		
21 September – 9	Finalise draft programme	Draft DED	GJL
October	document		
9 - 20 October	Light Appraisal	Appraisal report	ELK
21 - 23 October	Final programme document	Final DED, cover note and	GJL
		annexes	
26 – 29 October	Management review and approval	Approval/F2	GJL/UDVPL
30 November	Signed agreement	Agreement	GJL/NEFCO
6 November	First payment	Request for Payment	GJL/NEFCO
31 January 2021	Final scoping studies	Final reports	NEFCO
15 April 20221	External presentation of studies	Agenda for event NEFCO/GJL	
	and engagement of multilaterals		
June 2021	Final design of Uganda window	Adjusted design document	NEFCO

## Annex 9: Summary of recommendations of the appraisal

Title of (Country) Programme	Danish support to Beyond the Grid for Africa – Uganda window (NEFCO)
File number/F2 reference	F2 reference: F2: 2020-29493
Appraisal report date	20 October 2020
Council for Development Policy meeting date	
Summary of possible recommenda	ntions not followed
All recommendations have been follow	ved and language/information strengthened in the
Development Engagement Document.	

#### Overall conclusion of the appraisal

The current appraisal concerns the first Danish contribution to the new Beyond the Grid for Africa (BGFA) Uganda program. It will be followed by a second appraisal concerning an additional Danish contribution to BGFA Uganda, envisaged in 2021. The second appraisal is expected to take place in the first half year of 2021, performed by the same appraisal team.

The appraisal was conducted according to the Terms of Reference and was based on desk analyses of key documents (in particular the DED), combined with telephone interviews with key informants. They included NEFCO, REEEP and the Royal Danish Embassy in Uganda. The Appraisal Team (AT) consulted with the Danish Ministry of Foreign Affairs (GJL) throughout the appraisal process.

This first appraisal found that the proposed support to BGFA Uganda is well aligned to the strategic priorities of Denmark, in particular in supporting Danish priorities for SDG7, and for involving the private sector. By studying the project documentation and by interviewing Nordic Environment Finance Corporation (NEFCO), the Renewable Energy and Energy Efficiency Partnership (REEEP) and the Royal Danish Embassy in Uganda, the appraisal found the proposal to be solid and well informed. The management by NEFCO fully complies with Danish standards, REEEP is a qualified implementation partner and the project can make an important contribution to Uganda's national priorities on expanding access to electricity from off-grid systems, and for mobilizing private capital.

The appraisal found that the BFGA country specific implementation plan for Uganda is aligned to the partner countries' own objectives, related to poverty reduction and energy access and is clear on the implementation modalities and follow up mechanisms, as well as transparency, prevention of corruption and accountability, and donor coordination and harmonization. In addition, the appraisal found that the preliminary Results Framework in the DED is relevant and consistent with the objectives of the program and noted that the final results framework, targets and indicators will be informed by the Market Scoping Assessment to be completed end of January 2021. The Danish support to BGFA covers the period 2020 to 2024, which is in line with the time frame for the BGFA Uganda project. The appraisal found the time frame to be realistic but based on the timeline for the specific Danish priority on delivering improved access to energy by June 2023, a fast-track of ESP installations of off-grid solar might be needed.

The conclusion of the appraisal is thus that the project is suitable for Danish support and that the project is recommended to be presented for approval.

The second Danish contribution will be based on the outcomes of two scoping studies, as well as a specific Theory of Change and Results Framework. As part of the quality check of the documentation for this contribution, the second appraisal will:

- Analyze the results of the two scoping reports on the off-grid market in Uganda and the envisaged impacts on job creation
- Discuss how the impacts of achieving electricity access can be documented, e.g. for health and education and for production and income generation in the communities
- Discuss what may happen if/when the grid arrives to an PV powered off-grid area, e.g. to avoid 'stranded assets'
- Look into how BGFA Uganda will manage e-waste, e.g. obsolete PV panels and batteries

Recommendations by the appraisal team | Follow up by the responsible unit

1. Explain and justify how the costs per connection and jobs impact are estimated. Justify the 1:3 ratio for the Danish capital input

Estimates in the DED are based on experiences from Zambia. Explain more in detail why the Zambia experience is relevant for Uganda (e.g. similar market situation etc.)

An explanation why characteristics and experiences from Zambia can be used as a proxy for the BGFA Uganda window. It is due to the semi-mature level of the off-grid sector, annual instalment of SHS, number of active ESP's and consumers willingness to pay for energy services.

#### 2. Include information on the quality of power supply that will be provided

Currently the DED says 'basic electricity services for lighting charging phones and running small appliances such as fans, TV, radio etc.' and also refers 'productive energy pillar of BGFA'.

The Appraisal found that the DED should explain how the project addresses the different tiers, and that the ESMAP Multi-Tier Framework (MTF) could be a point of reference.

A clear estimation of the level of quality of energy provided is included together with a simple annex explaining the Multi-tier framework on energy access.

# 3. Explain the business models of participating companies, acting as Energy Service Providers (ESPs)

The DED presents the NEFCO/REEEP business model, but does not present the model(s) that typically can be applied by the private Energy Service Providers e.g. their approach to additional financing, revenue collection, installation, O&M and continuation/exit. To the extent this information is well-known at this point in time it should be included in the final DED.

A specific section presenting the ESP's as a project partner has been included. It explains the PAYG business model in more details.

## 4. Add details on sustainability, exit strategy, monitoring and multi stakeholder forum

The Appraisal found that the above issues should be further explained in the DED and has included an annex to this document with specific proposals to the text.

A sustainable exit approach has been incorporated in the programme document.

# 5. Clarify and provide more details on the proposed inception phase, including timing and outputs

The Appraisal suggest that the DED should provide a clearer picture of the proposed inception phase, including the envisaged outputs and the approval of these:

- Market scoping, due end Jan 2021
- Jobs and skills development study, due end Jan 2021
- ToC
- Final results framework
- Output based budget

It could possibly be done as a redrafting or adding to text on the first stage of implementation, section 3.2. In addition to this and in order to secure alignment with the concept used in the DED the appraisal suggest to change 'inception phase' with 'scoping phase'.

It has been agreed with MFA-ELK not to use the term inception phase. Rather, we will apply the term 'scoping phase' which also will be more aligned with partner approach and the expected stocktaking review which will be conducted in 2021.

Further details regarding the purpose and outcome of the scoping phase has been included in section 3.2.

#### 6. Explain the role of the Steering Committee and Denmark's participation

The DED should provide more details on the Steering Committee, e.g. who participates? Does it contribute to donor coordination? How can Denmark influence the implementation of BGFA-Uganda though the Steering Committee? How can Denmark cooperate with other donors e.g. Sweden in the Steering Committee?

Additional details have been incorporated in section 8. Further, an annex with terms of reference for the Steering Committee has been included.

#### 7. Mention the plans for an additional DKK 80m Danish contribution in 2021

The DED should provide more detail on the envisaged second Danish contribution, linked to the outcome of the Inception Phase/Inception Review

A paragraph has been included in section 2.2. and in the budget section.

I hereby confirm that the above-mentioned issues have been addressed properly as part of the appraisal and that the appraisal team has provided the recommendations stated above.

Signed in Copenhagen on the October 20, 2020.

Tobias von Platen-Hallermund

Appraisal Team leader/TQS representative

I hereby confirm that the responsible unit has undertaken the follow-up activities stated above. In cases where recommendations have not been accepted, reasons for this are given either in the table or in the notes enclosed.

Signed in Copenhagen on October 27 2020

Man &

Adam Sparre Spliid, Head of Unit (acting), GJL

### Annex 10: Multitier framework on access to energy

	ENERGISED ↑	POWER CAPACITY	AVAILABILITY	SERVICES	EXAMPLE OF APPLIANCES CONNECTED	
Г	Work	800 W <	Min 16 h & 23h electricity/day		4 lights, phone, radio, TV, sewing machine	TIER 4 & 5
systems	800 W	200 W - 800 W	Min. 8 hours of electricity/day	Tier 2 + any medium power appliances	4 lights, phone, radio, TV	TIER 3
Pay-as-you-go	Media	50 W - 200 W	Min. 4 hours of electricity/day	General lighting + phone charging + Television + Fan (if needed)	4 lights, phone, radio	TIER 2
Pay-a	50 W Home 10 W Light	3 W - 50 W	Min. 4 hours of electricity/day	Task lighting + phone charging	2 lights, phone	TIER 1
	3 W	0				TIER 0
	DISCONNECTED					

Source: IRENA (2020) 'Pays-as-you-go-models' (based on ESMAP's multi-tier framework)

### Annex 11: ToR for Steering Committee

The BGFA Steering Committee constitutes a forum, where the Facility Manager can present to Donors semi-annual reports on work done (for information) and draft semi-annual work plans and budgets on work to be done (for approval) as well as seek no-objection to the Facility Manager's contracting of procured ESPs, and for Sweden to provide general guidance and advice on how to best proceed to achieve the BGFA Programme objectives.

The BGFA Steering Committee will not have any formal decision-making powers, but will provide recommendations and serve as a forum for Donors to discuss and coordinate with the concerned Embassies before formally deciding upon the Fund Manager's recommendations on behalf of Sweden.

The BGFA Steering Committee shall have of the following composition:

One or more representatives from the Donors and if relevant representatives from each of the Embassies representing the participating countries (to the extent they wish to take part).

One or more representatives from the Facility Manager shall take part and will submit material to form basis for the members' discussions.

In its capacity as the BGFA Programme Implementation Manager one or more representatives from REEEP will take part and present matters of relevance regarding BGFA implementation and related strategy to inform the BGFA Steering Committee.

A representative from Sida, Stockholm (as the founding and major donor) will function as the Chairperson of each meetings with support from the Facility Manager.

The BGFA Steering Committee will meet twice a year, once in Europe and once in one of the targeted BGFA countries, and then combined with field visits. The semi-annual meetings will tentatively be held in June and December.

Meeting dates will be agreed by the Parties and meetings will be convened by the Chairperson.

The BGFA Steering Committee may also be convened on an ad hoc basis upon the request of any of the Parties and be convened by the Chairperson.

At the discretion of the Chairperson, observers may be invited to participate in regular and ad hoc BGFA Steering Committee meetings.

Meeting documents, including an agenda and other material supporting discussions to be held and recommendations to be made, will be circulated to the BGFA Steering Committee by the Facility Manager fourteen (14) business days ahead of each meeting.

The Facility Manager will keep the minutes of the meetings. As a rule, minutes recording formal approval/no-objections made made by Donors at the meeting will be prepared at the end of each meeting for Sweden's immediate signing. Draft minutes recording main parts of general discussions and recommendations by the BGFA Steering Committee will be circulated to the BGFA Steering Committee by the Facility Manager not later than twenty one (21) business days after each meeting inviting the BGFA Steering Committee Members represented at the meeting in question to provide possible comments within seven (7) business days. Final minutes will be circulated by the Facility Manager not later than seven (7) business days thereafter.

Exceptionally the opinion of Donor agencies and Embassy representatives of the BGFA Steering Committee may be sought by means of a written procedure at the initiative of the Facility Manager.

Any request or recommendation submitted by the Facility Manager for approval by Donors by means of a written procedure will be accompanied by supporting documentation.

The Facility Manager will inform the BGFA Steering Committee on the outcome of the written procedure, either in writing, or orally at the next meeting of the BGFA Steering Committee.

At the BGFA Steering Committee meeting, the Facility Manger will present semi-annual reports on work done (for information), draft work plans and budgets for upcoming half-year periods (for approval by Sweden) and outlooks for the next half year as well as seek Sweden's no- objection for the Facility Manager's contracting of procured ESPs.

The BGFA Steering Committee shall further serve as a forum for Donors to discuss, seek input and coordinate with Embassies from concerned countries, the Facility Manager and the Program Implementation Manager (REEEP) related to the following matters:

- General guidance and advice on overall strategic directions, issues and priorities of the BGFA Programme, including fundraising issues;
- General guidance and advice on how to proceed with planned and on-going activities to best achieve the BGFA Programme objectives;
- Advice on long-term strategic objectives of the BGFA Programme;
- Input to the market scoping and preparation of implementation plans;
- Guidance on the determination of overall eligibility criteria for the ESP procurement rounds and new activities;
- Guidance on the procurement plan (before the ESP procurement is launched);
- Input to possible expansions and replenishments; and
- Input to possible amendments of these Terms of Reference for the BGFA Steering Committee.

The Terms of Reference for the BGFA Steering Committee can be amended by separate mutual agreement between Donors and NEFCO.