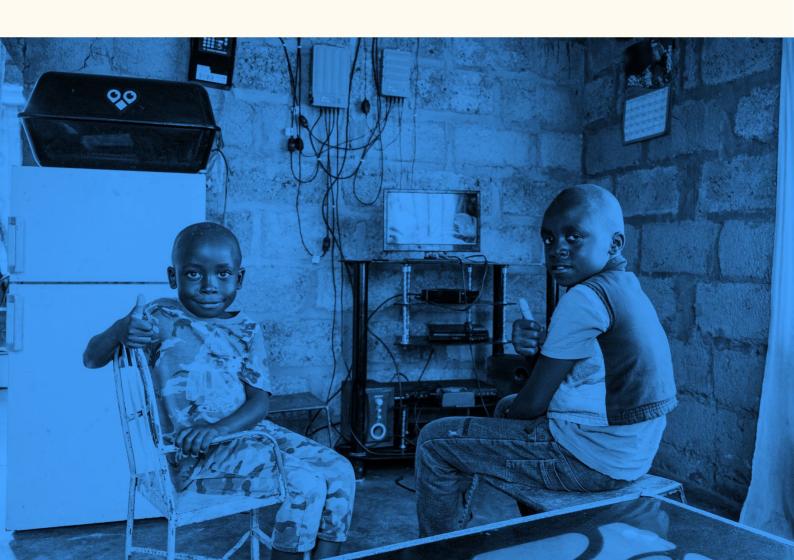


# **PRE-QUALIFICATION GUIDELINES**

FOURTH BGFA CALL FOR PROPOSALS (BGFA4)

THE DEMOCRATIC REPUBLIC OF THE CONGO

Helsinki, 21 June 2022





Beyond the Grid Fund for Africa (BGFA) is launching its fourth call for proposals (BGFA4), inviting interested off-grid energy service providers (ESPs) to compete for funding. BGFA4 aims to incentivise ESPs to scale up innovative sustainable businesses and thereby accelerate access to affordable and clean off-grid energy for customers living in underserved areas of the Democratic Republic of the Congo (DRC). BGFA funding under the DRC Country Programme can be sought to accelerate energy access not only in rural and peri-urban areas but also in certain urban areas. The four largest cities in the country (Kinshasa, Lubumbashi, Kananga and Mbuji-Mayi) are excluded from support in the Final Application Guidelines so as to target poorer urban areas not already served by existing providers

Eligible Applicants are for-profit ESPs that have already established business in DRC or are willing to establish business there. In case the Applicant is not already established in DRC, the application should be filed by the parent company. NEFCO will only be able to enter into BGFA financing contracts with for-profit ESPs once established in DRC and will require that the local company leads and undertakes full responsibility for the project implementation towards NEFCO.

#### These Pre-Qualification Guidelines1:

- (i) Describe the two-stage application process (Pre-Qualification and Final Application stage)
- (ii) Present the Pre-Qualification eligibility criteria and minimum requirements ESPs need to meet to be invited to take part in the Final Application stage
- (iii) Invite interested ESPs to fill in the online application via the SmartME system, including a Pre-qualification Concept Note

Applications are to be submitted by 29 August 2022. The Pre-Qualification stage is expected to be completed by the end of September 2022. Applicants successfully passing the Pre-Qualification stage will be notified in October 2022 and asked to submit a full proposal by the end of the year. Guidelines for the Final Application stage are scheduled to be published during October 2022.

Applicants will be duly informed of their progress and the final results of BGFA4 will be made public.

BGFA4 is funded by the Swedish International Development Cooperation Agency (Sida) with in-kind support from Power Africa.



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The English language version will be overruling any potential discrepancies between the English and French language versions of these guidelines. NEFCO further reserves the right to make potential corrections or specifications to these guidelines, in which case such changes will be published on the BGFA website.



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**Demonstrable** 

Operational

**Experience** 

**DRC** 

**ESP** 

**ESS** 

**Final Application** 

# List of abbreviations and definitions L'Agence Nationale de l'Electrification et des Services Energétiques en ANSER milieux rural et périurbain **Applicant** A single for-profit ESP that has or is willing to establish business in DRC Beyond the Grid Fund for Africa (a funding programme set up and **BGFA** managed by Nefco) **BGFA4** The fourth BGFA call for proposals targeted at DRC only Beyond the Grid Fund for Zambia (a pilot programme initiated by Sweden **BGFZ** with REEEP acting as Sweden's implementing agent) **Concept Note** To be filled in online by Applicants via SmartME Consortium A for-profit or non-profit entity forming part of a consortium established to Member implement the BGFA-financed project (a Project Consortium) Country BGFA4 is a single Country Programme **Programme**

or in other SSA countries

customers

The Democratic Republic of the Congo

Applicants' proven operational off-grid experiences in the Project Country

An Energy Service Provider, i.e. a company selling energy directly to end

Energy service subscriptions made by end customers entering into a

contract with an ESP for the provision of relevant energy services

BGFA4 is divided into two stages: a Pre-Qualification and a Final

stage will be invited to take part in the Final Application stage).

Application stage (only ESPs successfully passing the Pre-Qualification



Funding Lot	Amount of BGFA4 funding available to ESPs for the provision of a specific type or mix of off-grid energy solutions
Mini-/Micro-grid	Refers broadly to an isolated or grid-connected power distribution network, including its own renewable generation capacity, load management and control as well as distribution infrastructure, built and operated by an ESP
NEFCO	Nordic Environment Finance Corporation, BGFA Facility Manager. Nefco has established the BGFA Programme and manages it as a separate funding facility.
Power Africa	A USAID-led initiative to increase the number of people in Africa with access to power
Pre-Qualification	BGFA4 is divided into two stages: a Pre-Qualification and a Final Application stage (only ESPs successfully passing the Pre-Qualification stage will be invited to take part in the Final Application stage)
Productive Use Energy (PUE)	The provision of relatively large load energy connections, requiring the Applicant to make a significant investment in a transformation plant and machinery over and above the energy system (for basic generation, storage and distribution of energy, as relevant) for the provision of productive use and services
PUE ESS	An ESS that provides larger load energy access to customer(s)/end beneficiaries through one or more of the identified BGFA4 target PUE applications/services.
Project Consortium	A group of for-profit or non-profit entities (led and represented by a for-profit Applicant) that have formed or agreed to form a consortium to apply for BGFA4 funding and eventually implement the proposed project
Project Country	BGFA4 funding can only be used to implement projects in DRC (eligible Project Country).



Project Partner	A for-profit or non-profit entity with a material and meaningful interest in the implementation of the proposed project (e.g. product suppliers; financial service partners; engineering, procurement and construction service providers; capacity building and training organisations and initiatives; NGOs)					
SHS	A solar home system					
Sida	Swedish International Development Cooperation Agency					
Significant Sub- Contractor	A company or organisation sub-contracted by an Applicant with direct responsibility for implementing and/or operating one or more components of the proposed project representing a minimum of 20% of the awarded BGFA4 funding					
SmartME	BGFA4 is organised as an online, fully paperless application process and handled via an electronic intake system called SmartME.					
SSA	Sub-Saharan Africa					
Standalone	Refers broadly to an isolated renewable energy-powered energy service provided to customers and includes a range of products from SHS to small-scale productive use appliances (fridges/freezers/pumps and other powered devices), Nano-grids and Flash-grids (small systems shared between a number of household/commercial/institutional users) as well as hub and kiosk models for the distribution of batteries and charging devices or related appliances.					
Tier	Categorisation used to distinguish between different levels of energy services by the amount of electrical energy generated, Wh/day combined with peak capacity (W) and availability (h) (latter only relevant to Mini-grids).					
USAID	United States Agency for International Development					



# 1 BGFA4 funding and application process

#### 1.1. Background

BGFA builds on the experiences of BGFZ (https://www.bgfz.org), a Swedish initiative under Power Africa<sup>2</sup> commenced in 2016. Early experiences from the BGFZ pilot programme have shown that there is demand for off-grid energy services amongst rural and peri-urban consumers. Private capital has been mobilised and social and gender outcomes have been positive. These preliminary results encouraged Sweden to request that Nefco set up BGFA as a separate funding facility. The aim of BGFA is to expand into underserved rural and peri-urban markets in SSA. The new Country Programme in DRC now makes BGFA funding available for contracted ESPs to serve end consumers not only in rural and peri-urban areas but also in certain urban areas.

BGFA aims to bridge a critical gap between early-stage support, traditionally offered by challenge funds and (impact) equity, and concessional/commercial debt needed for transitioning to scale in SSA.

The BGFA approach can provide direct results-based financing to ESPs to unlock early structural challenges in the market, build business and investor confidence, and proactively mobilise various types of downstream investment and debt financing.

The DRC Country Programme is funded by Sweden.

A thorough market scoping process, with extensive outreach to local energy authorities and potentially interested ESPs, concluded that expansion of the BGFA approach to DRC is highly relevant and warranted and in line with national policies.

During 2020-22, progress towards the energy access objective (Sustainable Development Goal 7) has been jeopardised by the COVID-19 pandemic, which has hit African economies hard, particularly the poorest and most vulnerable communities. BGFA4 seeks to support much-needed connections and the implementation of decentralised energy solutions to mitigate the impact of the pandemic and promote a green recovery in DRC.

NEFCO reserves the right to adjust the Final Guidelines to reflect the outcomes of ongoing coordination discussions with the World Bank/ANSER Mwinda Fund.

More information on the BGFA programme is available at: https://beyondthegrid.africa.

### 1.2. Funding opportunities and disbursements

#### **Funding opportunities**

Due to the large size and relative immaturity of the off-grid market in DRC, the Country Programme offers funding under one combined Funding Lot, Lot #11, which enables the direct comparison of the value for money to BGFA and DRC of different off-grid

https://www.usaid.gov/powerafrica



business models and technology solutions. Applicants may freely choose to apply for BGFA4 funding under Lot #11 for the provision of one type of off-grid solution (Standalone Solar Home Systems, SHS; Mini-/Micro-grids; or Productive Use Energy, PUE). Each of these solutions can in turn use different technologies and business models for electricity generation and the provision of energy services.

To receive BGFA4 funding, ESPs are required to engage in selling and delivering affordable and renewable off-grid energy services directly to end consumers in an enduring and sustainable manner.

Project implementation is expected to start in 2023 and end in 2027.

BGFA4 financing is targeted at small, local ESPs already doing business in DRC that wish to accelerate the growth of their business in that market and large, international ESPs with relevant market experience in other SSA countries that wish to expand by starting or growing business in DRC.

Applicants taking part in BGFA are expected to provide a substantial amount of their own financing as well as mobilise co-financing. The amount of results-based BGFA4 financing available to individual projects will be determined during the Final Application stage through a reverse auction approach. Project proposals will be ranked and awarded funding based on their expected overall value for money in meeting BGFA4 targets.

In their application, Applicants should specify the total amount of BGFA4 funding being requested and their foreseen annual BGFA4 funding needs over the four-year project implementation period (2023-2027).

#### **BOX 1: WHAT COSTS ARE ELIGIBLE UNDER BGFA?**

BGFA aims to stimulate new sustainable business models that incentivise and accelerate the private sector to offer affordable and clean off-grid energy access at scale in Africa. It provides financial incentives to selected private companies to provide high-quality energy services and products to people in participating countries. The funding is a form of 'free equity' that can be used by ESPs to scale their businesses.

BGFA4 funds may be used by contracted ESPs to cover expenditure and investments in relation to legitimate business establishment and operational activities including but not limited to:

- Business establishment and preparation
- Hardware and software costs
- Inventory and spares
- Personnel costs
- Training and capacity building
- Scale-up activities such as expansion of physical distribution
- Last-mile promotion, sales and service

There are no specific exclusions, but BGFA does not cover costs that already have been incurred, e.g. previously deployed systems.



Applicants will be required to specify in their application that they have or will have access to an amount of own financing equal to the requested amount of BGFA financing. Own financing should amount to at least 50% of the proposed project budget. A part of this financing will be required at the time of contracting. Applicants are expected to demonstrate a credible financing plan during the Final Application stage. Further financing will also be requested to secure the sustainable future continuation of the project.

BGFA4 does not require ESPs to have secured and finalised all their own and additional financing prior to contract signing. However, ESPs will be required to demonstrate a viable capital structure and credible financial model satisfactorily showing timely availability of the required own financing equal to or greater than the funding requested from BGFA4 as well as a credible fundraising plan for expected cofinancing from third parties prior to contracting.

#### Disbursement

Financing can be disbursed flexibly, including in advance. Advance payments can be made for ESPs to establish their business in a new market, scale up a company already active in a BGFA4 market and/or launch a new product, service or initiative in an existing market.

Up to 30% of the requested BGFA4 funding can exceptionally be disbursed in advance up to a maximum of EUR 500,000.

#### 1.3. Country Programme and Funding Lot.

BGFA4 is inviting interested off-grid ESPs to compete under the DRC Country Programme for the following Funding Lot# 11<sup>3</sup> (see Table 1) to be disbursed during a four-year period with current funding of up to EUR 15 million in total.

**TABLE 1: FUNDING LOT #11** 

FUNDING LOT	FUNDING CATEGORY	TIER LEVEL	NUMBER OF ESS	NUMBER OF EXPECTED CONTRACTS	INDICATIVE INDIVIDUAL CONTRACT SIZE (EUR million)	TOTAL NOMINAL CAPITAL (EUR million)
	Standalone/SHS	1A-5	70,000– 100,000	1–3	2–5	Up to max. 10
<b>LOT #11</b> Up to €15 million	Mini-/Micro-grids	1A-5	12,000– 20,000	1–3	2–5	Up to max. 10
	PUE	≥ 5+*	60–150	1–4	0.75–2	Up to max. 5

<sup>&</sup>lt;sup>3</sup> BGFA uses continuous numbering of Funding Lots offered under various calls.



\*exceptions possible for water and irrigation systems

BGFA4 aims to incentivise ESPs to accelerate the establishment of new, long-term sustainable ESS at scale. The expectation is that up to 110,000 off-grid ESS will be established during the project implementation period, thus benefiting more than 500,000 people in rural, peri-urban and/or certain urban areas. The indicative individual contract ticket size per ESP is expected to be between EUR 1 and EUR 5 million.

Funding Lot #11 is designed to address the needs of the Congolese market. Rather than encouraging companies specialising in Mini-/Micro-grids, Standalone Systems or Productive Use of Energy solutions to apply to different funding lots, these different approaches will be compared based on value for money, practicality and their potential impact on surrounding populations.

BGFA4 will provide funding under a sole Funding Window. The approach of Funding Lot #11 builds on the lessons learned from previous funding lots and the specific objectives of BGFA4. In view of maximising the value-for-money competitiveness across different types of off-grid solutions, Lot #11 will take the form of an open competition between three technology categories: Solar Home Systems, Micro-/Minigrids and Productive Use Energy.

The rationale for Funding Lot #11 is based on BGFA providing additionality to existing/upcoming energy access programmes in the country, the maturity of the market, the desired impact and the potential challenges of monitoring and verification, among other factors.

When implemented, it is expected that these activities will increase customer awareness, accessibility and affordability of high-quality solar solutions, leading to a significant and sustainable boost in ESS connections. Moreover, the open competition across technology solutions will ensure that the programme benefits from maximum value for money.

Based on the results of the market assessment and lessons learned in the implementation of previous funding lots, Funding Lot #11 is focused on bridging the gap between the interest in and demand for solar solutions among Congolese consumers and the present sporadic access to these types of products and services across the country. While BGFA mainly supports underserved areas, urban areas will also be eligible under BGFA4. However, the four largest cities in DRC (Kinshasa, Lubumbashi, Kananga and Mbuji-Mayi) are excluded from BGFA financing.

BGFA4 funding is foreseen to support ESPs in last-mile promotion, sales and service activities to encourage Applicants to take a geographically focused approach (for example, focusing efforts in several adjoining districts) to effectively catalyse demand for ESS.

For the Mini-grid category, Applicants will be requested to provide proof that they are in advanced discussions with relevant authorities on national and/or provincial levels to secure the required titles (production/distribution concession and retail licence) in order to minimise the risk of delays.



Applicants invited to take part in the Final Application stage will be required to demonstrate a high level of security awareness and capability, e.g. through the submission of a detailed and robust security plan which is adequately funded.

Partnerships with small or medium-sized Congolese ESPs, locally established marketing and distribution specialists (also potentially operating in other segments) and/or providers of PUE-related services or community organisation specialists are encouraged; the in-depth market knowledge and operational experience of these organisations can help to better penetrate inaccessible market segments or geographic areas.

During the implementation phase, successful ESPs will also be eligible to receive technical assistance and business support from BGFA including advice, for example, related to monitoring, evaluation and gender as well as the mobilisation of additional funds. Specific technical assistance may be provided in the area of e-waste management.

#### **Energy Service Tier Matrix**

During the Final Application stage, Applicants will be asked to provide a detailed business plan in which they are required to categorise the different types of ESS they wish to offer end customers, including whether they are targeted at residential, commercial and/or institutional customers.

BGFA4 funding will be awarded to Applicants that, during the Final Application stage, can demonstrate the best value for money, defined as the lowest average weighted cost per ESS, taking into account the viability of the underlying business plan.

Clean cooking solutions (especially electric), productive appliances and equipment, and commercial and institutional connections will be incentivised through the use of multipliers on the weightings applied to the respective Energy Service Tiers for the purposes of calculating the final value for money.

The number of expected established ESS set out by the Applicants in the business plan will be assessed, stress-tested and undergo a detailed due diligence review before contract signing.

Applicants are encouraged already at this stage to familiarise themselves with the parameters set out in the applicable Energy Service Tier matrices included in <u>Annex C</u>.

#### **Productive Use**

An innovation for BGFA Funding Lot #11 is an explicit PUE category to incentivise high quality and high-capacity productive use of energy in specific value-added segments, addressing a critical market niche in DRC, responding to ESP needs and differentiating BGFA from other programmes. An indicative list of such sub-sectors includes, but is not limited to, cooling (cold storage and freezing rooms, cold chain logistics/ice-making), e-mobility, agro processing and transformation of raw materials (milling and grinding, crop drying soap manufacturing coffee roasting and chocolate production) and drinking water (water filtration and bottling), irrigation and pumping.



BGFA4 Funding Lot #11 includes a dedicated category for ESPs specialising in the provision of high-capacity PUE connections, applications and services. Applicants can propose projects focused solely on PUE and/or propose PUE connections in conjunction with other system categories (e.g. SHS, larger standalone systems or Mini-/Micro-grids). The inclusion of PUE is not mandatory but will be significantly incentivised. In both the Standalone and Mini-/Micro-grid categories, bidders may also include smaller PUE appliances such as pumps, fridges and freezers, and clean cooking solutions. Applicants are also encouraged to consider partnering with specialist providers of PUE connections and services. Strong preference will be given to PUE applications and services that deploy modern energy-efficient appliances, machinery and equipment.

PUE equipment, applications and services eligible for funding under BGFA4 are detailed in Annex C.

#### 1.4. Application process

The BGFA4 application process is divided into two stages:

- 1. Pre-Qualification stage (described in this document)
- 2. Final Application stage (to be described in detail in a future document)

The purpose of the Pre-Qualification stage is to check Applicants' compliance with the BGFA4 key eligibility criteria and minimum technical and financial capacity requirements. Only Applicants and project proposals meeting the eligibility criteria and minimum requirements will be invited to submit applications during the Final Application stage.

The Final Application stage will focus on assessing the quality of Applicants' business plans and carrying out a price per weighted energy service calculation, resulting in an overall evaluation of the proposed project and expected value for money per established ESS. BGFA funding will be awarded to ESPs using a reverse auction approach in which project proposals will be ranked based on their overall expected value for money in reaching the BGFA targets.

During the Pre-Qualification stage, Applicants are asked to submit a limited amount of information and documentation to reduce the time and cost of preparing the application. Applicants are required to complete a short online questionnaire and a Concept Note and upload a limited amount of supporting documentation.

Applicants invited to take part in the Final Application stage will be competing in a limited pool for BGFA4 funds and are therefore presumed to be willing to allocate more time and resources to preparing a comprehensive application.

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.

Prior to contract signing, a thorough due diligence review of each of the highestscoring project proposals will be carried out. The due diligence will include a review of all technical, social, environmental, financial, institutional and legal aspects deemed



relevant to the transaction.

A contract template will be made available at the Final Application stage and used as the basis for the negotiations. Applicants are kindly requested to note that any changes to the project after submission of the Final Application stage are subject to NEFCO's approval and at NEFCO's sole discretion.

Nefco reserves the right not to start negotiations with any of the Applicants or to discontinue negotiations with unresponsive Applicants. All contracts are subject to a successful due diligence review and individual prior no-objection from the donor(s).

# 2 Pre-Qualification application process

#### 2.1. Timing

The BGFA4 Pre-Qualification SmartME application intake system will open on 21 June 2022 and remain open until 29 August 2022.

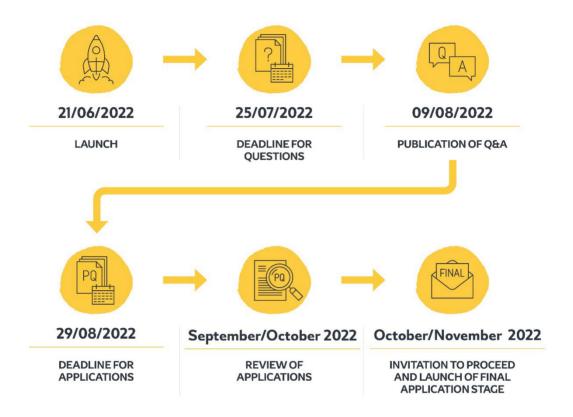
Applicants that pass the Pre-Qualification stage will be notified once the Pre-Qualification evaluation is ready and asked to submit a full proposal tentatively by January 2023. Guidelines for the Final Application stage are scheduled to be published during October/November 2022.

Contracts between ESPs and Nefco for BGFA4 financing are expected to be signed and initiated during 2023.

Applicants will be duly notified of their progress and the final results of BGFA4 will be publicly communicated.



FIGURE 1: PRE-QUALIFICATION STAGE TIMELINE



For more information about the preliminary timeline and stages (Pre-Qualification and Final Application stages) for the entire BGFA4 funding round, please check the <a href="https://www.beyondthegrid.africa">www.beyondthegrid.africa</a> website.

#### 2.2. Application intake system – SmartME

BGFA4 is organised as an online, fully paperless application process via an electronic intake system called SmartME.

The SmartME application intake system is specifically tailored for BGFA to simplify the Pre-Qualification stage application process as much as possible. We encourage Applicants to give us feedback on their experience of the SmartME intake system to help us learn and improve our services.

#### 2.3. Registration and submissions

Interested ESPs are encouraged to register and create a user account as early as possible and to familiarise themselves with the BGFA4 application requirements. Applicants are required to submit their applications and documents via the BGFA SmartME intake system only. Registration for the SmartME intake system can be found on the BGFA website at <a href="https://beyondthegrid.africa/register/">https://beyondthegrid.africa/register/</a>.

Only for-profit companies can register and submit applications, but non-profit organisations can play a supporting role in project implementation as detailed in these Guidelines.



Applicants are required to submit all documentation in English and denominate all financial information in EUR. Once submitted, Pre-Qualification applications will be considered final and cannot be amended.

Applications must be submitted by 29 August 2022 at 12:00 hrs (noon) Helsinki time (UTC+3).

It is the Applicants' responsibility to ensure that all documentation is submitted and <u>uploaded</u> via SmartME on time, taking into account the speed of Internet connections. It is strongly recommended to allow sufficient time to complete and submit the application well in advance of the submission deadline. The SmartME intake system will not accept late submissions/uploads.

#### 2.4. Questions and answers

Applicants are invited to post questions via the SmartME intake system's support section only and will receive an answer by the latest 25 July 2022 at 12:00 hrs (noon) Helsinki time (UTC+3).

Questions and answers will be made available to all registered Applicants in an anonymised and redacted form within two weeks of the above date.

# 3 Pre-Qualification eligibility criteria and minimum requirements

The Pre-Qualification review consists of two elements:

- (i) a completeness check to confirm that Applicants and their project proposals meet the eligibility criteria and minimum requirements set out below
- (ii) an evaluation and scoring of the Concept Note

The completeness check is a pre-screening carried out by Nefco based on the answers provided via the SmartME intake system. Statements and warranties made by Applicants in respect of eligibility at the Pre-qualification stage that later turn out to be unsubstantiated may result in disqualification at NEFCO's discretion.

The evaluation is carried out based on an assessment and scoring of the Concept Note. This evaluation will be carried out by a team of third-party, independent evaluators.

To pass the Pre-Qualification stage and be invited to take part in the Final Application stage, Applicants and project proposals must meet all of the eligibility criteria and minimum requirements below, and the Concept Note must score a minimum of 60 points (out of 100).

#### 3.1. Eligible Project Country

Projects shall be implemented in DRC.



#### 3.2. Eligible Applicants

#### Single for-profit ESPs

Applicants applying for BGFA4 funding shall be single for-profit ESPs selling energy and/or energy-related PUE services to end consumers.

Applicants shall be already legally incorporated and included in the register of for-profit companies in DRC or commit to being incorporated and/or registered as such, to NEFCO's satisfaction, before signing a possible BGFA financing contract.

Applicants should be in compliance with all tax, regulatory and legal frameworks in DRC. If not already established in DRC, Applicants should be in such compliance in their home country.

#### **Persons**

Individual persons or groups of persons (who are not legally incorporated and registered as a company in DRC or if registered elsewhere are unwilling to register as a company in DRC) are not eligible for BGFA4 financing.

#### **Partnerships**

Single for-profit ESP Applicants are allowed to enter into various types of project implementation partnerships with non-profit entities, community-based organisations and other non-commercial entities.

Applicants are not allowed to include the following entities as project implementation partners: government entities, public agencies and donors.

All eligible partner entities should be either legally registered companies or organisations in DRC or another jurisdiction and be in compliance with all tax, regulatory and legal frameworks in DRC or their relevant jurisdiction.

#### **Project Consortium**

A Project Consortium refers to a single for-profit ESP wishing to implement a BGFA4-financed project with a defined group of other eligible partner entities through the formation of a Project Consortium.

To be eligible for BGFA funding, an Applicant applying for funding on behalf of a Project Consortium should be capable and willing to lead the project and assume full responsibility for both the application and the project implementation. As the lead, the Applicant will be required to act on behalf of the Project Consortium during the application process and to be NEFCO's only direct counterparty (in a possible contract and as regards reporting, etc.).

Applicants applying on behalf of a Project Consortium should explain in the application the rationale for the proposed Project Consortium and describe how the Project Consortium will be managed and work in practice under their lead.

During the Final Application stage, Applicants applying on behalf of a Project



Consortium will be required to file a draft Project Consortium Agreement. The Project Consortium Agreement should provide for joint and several liability of the members of the Project Consortium towards the Applicant, since NEFCO, in a possible BGFA contract, will require a right to invoke its contractual rights and any claims for liability related to the proposed project as a whole solely against the Applicant (as NEFCO's only counterpart under a possible contract).

The final version of the Project Consortium Agreement should be satisfactory to NEFCO and a signed version of the Project Consortium Agreement provided to NEFCO before the signing of any BGFA financing contract at the latest.

#### **Project Partners**

Project Partners refers to Applicants that wish to implement a project together with one or more eligible partner entities as key delivery partner(s).

Project Partners may be product suppliers; financial service partners; providers of PUE-related applications and services; engineering, procurement and/or construction service providers; or similar. Applicants are not required to demonstrate that the proposed Project Partner(s) has/have a direct commercial or economic interest in the implementation of the proposed project, but Applicants should be able to explain in what way the Project Partner(s) is/are needed to provide support and/or facilitate (on a commercial or non-commercial basis) the implementation of the proposed project (including, e.g., through raising awareness, providing training, capacity building, services).

#### Other partners

Applicants may engage one or more other eligible partners for the establishment and distribution of ESS and any other equipment/appliances, including the provision/operation of PUE equipment/appliances and services.

During the Final Application stage, Applicants will be required to demonstrate in the business plan that a sufficiently robust relationship between the Applicant and any such distribution partner(s) has been or will be established to ensure a continued supply/appropriate level of service

# BOX 2: ESS ACTIVITIES WITH PARTNERS THAT ARE <u>NOT</u> ELIGIBLE FOR BGFA FINANCING

- Wholesale of energy to a third-party retailer or 'distribution partner' that does not form part of a Project Consortium
- Sales of bulk power to a third-party distributor of a Mini- or Micro-grid
- One-off cash sales of equipment and/or appliances that do not constitute a returning customer or long-term contractual relationship between an ESP and a customer (with the exception of certain PUE connections and services at NEFCO's discretion)



#### 3.3. Financial position requirements

Applicants must demonstrate:

- (i) Turnover of at least EUR 300,000 during the latest fiscal year
- (ii) Current ratio with a minimum value of one or higher
- (iii) Equity ratio of at least 15%4

If the Applicant is not registered as a company in DRC and for that reason has no historical financial records of its own or does not fulfil the minimum financial criteria as set out above, the financials of the Parent company or a Group's consolidated financials may be used instead. In that case, NEFCO may require an appropriate financial guarantee (such as a parental guarantee) to be issued by the Applicant/Parent company prior to BGFA contracting.

The sources of data for calculating these ratios shall be clearly referenced and included in the application. To be invited to the Final Application stage, the Applicant must fulfil at least two of the three financial criteria above.

#### 3.4. Professional capacity requirements

Applicants should be able to show that they, by themselves or through proposed partnerships, have sufficient resources, competence and prior professional experience to draw on when implementing a proposed project in DRC.

#### 3.5. Market experience requirements

Applicants should be able to demonstrate that they have relevant and sufficient market experience of working in off-grid markets either in DRC or in one or more other SSA countries. Applicants should demonstrate the following minimum market experience at the time of their Pre-Qualification application in the technology category for which they are applying:

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Shareholder loans can, generally, be included as part of the equation, as comparable to equity.



#### Standalone/SHS category

- A minimum of 12 months' operational experience in DRC or other SSA country
- Deployment of at least 3,000 SHS in DRC and/or 10,000 SHS in another SSA country.

# Other Standalone solutions (Nano-grids/hub and kiosk models/charging stations)

- A minimum of 12 months' operational experience in DRC or another SSA country
- A minimum of 15 active systems totalling 200 ESS (Nano-grids) or, for kiosk/hub-based models, at least 5 operating kiosks/hubs across their operations in DRC and/or other SSA countries with no less than 1,000 returning rental customers/subscribers

#### Mini-/Micro-grid category

 Successful deployment of at least 1 privately owned/operated site serving at least 40 ESS in the DRC or at least 3 privately owned/operated sites serving at least 500 ESS in another SSA country.

#### **PUE Energy category**

- Successful deployment of at least one of the following in either DRC and/or another SSA country (combinations allowed)
  - 500 pumps (with or without batteries) and/or irrigation systems and/or fridges and freezers
  - 3 cold rooms/cold storage facilities/cold chain logistics projects (combinations allowed)
  - 1 pilot project for any one of the other identified BGFA4 PUE categories (water filtration and bottling/agro processing/raw material transformation/e-mobility)

Applicants who do not themselves have this experience, may rely on experience within their corporate group provided the entity relied on is majority owned (>51%) within the group and the ability of the BGFA contract counterpart to leverage the experience can be clearly demonstrated through management structures and/or clear operational linkages.

Other experience criteria may be taken into consideration and/or the above criteria interpreted at NEFCO's discretion, provided that the Applicant can plausibly demonstrate and document a credible track record in the establishment and operation of off-grid and/or PUE energy connections and services in relevant markets.



#### 3.6. Compliance requirements

Contracted Applicants should follow national law at all times in their operations.

During this Pre-Qualification stage, Applicants will be required to confirm that they have familiarised themselves with and are ready to comply with Nefco's general policies and guidelines, available at <a href="https://www.nefco.int/about-nefco/legal-framework-and-guidelines/5">https://www.nefco.int/about-nefco/legal-framework-and-guidelines/5</a>, as relevant to the implementation of the proposed project in the case of a contract.

During the Final Application stage, the highest-scoring Applicants will be required to complete and sign a certificate of compliance before the start of the due diligence review and contract negotiations.

As part of any BGFA contract, Applicants and all partners will further be required to sign and submit a letter of social responsibility. A template for this letter and potential other compliance declarations will be provided for information during the Final Application stage.

#### 3.7. Eligible projects

#### **General requirements**

When planning, implementing and operating BGFA-financed projects, contracted ESPs should comply with relevant nationally established energy plans, other nationally established relevant strategies and local legislation.

It is expected and required that Applicants have or can obtain all relevant permits, certification, licences, endorsements, approvals and similar documents needed for the implementation of the proposed project before or within a reasonable time frame of BGFA contract signing.

#### **Technical requirements**

To be eligible, project proposals should meet certain technical requirements. Please see below and Annex B for more detailed information.

BGFA can <u>only</u> support ESPs' provision of renewable energy services and solutions. Energy services based on fossil fuels are <u>not</u> eligible for BGFA financing. Some energy- (only) generating technologies may also be eligible for BGFA financing but the focus is on electricity-generating and service distribution technologies/models.

However, project proposals using limited non-renewable technologies such as back-

- Nefco's Environmental and Sustainability Policy

- Nefco's Policy on Anticorruption and Compliance

Nefco's Procurement Policy and Procedures<sup>6</sup> Up to three CVs

<sup>&</sup>lt;sup>5</sup> This includes the following policies:

<sup>-</sup> Nefco's Sustainability Policy

<sup>-</sup> Nefco's Gender Policy

<sup>-</sup> Nefco's Policy on Prevention of Sexual Exploitation, Sexual Abuse and Sexual Harassment (SEAH)



up generation capacity only (e.g. diesel) are eligible for BGFA4 financing. Strong preference will be given to projects with the highest share of renewable energy.

Applicants will be required to demonstrate that any proposed biomass, bio-ethanol and/or biogas solutions are not likely to lead to deforestation or other forms of ecological degradation and that they will not have material negative impacts on protected areas and biodiversity.

Cooking solutions can form part of possible productive use services. Cooking solutions based only on the use of dry biomass or non-renewable energy solutions are <u>not</u> eligible.

Proposed projects should use one or more of the technologies listed below for electricity generation. Certain technologies for generating renewable sources for energy production (e.g. digesters) are also eligible for BGFA financing, but preference will be given to the projects with the highest share of electricity generation.

- Solar photovoltaic (PV)
- Wind
- Hydroelectric
- Biomass
- Bioethanol
- Biogas

Generally, ESPs are required to employ modern systems, hardware and software that comply with relevant industry technical standards and meet all relevant statutory standards and regulations in DRC. For more detailed information on technology-specific requirements, please see <u>Annex B</u>.

#### **Consumer protection**

Applicants should be willing to apply relevant consumer protection codes or policies such as:

https://www.gogla.org/consumer-protection and https://www.ruralelec.org/consumer-protection-principles-clean-energy-mini-grids-0.

During the Pre-Qualification stage, Applicants/Lead Applicants are only required to warrant that they are willing to undertake such commitments if selected for BGFA4 financing.

#### Reporting and monitoring

BGFA financing is results based and provided in return for ESPs providing an agreed number of ESS to end customers in peri-urban, rural and, in this case, also certain urban areas. Contracted ESPs should be willing to allow for online monitoring of the milestones and generally be willing to provide BGFA with detailed information throughout the course of the contract, including but not limited to sales information, energy usage, service calls and results, and development impacts.

BGFA uses the SmartME system for reporting and monitoring purposes. In addition to



manual progress and financial reporting of project and ESS delivery milestones via SmartME, contracted Applicants will be required to establish readiness for data transfer integration via an application programming interface (API) with an automated monitoring system to provide automated data to SmartME and/or other systems. Furthermore, Independent Verification Agents will be used from time to time to verify achievements independently.

Reporting and monitoring requirements, including those on data collection and sharing, will be described in more detail in the Final Application Guidelines.

#### **End-of-life management and e-waste**

BGFA generally recognises the environmental challenges facing ESPs when dealing with end-of-life off-grid solar products, especially as regards ensuring proper collection and recycling of waste. Effective policies, regulation and the physical infrastructure to manage e-waste are lacking in many countries.

Contracted ESPs will be required to develop a recycling partnership plan within one year of contract signing. These requirements will be described in more detail in the Final Application Guidelines.

At this Pre-Qualification stage, Applicants are only required to confirm that they are ready to prepare and implement an e-waste management plan addressing the minimum BGFA requirements.

At the Final Application stage or, at the latest, prior to a possible contract, Applicants will be required to provide a policy and plan for their e-waste handling that demonstrates that they can meet the minimum BGFA requirements. The e-waste management policy should be tailored to the local DRC context and include procedures for e-waste handling, transportation and storage.

Some technical assistance may be provided after contracting to support the implementation of such plans and policies.

#### **Gender mainstreaming**

Applicants are required to offer equal opportunities for men and women. This will be assessed based on the Applicants' present organisational governance (such as gender-balanced representation at all hierarchical levels and equality of pay) as well as the inclusion of gender considerations in applications submitted during the Final Application stage.

Contracted ESPs will be required to develop a company gender policy and a gender action plan, including a marketing/awareness-raising strategy and potentially a productive use of energy plan for women, as relevant to the proposed project.

In the Final Application stage, Applicants will also be requested to provide information about gender pay gap indicators. This will be described in detail in the Final Application Guidelines.



### 4 Evaluation

Only complete Pre-Qualification applications that fulfil the above eligibility criteria and minimum requirements will be evaluated. Evaluation and scoring will be done by an independent, external evaluation committee appointed by NEFCO. The evaluation criteria and score scaling are set out below in Table 2 and 3.

Applicants passing both the Pre-Qualification completeness check and the evaluation will be invited to take part in the Final Application stage and encouraged to submit a full application.

**TABLE 2: EVALUATION CRITERIA** 

EVALUATION CRITERIA	SPECIFICATION	POINTS	MAX. POINTS
	Existing relevant operations/operations capacity	25	
	General feasibility of technical/technology solution(s) in the context of the Country Programme and Funding Lot	5	
Technical, governance, operational, delivery and	Governance capacity of the Applicant together with possible partners (including assessment of the track record of other operations, length and maturity)	5	45
social responsibility capacity	Professional capabilities of management team (including assessment of experience, skills and track record)	5	.•
	Environmental, social and sustainability aspects, existing level of gender mainstreaming (gender policy, sexual exploitation, abuse and harassment, SEAH; women's representation at governance and executive level positions, equal pay)	5	
	Potential of the proposed solution to provide energy access at scale in rural, peri-urban and certain urban areas	5	
Development impact	Potential for accruing socio-economic, health, education and environmental benefits (particularly income generation opportunities). High share of renewable energy utilised.	5	
potential	Gender awareness: proactive policy in place to promote and ensure gender equality and women's empowerment, solutions meeting the needs of women and men and avoiding any negative gender bias/discrimination in marketing and operations	5	25
	Alignment of target market and demographics with BGFA4 objectives in the context of the Country Programme and Funding Lot	5	



	Geographic equity: sensitivity to conflict and security issues, ambition to roll out and operate in conflict and tension zones or in areas of deep social inequality, appropriate security measures in place	5	
	Relationship of shareholder equity (including convertible notes and retained profits/losses) to total assets (including intangibles) on the balance sheet and the relationship of total equity (as defined) to the funding request and total project volume	5	
Financial capacity	Level of committed required own co-financing already available and level of possibly already committed co-financing from external sources, e.g. other donors/DFI contributions, crowdfunding platforms, commercial sources, supplier finance	10	25
	Credibility of fundraising plan, status of discussions/negotiations with external finance providers, track record of raising finance in the past	10	
Professionalism and presentation of proposal	Consistent and high-quality organisation of data, concise text and ease of comprehension	5	5
TOTAL MAX. SCORE			100



#### **TABLE 3: SCORE SCALING**

(to be calculated proportionally in line with the maximum points for each scoring category/criterion)

SCORE	CRITERIA
0	The Applicant fails to address the criterion or cannot be assessed due to missing or incomplete information (unless the result of an 'obvious clerical error')
1	Poor: the criterion is inadequately addressed or there are serious inherent weaknesses
2	Fair: the Applicant broadly addresses the criterion but there are significant weaknesses
3	Good: the Applicant addresses the criterion well but with a number of shortcomings
4	Very good: the Applicant addresses the criterion very well but with a small number of shortcomings
5	Excellent: the Applicant successfully addresses all relevant aspects of the criterion; any shortcomings are minor

Applicants and proposed projects will be required to reach a minimum average of 60 points (out of 100) to pass the Pre-Qualification stage and be invited to submit a full application during the Final Application stage.

#### 4.1. Final Application stage

Project proposals submitted by Applicants in the form of a full application during the Final Application stage will be evaluated according to a number of additional evaluation criteria and requirements. These criteria and requirements are expected to include, but not be limited to, the following:

- Technical feasibility
- Commercial feasibility
- Market comprehension and relevance
- Management capacity and experience
- Financing structure and financial leverage
- Implementation and operational capacity
- Environment, including e-waste management
- Development impact potential
- Gender mainstreaming plan
- Consumer protection level
- Security Plan
- Productive Use of Energy
- Value for money



#### 4.2. Proof of compliance

NEFCO will require full proof of Applicants' compliance with all set eligibility criteria and requirements during a due diligence review, which will be carried out before contract signing.

Exceptionally, proof can be provided after contract signing, but in such a case this will be in the form of a condition precedent that the Applicant will need to meet before the entry into force of or first disbursement under any signed contract.

Any substantial changes in applications submitted during the Final Application stage compared with the Pre-Qualification stage may lead to the rejection of the application during the Final Application stage at NEFCO's discretion. Changes that are judged to improve the application, i.e. that do not affect the established ranking of Applicants, may be acceptable at NEFCO's discretion of at any stage of the BGFA4 process.

#### 5 Reservation

NEFCO reserves the right to request additional information from Applicants at any stage of the application process.

NEFCO reserves the right to adjust and/or further supplement the Pre-Qualification eligibility criteria and minimum requirements, as well as any other guidance related to BGFA4 provided here or otherwise. In case of possible changes, Applicants will be informed in a timely manner before the expiry of application deadlines.

The Pre-Qualification Guidelines do not constitute an offer and access to BGFA funding is always subject to funding being made available by donors to NEFCO.

#### 6 Personal data

For the purpose of the application and evaluation process, Nefco will collect and process personal data. This processing is based on Nefco's legitimate interest to assess the financial strengths and eligibility of the project proposals. Nefco's full Privacy Policy can be found here <a href="Privacy Policy - BGFA">Privacy Policy - BGFA</a> (beyondthegrid.africa). In the Privacy Policy you can read about how Nefco handles personal data and your rights as a data subject. Nefco's Data Protection Officer can be reached at dataprotection@nefco.int. External evaluators taking part in the evaluation process will also have access to this data.

When registering to the SmartME intake system for the first time, Applicants will be provided with a privacy notice from Adalia (the provider of the SmartME intake system), which will provide information on the personal data processed by Adalia when creating an account for the Applicant.

In addition, as part of the application process, Applicant's will be requested to read and agree to Nefco's <u>Terms and Conditions for using the BGFA website</u> as well as Adalia's User Agreement.



# 7 Miscellaneous

If you wish to report misconduct or make an environmental inquiry or a procurement complaint, please go to the following link:

https://www.nefco.int/contact-us/



# Annex A: CV template

CVs may be provided in the Applicant's preferred format but should as a minimum address the following issues for every member of the proposed management team:<sup>6</sup>

- Proposed position [only one candidate should be nominated for each position]
- 2. Name of firm [insert name of firm proposing the member]
- 3. Name of person
- 4. Date of birth
- 5. Nationality
- 6. Education
- 7. Membership of professional associations
- 8. Other training
- 9. Countries of work experience
- 10. Languages [for each language indicate proficiency: good, fair or poor in speaking, reading and writing]
- 11. Employment record relevant to the project
- 12. Adequacy for the project: detailed tasks assigned [list all tasks to be performed in relation to the project] and reference to prior work/assignments that best illustrate capability to handle the assigned tasks

Expert's contact information: (e-n	ail phone)
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#### Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes me, my qualifications and my experience, and I am available to undertake the assignment in the case of a BGFA contract. I understand that any misstatement or misrepresentation described herein may lead to my disqualification or dismissal by NEFCO and/or sanctions by NEFCO.

<sup>6</sup> Up to three CVs



# Annex B: Technology requirements

#### **General requirements**

Applicants are invited to familiarise themselves with the technology requirements described below and, where required, warrant via the SmartME intake system that they are willing to commit to these standards.

Applicants should employ technologically modern power systems, i.e. hardware and software subcomponents complying with relevant technical standards (e.g. ISO/IEC, IEC IEEE or equivalent) to ensure quality and reliability.

Applicants must offer a minimum warranty of three years on all systems, products and services. Applicants must offer a free end customer care number to receive and respond to customer service requests.

Systems relying on lead-acid batteries are not eligible for BGFA4 funding. Generally, BGFA has a strong preference for technologies that maximise the lifetime of applied energy-provision systems.

To successfully demonstrate eligibility of a proposed product/system for BGFA funding, Applicants are required to meet the following technology-specific criteria (as relevant to the proposed project):

#### Solar Home Systems (SHS)7

To be successful, Applicants will, at the Final Application stage, be required to submit proof of VeraSol certification, warranting that proposed products conform to either: 1) the Lighting Global Quality Standards or 2) the quality standards in the recently published IEC TS 62257-9-8:2020.

- If selected for contract negotiations, compliance will be checked during the due diligence review, at which Applicants will be asked to provide a Lighting Global verification letter or a VeraSol certification letter for each product. This will be checked against the publicly accessible list of VeraSol-/Lighting Global-accredited products (<a href="https://data.verasol.org/">https://data.verasol.org/</a>)<a href="https://data.verasol.org/">https://data.vera
- For modular SHS, if selected for contract negotiations, Applicants will be requested to submit proof of VeraSol certification for the family of products (as

<sup>&</sup>lt;sup>7</sup> SHSs are defined as systems which comprise all components required to provide basic energy services as a kit, including (and may consist of interchangeable components from a product family):

<sup>1)</sup> PV module(s), charge control unit(s), battery/batteries;

<sup>2)</sup> Cables, switches, connectors, and protective devices sufficient to connect the PV module(s) and charge control unit(s) and battery/batteries; and

<sup>3)</sup> Loads (optional): lighting and requisite cables, load adapter cables (e.g. for mobile phones) and other appliances (TV, fan, radio, etc.) and their requisite cables.

<sup>8</sup> CSV Excel file available for download at:\_ https://data.verasol.org/download/all/sek?verified=true&sortBy=qvDate\_desc

OSV Excel file available for download at:\_ https://data.verasol.org/download/all/sek?verified=true&sortBy=qvDate\_desc



described above) as well as provide a VeraSol assessment of the Available Daily Electrical Energy expressed in Wh/day. If a family of products<sup>10</sup> has not been tested as a full kit, and the combination proposed by the Applicant in question differs significantly from the one which has been tested (i.e. VeraSol cannot calculate a value for the available daily electrical energy from existing data), the Applicant will be required to submit lab test results of the proposed combination of products to VeraSol for assessment.

As regards possible deviations from the combination of components (including all appliances and lights) tested in the Lighting Global-/VeraSol-certified product, Applicants will, if selected for contract negotiations, be requested to submit proof of VeraSol certification for the proposed combination (as described above).

These requirements will also apply to any newly proposed systems included in a BGFA-funded project.

Any costs incurred by Applicants while fulfilling these compliance and testing requirements should be covered by Applicants and will not be refundable under the programme.

In the case of a BGFA contract, Applicants will be requested to undertake an obligation to provide a three-year warranty on all components forming part of the core SHS, including the PV panel(s), main battery pack and lights, and a one-year warranty on all other appliances sold with the SHS.

#### Refrigerators, Solar Water Pumps (SWP), Electric Pressure Cookers (EPC)

Any product included in the 'Global LEAP Awards Buyer's Guides', i.e. named winner or finalist in a previous Global LEAP awards competition, will automatically be eligible for BGFA funding. Applicants/Lead Applicants will be asked to provide a Global LEAP Awards Winner/Finalist certificate for each proposed product at the due diligence review. Compliance will be checked, during the due diligence review, against the comprehensive 'Global LEAP awards' list (i.e. finalists and winners) available on VeraSol's website (https://data.verasol.org/) in several buyers' guides.<sup>11</sup>

Applicants selected for contract negotiations offering other products, i.e. products that have not been included in previous Global LEAP award competitions, will be required to provide evidence at the due diligence stage showing that the proposed products are at least equivalent to the lowest performing product currently in the Global LEAP award database in terms of performance and quality. To verify this, the following procedure will apply:

Provision of two randomly-selected product samples: 1) to an independent third-party test laboratory for testing using the relevant Global LEAP test methods, and
 2) to a laboratory which has an active partnership with VeraSol. Costs for

As per VeraSol's definition: <a href="https://storage.googleapis.com/verasol-assets/LGFamiliesofProductsPolicy-v3-no-performance-reporting-1811203.pdf">https://storage.googleapis.com/verasol-assets/LGFamiliesofProductsPolicy-v3-no-performance-reporting-1811203.pdf</a>

Buyer's guides for 1) fridges: <u>2017</u> and <u>2019</u> rounds, 2) SWP pumps: <u>2019</u> round, and 3) EPC: please refer to the preliminary list of eligible products <u>here</u>..



determining that these requirements are fulfilled should be covered by Applicants and will not be refundable.

 Provision of the test result in a standard test report template enabling REEP to liaise with VeraSol to compare the quality and performance of the offered product against the similar size/form factor category in the Global LEAP award database. The costs of VeraSol's assessment will be covered through BGFA. After evaluation, all product data reviewed by VeraSol will be shared publicly on its dedicated database.

These requirements will also apply to newly proposed systems including during the course of the programme.

#### Mini-/Micro-grids<sup>12</sup>

Mini-grids should meet the general eligibility criteria for technical standards for generation, storage, load control and distribution. Applicants should include references to relevant technical (e.g. IEC TS 62257), safety and other standards at the latest in the business plan. As regards Mini-grids, Applicants should demonstrate compliance with all relevant statutory regulations and technical standards applicable in the Project Country.

To receive BGFA4 financing, Mini-grids should rely on an AC (single-phase or three-phase) distribution system. DC Mini-grids are not eligible for financing under BGFA4.

Mini-grids should incorporate modern load control, monitoring and management systems, as well as 'smart' metering solutions, so as to enable integration with an online and automated monitoring platform.

Applicants selected for contract negotiations will be requested to provide detailed technical design documentation for all aspects of the Mini-/Micro-grids, and the proposed solution will be checked during the due diligence review according to the international Quality Assurance Framework (QAF) for Mini-/Micro-grids as established by the US Department of Energy (DoE) and National Renewable Energy

#### Nano-grids

Widely accepted technical standards applicable to Nano-grids are not available at this point in time. Technical requirements for Nano-grids are expected to be established at the due diligence review stage on a case-by-case basis and may refer to a combination of technical standards applicable to the Standalone and Mini-/Micro-grid solutions, as appropriate, depending on the size and complexity of the technology employed and the overall infrastructure of the proposed project.

#### All other appliances and systems

For appliances not yet covered by Global LEAP (e.g. solar mills, water filtering units,

A Mini-/Micro-grid is defined as an aggregation of loads and one or more energy sources operating as a single system providing electric power isolated from a main power grid. A Mini-/Micro-grid will include primarily renewable-based generation, energy storage and load control.



etc.), Applicants selected for contract negotiations will, during the due diligence review, be requested to provide lab testing results from a VeraSol partner lab (<a href="https://verasol.org/test-labs">https://verasol.org/test-labs</a>) to ensure that the technical specifications indicated for the appliance(s) are accurate. Any costs incurred by Applicants from these tests should be covered by Applicants and will not be refundable. If lab testing is not feasible (e.g. large PV-powered cold rooms), NEFCO may request that Applicants provide the manufacturer's self-reported performance data over a period of time.

Applicants selected for contract negotiations will be required to demonstrate that any proposed biomass, bioethanol and/or biogas solutions are not likely to lead to deforestation or other forms of ecological degradation and do not have material negative impacts on protected areas and biodiversity. Cooking solutions based on the use of dry biomass only or non-renewable energy solutions are not eligible.



# Annex C: Energy Service Tier Matrix

When filling in the Concept Note, Applicants are encouraged to closely study and refer to the parameters set out in the tables below, which categorise different types of ESS into five main Tier levels.

The weighting criteria will be described in detail in the Guidelines for the Final Application stage; the criteria described here is still subject to change. During the Final Application stage, applications will be evaluated based on the value for money they provide with BGFA4 funding.

Applicants invited to take part in the Final Application stage will be required to use the Tier differentiation in the business plan when describing the ESS they expect to establish with the BGFA4 funding.

The energy service Tiers included in the proposed project will be <u>weighted</u> in line with the overall objectives of BGFA4. The weighting will reflect the proposed increase in the quality of energy services.

Energy services related to clean cooking (including electric cooking), productive use and delivery of public services will be given a particular weighting when deployed together with an eligible ESS<sup>13</sup>. The weighting mechanism reflects the development impact of productive use and delivery of public services and is mainly based on the relative cost of appliances.

#### **General Definitions**

- Residential customer: an end customer (person or household) receiving energy services for the home.
- Commercial customer: an end customer (driver of an e-vehicle, businesses, including micro, small and medium-sized enterprises, industries and to some extent also the so-called informal sector) receiving energy services for power appliances, machinery or any type of productive use equipment used in the production of goods or services for the purpose of the end customer's incomegenerating activity. Actors within the informal sector may qualify as commercial end customers as long as the energy service is used solely for income-generating activity (i.e. not serving a residential end customer).
- Institutional customer: an end customer (a public or <u>private</u> entity) receiving energy services to provide public services, for free or at a reasonable cost, to a community (e.g. health, education, drinking water, street lighting, etc.).

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<sup>&</sup>lt;sup>13</sup> To qualify, the equipment/machinery shall be provided to an end customer by the Applicant, a Consortium Member or a Project Partner together with an eligible ESS. This applies to all eligible appliances/equipment listed in Table 6 below, noting that more formalised arrangements (i.e. Consortium agreements) will be preferred to simple partnerships.



 PUE customer: a commercial or institutional end customer receiving energy services enhanced through the provision of equipment/machinery in one or more of the identified BGFA4 target PUE applications/services.

#### Tier matrix for Standalone systems, including Standalone PUE systems

When seeking funding for standalone systems, Applicants should categorise ESS based on available daily electrical energy (in Wh/day), applying the following indicative energy service Tier matrix. Eligible PUE applications benefit from a premium (see details in PUE sub-section).

**TABLE 4: ENERGY SERVICE TIER MATRIX FOR STANDALONE SYSTEMS** 

TIER LEVEL	1A	1B	2A	2B	2C	2D	3	4	5+	Drinking water
Eligible customers	Residential/Commercial/Institutional					l Commercial*/Institutional/PUE				
Available daily electrical energy [Wh/day]	≥ 20	≥ 35	≥ 70	≥ 175	≥ 310	≥ 6003	≥ 1000	≥ 2000	Additional weight for every kWh sold daily**	Weight per 2L sold daily

<sup>\*</sup>Weights for commercial customers Tier 2D-5+ will be discounted due to the increased capacity to pay of commercial customers relative to other types of customers.

The Tier levels are primarily based on the metric 'available daily electrical energy [Wh/day]':

- For integrated SHS with power ratings of 350 W<sub>p</sub> or lower, available daily electrical energy refers to the eponymous indicator in the VeraSol certification (see Technical Standards in Annex B).
- For Nano-grids and Standalone systems that do not use available daily energy as an indicator, the most practical and/or advantageous metric can be used by the Applicant:
  - The daily average battery storage capacity of the system rented/bought by the end customer (e.g. e-mobility) can be used as a proxy; for Nano-grids, the Tier of individual ESS can be defined by the battery capacity allocated to each end customer.
  - The average actual daily energy used through each ESS can be used as a proxy. In such a case, consumption patterns will be taken into account when calculating the average energy consumed: e.g. only school days for schools, harvest time for mills, etc.

<sup>\*\*</sup>A cap may be introduced for commercial and institutional customers, especially where a premium applies (medical equipment, artisanal use or fridges/freezers) to avoid incentivisation of over-dimensioned systems.



For hub-/kiosk-based models, the number of ESS shall be capped by the average number of daily rentals/services sold to end customers<sup>14.</sup> Each rental customer will need to be registered in an online monitoring tool and ESPs will be required to enable tracking of the level of service (frequency of renting) provided to each individual customer to determine whether the service provision meets the ESS requirements. If it is not possible to track service or customer use, it will not be possible to count them towards ESS numbers.

As per the above Tier matrix, the following thresholds will apply:

- For residential customers, ESS providing more than 20 Wh of available electrical energy per day will qualify.
- For commercial and institutional customers, ESS providing more than 20 Wh per day of available electrical energy will qualify.
- Typically, PUE ESS are expected to meet the requirements for Tier 5 ESS or higher, however exceptions are possible for small irrigation, filtration and agriprocessing systems. Details are included in the PUE sub-section below.

#### Tier matrix for Mini-/Micro-grids, including Mini-grid connected PUE

Applicants seeking funding to deliver ESS through Micro-/Mini-grids should categorise offered ESS according to the daily service used or according to the daily service used or subscribed to (in Wh/day) by the end customer, according to the indicative energy service Tier matrix set out below. The weighting for Mini-grid ESS will take the difference in infrastructure lifetime compared to Standalone systems into account.

TABLE 5: ENERGY SERVICE TIER MATRIX FOR MINI-/MICRO-GRIDS

TIER LEVEL	1–2	3	4	5	PUE	Electric mobility	Drinking water
Daily service (kWh used/day – or upper limit)	< 1	≥ 1	≥ 2	≥ 3	ESS weight + weight per	Per vehicle	Per 2L sold daily
Peak capacity (W)	NA	`	≥ 800	≥ 2000	additional kWh/day consumed by		
Availability of supply (hours)	≥ 4	≥ 8	≥ 16	≥ 22	machinery in the context of factory electrification		
of which evening supply (hours)	≥ 2	2	≥	4	Glostification		

#### Definitions:

 Peak capacity is only applied to Tier 4 and 5 ESS and refers to the monthly peak capacity, which is defined as the maximum average capacity consumed by an end

As an example: if a hub offers 100 batteries with a capacity of 20 Wh for rent every day and, on average, 80% of batteries are rented on a daily basis, the number of ESS (Tier 1A) is 80.



customer calculated over a 5-minute period in a calendar month. To meet the peak capacity requirements, the monthly peak capacity needs to exceed the applicable threshold at least 50% of the time over two years.

- Availability of supply: electricity should be available to end customers (if they wish
  to purchase it) for a minimum amount of time every day for at least 75% of the
  days in the year.
- Evening supply: end customers should be able, if they so wish, to purchase the
  energy service and draw current for at least two hours between 18:00 and 06:00
  (i.e. it is not a requirement that every end customer consumes power during
  evening hours).

#### Incentives for PUE, electric cooking and the delivery of public services

Electric cooking, productive use equipment and equipment used for the delivery of public services will be incentivised. Although the reverse auction mechanism primarily rewards the quantity of energy sold to end customers (or consumed by PUE equipment), energy efficiency is paramount and will be taken into account in the evaluation.

BGFA4 targets primarily PUE applications/services in the following sectors:

- Electric vehicles will be weighted based on the storage capacity of the battery/batteries rented by drivers on a daily basis. In addition, the charging unit connected to a Mini-grid will count as an independent ESS (up to Tier 5). For the purpose of the weightings, each e-vehicle will be considered as a commercial ESS.
- Filtration services delivered through Standalone systems or Mini-grids will be rewarded through the same weightings, using the metric 'per 2L of water sold daily'. In addition, the filtration unit connected to a Mini-grid can count as an independent PUE ESS (up to Tier 5).
- Solar water pumps qualify as Standalone PUE ESS but can also be included in a project primarily focused on Mini-grid ESS. To determine the tier level, the applicable metric is daily hydraulic energy with high irradiance for pumps without batteries. For pumps with batteries, the battery storage capacity will be added to the daily hydraulic energy with high irradiance. Additionally, a minimum weighting will be introduced to promote small and energy-efficient pumps to reflect the relatively large developmental impact.
- ESS deployed together with cold rooms/freezing rooms and/or agri-processing equipment qualify as PUE and will be incentivised through specific premiums. Additionally, for these two sectors, investments in integrated value chains, i.e. related upstream and/or downstream value chains, to secure access to intrants and/or customers will also be incentivised.



 Fridges and freezers will be incentivised through premiums applicable to commercial and/or institutional ESS. Additionally, a minimum weight will be introduced to promote small and energy-efficient fridges/freezers to reflect the relatively large developmental impact, and the maximum incentive will be capped.

Eligibility of equipment/appliances varies between types of customers according to Table 6 below:

**TABLE 6. INCENTIVE FRAMEWORK** 

ELIGIBLE	Customer							
EQUIPMENT/APPLIANCES	Residential	Commercial Institutiona		PUE				
Cooking								
Electric cooking			Eligible					
Standalone cooking	Not eligible							
Machinery/equipment	Machinery/equipment							
E-mobility	Not eligible	Eligible	Not eligible (q	ualifies as commercial)				
Artisanal use (e.g. welding, carpentry and woodwork, sawing)	Not eligible	Eligible	Not eligible					
Fridges/freezers	Not eligible	Eligil	ble	Not eligible				
Cold rooms, freezer rooms, cold chain and integrated value chain	Not eligible	I	Eligible, qualifie	s as PUE				
Agricultural processing, multi-functional platforms and integrated value chains	Not eligible	Ī	Eligible, qualifie	s as PUE				
Pumping for irrigation	Not eligible	I	Eligible, qualifie	s as PUE				
Drinking water	Not eligible	F	Eligible, qualifie	s as PUE				
Electrical medical equipment*	Not eligible			Not eligible				
Street lighting	Not eligible	Not eligible Eligible N		Not eligible				

<sup>\*</sup>For registered health centres, clinics and hospitals and for investments greater than EUR 1,000

#### Reservation

NEFCO reserves the right to adjust and/or further supplement the described specification parameters at its sole discretion.