

## **APPLICATION GUIDELINES**

## FIFTH BGFA CALL FOR PROPOSALS (BGFA5)

## Second Round in Uganda

## Helsinki, 16 March 2023



### **BGFA5** introduction

The Beyond the Grid Fund for Africa (BGFA) programme finances sustainable development outcomes by supporting the creation of local off-grid energy business and offering results-based financing combined with targeted technical assistance to private off-grid energy service providers (ESPs) and other market stakeholders, including the local government, with the aim to:

- accelerate access to renewable and clean off-grid energy for customers in periurban and rural areas of Uganda.
- make high quality off-grid products and services affordable for customers;
- unlock early structural challenges in the market;
- build business, customer and investor confidence;
- support the creation of new business and job opportunities;
- mobilise additional climate finance at scale; and
- support sustainable development.

Drawing on experiences from a Swedish funded pilot programme in Zambia (Beyond the Grid Fund for Zambia, BGFZ, 2017 – 2022), the BGFA programme launched its first call for proposals (BGFA1) in September 2020 inviting interested ESPs to compete for BGFA financing to improve energy access. BGFA1 and three subsequently launched calls for proposals (BGFA2-4) have generated valuable feedback from the market. Reflecting on this and recommendations provided in an early mid-term external evaluation solicited by Nefco, a simplified and expedited fifth call for proposals (BGFA5) is now launched.

The third BGFA call for proposals (BGFA3) was closed at the end of January 2023 in Uganda. However, a residual amount of up to **EUR 6.3 million** remains unallocated from funds contributed by Sweden and Denmark. It is also possible that additional funds might become available.

To expedite and simplify the funding offering, BGFA5 offers funding to Standalone solar solutions, Mini-/Micro-grids, and Productive Use of Energy solutions under a single Funding Lot. All interested, for-profit ESPs are invited to apply. However, those that were successful in securing financing under the BGFA3 cannot receive funding under BGFA5 for <u>the same ESS category</u>.<sup>1</sup> In other words, an ESP can receive funding in another BGFA5 ESS category (see Table 1).

BGFA5 is committed to enabling local ESPs to accelerate their business growth in Uganda and encourages international ESPs to utilise the expertise and capacities of local market actors. BGFA financing is made available under **one single funding window and lot, Lot#12**. Both experienced and less experienced, locally owned and managed ESPs can apply for funding. The indicative individual **contract size per ESP is expected to be between EUR 1.0 and EUR 4.0 million**.

<sup>&</sup>lt;sup>1</sup> Companies that have contracted under Lot #8 or Lot #10 of BGFA3 are excluded from participation in bids for Standalone solar products in BGFA5 as well as companies under BGFA3 Lot #9 are excluded from participation in bids for Mini-/Micro-grids.

To receive 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.<sup>2</sup> Applicants are free choose to apply for BGFA5 funding for the provision of one type of off-grid solution (Standalone Solar Home Systems, SHS; Mini-/Micro-grids; or Pure Productive Use Energy, PPUE). Each of these solutions in turn, can use different technologies and business models for electricity generation and the provision of energy service subscriptions (ESS).

Under BGFA5, only Energy Service Subscriptions (ESS) that remain active<sup>3</sup> will be considered and counted towards the deployment targets. For the PPUE category, somewhat different approach may be used depending on actual solutions in line with the main rule.

BGFA5 offers a financial incentive (subsidy) per established ESS while noting that ESPs will need to provide matching co-financing equalling a minimum of the BGFA total incentive. BGFA5 is **testing** a new, **single-stage** and **generally simplified process**, in which ESPs are requested to submit an application with streamlined requirements while still maintaining the BGFA approach.<sup>4</sup>

Payments of BGFA result-based financing will be made in arrears against ESPs' proven sales and establishment of ESS with customers. Exceptionally, up to 30% of the requested financing, but a maximum of EUR 500,000 can be paid in advance if specific needs can be demonstrated.

ESPs, who have signed BGFA contracts, will have access to limited, targeted technical assistance and job creation support. Through the planned establishment of an Off-Grid Taskforce in Uganda - involving both public and private stakeholders – BGFA supports the development of local business environments that are conducive to the sale of off-grid energy services and that can provide sustainable development can be provided.

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

 $<sup>^2</sup>$  The ESS will be considered sustainable (i) after a minimum of two years' provision of the energy service in question (typically at least one payment in the lasty 90 days); and/or (ii) after the ESS have been fully repaid by the end-customer; and/or (iii) as long as the end-customer is not in default by the contract end-date.

<sup>&</sup>lt;sup>3</sup> Hub models have slightly different approach as explained in Annex B.

<sup>&</sup>lt;sup>4</sup> Please refer to BGFA General Guidance for additional information including the list of abbreviations, definitions, policies and other requirements.

### Contents

BGFA	5 introduction	2
1.	BGFA5 minimum requirements	5
2.	Application process	5
3.	Country Programme, Funding Window and Funding Lot	7
4.	Eligible projects	8
5.	Eligible Applicants	10
6.	Minimum requirements	11
7.	Evaluation process	12
8.	Due diligence and contracting	16
9.	Monitoring, reporting and payments	17
10.	Reservations	18
11.	Complaints and reporting of corruption and misconduct	19
12.	Personal data and confidentiality	19
Annex	A. Technology requirements	4-1
Annex	B. Energy Service Tier Matrix and ESS input data	3-1

### 1. BGFA5 minimum requirements

To receive BGFA financing, ESPs must, at a minimum:

- be a for-profit company/entity that has not received BGFA3 funding for the same category;
- demonstrate relevant experience in Uganda or other relevant sub-Saharan African market(s) in the proposed project structure;
- be legally incorporated and validly existing in Uganda or willing to be so within a reasonable time frame before the BGFA contract signing;
- have a bank account in a Ugandan bank, acceptable to Nefco (as the bank account details are to be included in BGFA contract for receiving funds);
- offer high-quality, <u>eligible</u> off-grid solutions fulfilling the BGFA5 requirements;
- make timely minimum matching co-financing available (with a minimum ratio of 1:1);
- follow national laws in their operations;
- have or be able to 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;
- be willing to comply with Nefco's general policies and procedures;
- be willing to comply with BGFA-specific e-waste, sustainability, gender, security and consumer protection requirements as applicable when implementing the proposed project;
- fulfil the key eligibility criteria as outlined below; and
- engage in the development of long-term sustainable, local off-grid markets.

### 2. Application process

BGFA5 is organised as an online, fully paperless application process via an electronic intake system called SmartME. Interested ESPs are encouraged to register and create a user account in SmartME to familiarise themselves with the BGFA5 application requirements as early as possible. Applicants are required to submit their applications and documents via the BGFA SmartME intake system only. Registration for the BGFA SmartME intake system is available on the website at https://beyondthegrid.africa/register/.

On the application form all interested ESPs are required to provide a project<sup>5</sup> description, a business plan and other key data to allow assessment of how ESPs can contribute to BGFA's ultimate goals, while maintaining a number of key eligibility and minimum requirements.

<sup>&</sup>lt;sup>5</sup> BGFA does not support 'projects' as such as BGFA's objective is to support sustainable business development. The word 'project' is used for easier reference, and any BGFA related activities need to be reported and audited separately from any other business there may be.

The Application Form is available in the SmartME system. The form also indicates which documents shall be uploaded as part of the application, while more documents and information will only be required during the due diligence, contracting and/or implementation phases, as applicable.

Information to be submitted during the application stage includes:

- A completed application form/business plan;
- A financial model (in the form of an Excel file with visible formulae);
- Energy Subscription Services offer (incl. Tiers, types and number of ESS) as an Excel and as a signed pdf;
- The most recent audited financial statements (2021 or 2022);
- Commitment letter; and
- Additional information on the proposed structure and eligibility aspects as indicated in the application form and as applicable.

All required information and documentation shall be submitted in English and all financial information in EUR. If some documentation is not available in English, it may be provided in local official languages. In this case, Applicants are required to provide an unofficial English translation. Notarised translations of key documents may be required at the due diligence and/or contracting stage. Nefco reserves the right to reject applications on this basis.

Submitted applications will be considered to be in their final form and may not be amended once submitted. Nefco reserves the right to ask for clarifications and/or additional documentation at any stage of the BGFA5 application process. Changes that improve the application may be accepted at Nefco's discretion. Applicants bear all their own costs incurred in the preparation and submission of the Application.

# The BGFA5 SmartME intake system will open on **16 March 2023 and close on 4 May 2023 at 12:00 hrs (noon) Helsinki time (EET).**

It is the Applicants' responsibility to ensure that all documentation is submitted and uploaded via SmartME on time, taking into account the time zones and the Internet connection speed. It is strongly recommended to start in good time to allow sufficient time to complete and submit the Application well ahead of the submission deadline. The SmartME intake system will not accept submissions/uploads after the submission deadline.

Applicants are invited to post questions only via the SmartME intake system's support section by 6 April 2023 at 12:00 hrs (noon) Helsinki time (EET). Questions and answers will be made available to all registered Applicants in an anonymised and redacted form within one week of the above date.

Applicants will be duly notified of their progress and the final results of BGFA5 will be made public in due course. For more information about BGFA5 please visit <u>https://beyondthegrid.africa/</u>. All the deadlines are still subject to change.

#### FIGURE 1. BGFA5 TIMELINE



### 3. Country Programme, Funding Window and Funding Lot

BGFA5 offers Applicants the chance to compete under the Uganda Country Programme for Funding Lot #12<sup>6</sup> (see Table 1), with indicative funding of up to EUR 6.3 million in total. Additional funds may become available. Implementation is expected to start in 2023 and end in 2027.

FUNDING LOT	FUNDING CATEGORY	TIER LEVEL	NUMBER OF EXPECTED CONTRACTS	INDICATIVE INDIVIDUAL CONTRACT SIZE (EUR million)	INDICATIVE TOTAL BGFA FUNDING PER CATEGORY (EUR million)
	Standalone/SHS <sup>7</sup>	1A–6+	1-2	1.0 - 4.0	Up to 4.0
LOT #12 Up to €6.3 million	Mini-/Micro-grids	1–5	1-2	1.0 – 4.0	Up to 4.0
	Pure Productive Use of Energy, PPUE	1A–6+	1 – 2	1.0 - 4.0	Up to 4.0

#### TABLE 1. FUNDING LOT #12

<sup>&</sup>lt;sup>6</sup> BGFA uses continuous numbering of Funding Lots offered under various calls.

<sup>&</sup>lt;sup>7</sup> Includes nano-grids/hub and kiosk models/charging stations.

BGFA5 welcomes applications from energy service providers focused on different technologies and delivery models. Applicants to the Standalone/SHS and Mini-/Microgrid are invited to include productive use of energy solutions in their service offerings, but applicants to the Pure Productive Use of Energy (PPUE) funding category are required to submit proposals consisting solely of PUE solutions.<sup>8</sup> More information on which PUE solutions are eligible for BGFA funding can be found in Annex B.

Contracted ESPs will be eligible during implementation to receive limited technical assistance and business support financed by BGFA, related to topics such as e-waste, sustainability, gender, security action plans and mobilisation of additional funds.<sup>9</sup>

Applicants are requested to submit their price offer (requested incentive(s) per Tier(s)) based on the assumption that the current duty regime will continue to apply on all imported products and to specify clearly in the proposal any exemptions that apply to existing operations they may already have in Uganda.

As regards proposed Mini-/Micro-grids and pure productive use, Applicants are expected to submit financial models with the same level of detail that they would use to apply for licensing/permitting (as relevant) and tariff approval from relevant regulatory authorities.

### 4. Eligible projects<sup>10</sup>

#### **General requirements**

During the Application stage, Applicants will be required to confirm that they have familiarised themselves with and are willing to comply with Nefco's general policies and guidelines, available at https://www.nefco.int/about-nefco/legal-framework-and-guidelines/<sup>11</sup>, as relevant to the implementation of the proposed project in the event of a possible contract.

Applicants are required to provide additional information and to fulfil various other requirements linked to Nefco policies and some general BGFA requirements. ESPs are required to apply high standards related to social and environmental sustainability, gender, security and consumer protection issues when implementing the project.

<sup>&</sup>lt;sup>8</sup> For example, an ESP that provides Standalone lighting solutions to residential and institutional customers, as well as PUE-eligible refrigerators, should apply for funding under the Standalone/SHS lot, and would be eligible to receive incentives on qualifying PUE products. An ESP that provides only PUE eligible agri-value chain solutions could choose to either apply under the Standalone funding category or the Pure Productive Use of Energy (PPUE) funding category.

<sup>&</sup>lt;sup>9</sup> TA will mainly be available to the smaller companies.

<sup>&</sup>lt;sup>10</sup> BGFA does not support 'projects' as such as BGFA's objective is to support sustainable business development. The term 'project' is however used for easier reference. All BGFA related activities in a company need to be 'ring-fenced' for reporting and auditing purposes.

<sup>&</sup>lt;sup>11</sup> This includes the following policies:

NEFCO's Environmental and Sustainability Guidelines

NEFCO's Environmental and Sustainability Policy 2022

NEFCO's Gender Policy

NEFCO's Policy on Anticorruption and Compliance

NEFCO's Policy on Prevention of Sexual Exploitation, Sexual Abuse and Sexual Harassment (SEAH)

NEFCO's Procurement Policy and Procedures

Please see the BGFA General Guidance for more detailed information on the general requirements for the ESPs as available in SmartME.

Fulfilment of these general requirements will be checked during the due diligence or contracting process or may be added as Conditions Precedent for the payments or as deliverables under Work Plan Milestones in the contract as applicable.

### Technical requirements

To be eligible, project proposals and solutions should meet technical requirements and offered ESS should meet certain minimum requirements. Please see <u>Annex A</u> for detailed information.

BGFA can only support ESPs' provision of renewable energy services and solutions. Energy services based on fossil fuels are not eligible for BGFA financing. Some energy (only) generating technologies may also be eligible for BGFA financing. Proposals using limited non-renewable technologies such as back-up generation capacity only (e.g. diesel) are eligible for BGFA5 financing.

Applicants 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 that they will not have material negative impacts on food security, protected/sensitive areas or biodiversity. Cooking solutions can form part of possible productive use services. Cooking solutions based on the use of nonrenewable energy solutions are not eligible.

Proposed projects should use one or more of the renewable energy sources and/or technologies listed below for electricity generation. Certain technologies for generating renewable sources for energy production (e.g. digesters) are also eligible for BGFA financing.

- Solar photovoltaic (PV)
- Wind
- Hydroelectric
- Sustainable biomass
- Bioethanol
- Biogas

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 Uganda.

### Additionality

Applicants will need to demonstrate that the proposed project is additional and, it would not happen without BGFA5 funding. Parallel financing (i.e. linked to any other on-going activities but not directly to the proposed BGFA5 project) is not eligible as co-financing, noting, however, that some infrastructure etc. may be shared between similar activities. In this case, appropriate allocations of the shared resources should

be made and will be considered acceptable, provided that the allocation is realistic and adequately justified.

In the case that Applicants are considering including carbon finance as one of the funding sources, it would need to be indicated in the application.

#### Geographical focus

The BGFA Country Programme for Uganda aims to strike a relevant balance between increasing the number of electricity connections in rural and peri-urban areas, achieving overall development impact, and accelerating sustainable off-grid market development. To this effect and in an effort to reduce existing geographic inequalities and improve financial inclusion of underserved populations in Uganda, BGFA5 (like BGFA3) has tailored an approach that incentivises geographic inclusiveness.

ESS sold in Kampala district are not eligible for BGFA5 financing, and do not count towards the total number of contracted ESS.

Applications to establish ESS in underserved districts (**TABLE 2**) will be rewarded during the evaluation when assessing and scoring the business plan. Nefco reserves the right to monitor these on a regional level as applicable.

Abim	Amuru	Kapchorwa	Maracha	Nwoya
Adjumani	Bukwa	Katakwi	Moroto	Otuke
Agago	Bulambuli	Koboko	Моуо	Oyam
Alebtong	Buyende	Kole	Nakapiripirit	Pader
Amolatar	Dokolo	Kotido	Napak	Yumbe
Amudat	Kaabong	Kween	Nebbi	Zombo
Amuria	Kaberamaido	Lamwo	Ngora	

#### TABLE 2. UNDERSERVED DISTRICTS

Mini-/Micro-Grid Site Clustering and Selection Process guidance is available in an annex to the BGFA General Guidance.

### 5. Eligible Applicants

Applicants applying for BGFA5 funding shall be for-profit ESP companies/entities selling energy and/or energy-related PUE services to end-consumers. Applicants must already be legally incorporated and validly existing in Uganda or commit to being incorporated and registered as such, to Nefco's satisfaction prior to contract signing. Individual persons or groups of persons (who are not legally incorporated and registered as a company in the Project Country) are not eligible for BGFA5 funding.

However, Applicants are allowed to enter into various types of project implementation partnerships with for-profit and non-profit entities, community-based organisations and other non-commercial entities. Information on any listed companies will be required in the application if applicable.

Applicants must provide relevant agreements on partnership arrangements to Nefco's satisfaction at the latest prior to contracting. Responsibility for the project implementation is to be agreed and defined to Nefco's satisfaction and the arrangements need to comply with Nefco's general policies and procedures as well as with BGFA requirements.

Applicants are not allowed to include government entities, public agencies and/or donors as project implementation partners. Applicants and all partners should be in compliance with all tax, regulatory and legal frameworks and laws in Uganda or in their home country.

### 6. Minimum requirements

The Applicant must demonstrate:

- Turnover<sup>12</sup> of at least 15% of the requested BGFA Funding but in any case minimum of EUR 300,000 during the last fiscal year <u>or</u> existing equity matching the requested BGFA5 funding; and
- (ii) Current ratio with a minimum value of one or higher; and
- (iii) Equity ratio of at least 15%.<sup>13</sup>

If the future Nefco counterparty is not registered as a company/entity or business in Uganda 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 or as a condition precedent for the first payment.

The sources of data for turnover and ratios shall be clearly referenced and included in the application. The most recent financials must be provided – typically for the year 2021, but the 2022 audited financials – once available - must also show the fulfilment of these requirements.

Applicants should be able to show that they either by themselves or through proposed partnerships, they have sufficient resources and competence and prior relevant and sufficient professional market experience of working in off-grid markets either in Uganda or in one or more other SSA countries:

### Standalone/SHS category

• A minimum of 12 months' relevant operational experience in Uganda or other SSA country; and

<sup>&</sup>lt;sup>12</sup> Variances in accounting practices with regards to revenue recognition could lead to discrepancies in turnover figures between ESPs. Applicants are requested to state their assumptions regarding revenue recognition, and other supporting information they deem necessary, when providing these figures.

<sup>&</sup>lt;sup>13</sup> Shareholder loans can, generally, be included as part of the equation, as comparable to equity.

• Deployment of at least 2,000 ESS in Uganda or 10,000 ESS in another, specified SSA country.

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

- A minimum of 12 months' relevant operational experience in Uganda or another SSA country; and
- A minimum of 10 active systems totalling 200 ESS (Nano-grids) or, for kiosk/hub-based models, at least 5 operating kiosks/hubs across their operations in Uganda 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 Uganda or at least 2 privately owned/operated sites serving at least 500 ESS in another, specified SSA country.

### Pure Productive Use of Energy, PPUE category

- Successful deployment of at least one of the following in either Uganda and/or another SSA country
  - 200 pumps (with or without batteries) and/or irrigation systems and/or fridges/freezers;
  - 2 cold rooms/cold storage facilities/cold chain logistics projects (combinations allowed);
  - 1 pilot project for any one of the other identified PPUE sub-categories (water filtration and bottling/agro processing/agro value chain/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 demonstrated through management structures and/or clear operational linkages.

Other experience provided by the possible partners and/or consortium members may be taken into consideration and/or the above criteria interpreted at Nefco's discretion to meet these minimum requirements provided that the Applicant can plausibly demonstrate and document a credible track record.

### 7. Evaluation process

Evaluation is focused on (i) assessing the quality of applications and (ii) on carrying out a weighted cost per energy service subscription calculation (wC), forming the basis for the overall evaluation and scoring of the proposed project and its value for money (VfM). The evaluation process consists of the following steps:

- (i) an eligibility and completeness check by Nefco;
- (ii) an external evaluation of the final application/business plan;

- (iii) calculation of the weighted cost (wC); and
- (iv) calculation of the overall expected value for money (VfM).

BGFA5 funding will be awarded to Applicants who demonstrate the best overall value for money (VfM) using a reverse auction approach. Only applications that are complete and fulfil all requirements based on the completeness check will be evaluated. Evaluation and scoring will be undertaken by an independent, external evaluation committee appointed by Nefco. Proposals need to score more than 60 points (out of 100) in the external evaluation to qualify for the VfM calculation.

The purpose of weighted cost (wC) is to provide a level playing field for all solutions. Applicants can freely design their application combining different Tiers (in one category per application), and wC 'captures' various solutions in a single number in a transparent and fair way. The methodology for calculating wC is described in more detail in <u>Annex B</u>.

The wC and the quality of the application will be compounded to create a single comparison score (CS) as follows:

$$CS = (wC_{low}/wC*X*100) + (BP * (1-X))$$

Where: CS is the comparison score wC is the weighted cost per energy subscription wC<sub>low</sub> is the lowest of all evaluated weighted costs per energy subscription BP is the score obtained at the Application stage and reflecting the quality of the application X is the weight for the wC

Weight for the wC is 0.3. This refers to 30% weighting for wC and 70% weighting for the quality of the application.

Applicants will be ranked according to their final CS score. The higher the CS score, the higher the VfM offered to BGFA5.

The highest-ranking Applicants with project proposals representing up to the total EUR amount available will be shortlisted and invited to undergo a due diligence review. If the review is successful, Applicants will be invited to contract negotiations, starting with the highest-ranking applications.

Nefco will seek to allocate all available funding to the highest-scoring ESPs, starting from the top.

However, Nefco reserves a right to balance the BGFA5 portfolio and reserves a right to contract at least one ESP per category: i.e. a lower ranked proposal from <u>another</u> <u>category</u> may supersede a higher ranked proposal in another category.

Some lower-ranking applications may remain on a reserve list, and Applicants will be notified if this is the case. A due diligence review of compliance and eligibility of lower-ranked Applicants may also be initiated for reserve list Applicants.

#### TABLE 3. BGFA5 EVALUATION AND SCORING

EVALUATION CRITERIA	SPECIFICATION	MAX POINTS
Technical feasibility	General feasibility of technical/technology solution(s) in the context of the target market, including product design, electricity generation and management, etc.	5
	Compliance with pertinent quality standards	
	Market experience of the Applicant/Consortium/partners in the Ugandan market	
	Market experience of the Applicant/Consortium/partners in other relevant market in Sub-Saharan Africa	
Market comprehension and market experience	Awareness and analysis of the market potential (incl. trends and opportunities, policy and regulatory environment, technology developments etc.) and sensitivity to market constraints (ability and willingness to pay, institutional barriers, etc.)	16
	Understanding of competitors, and positioning vis-à-vis competitors/competitive advantage (incl. industry structure and segmentation, core competencies and barriers to entry)	
	Viability, robustness, credibility, and maturity of the business model, including feasibility of the proposed business model	
Commercial	Understanding and control of the cost structure and use of funds; ability to manage and influence costs and funds	
feasibility and financing	Financing structure: appropriateness and additionality of funding request, levels of co-funding (own equity or from any other party) equal or above the amount of funding requested from the BGFA	22
	Proof of overall financial health and sufficient financial resources to implement deployment planning	
	Compelling and credible plan for implementation	
Implementation and operation capacity	Standardised and formalised processes (e.g., standard operating procedure(s) on operating the shops or other sales channels for solar-home systems or Micro-grids, on recruiting/training staff, on distribution partnerships, on repossession of assets, etc.)	20

	Operational capacities, including credible monitoring and reporting systems, methodologies, and indicators Credible environmental and social risks management capacity, policies and procedures, and ESG -related reporting and monitoring capacities, policies and action plans (as applicable), including but not limited to environment and social sustainability, health and safety and good governance (e.g., anti-bribery, anti-corruption, labour conditions), grievance mechanisms, consumer protection, and e-waste handling	
	Potential for accruing environmental and health benefits: e.g., reduction of greenhouse gas emissions and mitigating other negative impacts on the environment (deforestation, biodiversity loss, and air quality	
Development impact potential	Capacity to impact underserved districts Potential for contribution to jobs, income generation, economic development and/or value addition and value chain development	27
	Productive Use of Energy components in the project. Potential of the proposed solution(s) to provide energy access at scale in rural and peri-urban areas (e.g., number and types of connections, type and quality of service, potential for end-users to upgrade to higher level systems)	
	Promotion of gender equality in the proposed project implementation and potential to reduce socio-economic inequalities	
Management capacity and	Delivery capability of Applicant and/or Consortium; experience, and track record; management structure; skills balance and quality	10
experience	Gender representation of the Applicant and company-level gender mainstreaming	10
TOTAL MAX. SCORE		100

#### TABLE 4. SCORE SCALING

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

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

### 8. Due diligence and contracting

Prior to possible contract signing, a thorough due diligence including an integrity due diligence review will be carried out. The due diligence will include a review of the key technical, social, environmental, financial, institutional and legal aspects, which are relevant for BGFA financing. Applicants need to have credible plans and access to the resources needed (including financing) to deliver the number, types and Tier of ESS offered.

Nefco will require full proof of Applicants' compliance with BGFA5 requirements during the due diligence review. Exceptionally, proof can be provided after contract signing as conditions precedent for payment or as Work Plan Milestone deliverables in a possible contract.

Supporting documentation will be required in advance of or during the due diligence review, and during the review, the highest-scoring Applicants will be required to demonstrate that they are in good standing in the relevant country of registration and in compliance with all relevant requirements including tax, policy and regulatory frameworks and laws in their home country and in Uganda as applicable.

Based on findings during the due diligence review, Nefco reserves the right not to proceed to contract negotiations, insofar as Applicants cannot adequately demonstrate the above and that the proposed project complies with BGFA5 requirements.

Applicants are requested to take note that the wC cannot be negotiated or changed by Applicants during the due diligence process. Computational or mathematical errors may be corrected. Changes due to external factors beyond ESPs' control (e.g. changes in duties, taxes or formally set tariffs) may be considered. These may lead to a re-ranking of Applicants after submission. Changes that improve the project design in accordance with the BGFA requirements are acceptable at Nefco's discretion – including a lower wC.

If insufficient donor funds remain to contract all offered ESS by the highest-scoring ESPs, Nefco may offer to contract a lesser volume of ESS than offered but at the same incentive level per Tier. In such a case, Applicants will not be bound to enter into a contract if the reduction is significant, i.e. more than 20%.

Applicants selected for contract negotiations will be required to suggest ESS Delivery Schedule and Work Plan Milestones to be met for them to receive payments.

While the number of applications is not limited, Nefco reserves the right to award only one contract to the same company under BGFA5 in order to secure a diversified portfolio.

### 9. Monitoring, reporting and payments

BGFA5 funding is made available in return for ESPs implementing the proposed project and providing the offered number of ESS to end-customers. Exceptionally, up to 30% of the requested financing, but a maximum of EUR 500,000 can be paid in advance, if ESPs can demonstrate a specific need in the business model and as confirmed during the due diligence.

ESPs will be required to employ modern control, monitoring, metering and customerrelationship management systems in the delivery of energy services, i.e. various modern sales/loan or pay-as-you-go (PAYGO) management platforms and 'smart' metering solutions. To the extent necessary, ESPs will be required to enter into a BGFA relevant data-sharing agreement.

ESPs must provide reports on the achievement of Work Plan and ESS Delivery Milestones. Contracted ESPs must further be willing to provide detailed information on achievements, business performance, development impacts, market developments and related risks through progress reports and regular engagement with the BGFA team.

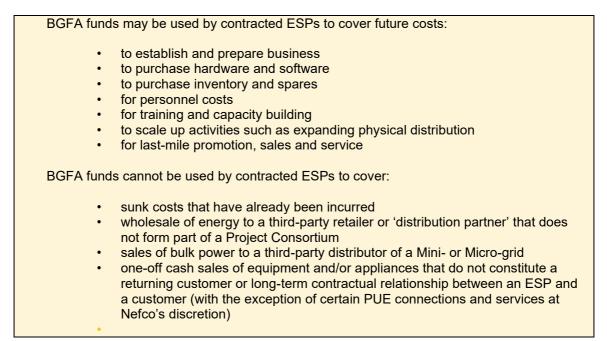
BGFA also uses the SmartME system for reporting and monitoring purposes and is working together with external service providers on monitoring, reporting and verification.

ESPs may also be required to establish automated data transfer integration via an application programming interface (API) with an automated monitoring system to provide automated data with relevant data points to SmartME and/or other systems. ESPs may be eligible for up to EUR 5,000 in technical support to cover expenses incurred during the establishment of integration with an automated monitoring system.

Double counting of ESS is not allowed, and ESS established with BGFA5 funding shall be solely reported to BGFA.

Nefco may disclose general information including but not limited to the following: date of the signed Sustainable Off-grid Energy Services Agreement project title or purpose, description of the project, name of the host country, ESP's name and other details of the contract such as the amount of Nefco's financing according to Nefco's guidelines.

### TABLE 5. ELIGIBLE AND INELIGIBLE EXPENDITURE UNDER BGFA



### 10. Reservations

Nefco reserves the right:

- not to start negotiations with any of the Applicants; all contracts are subject to a successful due diligence review and individual prior no-objection from the Donor(s)
- to request additional information from invited Applicants at any stage of the process
- to adjust and/or further supplement the Application requirements, as well as any other guidance related to BGFA5, provided here or elsewhere; in the event of any changes, invited Applicants will be informed in a timely manner.
- to reject applications on the basis of an abnormally low or high wC and/or requested incentive per Tier<sup>14</sup>

The Application Guidelines do not constitute an offer, and access to BGFA5 funding is always subject to funding made available by Donor(s) to Nefco.

<sup>&</sup>lt;sup>14</sup> wC values in contracted BGFA3 ESPs may be used in this assessment

### 11. Complaints and reporting of corruption and misconduct

For complaints, please visit the following link: <a href="https://www.Nefco.int/contactus/complaints-review/">https://www.Nefco.int/contactus/complaints-review/</a>

or email Nefco at: complaints@nefco.int

Any corruption or misconduct in activities related to Nefco and BGFA must be reported via Nefco's Ethics and Compliance function. The report is confidential and can be submitted anonymously at:

https://www.Nefco.int/contact-us/report-corruption-and-misconduct/

or email Nefco at: corruption@nefco.int

### 12. Personal data and confidentiality

For the purposes of the application and evaluation process, Nefco will collect and process certain 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 Global Privacy Policy can be found on Nefco's website <u>www.nefco.int</u>. The Global Privacy Policy states how Nefco processes personal data and the rights of the data subject. Nefco's Data Protection Officer can be reached at <u>dataprotection@nefco.int</u>. External evaluators and other service providers taking part in the evaluation process will also have access to the data provided to Nefco as part of the application.

When registering with the SmartME intake system for the first time, Applicants are provided with a privacy notice from Adalia (the provider of the SmartME intake system) with information on the personal data processed by Adalia when creating an account for the Applicant. Applicants are requested to read and agree to Adalia's User Agreement.

### Annex A. Technology requirements

### General requirements

BGFA has a strong preference for technologies that maximise the lifetime of applied energy provision systems and solutions. Applicants should generally 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 high product quality and reliability.

Applicants must also offer a freephone or equivalent end-customer care line to receive and promptly respond to customer service requests.

Systems relying on lead-acid batteries will not be eligible for BGFA5 funding. In order to successfully demonstrate eligibility for a proposed product/system for BGFA5 funding, Applicants are required to meet the following technology-specific criteria (as relevant to the proposed project):

#### Solar home systems (SHS)<sup>15</sup>

To be successful, Applicants will be required to submit proof that proposed products conform to either: 1) the Lighting Global Quality Standards <u>or</u> 2) the quality standards in the recently published <u>IEC TS 62257-9-8:2020</u>.

- If selected for contract negotiations, compliance will be checked during the due diligence review in which Applicants will be asked to provide a Lighting Global verification letter or a VeraSol certification letter for each product, or family of products. This will be checked against the publicly accessible list of VeraSol/Lighting Global accredited products (https://data.verasol.org/).
- For modular SHSs belonging to a family of products, Applicants will, if selected for contract negotiations, be requested to submit proof of the VeraSol certification (as described above) including a VeraSol assessment of the Available Daily Electrical Energy in Wh/day. If the product has not been tested as a full kit, and a Wh/day estimate is not presented in the VeraSol Spec Book for the combination proposed, the ESP will need to request that VeraSol calculate available electrical energy per day from existing data and component ratings for the proposed combination.
- As regards possible deviations from the combination of components (including all appliances and lights) tested in the Lighting Global/VeraSol-certified product, ESPs will be requested, at the latest before the first payment, to submit proof of VeraSol certification for any proposed combination. If VeraSol cannot calculate a value for the available electrical energy per day from existing data,

<sup>&</sup>lt;sup>15</sup> SHSs are defined as systems that 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.

ESPs may be required to submit lab test results of the proposed combination of products to VeraSol for assessment.

For large solar home systems and/or component-based stand-alone systems with >350  $W_p$ , Applicants will be requested to demonstrate compliance with VeraSol's Quality Assurance Framework for Component-based Off-grid Solar Energy Systems.<sup>16</sup>

These requirements will also apply to possible new systems proposed for inclusion in a BGFA5-funded project.

# Refrigerators, solar water pumps (SWP), electric pressure cookers (EPC) and cold chain technologies

Any product included in the 'Global LEAP Awards Buyer's Guides', i.e. already named a winner or finalist in previous rounds of Global LEAP awards competitions, will automatically be eligible for BGFA5 funding. ESPs will be asked to provide a Global LEAP Awards Winner/Finalist certificate for each proposed product at the latest before the first payment. ESPs will also be required to demonstrate compliance with the comprehensive 'Global LEAP awards' list (i.e. finalists and winners) available on VeraSol's website (https://data.verasol.org/) and in several buyers' guides.<sup>17</sup>

Contracted ESPs offering other products, i.e. that are not included in the previous Global LEAP award competitions, will be required to provide evidence at the latest before the first payment showing that the proposed products are at least equivalent to performance and quality benchmarks of Global LEAP Awards Finalists for each product category. To verify this, the following procedure will apply:

- Step 1: Provision of two randomly selected product samples to an independent third-party test laboratory that has an active partnership with VeraSol<sup>19</sup> for testing, using the relevant Global LEAP test methods.<sup>20</sup> If testing in a lab is not feasible (e.g. cold chains), Applicants will be requested during the due diligence review to arrange verification of key performance data for their proposed product over a period of time.
- Step 2: Provision of the test result in a standard test report template enabling Nefco or its representatives to liaise with VeraSol to compare the quality and performance of the offered product against the similar size/form factor category as specified in the Global LEAP Awards. After evaluation, all product data reviewed by VeraSol will be shared publicly in its dedicated database.

<sup>&</sup>lt;sup>16</sup> Please reference the standards outlined in this document, specifically in §4 Component Standards Requirements and the associated Annexes. Note that all tests must be conducted and presented to Nefco's satisfaction, and Nefco reserves the right to request additional information.

https://storage.googleapis.com/verasol-assets/Overview\_Quality-Assurance-Framework\_Component-based-Off-Grid-Solar-Energy-Systems\_June-2022.pdf

<sup>&</sup>lt;sup>17</sup> Buyer's guides for 1) fridges: <u>2017</u> and <u>2019</u> rounds, 2) SWP pumps: <u>2019</u> round, 3) Electric Pressure Cookers: <u>2020</u> and list for off-grid cold chains: <u>2018</u>

<sup>&</sup>lt;sup>18</sup> Winners and finalists of the Global LEAP Awards Off-Grid Cold Chain Challenge 2022 should submit proof of their status upon request.

<sup>&</sup>lt;sup>19</sup> List of labs (<u>https://verasol.org/test-labs</u>), section Off-Grid-Appropriate Appliances and Productive Uses) and for electric pressure cookers: <u>Kijani Testing</u> in Kenya. Prior to contacting a VeraSol partner lab, it is recommended to liaise with VeraSol (<u>info@verasol.org</u>) to confirm which partner labs are suitable for a given technology.
<sup>20</sup> <u>https://efficiencyforaccess.org/publications/type/test-methods/</u>

These requirements will also apply to new systems proposed for inclusion during the course of BGFA5.

#### Mini-/Micro-grids<sup>21</sup>

Mini-grids should meet the general eligibility criteria of technical standards for generation, storage, load control and distribution. ESPs should include references to relevant technical (e.g. IEC TS 62257), health and safety, and other standards in the business plan and demonstrate compliance with or willingness to comply with all relevant statutory regulations, licensing and technical standards applicable in the Project Country. National regulations deemed particularly relevant for the off-grid sector in Uganda have been listed in <u>an annex to the BGFA General Guidance</u>. Please note that this list is not exhaustive, and ESPs should themselves look for any updated information that is relevant for their business.

To be eligible for BGFA5 financing, Mini-grids should rely on an AC (single-phase or three-phase) distribution system. DC Mini-grids are not eligible for financing under BGFA5. Mini-grid providers should incorporate modern load control, monitoring and management systems, as well as 'smart' metering solutions to enable integration with an automated monitoring platform.

Applicants selected for contract negotiation will be requested to provide detailed technical design documentation for all aspects of the Mini-/Micro-grids and the proposed solution at the latest before the first payment and compliance is checked e.g. against the international Quality Assurance Framework for Mini-/Micro-grids as established by the US Department of Energy and National Renewable Energy Laboratory (https://www.nrel.gov/docs/fy17osti/67374.pdf).

#### Nano-grids

Widely accepted technical standards applicable to Nano-grids are not yet available at this point in time. Technical requirements for Nano-grids under BGFA5 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 Standalone and Mini-/Micro-grids, 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 Awards (e.g. solar mills, water filtering units, solar ovens, etc.), contracted ESPs will be requested, at the latest before the first payment, to arrange verification of key performance data by a VeraSol testing lab based on protocols/standards determined by Nefco to ensure that the technical specifications indicated in Applications for the appliance(s) are accurate. If lab testing is not feasible, Nefco may request the contracted ESP to arrange alternative means

<sup>&</sup>lt;sup>21</sup> 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.

of testing performance data over a period of time. The data may be handed over to VeraSol, which will make it publicly available.

During the due diligence review, Applicants 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 will not have material negative impacts on protected areas and biodiversity. Cooking solutions based on the use of non-renewable energy solutions are not eligible.

### Annex B. Energy Service Tier Matrix and ESS input data

Applicants are required to categorise the different types of ESS offered using the main Tier levels, customer categories and other attributes described in this Annex, when filling in the application (in SmartME) and preparing their financial model. Please refer to Table 5, below, for more details. The minimum requirement for available daily electrical energy is 20Wh/day.

During the evaluation of applications, the energy service Tiers offered in the project proposal submitted to the Application stage are <u>weighted</u> to reflect how much they each contribute to the overall objectives of BGFA5. The weighting mechanism reflects the increased quality of access with increasing Tier levels and the contribution of enhanced services (e.g. through electric cooking, productive use of energy or other eligible appliance/piece of equipment) to socio-economic development.

The Tiers and their respective applied weights are described below and organised according to the underlying delivery technology:

- Section 1 provides General Definitions applicable universally to BGFA5;
- Section 2 provides the Tier Matrix and Weights for Standalone/SHS Systems delivery models;
- Section 3 provides the Tier Matrix and Weights for Mini-/micro-grids delivery models;
- Section 4 provides the Tier Matrix & Weights for Pure Productive Use of Energy (PPUE) delivery models;
- Section 5 provides the Premiums applicable to the underlying weights for defined Productive Use Applications (which are combined with the respective weights for the underlying delivery technology – i.e., either Standalone, Mini-/microgrids or PPUE).

Applications submitted will be evaluated based on their ability to maximise the VfM offered to BGFA5.

The final ESS Financial Offer Excel template to be used in the application is available in SmartME including possible updates.

#### **SECTION 1 - General Definitions**

- Under BGFA5, only Energy Service Subscriptions (ESS) that remain active (i.e. a customer has made a payment in the last 90 days) will be considered and counted towards the deployment targets.
- *Residential customer:* an end-customer (person or household) receiving energy services for dwelling purposes.
- Commercial customer: an end-customer (micro, small and medium-sized enterprises, industries and to some extent also the so-called informal sector) receiving energy services for power appliances, machinery and any type of productive use equipment used in the production of goods or services for the

purpose of the end-customer's income-generating activity. Actors within the informal sector may qualify as commercial end-customers as long as the energy service is used <u>solely</u> for an income-generating activity (i.e. not serving a residential end-customer).

- *Institutional customer*: an end-customer (a public or private entity) receiving energy services to provide public services, free or at a reasonable cost, to a community (e.g. health, education, street lighting, etc.).
- *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 BGFA5 target PUE applications/services, i.e. agri-processing, cold rooms/chains, and refrigeration, solar water pumping, drinking water production, artisanal use, and e-vehicles.

# SECTION 2 Energy Service Tier Matrix for Standalone / SHS Systems delivery models

When seeking funding for standalone systems, Applicants should categorise ESS based on available daily electrical energy (in Wh/day) as per VeraSol assessment applying the following mandatory energy service Tier matrix. Eligible appliances/equipment may benefit from a premium (see details in dedicated subsection).

In order to promote electric cooking, PUE, other selected income-generating activities and the delivery of public services, relevant ESS deployed together with an eligible piece of equipment may benefit from a premium on top of the corresponding base weight. Eligible equipment and applicable premiums are defined below in a separate section.

#### TABLE 5. ENERGY SERVICE TIER MATRIX FOR STANDALONE/SHS SYSTEMS

TIER LEVEL	1A	1B	2A	2B	2C	3	4	5	6+	ELECTRIC MOBILITY	
Eligible customers		Residential*/Commercial**/Institutional/PUE									
Available Daily Electrical Energy [Wh/day] or proxy	≥ 20	≥ 35	≥ 70	≥ 175	≥ 310	≥ 600	≥ 1000	≥ 2000	≥ 3000	ESS for charging station + ESS per vehicle per kWh of battery rented daily	
Base weight	1	2	3	4.5	5.25	27.5	55	110	180+***	NA	

\* Residential connections over Tier 2C will given a base weight of 5.25.

\*\* Weights for commercial customers Tier 3-5 will be discounted by 30% due to the increased capacity to pay of commercial customers relative to other types of customers.

\*\*\* With Incremental weight of 40 per additional kWh sold daily

The Tier levels are primarily based on the metric 'available Daily Electrical Energy (Wh/day) or a proxy.

For integrated SHS with power ratings of 350  $W_p$  and below, available daily electrical energy refers to the eponymous indicator in the VeraSol certification (see Technical standards in <u>Annex A</u>). For SHS or other Standalone systems with 350 Wp and above, available daily energy will be determined by test results undertaken in certified partner labs.<sup>22</sup>

- 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, and, for Nano-grids the Tier of individual ESS can be defined by the battery capacity allocated to each end-customer. In cases where regular rentals are occurring from a single hub, a measurement system similar to that described below for hub-/kiosk-based models can apply.
  - 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

<sup>&</sup>lt;sup>22</sup> Nefco reserves the right to request additional information, tests or certification of any energy capacity from Applicants. Unless noted otherwise and/or requested by Nefco, tests for available energy on Standalone solar systems with higher than 350 Wp should conform to VeraSol's <u>Quality Assurance Framework for Component-Based Off-Grid Solar Energy Systems</u>.

calculating the average energy consumed: e.g. only school days for schools, harvest time for mills, etc.

- For hub-/kiosk-based models,<sup>23</sup> the number of sustainable ESS is calculated as the sum of the average daily number of rentals per hub, calculated over a milestone period or, if the hub was launched during the milestone period, the number of days from the first day of operation of the hub to the end of the milestone period. The "end of a milestone period" is defined as the last rental day included in the granular data submitted with the milestone payment request. After a hub is launched, all days are taken into account for the calculation of the average daily number of rentals, including Sundays, bank holidays, election days, etc. ESS still need to be categorised by customer types (residential/commercial/institutional), tiers, and potential eligible equipment deployed along the ESS, as per the Guidelines.
- After a hub has been operational for at least two full years at the end of a milestone period, ESS will be locked in to the average 'average daily rentals per day' (Av.ESSy) calculated over the past milestones from milestone 1 to milestone Y (with milestone 1 being the milestone period in which the hub was launched and milestone Y the milestone period at the end of which the hub was at least 2 years in operation). If the average "average daily rentals per day" goes down in milestone Y+1, the subsidy 'earned' for the hub (Sy+1) cannot fall below the amount corresponding to Av.ESSy. If the average daily rentals per day goes up in milestone Y+2, such that the average "average daily rentals per day" calculated over milestones 1 to Y+2 goes up, Av.ESSy+2 will be locked in.

### SECTION 3 - Tier matrix for Mini-/Micro-grids delivery models (including Minigrid-connected PUE)

Applicants seeking funding to deliver ESS through Micro-/Mini-grids should categorise offered ESS according to the daily service subscribed/available 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 takes the difference in infrastructure lifetime compared to Standalone systems into account.

Mini-/Micro-Grid Site Clustering and Selection Process guidance is available in the BGFA General Guidance.

In order to promote electric cooking, PUE, other selected income-generating activities and the delivery of public services, relevant ESS deployed together with an eligible piece of equipment will benefit from a premium on top of the corresponding base weight. Eligible equipment and applicable premiums are defined in the section below.

<sup>&</sup>lt;sup>23</sup> Additional guidance/examples on Hub models can be made available as applicable.

	TIE	R LEVEL	1-2	3	4	5	PUE	ELECTRIC MOBILITY
Daily sei available limit)		(kWh d/day or upper	< 1	≥ 1	≥2	≥3	ESS weight +	
Peak ca	pacit	y (W)	N	A	≥ 800	≥ 2000	weight per kWh/day consumed by machinery in the context of	ESS for charging station + ESS per vehicle
Availabil	Availability of supply (hours)				≥ 16	≥ 22	facility electrification for Tier 5 PUE ESS	per kWh of battery rented daily
of which	evei	ning supply (hours)	≥	2	≥ 4			
		Residential			60			NA
Base weight	Customer	Commercial/PUE	60	80	100	120	NA	NA
		Institutional	300	300 420		900	20	NA

#### TABLE 6. ENERGY SERVICE TIER MATRIX FOR MINI- /MICRO-GRIDS MODEL<sup>24</sup>

### **SECTION 4 – Tier Matrix for Pure Productive Use Delivery Models**

The Pure Productive Use of Energy funding category has been designed to encourage participation of ESPs who focus solely on delivery of Productive Use of Energy products and services (either with integrated power sources or attached to micro-/mini-grids).

In order to qualify to bid under the PPUE delivery model, Applicants must propose 100% of the value of their requested BGFA funding to be allocated towards products that qualify under the BGFA focus areas for Pure Productive Use of Energy. Any submitted applications that combine PUE and other types of connections (Residential,

<sup>&</sup>lt;sup>24</sup> This matrix applies to all Mini-grid-connected ESS. In case an Applicant proposes to deliver Standalone ESS as part of a larger Mini-/Micro-grid application, Standalone ESS will be weighted according to the Standalone ESS matrix presented in Table 5. A more detailed definitions linked to Mini- /Micro-grids can be made available in SmartME.

Commercial, Institutional) should apply under the Standalone or Micro-/Mini-grid funding category.

Applicants seeking funding to deliver ESS through a Pure Productive Use of Energy delivery model should categorise offered ESS according to the daily energy available to the end-customer (in Wh/day), according to the energy service Tier matrix set out below:

TABLE 7.	ENERGY	SERVICE	TIER	MATRIX	FOR	PURE	PRODUCTIVE	USE OF	ENERGY
SYSTEMS (	including	connected	PUE)						

TIER LEVEL	1 <b>A</b>	1B	2A	2B	2C	3	4	5	6+	ELECTRIC MOBILITY		
Eligible customers		PUE										
Available Daily Electrical Energy [Wh/day] or proxy	≥ 20	≥ 35	≥ 70	≥ 175	≥ 310	≥ 600	≥ 1000	≥ 2000	≥ 3000	ESS for charging station + ESS per vehicle per kWh of battery rented daily		
Base weight	1	2	3	4.5	5.25	27.5	55	110	180+*	NA		

\* With Incremental weight of 40 per additional kWh sold daily

Applicants applying under the PPUE funding category can mix their PUE solutions among different PUE-eligible technology types as they wish. The weighted cost of the PUE solutions will be impacted by the premiums for PUE products (outlined below). In cases where PPUE products and services are not sold with integrated power sources, these solutions should be categorized according to average daily electrical energy consumed.

**SECTION 5 - Incentive framework and premiums for PUE** (including selected income-generating activities, electric cooking and the delivery of public services)

When deployed together with eligible ESS<sup>25</sup>, energy services related to electric cooking, productive use, other selected income-generating activities and the delivery of public services are incentivised through: 1) the base weight associated with the type of ESS (as per the applicable energy service tier matrix in Section 1 or Section 2 above, the type of end-customer and Tier categories) and 2) the applicable premiums on top of the corresponding base weight as defined in Table 7 below.

<sup>&</sup>lt;sup>25</sup> To qualify, the equipment/machinery shall be provided to an end customer by the Applicant, a Project Consortium Member or a Project Partner together with an eligible ESS. This applies to all eligible appliances/equipment listed in Table 7, noting that more formalised arrangements (i.e. Project Consortium agreements) will be preferred to simple partnerships.

Standalone and/or Micro-/Mini-grid ESPs applying under their respective funding categories are invited and able to include PUE products in their service offerings<sup>26</sup>, and these PUE offerings will attract the incentives outlined in Table 7. Applicants under the Pure Productive Use of Energy funding category can only include PUE products in their service offerings.

Although the reverse auction mechanism primarily rewards the quantity of energy sold to customers (or consumed by PUE equipment), energy efficiency is paramount and will be rewarded in the evaluation of the quality of the proposed project. Furthermore, the impact and appropriateness of the proposed solutions will be measured in part by operational metrics: for example, drinking water projects will be assessed by the litres of water sold daily through filtration hubs.

The following applications/services are particularly targeted through BGFA5 and qualify as PUE:

- Filtration services/drinking water systems are rewarded based on the watt hour used per day by their filtration and water supply systems, with a premium placed on top.
- Solar water pumps qualify as Standalone PUE ESS as well as ESS in Pure Productive Use of Energy projects and 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 is added to the daily hydraulic energy with high irradiance. Additionally, a minimum weighting of 40 for SWP ESS (and 50 when a battery is included) is introduced to promote small and energy-efficient solar water pumps and reflect the relatively large developmental impact. There is no specific premium for pumping.
- Fridges and freezers are incentivised through premiums applicable to institutional or PUE ESS. Additionally, a minimum weight of 10 is introduced to promote small and energy-efficient fridges/freezers and reflect the relatively large developmental impact of these technologies.
- Cold rooms, freezer rooms, cold chain and ice creation are differentiated from fridges and freezers above by being understood to exist as temperature stabilization components of industrial, agriculture or aquaculture value chains. In order to quality for this premium, ESPs should demonstrate that their technology solution contributes to value addition and/or retention in these domains.
- Electric vehicles are weighted based on the storage capacity of the battery/batteries rented by drivers on a daily basis. In addition, the charging unit counts as an independent ESS.
- Other selected activities, such as artisanal use, as presented in Table 8 below.

<sup>&</sup>lt;sup>26</sup> Applicants may include PUE components also under Standalone/SHS and Mini-/Micro-grids categories.

Eligibility of equipment/appliances and applicable premiums vary between types of customers according to Table 8 below.

The following premiums are added to the underlying base weights of the corresponding ESS providing any one of the following PUE applications.

#### TABLE 8. PUE PREMIUM INCENTIVE FRAMEWORK

ELIGIBLE	E							
EQUIPMENT/APPLIANCES	RESIDENTIAL	ESIDENTIAL COMMERCIAL		PUE	PREMIUM*			
Cooking								
Electric cooking		Yes		No	50%			
PUE machinery/equipment								
Cold rooms, freezer rooms, cold chain and ice creation**					60%			
Agricultural processing and agricultural value addition				Yes	50%			
Pumping for irrigation	No		ualify as PUE omers)		Min. weight 40, and 50 if battery			
Drinking water					50%			
Artisanal use (e.g. welding, carpentry and woodwork, sawing)			ualify as PUE omers)	Yes	50%			
Electric Mobility/E-vehicles	No				50%			
Fridges/freezers		No (may qualify as PUE customers)	Yes		50% - Min. weight 10			
Delivery of public services	Delivery of public services							
Electrical medical equipment***					100%			
Street lighting	No	)	Yes	No	Min. weight 27.5			

\* In order to benefit from a premium, the eligible equipment/appliance needs to be dimensioned in line with the expected number of beneficiaries. Nefco reserves the right to reduce the awarded premium if this is not the case and/or if the resulting load or consumption is not primarily generated by the proposed equipment/appliance.

\*\* This type of technology is differentiated from fridges/freezers by being directly involved in the temperature stabilization of industrial, agricultural or aquaculture materials along a value chain. \*\*\* For registered health centres, clinics and hospitals.

Other PUE applications not listed above are still eligible for BGFA5 support but will not attract premiums – i.e., will only be incentivised through the BGFA5 base weight relative to the respective Energy Service Tier. Only applications counted in the above categories "PUE machinery / equipment" will count towards the minimum thresholds for Pure Productive Use of Energy (PPUE) Category.

### Weighted cost per connection

Applicants' bids for BGFA5 contracts in terms of the amount (expressed in EUR) of the incentive they request for a particular ESS connection, based on its Tier, quality of service provided and whether or not it is attached to a productive use application.

ESS which deploys productive use applications attract premiums on top of the underlying weightings to reflect the additional economic benefit (and costs) of deploying such solutions. The aggregated weights and premiums of the complete basket of the ESS offered by the Applicant will be used to determine the average weighted cost (wC) of the proposal.

The energy service Tiers are weighted to reflect how much they contribute to the objectives of BGFA5. The weighting increases with the quality of energy services provided. These weights will be used to determine the average weighted cost of the basket of ESS offered through the Applicant's proposal, as per the below formula:

$$wC = \frac{\sum_{i} \frac{Cost_{i} * ESS_{i}}{w_{i}}}{\sum_{i} ESS_{i}}$$

where:

- wC is the weighted cost per connection
- i represents the different energy service categories (type of customers and Tier levels) as defined in the Tier matrix
- ESS<sub>i</sub> is the targeted number of energy subscription offered under category i
- **Cost**<sub>i</sub> is the subsidy per connection requested by the Applicant under category i
- **w**<sub>i</sub> is the weight associated with category i (including a premium, as applicable)

The wC is then compounded with the qualitative score arising from the evaluation of the proposal to give an overall comparison score which will be used to determine the Value for Money (VfM) and overall ranking of the proposal vis-à-vis the other bids (see Section 4.2).

Applicants are requested to carefully read the user instructions in the 'Read first' tab of the ESS Financial Offer tool before completing it.

#### Reservation

Nefco reserves the right to adjust and/or further supplement the above-described calculations and/or specification parameters.