

Part I: Project Information		Response
GEF ID	10413	
Project Title	GEF-7 Africa Minigrids Program	
Date of Screening	4-Dec-19	
STAP member Screener	Saleem H. Ali	
STAP secretariat screener	Sunday Leonard	
STAP Overall Assessment		Minor issues to be considered during project design
		<p>The Africa Minigrid Program seeks to support selected African countries to increase energy access by reducing the cost and increasing commercial viability of renewable energy mini-grids. The PIF effectively made a case for support through a variety of features. The lesson drawn from earlier Child projects, as well as the partnership with innovative organizations such as Rocky Mountain Institute, give the proposal considerable depth and scope.</p> <p>Mini-grids have much potential to bypass old development pathways for electrification. However, there is also growing literature on their pitfalls, which should be addressed. As with other GEF project proposals, more effort is needed to engage with the peer-reviewed literature on the topics. Examples of literature in this genre include: Mini-Grids for the Base of the Pyramid Market: A Critical Review (https://www.mdpi.com/1996-1073/11/4/813); Mini-grid based off-grid electrification to enhance electricity access in developing countries: What policies may be required? (https://www.sciencedirect.com/science/article/pii/S0301421516301781); Rethinking the sustainability and institutional governance of electricity access and mini-grids: Electricity as a common pool resource (https://www.sciencedirect.com/science/article/pii/S2214629617303638); Institutional Innovation in the Management of Pro-Poor Energy Access in East Africa (https://www.sussex.ac.uk/webteam/gateway/file.php?name=2015-29-swps-gollwitzer-et-al.pdf&site=25).</p>
		<p>Furthermore, there is considerable literature on the opportunities presented by blockchain technology for energy projects like this, including for renewable energy generation, distribution and management. STAP recommends that the project proponents explore the possibilities of using this technology to enhance the global environmental benefits of the project. Examples of relevant literature on this include: STAP's blockchain paper (http://stapgef.org/harnessing-blockchain-technology-delivery-global-environmental-benefits); Blockchain technology in the energy sector (https://www.sciencedirect.com/science/article/pii/S1364032118307184); Blockchain meets Energy (https://fsr.eui.eu/wp-content/uploads/Blockchain_meets_Energy_-_ENG.pdf); Blockchain: A true disruptor for the energy industry (https://www2.deloitte.com/content/dam/Deloitte/us/Documents/energy-resources/us-blockchain-disruptor-for-energy-industry.pdf).</p>

		<p>A generic diagram of the theory of change for mini-grids is presented which starts with a diagnosis of risks and then proposes how to address them. However, this is linear and has only one step. There needs to be consideration of how particular kinds of policies could lead to change rather than just stating that policies will address the diagnostics. This diagram needs to be refined with more steps that unpack points like “innovative financing” and “business model and innovation” and “policies and regulations.” Please see STAP paper on theory of change for further guidance: http://stapgef.org/theory-change-primer</p> <p>The proposal identifies carbon mitigation benefits with adequate referencing of methods. Tradeoffs are not discussed but should be, in terms of reliability failures that can happen with mini-grids. What are the backups to prevent diesel generators from still being frequently used? Resilience needs to be built into the grid architecture to address times of power outages.</p> <p>The proposal presents an adequate list of stakeholders. However, the diesel generator industry is quite widespread in Africa and the project proponents need to consider how to ensure that they do not hinder project success. The project also needs to consider incentives for alternative livelihoods for people involved in diesel generator business.</p>
Part I: Project Information	What STAP looks for	
B. Indicative Project Description Summary		
Project Objective	Is the objective clearly defined, and consistently related to the problem diagnosis?	Yes
Project components	A brief description of the planned activities. Do these support the project’s objectives?	Nicely described with clear objectives.
Outcomes	A description of the expected short-term and medium-term effects of an intervention.	These are adequately provided.
	Do the planned outcomes encompass important global environmental benefits/adaptation benefits?	
	Are the global environmental benefits/adaptation benefits likely to be generated?	
Outputs	A description of the products and services which are expected to result from the project. Is the sum of the outputs likely to contribute to the outcomes?	Adequately provided.
Part II: Project justification	A simple narrative explaining the project’s logic, i.e. a theory of change.	
1. Project description. Briefly describe:		
1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)	Is the problem statement well-defined?	A generic UNDP theory of change for minigrids diagram is presented which starts with a diagnosis of risks and then proposes to address them. However, the theory of change presented is linear and has only one step. There needs to be consideration of how particular kind of policies could lead to change rather than just stating that policies will address the diagnostics. This diagram needs to be refined with more steps which unpack points like “innovative financing” and “business model and innovation” and “policies and regulations.” (Box 1)
	Are the barriers and threats well described, and substantiated by data and references?	

	For multiple focal area projects: does the problem statement and analysis identify the drivers of environmental degradation which need to be addressed through multiple focal areas; and is the objective well-defined, and can it only be supported by integrating two, or more focal areas objectives or programs?	
2) the baseline scenario or any associated baseline projects	Is the baseline identified clearly?	Baselines are linked to earlier Child projects.
	Does it provide a feasible basis for quantifying the project's benefits?	
	Is the baseline sufficiently robust to support the incremental (additional cost) reasoning for the project?	
	For multiple focal area projects:	
	are the multiple baseline analyses presented (supported by data and references), and the multiple benefits specified, including the proposed indicators;	
	are the lessons learned from similar or related past GEF and non-GEF interventions described; and	
	how did these lessons inform the design of this project?	
3) the proposed alternative scenario with a brief description of expected outcomes and components of the project	What is the theory of change?	There is a growing literature on the barriers to minigrad adoption. As with other GEF project proposals, more effort is needed to engage with the peer-reviewed literature on the topic. An example of an article in this genre which is open source is linked here: https://www.mdpi.com/1996-1073/11/4/813
	What is the sequence of events (required or expected) that will lead to the desired outcomes?	
	· What is the set of linked activities, outputs, and outcomes to address the project's objectives?	
	· Are the mechanisms of change plausible, and is there a well-informed identification of the underlying assumptions?	
	· Is there a recognition of what adaptations may be required during project implementation to respond to changing conditions in pursuit of the targeted outcomes?	
5) incremental/additional cost reasoning and expected contributions from the baseline, the GEF trust fund, LDCF, SCCF, and co-financing	GEF trust fund: will the proposed incremental activities lead to the delivery of global environmental benefits?	Cost reasoning is well defined. Monitoring and evaluation is noted adequately through the Child projects phase. The prior usefulness of these monitoring mechanisms should be reviewed.
	LDCF/SCCF: will the proposed incremental activities lead to adaptation which reduces vulnerability, builds adaptive capacity, and increases resilience to climate change?	
6) global environmental benefits (GEF trust fund) and/or adaptation benefits (LDCF/SCCF)	Are the benefits truly global environmental benefits, and are they measurable?	The proposal identifies carbon mitigation benefits with adequate referencing of methods. Tradeoffs are not discussed but should be in terms of reliability failures that can happen with minigrads. What are the backups to prevent diesel generators from still being frequently used.
	Is the scale of projected benefits both plausible and compelling in relation to the proposed investment?	
	Are the global environmental benefits explicitly defined?	

	Are indicators, or methodologies, provided to demonstrate how the global environmental benefits will be measured and monitored during project implementation?	
	What activities will be implemented to increase the project's resilience to climate change?	
7) innovative, sustainability and potential for scaling-up	Is the project innovative, for example, in its design, method of financing, technology, business model, policy, monitoring and evaluation, or learning?	Proponents have partnered with Rocky Mountain Institute which has a distinguished record of innovative approaches to energy policy and there are clear highlights of scaling out (even though they note this as scaling "up". There is a focus on finding innovative ways of cost reduction and also to consider financing linkages between minigrids to promote resilience following the Rockefeller Foundation's CrossBoundary Energy Access (CBEA) investment .
	Is there a clearly-articulated vision of how the innovation will be scaled-up, for example, over time, across geographies, among institutional actors?	
	Will incremental adaptation be required, or more fundamental transformational change to achieve long term sustainability?	
1b. Project Map and Coordinates. Please provide geo-referenced information and map where the project interventions will take place.		Not georeferenced but overall map provided.
2. Stakeholders. Select the stakeholders that have participated in consultations during the project identification phase: Indigenous people and local communities; Civil society organizations; Private sector entities. If none of the above, please explain why. In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.	Have all the key relevant stakeholders been identified to cover the complexity of the problem, and project implementation barriers?	Adequate presentation of stakeholders through the UNF Minigrid Partnership. However, diesel generation industry is quite widespread in Africa and how to ensure they don't sabotage prevalence of project and have incentives for new livelihoods should be considered.
	What are the stakeholders' roles, and how will their combined roles contribute to robust project design, to achieving global environmental outcomes, and to lessons learned and knowledge?	
3. Gender Equality and Women's Empowerment. Please briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis). Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes/no/ tbd. If possible, indicate in which results area(s) the project is expected to contribute to gender equality: access to and control over resources; participation and decision-making; and/or economic benefits or services. Will the project's results framework or logical framework include gender-sensitive indicators? yes/no /tbd	Have gender differentiated risks and opportunities been identified, and were preliminary response measures described that would address these differences?	Yes – there is a fairly detailed section on gender aspects of this project.
	Do gender considerations hinder full participation of an important stakeholder group (or groups)? If so, how will these obstacles be addressed?	

<p>5. Risks. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design</p>	<p>Are the identified risks valid and comprehensive? Are the risks specifically for things outside the project's control?</p>	<p>Identified. Detailed climate risk assessment should be carried out</p>
	<p>Are there social and environmental risks which could affect the project?</p>	
	<p>For climate risk, and climate resilience measures:</p>	
	<ul style="list-style-type: none"> · How will the project's objectives or outputs be affected by climate risks over the period 2020 to 2050, and have the impact of these risks been addressed adequately? 	
	<ul style="list-style-type: none"> · Has the sensitivity to climate change, and its impacts, been assessed? 	
	<ul style="list-style-type: none"> · Have resilience practices and measures to address projected climate risks and impacts been considered? How will these be dealt with? 	
	<ul style="list-style-type: none"> · What technical and institutional capacity, and information, will be needed to address climate risks and resilience enhancement measures? 	
<p>6. Coordination. Outline the coordination with other relevant GEF-financed and other related initiatives</p>	<p>Are the project proponents tapping into relevant knowledge and learning generated by other projects, including GEF projects?</p>	<p>Good coordination details provided based on historical relations as well.</p>
	<p>Is there adequate recognition of previous projects and the learning derived from them?</p>	
	<p>Have specific lessons learned from previous projects been cited?</p>	
	<p>How have these lessons informed the project's formulation?</p>	
	<p>Is there an adequate mechanism to feed the lessons learned from earlier projects into this project, and to share lessons learned from it into future projects?</p>	
<p>8. Knowledge management. Outline the "Knowledge Management Approach" for the project, and how it will contribute to the project's overall impact, including plans to learn from relevant projects, initiatives and evaluations.</p>	<p>What overall approach will be taken, and what knowledge management indicators and metrics will be used?</p>	<p>Identified and details adequately provided.</p>
	<p>What plans are proposed for sharing, disseminating and scaling-up results, lessons and experience?</p>	
<p>STAP advisory response</p>	<p>Brief explanation of advisory response and action proposed</p>	
<p>1. Concur</p>	<p>STAP acknowledges that on scientific or technical grounds the concept has merit. The proponent is invited to approach STAP for advice at any time during the development of the project brief prior to submission for CEO endorsement.</p>	

	<p>* In cases where the STAP acknowledges the project has merit on scientific and technical grounds, the STAP will recognize this in the screen by stating that <i>“STAP is satisfied with the scientific and technical quality of the proposal and encourages the proponent to develop it with same rigor. At any time during the development of the project, the proponent is invited to approach STAP to consult on the design.”</i></p>	
2. Minor issues to be considered during project design	<p>STAP has identified specific scientific /technical suggestions or opportunities that should be discussed with the project proponent as early as possible during development of the project brief. The proponent may wish to:</p>	
	<p>(i) Open a dialogue with STAP regarding the technical and/or scientific issues raised;</p>	
	<p>(ii) Set a review point at an early stage during project development, and possibly agreeing to terms of reference for an independent expert to be appointed to conduct this review.</p>	
	<p>The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.</p>	
3. Major issues to be considered during project design	<p>STAP proposes significant improvements or has concerns on the grounds of specified major scientific/technical methodological issues, barriers, or omissions in the project concept. If STAP provides this advisory response, a full explanation would also be provided. The proponent is strongly encouraged to:</p>	
	<p>(i) Open a dialogue with STAP regarding the technical and/or scientific issues raised; (ii) Set a review point at an early stage during project development including an independent expert as required. The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.</p>	