

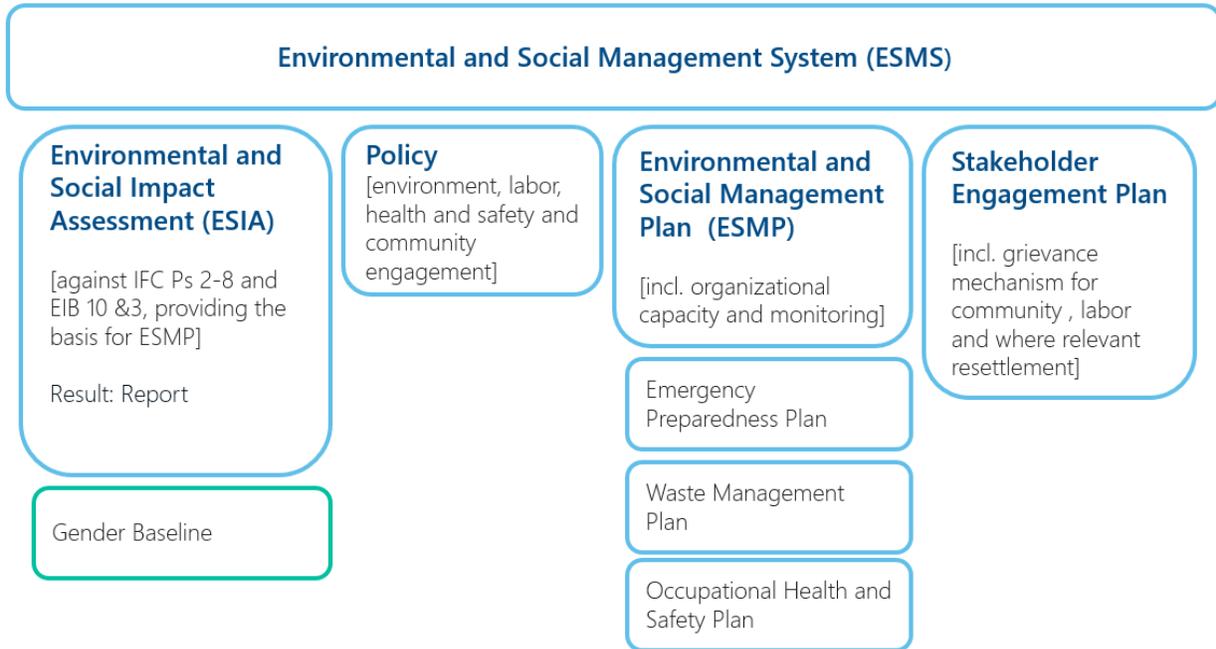
## Guidance Note: ESMS Guidance for solar PV mini-grid projects seeking REPP support

<b>Subject:</b>	Guidance Note on REPP Environmental and Social (E&S) requirements, with specific notes for projects with capacity below 100kW where the generation system is primarily made of a solar PV panels on the roof or solar home systems, which are not in need of a third party ESIA and are in process of establishing Environmental and Social Management System (ESMS) for the project.
<b>Last updated</b>	3 December 2018
<b>Purpose</b>	To provide guidance for the REPP E&S requirements for project developers seeking REPP support and are in process of establishing an ESMS and serves as an ESIA.
<b>Background</b>	<p>REPP-supported projects must follow the REPP E&amp;S Policy, which are based on the IFC Performance Standards on E&amp;S Sustainability and the EIB E&amp;S Standards No. 3 and No. 10.</p> <p>The developer is required to establish and maintain an Environmental and Social Management System (ESMS) for the project, including the identification and assessment of its E&amp;S risks and impacts, that is appropriate to the nature and scale of the project and commensurate with the level of its environmental and social risks and impacts.</p>
<b>References</b>	<p>IFC Performance Standards on E&amp;S Sustainability (IFC PS): <a href="http://www.ifc.org/wps/wcm/connect/115482804a0255db96fbffd1a5d13d27/PS_English_2012_Full-Document.pdf?MOD=AJPERES">http://www.ifc.org/wps/wcm/connect/115482804a0255db96fbffd1a5d13d27/PS_English_2012_Full-Document.pdf?MOD=AJPERES</a></p> <p>EIB E&amp;S Standards (EIB ESS): <a href="http://www.eib.org/attachments/strategies/environmental_and_social_practices_handbook_en.pdf">http://www.eib.org/attachments/strategies/environmental_and_social_practices_handbook_en.pdf</a></p>

### Notes for users

- This guidance note serves as a tool to establish a corporate level ESMS and an ESIA incl. identify and follow-up actions to be implemented by the developer;
- This document is intended to form the ESMS, i.e. it provides the structure and required sections for ESMS;
- **Fill in yellow highlighted parts.** Delete “Guidance” and “Notes for rooftop solar PV projects” from the final version.

Elements of Environmental and Social Management System (ESMS)



[Delete the above from final version and replace with project specific diagram]

## Contents

<b>Guidance Note: ESMS Guidance for Rooftop solar PV Projects seeking REPP Support</b> .....	1
1. IFC PS 1: Assessment and Management of Environmental and Social Risks and Impacts .....	4
1.1. Environmental and Social Assessment and Management System (ESMS) .....	4
1.2. ESMS – Policy .....	4
1.3. ESMS - Identification of risks and impacts .....	5
1.4. ESMS - Organizational capacity and competency .....	6
1.5. ESMS – Management Programs .....	6
1.6. ESMS – Emergency preparedness and response .....	7
1.7. ESMS - Stakeholder engagement, incl. communication, grievance mechanisms and ongoing reporting to Affected Communities .....	7
1.8. ESMS - Monitoring and review .....	8
2. IFC PS 2: Labour & Working Conditions .....	9
2.1. Working conditions and management of worker relationships .....	9
2.2. Protecting the work force, occupational health and safety, workers engaged by third parties and supply chain .....	10
2.3. ESMS - Emergency preparedness and response .....	11
3. IFC PS 3: Resource Efficiency and Pollution Prevention .....	11
3.1. Pollution prevention: Wastes, hazardous materials and pesticide use and management .....	11
4. IFC PS 4: Community Health, Safety, and Security .....	12
4.1. Community Health and Safety .....	12
<b>Annex 1: Template Stakeholder Engagement Plan</b> .....	1
<b>Annex 2: ESMS Monitoring Guidelines for Solar Home Systems</b> .....	2
<b>ANNEX 3: REPP Definitions</b> .....	6

Standard	<b>1. IFC PS 1: Assessment and Management of Environmental and Social Risks and Impacts</b>
Item	<b>1.1. Environmental and Social Assessment and Management System (ESMS)</b>
Description	<ul style="list-style-type: none"> <li>Establish and maintain an E&amp;S Management System (ESMS) appropriate to the nature and scale of the project and commensurate with the level of its environmental and social risks and impacts</li> </ul>
Guidance	<ul style="list-style-type: none"> <li>The developer needs to set in place an overall ESMS at the organization level</li> <li>E&amp;S management and monitoring plans can be used as a basis for the ESMS, particularly focusing on occupational health and safety when operating the solar home system units, O&amp;M procedures and waste management of toxic chemicals contained within the solar panels, portable batteries and accompanying appliances. This is to extend to the staff, contractors and community.</li> <li>If an ESMS exists, the company E&amp;S operational manager should comment on the extent to which the requirements are met (see details below)</li> </ul>
Item	<b>1.2. ESMS – Policy</b>
Description	<ul style="list-style-type: none"> <li>Policies are the foundation of your ESMS. They provide the rules you expect your employees to follow and the public statement you make about what your company believes in and conducts business</li> <li>Establish overarching policy defining the environmental and social objectives and principles that guide the Project, including responsibilities for its execution</li> <li>Specify that the Project will comply with the applicable laws and regulations. Please state these laws.</li> </ul>
Guidance	<ul style="list-style-type: none"> <li>As part of the ESMS, the developer needs to set in place an E&amp;S policy at the organization level.</li> <li>If an ESMS exists, the company E&amp;S operational manager should comment on whether it contains an E&amp;S policy and whether the policy complies with local national law and IFC PS and EIB ESS.</li> </ul> <p><u>Checklist:</u></p> <p><i>Environment</i></p> <ul style="list-style-type: none"> <li><i>Environmental laws and regulations</i></li> <li><i>Hazardous and non-hazardous wastes</i></li> <li><i>Recover, reuse, treatment, and proper disposal of waste</i></li> </ul>

Standard	<b>1. IFC PS 1: Assessment and Management of Environmental and Social Risks and Impacts</b>
	<p><i>Labour and Working Conditions</i></p> <ul style="list-style-type: none"> <li>• Documented labour policies and procedures</li> <li>• Clear communications throughout the company</li> <li>• Reasonable working conditions and terms of employment (e.g. compensation, benefits)</li> <li>• Training, tools and opportunities for advancement</li> <li>• Personal protective equipment and appropriate training</li> <li>• Documentation and reporting of accidents, near misses, and illnesses</li> </ul> <p><i>Community Health and Safety</i></p> <ul style="list-style-type: none"> <li>• Consumer product safety</li> <li>• Health and safety of the public related to company activities</li> <li>• Health and safety of the public related to the construction, operation, and decommissioning of equipment and infrastructure</li> <li>• Grievance mechanism for workers and the community to express concerns about the security system and personnel</li> <li>• Investigation of allegations of past abuse</li> </ul>
Policy	[Specify E&S company policy here]
Item	<b>1.3. ESMS - Identification of risks and impacts</b>
Description	<ul style="list-style-type: none"> <li>• Provide summary of key impacts.</li> </ul>
Guidance	<ul style="list-style-type: none"> <li>• <u>Checklist:</u> <ul style="list-style-type: none"> <li>○ What is the health and safety issues arising from providing solar home systems, portable batteries and appliances to communities and what consistent maintenance exists for the project? Consider health of workers and safe working conditions (Refer to IFC PS 2) Consider health of community and safe operation (Refer to IFC PS 4)</li> <li>○ Waste and hazardous materials generated by the project. → Consider installation phase and disposal of panels and batteries in case of failure and end of life waste management and recycling (Refer to IFC PS 3).</li> </ul> </li> </ul>
Key Impacts	[Provide summary of key impacts here]

Standard	<b>1. IFC PS 1: Assessment and Management of Environmental and Social Risks and Impacts</b>
Item	<b>1.4. ESMS - Organizational capacity and competency</b>
Description	<ul style="list-style-type: none"> <li>Establish and maintain an organizational structure that defines roles, responsibilities and authority to implement the ESMS and designates specific personnel with sufficient skills, knowledge and resources</li> </ul>
Guidance	<ul style="list-style-type: none"> <li>ESMS extends beyond documented policies and procedures. This does not mean that ESMS implementation should become a full-time job, rather, the new identified responsibilities should be incorporated into the relevant job descriptions and E&amp;S performance should be evaluated based on the consistent implementation of assigned duties as defined in procedures.</li> <li>As part of the ESMS, the developer must establish and maintain a simple E&amp;S organizational structure</li> <li>The developer must designate a position within the company that will oversee the management and mitigation of each E&amp;S risk</li> </ul> <p><u>Checklist</u></p> <ul style="list-style-type: none"> <li>Consider different levels of engagement: senior management, ESMS team, HR department, Workers and Managers, procurement and their relative training needs.</li> </ul>
Organizational capacity and competency	[Describe roles, responsibilities and competency here, we propose an organizational diagram to better understand the reporting lines]
Item	<b>1.5. ESMS - Management Programs</b>
Description	<ul style="list-style-type: none"> <li>Establish management programs that describe the mitigation and performance improvement measures and actions that address the identified environmental and social risks and impacts of the project</li> <li>Establish environmental and social Action Plans, defining the desired outcomes and actions to address the identified issues, with elements such as performance indicators, targets, or acceptance criteria that can be tracked, and with estimates of resources and responsibilities for implementation</li> </ul>
Guidance	<ul style="list-style-type: none"> <li>As part of the ESMS, the developer should establish and implement a simple management program, which should include E&amp;S management and monitoring plans as a basis for the management program</li> <li>Management programmes and related action plans assist you in addressing the risks identified above in section 1.3.</li> </ul>

Standard	<b>1. IFC PS 1: Assessment and Management of Environmental and Social Risks and Impacts</b>
	Key questions to think about, when establishing action plans/ management programs <sup>1</sup> : <ul style="list-style-type: none"> <li>• <i>What</i> – environmental and social risks you want to address</li> <li>• <i>How</i> – related actions and procedures are to be implemented to address the risk</li> <li>• <i>Why</i> – reasons (objectives) for the actions and procedures, and the expected results (targets)</li> <li>• <i>When</i> – timeframe and deadlines for each action</li> <li>• <i>Who</i> – responsible people</li> </ul>
Management Programs	[Identify management plans required, here. (Provide plans below, e.g. waste, stakeholder engagement, etc..)]
Item	<b>1.6. ESMS – Emergency preparedness and response</b>
Description	Establish and maintain an emergency preparedness and response system, including identification of areas where accidents and emergency situations may occur, communities and individuals that may be impacted, response measures, provision of equipment and resources, training, review etc.in a manner appropriate to prevent and mitigate any harm to people and/or the environment.
Guidance	An Emergency Preparedness and Response Plan should include <sup>2</sup> : <ul style="list-style-type: none"> <li>• <i>identification of potential emergencies</i> based on hazard assessment;</li> <li>• <i>procedures to respond</i> to the identified emergency situations;</li> <li>• <i>emergency contacts and communication protocols</i>, including with communities when necessary, and procedures for interaction with the government authorities;</li> </ul>
Action Plan	[Establish emergency response plan here]
Item	<b>1.7. ESMS - Stakeholder engagement, incl. communication, grievance mechanisms and ongoing reporting to Affected Communities</b>

<sup>1</sup> IFC 2015. ESMS Implementation Handbook.

<sup>2</sup> IFC 2015. ESMS Implementation Handbook.

Standard	<b>1. IFC PS 1: Assessment and Management of Environmental and Social Risks and Impacts</b>
Description	<ul style="list-style-type: none"> <li>• Establish and implement ongoing stakeholder engagement process that may include the following elements:               <ul style="list-style-type: none"> <li>○ implement and maintain a procedure for disclosure and dissemination of information to (i) receive and register communications from the public and offtakers; (ii) screen and assess the issues raised and determine how to address them; (iii) provide, track, and document responses, if any; and (iv) adjust the management program to reflect deviations in management of communication</li> <li>○ <u>Ongoing reporting</u>: Provide periodic reports to the Affected Communities that describe progress with implementation of the project Action Plans.</li> </ul> </li> </ul>
Guidance	<ul style="list-style-type: none"> <li>• The developer must establish and implement stakeholder engagement and grievance mechanisms, based on a standard process at the corporate level which is applied to every site, considering the site’s characteristics.</li> <li>• The developer may identify, consider and assess any stakeholder engagement activities already carried out by the developer, ideally based on documented evidence of such engagement.</li> <li>• The developer should conduct an awareness raising on the project’s identified risks and impacts and the measures taken to address these risks, particularly waste management and disposal. The stakeholder engagement should outline the necessary personnel to which issues should be raised.</li> <li>• The developer should comment on the existence and adequacy of any stakeholder engagement process already carried out, whereby villagers have been explained how they could be affected by the project during construction and operation.</li> <li>•</li> </ul>
Notes for rooftop solar	<p><b><i>Before their house is connected to the grid:</i></b></p> <ul style="list-style-type: none"> <li>○ Have customers received advice on health and safety?</li> <li>○ Has use of electricity in a safe manner been explained to customers?</li> </ul> <p><b><i>Once the house is connected:</i></b></p> <ul style="list-style-type: none"> <li>○ Do customers have an easy way to ask a question or complain if the system is defective or not performing to their expectations (grievance mechanism)?</li> </ul>
Stakeholder Engagement Plan	<p>[Refer to Annex 1: Template Stakeholder Engagement Plan – establish a plan]</p>
Item	<p><b>1.8. ESMS - Monitoring and review</b></p>

Standard	<b>1. IFC PS 1: Assessment and Management of Environmental and Social Risks and Impacts</b>
Description	<ul style="list-style-type: none"> <li>Establish procedures to monitor and measure the effectiveness of the management program as well as compliance with any related legal and/or contractual obligations and regulatory requirements, using dynamic mechanisms to compare performance against desired outcomes or benchmarks, and performance reviews to adjust operations to improve the effectiveness of the ESMS over time</li> <li>Document monitoring results and identify and reflect the necessary corrective and preventive actions in the amended management program and plans</li> <li>The type, extent and frequency of monitoring should be commensurate with the potential impacts and risks of the project as identified by the risks and impacts identification process, and as specified in the management system</li> <li>Refer to Annex 2 ESMS Monitoring Guidelines.</li> </ul>
Guidance	<ul style="list-style-type: none"> <li>As part of the ESMS, the developer should establish a simple monitoring and review program.</li> </ul>
Monitoring Plan	<p>[Refer to Annex 2: ESMS Monitoring Guidelines -establish monitoring plan]</p>

Standard	<b>2. IFC PS 2: Labour &amp; Working Conditions</b>
Item	<b>2.1. Working conditions and management of worker relationships</b>
Description	<ul style="list-style-type: none"> <li>Adopt and implement human resources policies and procedures</li> <li>Provide reasonable working conditions and terms of employment</li> <li>Allow workers or contracted workers to organize themselves to express their grievances and protect their rights regarding working conditions and terms of employment</li> <li>Make employment decisions and implement any retrenchment plan based on non-discrimination and equal opportunities</li> <li>Provide a grievance mechanism</li> </ul> <p>This Performance Standard (PS2) applies in conjunction with <i>emergency preparedness and response plan</i> (identified above in section 1.6) and <i>grievance mechanism</i> (section 1.7)</p>
Guidance	<ul style="list-style-type: none"> <li>The company should have in place and enforce a corporate-wide staff policy, stating:             <ul style="list-style-type: none"> <li>Fair treatment, non-discrimination, equal opportunity;</li> </ul> </li> </ul>

Standard	<b>2. IFC PS 2: Labour &amp; Working Conditions</b>
	<ul style="list-style-type: none"> <li>○ Good worker–management relationship;</li> <li>○ Comply with national employment and labour laws;</li> <li>○ Protect workers, in particular those in vulnerable categories;</li> <li>○ Promote safety and health;</li> <li>○ Avoid use of forced labour or child labour.</li> </ul>
Key Impacts	Identify risks and impacts associated with working conditions for both contractors and team members during construction, operational and decommissioning phases and possible mitigative actions or measures to combat these risks.
Labour Policy	[Specify company labour policy here]
Item	<b>2.2. Protecting the work force, occupational health and safety, workers engaged by third parties and supply chain</b>
Description	<ul style="list-style-type: none"> <li>• <u>Child labour</u>: Do not employ children in any manner that is economically exploitative or is likely to be hazardous or to interfere with the child’s education, or to be harmful to the child’s health or development. See REPP definition of Child Labour in Annex 3.</li> <li>• <u>Forced labour</u>: Do not employ forced labour</li> <li>• <u>Occupational health and safety</u>: Provide a safe and healthy work environment, identifying potential hazards and providing preventative and protective measures, training and documentation and reporting of occupational accidents, diseases and incidents, as well as arrangements for emergency prevention, preparedness and response.</li> <li>• <u>Workers engaged by third parties</u>: Take commercially reasonable efforts to ascertain that third parties who engage their workers are reputable and legitimate enterprises with appropriate ESMS; establish policies and procedures for managing and monitoring the performance of such third-party employers; ensure access to grievance mechanism by contracted workers</li> <li>• <u>Supply chain</u>: Where there is a high risk of child/forced labour in the primary supply chain, identify those risks, take appropriate steps to remedy them, and monitor its primary supply chain on an ongoing basis. Refer to Solarscore card available at <a href="http://www.solarscorecard.com/2018/previous-scorecards.php">http://www.solarscorecard.com/2018/previous-scorecards.php</a></li> </ul>
Guidance	<ul style="list-style-type: none"> <li>• The company should have in place appropriate labour and health and safety policies, and processes and resources for their enforcement.</li> </ul>

Standard	<b>2. IFC PS 2: Labour &amp; Working Conditions</b>
OHS Plan	[Establish occupational health and safety (OHS) Plan incl. protective gear, training, handling of hazardous materials and/ or electric equipment. Include here.]
Item	<b>2.3. ESMS - Emergency preparedness and response</b>
Description	<ul style="list-style-type: none"> <li>Establish and maintain an emergency preparedness and response system, including identification of areas where accidents and emergency situations may occur, communities and individuals that may be impacted, response measures, provision of equipment and resources, training, review etc.</li> </ul>
Guidance	<ul style="list-style-type: none"> <li>As part of the ESMS, the developer should prepare a simple emergency preparedness and response system.</li> </ul>
Emergency Preparedness Plan	[Prepare a simple emergency preparedness and response system incl. considerations of community health and safety). Include here.]

Standard	<b>3. IFC PS 3: Resource Efficiency and Pollution Prevention</b>
Item	<b>3.1. Pollution prevention: Wastes, hazardous materials and pesticide use and management</b>
Description	<ul style="list-style-type: none"> <li>Avoid or minimize the release of pollutants and/or control the intensity and mass flow of their release</li> </ul>
Guidance	<ul style="list-style-type: none"> <li>The developer needs to prepare and implement a waste management plan for the project, including actions for the appropriate handling and recycling or disposal of e.g. solar panels at the end of their life and the minimization and appropriate management of waste disposal.</li> <li>the developer should identify potential sources of waste, assess the associated risks and impacts. The E&amp;S management plan should then recommend measures to avoid, minimise and appropriately handle it and to monitor the performance of these measures (in the E&amp;S monitoring plan).</li> <li><u>Checklist:</u> <ul style="list-style-type: none"> <li>Is installation waste disposed of in a manner which minimizes pollution?</li> <li>In the case of solar PV projects, are the policies on maintaining batteries and solar panels, and their disposal at the end of their life satisfactory?</li> </ul> </li> </ul>

Standard	<b>3. IFC PS 3: Resource Efficiency and Pollution Prevention</b>
	<ul style="list-style-type: none"> <li>○ Are there considerations (e.g. procedures and safety measures) for storage of leaking or non-functional batteries?</li> <li>○ Consider Extended Producer Responsibility, whereby the used materials are reabsorbed by the manufacturer, thereby reducing the mining of raw materials</li> </ul>
Key Impacts	Identify risks and impacts associated with waste generated during installation, operational and decommissioning phases, in particular, solar PV panels and batteries. Please take into account reabsorption of materials into manufacturing facility to replace raw materials.
Waste Management Plan	[Establish Waste management Plan and Recycling Plan incl. required actions, roles and responsibilities. Include here.]

Standard	<b>4. IFC PS 4: Community Health, Safety, and Security</b>
Item	<b>4.1. Community Health and Safety</b>
Description	<ul style="list-style-type: none"> <li>• It is project developer’s responsibility to avoid or minimize the risks and impacts to community health, safety, and security that may arise from project related-activities, with particular attention to vulnerable groups.</li> <li>• <u>Infrastructure and equipment design and safety</u>: Design, construct, and operate and decommission the structural elements or components of the project in accordance with good international industry practice.</li> <li>• <u>Hazardous materials management and safety</u>: Prevent or minimize the potential for community exposure to hazardous materials that may be released by the project.</li> <li>• <u>Emergency preparedness and response</u>: Assess the potential risks and impacts from project activities and inform affected communities of significant potential hazards in a culturally appropriate manner. Refer to Emergency Response Plan.</li> </ul>
Guidance	<ul style="list-style-type: none"> <li>• Due to the limited risk during the installation stage, solar home systems usually have limited adverse impacts or risks to community health, safety and security, and natural resources.</li> <li>• The developer should identify and assess risks and impacts to local communities. The E&amp;S management plan then recommends measures to avoid, minimise and manage risks and impacts, and to monitor the performance of these measures (in the E&amp;S monitoring plan).</li> </ul>

Standard	<b>4. IFC PS 4: Community Health, Safety, and Security</b>
	<ul style="list-style-type: none"> <li>• <u>Checklist for the developer:</u> <ul style="list-style-type: none"> <li><i>During operation</i> <ul style="list-style-type: none"> <li>○ Have warning signs been installed on all hazardous electrical equipment, power cables, batteries etc.?</li> <li>○ Are lightning protection and earthing installed on all required electrical equipment?</li> </ul> </li> </ul> </li> </ul>
Key Impacts	Identify risks to community health and safety, during construction, operational and decommissioning phases and possible mitigative actions or measures to combat these risks.
Community Health and Safety	[Describe here actions taken and related roles and responsibilities to guarantee community health and safety.]

## Annex 1: Template Stakeholder Engagement Plan

Chapter	Guidance
Introduction	Briefly describe the project to the stakeholders (or the company’s operations) including design elements and potential social and environmental issues.
Previous Stakeholder Engagement Activities	<p>If the company has undertaken any activities to date, including information disclosure and/or consultation, provide the following details:</p> <ul style="list-style-type: none"> <li>• Type of information disclosed, in what forms (e.g. oral, brochure, reports, posters, radio, etc.), and how it was disseminated</li> <li>• The locations and dates of any meetings undertaken to date</li> <li>• Individuals, groups, and/or organizations that have been consulted</li> <li>• Key issues discussed, and key concerns raised</li> <li>• Company response to issues raised, including any commitments or follow-up actions</li> <li>• Process undertaken for documenting these activities and reporting back to stakeholders</li> </ul>
Project Stakeholders	<p>List the key stakeholder groups who will be informed and consulted about the project (or the company’s operations). These should include persons or groups who:</p> <ul style="list-style-type: none"> <li>• are directly and/or indirectly affected by the project (or the company’s operations)</li> <li>• have “interests” in the project or parent company that determine them as stakeholders</li> <li>• have the potential to influence project outcomes or company operations</li> </ul>
Stakeholder Engagement Program	<ul style="list-style-type: none"> <li>• Summarize the purpose and goals of the program.</li> <li>• Briefly describe what information will be disclosed on what type of platform, in what formats, and the types of methods that will be used to communicate this information to each of the stakeholder groups identified in the section on project stakeholders.</li> <li>• Briefly describe the methods that will be used to consult with each of the stakeholder groups</li> <li>• Describe how the views of <u>women</u> and other relevant sub-groups (e.g. minorities, elderly, youth etc.) will be taken into account during the process.</li> <li>• Public participation records should indicate gender of participant, to monitor woman’s participation.</li> <li>•</li> </ul>
Timetable	Provide a schedule outlining dates and locations when various stakeholder engagement activities, including consultation and disclosure will take place and the date by which such activities will be incorporated into the company’s management system (at either the project or corporate level).
Resources and Responsibilities	Indicate what staff and resources will be devoted to managing and implementing the company’s Stakeholder Engagement Program. Who within the company will be responsible for carrying out these activities?
Monitoring and Reporting	<ul style="list-style-type: none"> <li>• Describe any plans to involve project stakeholders (including affected communities) or third-party monitors in the monitoring of project impacts and mitigation programs.</li> <li>• Describe how and when the results of stakeholder engagement activities will be reported back to affected stakeholders as well as broader stakeholder groups.</li> </ul>

## **Annex 2: ESMS Monitoring Guidelines for Solar Home Systems**

The monitoring plan shall be tailored to the nature and scale of the project and the relative level of environmental and social risk and impacts of the project. ESMS shall serve as a basis for the project monitoring plan. The monitoring plan shall be provided in tabular format (see proposed template below) and shall contain following:

- a. Potential Impact (against IFC performance standard);
- b. Proposed Mitigation Measures;
- c. Parameter to be monitored (How mitigation measure is to be monitored);
- d. Measurement unit;
- e. Measurement range/ target level;
- f. Source of data;
- g. Timing (construction / operation);
- h. Frequency of monitoring (continuous/ daily/ weekly/ monthly);
- i. Reporting frequency (weekly/ monthly/ annually);
- j. Location where recorded (document name and location);
- k. Corrective action, where parameter over/ under indicated range;
- l. Quality assurance and /or supporting document;
- m. Responsible person.

In addition to the parameters defined based on the results of the ESIA, following parameters shall be included in the monitoring plan:

1. Installed Capacity of the plant;
2. Operational Capacity of the plant;
3. Amount of electricity generated;
4. Amount of electricity sold;
5. Fuel consumed;
6. Number of jobs generated desegregated by gender, stage (construction/operation) and level (low skilled / high skilled);
7. Grievances addressed

Stage / Timing	Potential Direct Impacts	Proposed Mitigation Measures	Parameter to be monitored	Measurement unit	Range/ Target Level	Source of data	Monitoring frequency	Corrective action <sup>3</sup>	Reporting frequency	Location where recorded	Quality assurance and /or supporting document	Responsibility
Commissioning		n/a	Installed Capacity	KW	[specify]	Name Plate/ equipment contract/ commissioning report	Once		Once	[specify]	Name Plate/ equipment contract/ commissioning report	[specify]
Operation	Increased share of renewable energy	n/a	Operational capacity	KW	[specify]	Name Plate/ equipment contract (generator operating)	Continuous	Report problem take necessary actions to ensure full operation.	Annually	[specify]		[specify]
Operation	- Increased share of renewable energy - Increased energy security and energy access	n/a	Electricity generated	KWh	[specify]	Electric meter	Continuous	Report problem take necessary actions to ensure production on target levels.	Monthly	[specify]		[specify]
Operation	- Increased energy security and energy access	n/a	Fuel used	Litres	[specify]	Invoices	Continuous	Report problem take necessary actions to ensure production on target levels.	Monthly	[specify]	Sales records	[specify]

<sup>3</sup>Corrective action refers to the action required, if monitored parameter is not within the target range.

Operation	- Removal and management of waste	n/a	Battery units recycled	[absolute number]	[specify]	Contracts	Continuous	Report problem take necessary actions to ensure production on target levels.	Monthly	[specify]	Battery collection records and follow on waste management service provider contract	[specify]
Operation	- Removal and management of waste	n/a	Solar panels and mounting structures recycled	[absolute number]	[specify]	Contracts	Continuous	Report problem take necessary actions to ensure production on target levels.	Monthly	[specify]	Unit collection records and follow on waste management service provider contract	[specify]
Installation and operation	Increased access to economic resources		Number of jobs generated by 1) gender, 2) stage (installation/operation) and 3) level (low skilled / high skilled	[absolute number]	[specify]	Employment contracts	Continuous		Annually	[specify]	Calculation	[specify]
Installation, operation and decommissioning	Community Acceptance	Stakeholder Engagement Plan / Community Grievance Mechanism	Concerns raised	[absolute number]	[specify]	Grievances brought forward [specify source]	Continuous		Monthly	[specify]	Grievance record	[specify]
Installation, operation and decommissioning	Community Acceptance	Stakeholder Engagement Plan / Community Grievance Mechanism	Concerns addressed	[absolute number]	[as above]	Grievances addressed forward [specify record]	Continuous	If not resolved clarify why and when expected to be resolved.	Monthly	[specify]	Records off actions taken.	[specify]
			Add ES parameter									
			Add ES parameter									



Renewable Energy Performance Platform

			<i>Add ES parameter</i>									
--	--	--	-------------------------	--	--	--	--	--	--	--	--	--



Renewable Energy Performance Platform

### **ANNEX 3: REPP Definitions**

“ **Child Labour**”. In accordance with ILO Convention concerning Minimum Age for Admission to Employment and ILO Recommendations on Child Labour the minimum age for work should not be below the age for finishing compulsory schooling and in any case not less than 14. Children between the ages of 13 and 14 years old may do light work, as long as it does not threaten their health and safety or hinder their education or vocational orientation and training. Any hazardous work which is likely to jeopardize children’s physical, mental or moral health and safety should not be done by anyone under the age of 18.

<https://www.ilo.org/ipecc/facts/ILOconventionsonchildlabour/lang--en/index.htm>