**ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEM TEMPLATE**

June 2024



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1.

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# Acronyms

|  |  |
| --- | --- |
| **Acronym** | **Full word** |
| AQNMP | Air Quality and Noise Management Plan  |
| BAP | Biodiversity Action Plan  |
| CITES | Convention on International Trade of Endangered Species |
| CLO | Community Liaison Officer |
| EPRP | Emergency Preparedness and Response Plans |
| E&S | Environment and Social  |
| ESAP | Environmental and Social Action Plan |
| ESDD | Environmental and Social Due Diligence |
| ESIA | Environmental and Social Impact Assessment |
| ESMS | Environmental and Social Management System |
| FPIC | Free, Prior, Informed Consent |
| GESI | Gender Equality and Social Inclusion |
| GHG | Greenhouse Gas |
| GRM | Grievance Redress Mechanism |
| IFC PS | International Finance Corporation Performance Standard |
| ILO | International Labour Organisation |
| KYBP | Know Your Business Partner  |
| LMRA | Last Minute Risk Assessment  |
| OHS | Occupational Health and Safety |
| RAP | Resettlement Action Plan |
| WMP | Waste Management Plan |

1.
2. EXECUTIVE SUMMARY

The Environmental and Social Management System (ESMS) manual has been developed to manage the environmental and social (E&S) impacts of solar mini-grids and associated facilities (referred to herein as "Project"). The ESMS comprises procedures and guidelines that can be incorporated into rural solar mini-grids/other energy access technologies' core operations.

1. Customisation and Compliance

Developers are encouraged to adopt this ESMS by inserting their company name in place of "[Developer]." However, it is imperative to conduct a thorough review of the ESMS procedures, tailoring them to local contexts, regulatory requirements, and existing company policies. Furthermore, alignment with the expectations of investors or lenders is crucial for ensuring compliance and demonstrating commitment to responsible business practices. Investor and developer considerations when adopting the ESMS have been summarised below.

To ensure the ESMS is practical and meets both investor and operational needs, please consider the following:

1. Specificity: Tailor the policies, procedures, and management plans to reflect the specific environmental and social impacts of your projects. Include details relevant to your operational context and geographical location.
2. Operational Integration: The ESMS must be integrated into daily operations, covering all phases of the project lifecycle from pre-development to decommissioning. This involves training staff, establishing clear roles and responsibilities, and ensuring ongoing compliance.
3. Compliance with Standards: Align the ESMS with both international standards (e.g., IFC Performance Standards) and local regulations. Ensure that the document clearly demonstrates how these standards will be met in practice.
4. Detailed Procedures and Roles: Define specific roles and responsibilities for implementing the ESMS. Provide detailed procedures for risk management, monitoring, and reporting.
5. Stakeholder Engagement: Develop a robust stakeholder engagement plan, including mechanisms for managing grievances and ensuring transparent communication with all stakeholders.
6. Resource Allocation: Commit to allocating the necessary resources, including personnel and training, to effectively implement and maintain the ESMS.
7. Continuous Improvement: Establish a process for regularly reviewing and updating the ESMS to reflect new risks, regulatory changes, and lessons learned.

At a minimum, the ESMS covers effective implementation of E&S risk management through:

1. Developing E&S organisational capacity by institutionalising an E&S Committee that is fully committed to the implementation of the ESMS through the E&S Manager or Officer as well as ensuring that all internal staff are aware of their roles and responsibilities in relation to the ESMS.
2. Establishing an E&S Policy that sets out developer’s commitment to managing its E&S performance in line with Applicable E&S Standards to instill best practices in developer’s operations.
3. Developing a set of developer's E&S requirements including guidelines and procedures required in addressing E&S risks across the Project cycle.
4. Establishing an active monitoring and reporting plan to track E&S progress, identify areas for improvement, and report on developer's E&S performance.
5. Establishing an effective communication mechanism with:
	* Investors or lenders to collaborate and make informed decisions pertaining to the investments’ E&S risks and opportunities.
	* Internal and external stakeholders to ensure effective implementation of the ESMS throughout developer's operations.
6. Commitment to continually review and improve the ESMS to ensure it remains relevant and effective in addressing developer's E&S risks and impacts.
7. E&S POLICY STATEMENT

*{Insert existing E&S policy if available}*

[Developer] has established an E&S Policy that provides a guiding framework for integrating and managing E&S risks. Specific commitments in the policy include:

1. Development and implementation of an ESMS across all its Projects cycle;
2. Development of E&S objectives aligned with the community and customers that the [Developer] serves;
3. Commitment to dedicate capacity and resources to implement and maintain the ESMS including E&S training and leadership involvement and commitment to E&S compliance;
4. Conformance with the Applicable Standards with a mandate to go beyond local compliance and achieve best practices within local context;
5. Compliance with relevant national E&S legislation;
6. Commitment to managing broad E&S risks affecting the solar mini-grid sector by establishing policies and procedures to manage key E&S focus areas including but not limited to occupational and community health and safety, labour and working conditions, security, human rights, climate, gender, procurement, and resource management;
7. Demonstrate [Developer]'s commitments by communicating the policies and procedures to internal staff through formal meetings, awareness training, and other internal communication channels;
8. Commitment to regular review of the policies and procedures for suitability and relevance.

*{E&S Policy statement endorsement by leadership}*

[Signature]

[Name]

[Title]

[Date]

1. APPLICABLE E&S STANDARDS

[Developer] commits its operations to conform with the following E&S standards and guidelines (collectively referred to as the Applicable Standards):

1. All relevant national laws and regulations pertaining to E&S in countries of operations.
2. IFC Performance Standards (PS) 2012, and associated Guidance Notes.
3. {*Insert all E&S standards of lenders, investors and shareholders including but not limited to standards pertaining general E&S risk identification and management including climate risk, labour rights, human rights as documented in the ESMS, health, safety, and security, and gender-based violence / sexual exploitation, abuse, and harassment.*}
4. E&S ORGANISATIONAL CAPACITY AND COMPETENCY
5. E&S Organisational Structure

The organisational structure (Figure 1) presents a governance framework within [Developer] operations to manage E&S aspects and integrate E&S considerations into its decision-making processes. The structure includes roles and responsibilities to identify, assess, and manage E&S risks and opportunities. The E&S Committee[[1]](#footnote-2) holds the overarching responsibility for overseeing E&S performance. This oversight is facilitated by the E&S Manager/Officer, who assumes overall responsibility for implementing the ESMS. The E&S Manager/Officer collaborates closely with various internal stakeholders, including Technical, Legal, Operations, and Customer teams, ensuring comprehensive integration of E&S principles across all facets of operations. Additionally, they manage relations with investors and lenders, ensuring alignment with E&S goals. The [Developer] also ensures provision of a Cluster Supervisor or Project Manager for every [5] mini-grid sites, to manage the EPC or Local operator/Technician’s scope in relation to health, safety, and environmental (HSE) requirements stipulated in the ESMS. The role of the Cluster or Project Manager extends to management of the Community Liaison Officer’s (CLO) scope in relation to community engagements and management of grievances.

Investors/Lender

E&S Manager/Officer

Cluster Supervisor/Project Manager

EPC HSE Officer/Local technician 02/CLO

EPC HSE Officer /Local technician 03/CLO

EPC HSE Officer/Local technician/CLO

E&S Committee

 E&S consultant

Internal Technical, Legal, Customer, Operations teams…

Managing Director

Figure 1: E&S governance framework cuts across all levels in the organisation

1. Key Roles and Responsibilities
2. E&S Committee

The E&S Committee comprises of the Managing Director, E&S Manager, Legal, Technical, Customer, and Operations Managers.

The E&S Committee shall demonstrate leadership and commitment with respect to the ESMS by:

1. Reviewing and approving ESMS policies and procedures.
2. Managing the ESMS to ensure that it is adequately maintained, updated, and resourced as necessary.
3. Regularly reviewing the effectiveness of the ESMS and identifying areas of improvement documented in an action plan.
4. Ensuring the integrity of the ESMS is maintained during planned changes.
5. Ensuring the ESMS conforms to the Applicable Standards.
6. Providing overall direction and support, recommending resources required for ESMS implementation to the [Developer] board.
7. Communicating the importance of ESMS effectiveness to relevant stakeholders and confirming ESMS requirements.
8. Encouraging proactive involvement of all Project personnel in executing relevant management programs and ensuring risk-based thinking and continual improvement.
9. Ensuring Project E&S KPIs appropriately represent each Project's performance.
10. Allocating an adequate budget for the operation of the [Developer] E&S function.
11. Holding quarterly meetings to track ESMS implementation progress and address upcoming E&S developments requiring attention or action.
12. E&S Manager

The E&S Manager will have the responsibility of implementing the ESMS throughout the investment process with specific duties including:

1. Conducting E&S screening process of the Project and associated activities as outlined in section 5 below.
2. Conducting governance screening of the Project and associated activities, including conducting human rights due diligence in the supply chain, and know your business partner (KYBP) screening process.
3. Appointment of E&S consultants, where applicable, to conduct E&S studies including environmental and social impact assessments (ESIA), environmental and social management plans (ESMP), resettlement action plans (RAP) etc.
4. Review of the ESIAs in line with the Applicable Standards.
5. Implementing Environmental and Social Action Plans (ESAP) received from investors or lender, where applicable.
6. Ensuring all E&S permits have been obtained.
7. Ensuring E&S requirements are included in relevant legal and contractual documentation with the EPC.
8. Ensuring E&S key performance indicators are monitored and tracked on site.
9. Collecting, reviewing, and reporting E&S performance data internally and to investors/lenders.
10. Reporting significant E&S incidents internally and to investors/lenders.
11. Developing annual E&S reports including ESMP performance for internal reporting and to investors/lenders.
12. Providing E&S stewardship at [Developer] Board level.
13. Ensuring the ESMS is continuously reviewed and improved and reflect on lessons learnt.
14. Coordinating E&S training within the organisation and conducting E&S training for the EPC site workers.
15. Cluster Supervisor/Project Manager
16. Overseeing management and operations of HSE.
17. Conducting regular HSE risk assessments and hazard identifications.
18. Ensuring EPC HSE/local technicians are trained on site work.
19. Overseeing technical controls and safety measures implementation.
20. Providing technical input and support for HSE management.
21. Overseeing CLO’s scope of work.
22. EPC HSE Officer/ Local technician
23. Implementing HSE protocols on-site.
24. Following all HSE guidelines outlined in training programs and safety manuals.
25. Using provided PPE and safety tools appropriately.
26. Reporting safety concerns, incidents, or near misses promptly.
27. Participating in regular safety meetings and training sessions.
28. Contributing to a culture of safety and adherence to HSE protocols on-site.
29. Community Liaison Officer (CLO)
30. Facilitating communication between Project team and local communities regarding HSE matters.
31. Disseminating information on project activities, potential risks, and safety measures to community members.
32. Addressing community concerns related to HSE transparently and promptly.
33. Overseeing the community grievance mechanism process.
34. E&S Training

[Developer] is committed to conducting frequent E&S training for its employees. E&S training aims to equip [Developer] staff with knowledge and skills to identify and mitigate potential E&S risks associated with Projects and to take proactive measures to prevent or minimise them.

At a minimum, the E&S manager will conduct training to the [Developer] team at least quarterly on:

* The E&S policy commitments.
* The requirements of the ESMS and the roles and responsibilities that [Developer] staff will play in implementing it.
* Material E&S aspects and high E&S risks of the mini-grid sector and those specific to the geographies in which the Projects are being developed. These may include labor rights, human rights, occupational health and safety, community health and safety, waste management, stakeholder engagement, gender, climate risk, indigenous peoples, biodiversity, involuntary displacement, and resettlement.
* Prioritization of training requirements with emphasis on a quarterly health and safety training session.
* E&S monitoring and reporting requirements.
1. ESMS INTEGRATION INTO THE PROJECT CYCLE
2. Overview

E&S is integrated throughout the [Developer] project cycle i.e. the pre-development, construction, operations and maintenance, and decommissioning phases.

|  |  |  |
| --- | --- | --- |
| Project stage | E&S Activities | E&S Tools  |
| Pre-development stage  |  |  |
| 1. E&S screening and risk identification
 | * Screen against an internal or lender/investor Exclusion List.
* Fill out E&S screening checklist designed as per Applicable Standards.
* Assess E&S risks identified from the initial screening stage and assign a preliminary E&S risk category[[2]](#footnote-3) as per Applicable Standards.
 | * Exclusion List
* E&S screening checklist
* E&S risk categorization criteria
 |
| 1. E&S studies/assessments
 | * Through a qualified environmental consultant, conduct an environmental and social impact assessment (ESIA).
* Conduct supplementary studies such as a climate risk assessment, and human rights risk assessment in accordance with the E&S risks identified.
 | * Procurement standards and procedures including RFP templates, and evaluation criteria.
* ESIA template
* Climate risk assessment procedures
* Supply chain human rights DD procedures
 |
| 1. E&S management programmes
 | * Develop the project ESMP. The ESMP is a mandatory outcome of the ESIA study.
* Where applicable, develop supplementary E&S management procedures as per Annex 2 below.
 | * ESMP template
 |
| 1. E&S permits
 | * Acquire ESIA or ESMP certificate as a mandatory requirement and additional permits where applicable including water abstraction permits, bulk diesel storage permit, fire safety permit, and way of right permit.
 | * Permitting monitoring and compliance procedure
 |
| Construction |  |  |
| 1. Monitoring
 | * Monitoring of E&S KPIs through site visit observations.
* Monitor E&S construction activities such as human rights (labour and working conditions, worker’s accommodation, OHS, Indigenous Peoples and cultural heritage triggered), community and employee grievances logged, resource management (water, GHG monitoring), and pollution prevention (waste, e-waste, noise, and air quality) as described in Annex 2.
 | * E&S monitoring methodologies
* E&S site visit checklist with E&S KPIs
 |
| 1. Reporting
 | * Weekly and monthly E&S reporting and meetings.
 | * E&S reporting template
* Incident reporting procedures and template
 |
| Operations and Maintenance |
| 1. Monitoring
 | * Monitoring of E&S KPIs through site visit observations.
* Tracking corrective actions through ESAP review
* Monitor E&S operational activities such as community engagements, community reporting, grievance mechanism, resource management (water, GHG monitoring), pollution prevention (waste, e-waste, noise, and air quality), and human rights management (labour and working conditions, OHS, community health and safety, involuntary displacement, Indigenous Peoples, cultural heritage) as described in Annex 2.
 | * E&S monitoring methodologies
* E&S site visit checklist with E&S KPIs
 |
| 1. Reporting
 | * Monthly, quarterly, and annual HSE.
 | * E&S reporting template
* Incident reporting procedures and template
 |
| Decomissioning/End of life management  |
| 1. E&S exit plan
 | * Consolidate E&S performance over operational lifecycle of the project where the solar mini-grid is being integrated into the main grid.
* Implement waste management plan where applicable.
 | * E&S exit report template
 |

1. Pre-Development Stage
2. E&S Screening and Risk Identification

#### Exclusion List

The E&S Manager conducts a preliminary review of the [Developer]'s activities against the internal or investor’s Exclusion List[[3]](#footnote-4). Where the Project, or associated activities (procurement, or financing opportunity) is found to be associated with activities or products on the Exclusion List, the E&S Manager informs the commercial team that the opportunity will not proceed further.

#### E&S Screening

The E&S screening process is conducted by the E&S Manager after the initial screening against the Exclusion List. The screening process entails identification of risks and opportunities associated with the Project and community. The outcome of the screening process is documented on an E&S screening checklist that is designed as per standards provided in the Applicable Standards. Issues to be screened include environmental and social setting[[4]](#footnote-5) of the site, potential displacement/resettlement, Indigenous Peoples (IPs), cultural heritage, gender and diversity, resource availability (water), physical and transition climatic risks, and biodiversity.

Some E&S risks that may arise from the external operating environment, not the Project itself should also be documented such as systemic discrimination, conflict, or widespread disease. The E&S Manager should also gather additional information regarding community perceived E&S risks and opportunities during community engagements at this stage.

#### E&S Scoping and Categorization

The E&S Manager shall identify the triggered Applicable Standards as per the internally established framework to determine the categorization and the scope required for E&S assessments. The Projects are classified into one of the following four categories (see Annex 1) according to the relevance of their potentially adverse E&S impacts and risks: “A” (high risk), “B+” (substantial risk), “B” (moderate risk) or “C” (low risk). Typically, solar mini-grid projects fall under the “B+” (substantial risk), “B” (moderate risk) or “C” (low risk) category given their scale.

The completed E&S checklist shall be discussed with the commercial team and inform part of the decision-making process.

1. E&S Assessments

#### Overview

E&S assessments are conducted according to the Project category and types of E&S risks identified. Projects under category B+ and B require a full environmental and social impact assessment (ESIA) study and an environmental and social management plan (ESMP) and additional E&S assessments where applicable, while projects under category C only require an ESMP.

#### Environmental and Social Impact Assessment (ESIA)

The [Developers] will appoint an E&S consultant to undertake an ESIA for the Project (whether individually or a cluster of Projects) in line with all local regulations and the Applicable Standards. The ESIA is to be developed to at a minimum cover the topics provided in the ESIA sample outline in Annex 3.

The ESIA is to be approved or permitted by local authorities where required. The breadth, depth, and type of analysis of E&S impacts is to be documented through the ESIA process and should be proportionate to the nature and scale of the proposed Project’s potential E&S impacts. A copy of the ESIA report and any associated approval or permit is submitted to the investor/lender upon request.

#### Supplementary E&S Assessments

##### Climate risk assessment

The E&S Manager ensures that a climate risk assessment is conducted either as part of the ESIA or as a stand-alone assessment. This assessment evaluates potential risks and opportunities associated with climate change on a Project through:

* Identification of climate-related hazards such as extreme weather events, sea-level rise, and changes in temperature and precipitation patterns.
* Assessing the vulnerability of the project to these hazards, considering factors like location, infrastructure, and operational processes.
* Evaluating the potential impacts of climate change on project outcomes, including financial, operational, and reputational risks.
* Developing strategies to manage and mitigate these risks, which may involve incorporating climate-resilient design, adopting low-carbon technologies, and implementing adaptation measures.

##### Human rights risk assessment

The E&S Manager ensures that a human rights risk assessment is conducted to identify and address potential adverse impacts on human rights associated with a Project. It involves:

* Identifying human rights risks by considering the project's context, stakeholders, and potential impacts on affected communities.
* Assessing the project's potential to cause or contribute to human rights violations, such as forced displacement, labor rights abuses, or community health impacts.
* Engaging with relevant stakeholders, including local communities, indigenous groups, and vulnerable populations, to understand their concerns and perspectives.
* Developing strategies to prevent, mitigate, and address human rights risks, which may include stakeholder engagement, grievance mechanisms, and capacity building.
1. E&S Management Programmes

#### Environmental and Social Management Plan (ESMP)

The ESMP for the Project describes all measures that need to be taken to avoid, mitigate, offset, and monitor any adverse E&S impacts and risks identified by the ESIA, and is typically the final chapter of an ESIA report. The measures are usually split by project phase, i.e., i) preparation (conception, planning); ii) construction and commissioning; and iii) operations. It may comprise an overarching ESMP document with supplementary documents described in Annex 2. It will also assign responsibilities for implementing such measures.

The ESMP should include sub-sections on the following:

* Overview of roles and responsibilities;
* Overview of capacity building / training arrangements; and
* Overview of monitoring, inspection, and audit arrangements.
* Overview of reporting and review arrangements
* Definition of detailed E&S management plans/procedures that should be developed

The main component of an ESMP is a table that sets out the mitigation measures, and monitoring requirements. Each phase is further divided into E&S aspects, and associated mitigation measures, each allocated responsibilities and monitoring requirements.

The E&S Manager ensures that the ESMP actions are extracted and included as part of the E&S monitoring procedures.

#### Supplementary E&S management programmes

Supplementary E&S management programmes are additional initiatives or plans put in place alongside the ESMP to address specific E&S issues that may arise during the lifecycle of a Project. These programs are designed to complement the measures outlined in the ESMP and provide further guidance on managing and mitigating E&S risks. [Developer] shall implement supplementary E&S management programmes as provided in Annex 2.

1. E&S Permits

#### ESIA/ESMP certificate

[Developer] will obtain an ESIA or ESMP certificate issued upon completion of the ESIA process for a Project. This certificate signifies that the project has undergone a thorough evaluation of its potential environmental and social impacts, and that appropriate measures have been identified and planned to manage and mitigate these impacts.

#### Additional E&S certificates

Where applicable, [Developer] will obtain additional permits including:

* + Fire safety certificate.
	+ Groundwater abstraction permit
	+ Hazardous waste permit
	+ Waste transfer agreements and consignment notes.
1. Construction Stage
2. Construction E&S Monitoring

#### E&S KPIs

[Developer] has/will establish E&S KPIs to monitor, evaluate, and improve its E&S performance. The E&S KPIs provide a clear framework for tracking the progress of E&S goals and ensuring that they are measurable and achievable. The E&S KPIs are established through:

* Definition of E&S commitments and goals stipulated in the E&S policy.
* ESMP construction indicators pertaining to H&S and general E&S monitoring.
* Identification of measurable metrics based on materiality and the practicalities of collecting reliable data.
* Reviewing specific E&S KPIs from its investors or lenders.

#### E&S Monitoring Site Visits

The E&S Manager will conduct site visits at least once a month during the construction period. The site visit shall entail:

* Visual inspection of the Project sites, including the facilities such as genset, batteries and battery housing, solar panels, diesel storage tank, security facilities, storage, firefighting equipment, and surrounding E&S conditions.
* Visual inspection of the distribution network from the power plant, including poles, lines, and smart meters.
* Interviews with the EPC workers including technicians, and security guards
* Interviews with the senior community representatives and women-focused engagements.
* Visits to local business customers such as tailors and clothes makers, grain mills, restaurants, schools, hospitals, etc.

.

The frequency of site visits shall be dictated by the Project category. Frequency can be increased as necessary should a series of significant incidents occur or there is a trend in data demonstrating there might be an emerging issue (e.g., large number of grievances logged).

1. Construction E&S Reporting

#### E&S Reporting

*Weekly, and monthly E&S reporting*

The E&S Manager will hold weekly meetings with the site workers to track the E&S KPIs throughout the construction period.

On a monthly basis the E&S Manager shall report on:

* The status of implementation of the ESMP or investor ESAP where applicable.
* Summary of E&S incidents or issues that occurred in the preceding one (1) month.
* Overview of any E&S activities being undertaken by [Developer] such as upcoming E&S training, updates made on the ESMS or E&S policies.

*Quarterly E&S reporting*

[Developer] E&S Manager will prepare and submit E&S quarterly reports. The report will provide information on the E&S performance of the Projects as well as internal [Developer] E&S performance. The reports will cover a range of E&S topics as defined in the E&S KPIs.

Some of the key components of E&S quarterly reports shall include:

* Status of implementation of the ESMP and ESAP where applicable.
* Summary of E&S incidents or issues that occurred during the reporting period.
* Overview of any E&S activities undertaken by the [Developer] such as E&S training, update of the ESMS or E&S policy, and any change in E&S function or resources during the reporting period.
* An overview of the [Developer’s] E&S performance for the reporting period.
* Analysis of trends and patterns in E&S performance over time, and identification of areas of concern or potential improvement.

#### Incident Reporting

The E&S Manager will report any serious incidents or accidents no more than two (2) business days after [Developer] becomes aware of the occurrence and as soon as reasonably practicable thereafter a more detailed report within five (5) business days outlining:

* The nature of the incident, accident, or circumstance.
* The impact arising from the incident, accident, or circumstance.
* The measures being taken, or plans to be taken, to address them and prevent any future similar event.
1. Operations and Maintenance(O&M) Stage
2. O&M Monitoring

The E&S Manager will conduct site visits at least once a quarter for Projects in operations. The site visit will include inspection of the generation and distribution assets as well as engagements with the community on ongoing grievances

The report of each E&S site visit event will be included in the ESMP and will:

* Identify any emerging/new significant E&S issues with reference to the Applicable Standards.
* Define the recommendations to address any new or outstanding E&S issues or enhance E&S performance as well as highlight positive sustainability outcomes.

The E&S site visit findings should be communicated to and discussed with the site workers to ensure their understanding and determine whether they need support to implement the actions in the ESMP or recommendations provided.

1. O&M Reporting

#### E&S Reporting

*Monthly E&S reporting*

On a monthly basis the E&S Manager shall report on:

* The status of implementation of the ESMP or investor ESAP where applicable.
* Summary of E&S incidents or issues that occurred in the preceding one (1) month.
* Overview of any E&S activities being undertaken by [Developer] such as upcoming E&S training, updates made on the ESMS or E&S policies.

*Quarterly and annual E&S reporting*

[Developer] E&S Manager will prepare and submit E&S quarterly and monthly reports. The report will provide information on the E&S performance of the Projects as well as internal [Developer] E&S performance. The reports will cover a range of E&S topics as defined in the E&S KPIs.

Some of the key components of E&S quarterly reports shall include:

* Status of implementation of the ESMP and ESAP where applicable.
* Summary of E&S incidents or issues that occurred during the reporting period.
* Overview of any E&S activities undertaken by the [Developer] such as E&S training, update of the ESMS or E&S policy, and any change in E&S function or resources during the reporting period.
* An overview of the [Developer’s] E&S performance for the reporting period.
* Analysis of trends and patterns in E&S performance over time, and identification of areas of concern or potential improvement.

#### Incident Reporting

The E&S Manager will report any serious incidents or accidents no more than two (2) business days after [Developer] becomes aware of the occurrence and as soon as reasonably practicable thereafter a more detailed report within five (5) business days outlining:

* The nature of the incident, accident, or circumstance.
* The impact arising from the incident, accident, or circumstance.
* The measures being taken, or plans to be taken, to address them and prevent any future similar event.

In some cases, [Developer] may be unable to provide a detailed report of the incident within five (5) business days depending on the complexity of the incident. In such cases, the E&S Manager, the legal team, and the commercial lead[[5]](#footnote-6) undertake the following:

1. Collect data of events leading to and after the incident through document review, interviews, and meetings with the affected persons and associated personnel.
2. Assess the impact of the incident including E&S, financial, and legal impact by analysing the data collected.
3. Prepare a comprehensive report that includes all relevant information about the incident, its impact, and any steps taken to mitigate the impact.
4. Submit a finalised report to investors.
5. Monitor the situation and provide ongoing updates to investors as needed, including any new developments or additional measures taken to address the incident.
6. End of Life Management

[Developer] manages the Projects over a long period of time hence replacement of solar panels, batteries, inverters and electric distribution cables and poles is required. These components require recycling, re-use, or disposal when they reach the end of their life.

As part of E&S integration, [Developer] will ensure ethical management of waste including e-waste and hazardous materials as per the hazardous and electronic waste management guidelines.

In the event main grid integration is required, [Developer] will ensure that E&S impacts of the integration is assessed and mitigated as per the guidelines provided in the ESMS.

1. ANNEXES
2. Annex 1: Risk Categorization

| Category | Risk Level | Definition and Guidance |
| --- | --- | --- |
| Project | Platform Company |
| A  | High | A project with **diverse, significantly adverse E&S impacts and risks** that are **long-term, irreversible, or unprecedented**, and **impact beyond the project site**. Impacts and risks may potentially be significantly adverse because of the complex nature of the project, the scale (large to very large) of the project, and/or the sensitivity of the location(s) of the project. | A Project with activities that typically have **diverse, significantly adverse E&S impacts and risks** that are **long-term, irreversible, or unprecedented**, and **impact beyond the sites at which they operate**. Impacts and risks may potentially be significantly adverse because of the complex nature of the business activities, the scale (large to very large) of the business activities, and/or the sensitivity of the location(s) of the business activities. Consideration should be given to the activities of third parties including contractors and supply chain. |
| B+  | Substantial | Typically, the potential impacts and risks of category B+ projects are limited to a local area, are in most cases reversible and are easier to mitigate through appropriate measures. However, if it is expected that a Category B+ project has **a single significant adverse environmental and social impact and risk** **that is irreversible or unprecedented in a single area**, this project would be categorized as Category B+ (substantial risks). | Typically, the potential impacts and risks of a category B+ portfolio co/project are limited to a local areawhere they operate, are in most cases reversible and are easier to mitigate through appropriate measures. However, if it is expected that a Category B+ portfolio company/project has **a single significant adverse environmental and social impact and risk** **that is irreversible or unprecedented in a single area**, this portfolio company/project would be categorized as Category B+ (substantial risks). |
| B | Moderate | A project that has **potentially adverse E&S risks and impacts**, although to a lesser extent than those of a category A/B+ project. Typically, the potential impacts and risks of a category B project are **site specific, are in most cases reversible and are easier to mitigate through appropriate measures**. | A project with activities that typically have **potentially adverse E&S risks and impacts**, although to a lesser extent than those of a category A/B+ project. Typically, the potential impacts and risks of a category B portfolio company/project are **site specific, are in most cases reversible and are easier to mitigate through appropriate measures**. |
| C  | Low | A project that has **no or only minor adverse E&S impacts or risks**, and the construction and operation of the project does not require any particular protection, compensation, or monitoring measures. | A project with activities that typically have **no or only minor adverse E&S impacts or risks**, and business activities of the portfolio company/project does not require any particular protection, compensation, or monitoring measures. |

1. Annex 2: Supplementary E&S Management Programmes
2. Human Rights

#### Occupational Health and Safety Management Plan

[Developer] has/will develop an Occupational Health and Safety (OHS) Management Plan that sets out principles for the positive management of health & safety on the Projects during construction and operation. It should incorporate mitigation and enhancement of health and safety measures in order to establish arrangements that will avoid accidents and promote a safe and healthy working environment. The OHS Management Plan applies to direct and third-party workers.

Elements of the OHS Management Plan shall include:

1. OHS Policy: Sets out the [Developers’] commitment to providing a safe and healthy working environment and the provisions that will be put in place to achieve this. It shall be communicated to all personnel involved in the Project.
2. Risk assessments:
	* Baseline risk assessment (BRA) should be conducted for all phases of the Project.
	* Daily task risk assessments and safety task instructions should be developed for all sites.
	* Last minute risk assessments (LMRA).
3. Risk management:
* Risk register outlining prevention and mitigation measures
* Method statements including control measures should be developed for all phases of the Project.
	+ Permit to work system for high-risk activities should be obtained.
	+ Toolbox talks should be carried out on a daily basis.
	+ OHS rules and procedures should be available and displayed on all sites.
	+ Emergency preparedness and response plans (EPRP) for OHS-related incidents should be developed for each site.
1. Risk monitoring and reporting:
	* Leading and lagging indicators as well as monitoring and reporting regime should be established and implemented.
	* Audit and inspection regime should be established and implemented.
	* Incident reporting and investigation regime should be established and implemented.
2. OHS training plan, including induction, refresher, and hazard/task-specific training should be developed and implemented.
3. OHS Committee should be established, and regular meetings conducted.
4. Additional H&S requirements pertaining to the supply chain, security personnel, diesel, and suppliers.

#### Community Health and Safety

[Developers] has/will develop a Community Health and Safety Management Plan (or separate plans) to ensure the health and safety of the communities where the Projects are developed in line with [insert Applicable Standard][[6]](#footnote-7). This plan applies to construction and operation of solar mini-grids, as well as interactions with local communities.

Aspects of community health and safety that the plan should cover include the following:

1. Infrastructure and equipment design and safety, particularly related to preventing electric shocks from attempts to steal electricity from the distribution network or access the mini-grid power plant sites.
2. Exposure to hazardous materials, particularly related to storage and handling of diesel, batteries, general e-waste, and pesticides at the site.
3. Exposure to disease, particularly through hygiene and sanitation at the site during all Project phases, managing environments to ensure they are not conducive to disease vectors, and having strict rules to prevent sexually transmitted disease.
4. Prevention of gender-based violence and harassment by having strict rules, training, and appropriate grievance mechanisms in place.
5. Degradation of priority ecosystem services that protect communities, for example land use changes or the loss of natural buffer areas such as wetlands, mangroves, and upland forests that mitigate the effects of natural hazards such as flooding, landslides, and fire, or the diminution or degradation of natural resources such as freshwater that may result in health-related risks and impacts.
6. Security, particularly related to relationships with the community and ensuring proportional response to a security incident in line with the VPSHR. Reference should be made to the [insert Applicable Standards][[7]](#footnote-8) given the potential use of untrained locals and vigilante groups, including those that may not be directly employed or contracted by the [Developer] but rather provided by the community.

#### Labour and Working Conditions

[Developers] has/will develop and implement human resources policies and procedures to ensure workers are employed in compliance with local labour laws, and [insert Applicable Standards- labour laws][[8]](#footnote-9).

These standards cover: employment contracting, working terms and conditions (including salary, payment dates, working hours and overtime, leave, and other benefits), freedom of association and collective bargaining, non-discrimination and equal opportunities, prohibition of forced and child labour, health and safety in the workplace and employee grievance mechanism. This applies to direct and third-party workers.

#### Workers Accommodation

[Developer] has/will develop a Worker Accommodation Management Plan to ensure that workers’ sanitary and living (where workers are required to stay over-night or extended period of time) facilities are designed and managed in compliance with [insert Applicable Standard-labour laws][[9]](#footnote-10). This applies to direct and third-party workers.

#### Involuntary Displacement and Resettlement

Displacement may be either physical or economic. Physical displacement is the actual physical relocation of people resulting in a loss of shelter, productive assets, or access to productive assets such as land, water, and forests. Economic displacement results from an action that interrupts or eliminates people’s access to productive assets without physically relocating the people themselves. Displacement or resettlement is involuntary when it occurs without the free, prior, informed consent (FPIC) of the displaced persons or, if they give their consent, without having the power to refuse resettlement. People who may be subject to involuntary displacement or resettlement can for formal or informal landowners and users, including squatters.

For all Projects that involve involuntary resettlement, regardless of the number of people affected or the significance and severity of anticipated impact, the process should be conducted in accordance with local laws, and [insert Applicable Standards][[10]](#footnote-11).

Where displacement has been triggered, [Developer] will engage a consultant to develop a Resettlement Action Plan (RAP) and Livelihood Restoration Plan (LRP) as per the outline in Annex 4.

#### Indigenous Peoples

[Developer] will obtain Free, Prior and Informed Consent under [insert Applicable Standard][[11]](#footnote-12) where the Project triggers Indigenous Peoples as identified in the Project ESIA.

#### Cultural Heritage

[Developer] will avoid Projects that directly impact critical cultural heritage as defined by [insert Applicable Standards][[12]](#footnote-13).

#### Supply Chain

[Developer] has/will develop and implement a human rights policy and procedure that covers human rights risks in the supply chain including the appointed Engineering, Procurement and Contracting (EPC). [Developer] will specifically consider the Uyghur population being used under forced labour conditions to mine quartz and produce polysilicon that enters the global solar panel supply chain. [Developer] will avoid sourcing materials, components and equipment for the development and operation/maintenance of the Projects that has been produced using forced or child labour or involving significantly hazardous working conditions.

1. Grievance Redress Mechanisms (GRM)

[Developer] has/will develop a grievance mechanism to receive and facilitate resolution of affected communities’ concerns and grievances about the Project’s E&S performance. The grievance mechanism should be scaled to the risks and adverse impacts of the Project and have affected communities as its primary user.

The grievance mechanism should:

* Allow stakeholders to register grievances, concerns, suggestions, inquiries, and compliments.
* Support submission of grievances at multiple locations and through multiple mechanisms.
* Be accessible to all stakeholders regardless of their social, cultural, or economic standing.
* Use existing formal and informal mechanisms where feasible and suitable, with supplementation as needed.
* Cover a broad range of potential escalation mechanisms for various issues that could affect a Project such as:
	+ Environmental concerns such as poor waste management.
	+ Social concerns such as service quality, safety, involuntary resettlement, tariff, gender-based violence.
	+ Address concerns and handle grievances promptly and effectively and in a transparent and culturally appropriate manner.
* Seek to resolve concerns promptly, using an understandable and transparent consultative process that is culturally appropriate and readily accessible, and at no cost and without retribution to the party that originated the issue or concern.
* Be discreet, objective, sensitive. and responsive to the needs and concerns of the project-affected parties.
* Allow anonymous complaints to be raised.
* Include a log for registering and tracking grievances and actions taken.
* Include a procedure for dissemination of information on the grievance process to affected communities

Ways in which grievances can be submitted should include:

* In person, through intermediaries such as community leaders or Project community liaison officer (CLO).
* Electrically by phone, text message, mail, or email.
* Company website.
* Social media.

[Developer] will maintain a grievance mechanism for every Project site with guidelines outlines above.

1. Stakeholder Engagement Plan (SEP)

[Developers] has/will develop and implement a stakeholder engagement plan (SEP) to include stakeholder analysis and planning, disclosure and dissemination of information, consultation and participation, grievance mechanism, and reporting. In addition, [Developer] will employ a CLO to foster positive relationships and effective communication during stakeholder engagements.

At a minimum, developing a SEP should reference the [insert Applicable Standard][[13]](#footnote-14) entails:

1. Identification of the range of stakeholders and formulation of a framework for dialogue with the stakeholders.
2. Development of a stakeholder engagement framework to outline objectives, scope, and approach to engaging and involving stakeholders in the Project. The framework should be developed in collaboration with relevant stakeholders and should consider the interests, needs, and perspectives of all stakeholders.
3. Establishing effective communication channels to ensure that all stakeholders are informed about the Project, have access to relevant information, and are able to provide input and feedback on the Project. All engagements should be documented electronically and on paper, and in certain cases, the ESAPs and Project ESIAs shall be uploaded on the [Developer’s] website for a minimum of 30 days during engagements.
4. Engaging stakeholders in a transparent, inclusive, and participatory manner throughout the Project cycle, from Project design to implementation and monitoring. This should include regular meetings, consultations, and other forms of engagement, as well as opportunities for stakeholders to provide input and feedback on the Project. In the meetings, relevant Project information will be disclosed to help the affected communities to understand the risks and impacts of the Project. Specifically, the affected communities should be given access to the purpose, nature and scale of the Project, the duration of the Project, any risks, and potential impacts as well as mitigation measures, the envisaged stakeholder engagement process and the grievance mechanisms.
5. Managing stakeholder feedback in a systematic and transparent manner, including tracking, and responding to stakeholder concerns and requests, and incorporating feedback into the Project design and implementation as appropriate.
6. Ensuring regular monitoring and evaluation of the stakeholder engagement process to ensure that it is being implemented in accordance with the SEP and that the needs and interests of all stakeholders are being effectively addressed. The results of the monitoring and evaluation should be used to make any necessary adjustments to the SEP.
7. Gender Equality and Social Inclusion (GESI)

For equitable and sustainable energy access, [Developer], will incorporate GESI considerations in design, construction, operations and maintenance of the solar rural mini-grids. Integration of GESI considerations aims to promote inclusivity, empower marginalized groups, and address gender disparities.

At a minimum, GESI integration includes:

1. Developing and enforcing policies that promote GESI in the project, such as gender and gender-based violence policies, and anti-discrimination policies.
2. Conducting gender-sensitive and socially inclusive surveys and focus groups during community engagements to understand the energy needs and barriers faced by different community members.
3. Using data disaggregated by gender, age, disability, and socioeconomic status to inform project design and planning.
4. Establishing community engagement plans that involve women and marginalized groups in planning and decision-making processes.
5. Implementing measures to ensure women and marginalized groups can participate in and benefit from such as appliance financing programmes.
6. Monitoring and evaluating gender KPIs and outcomes to measure progress.
7. Biodiversity Mitigation/Action Plan

[Developer] will avoid Projects on sites which could have an impact on critical habitat, or Legally Protected and Internationally Recognised Areas as defined by [insert Applicable Standard][[14]](#footnote-15). In the event that there is impacts to natural habitat and critical habitat, [Developer] will develop and implement a Biodiversity Action Plan (BAP) as per the outline provided in Annex 5 and in line with (insert Applicable Standards][[15]](#footnote-16) to achieve no-net-loss[[16]](#footnote-17)(NNL).

1. Resource Use and Efficiency

#### Greenhouse Gas Monitoring Plan

[Developer] has/will develop and implement a GHG Monitoring Plan for the operations phase of all Projects to:

* Monitor and calculate scope 1, 2 and material 3[[17]](#footnote-18) GHG emissions of each Project in line with the GHG Protocol Corporate Accounting and Reporting Standard on a calendar year annual basis.
* Monitor and calculate GHG emissions intensity of each Project on a calendar year annual basis and check against the base limit defined above.

#### Water Use

[Developer] has/will develop and implement a Water Use Management Plan to apply to Projects which:

1. Are in high or extremely high-water stress areas (as identified through the Water Resources Institute's Aqueduct Water Risk Atlas (https://www.wri.org/aqueduct) or WWF's Water Risk Filter (<https://https://riskfilter.org/>).
2. Could consume per year during operation more than 10,000 liters of water from local sources.

The Management Plan shall be developed in accordance with [insert Applicable Standard][[18]](#footnote-19) and shall entail:

1. Estimating annual water use during operations, identifying the water source (and the quality of it in relation to its planned use) for the Project, identifying other water users (communities and/or ecosystems) in the area through community engagement, desktop research and site visit surveys, and determine water stress level of the area.
2. Water efficiency measures to minimise water use including, but are not limited to:
* Installing low-flow fixtures to hoses.
* Installing water meters.
* Regular maintenance and cleaning of water infrastructure to minimise losses.
* Installing rainwater harvesting infrastructure.
1. Avoiding developing Projects on sites with water sensitive ecosystems, e.g., wetlands.
2. Community engagement (integrated with the Stakeholder Engagement Plan guidelines) to identify and manage any water use conflicts.
3. Training of workers on water conservation measures.
4. Monitoring and reporting on water consumption during operations.
5. Pollution Prevention and Control

#### Waste Management

[Developer] has/will develop and implement a Waste Management Plan (WMP) to manage all waste types (solid, liquid, general, hazardous, electronic) generated during construction, operation, and decommissioning of Projects in an environmentally responsible and safe manner. The management plan shall be designed to ensure that waste management activities are conducted in accordance with local laws and regulations, [insert Applicable Standards][[19]](#footnote-20).

The Management Plan shall entail:

1. Identification of the waste type
2. Identification of each waste stream.
3. On-site waste storage standards for each waste stream.
4. Health and safety measures to be observed during waste handling.
5. Waste management method for each waste stream and demonstrating implementation of the waste management hierarchy[[20]](#footnote-21).
6. Waste collection, transportation, disposal, and management standards, including contracting of licensed waste management providers and facilities.
7. Waste management documentation, monitoring, and reporting requirements.

For e-waste in particular, arrangements should be made for an Extended Producer Responsibility programme with suppliers.

#### Air Quality and Noise

[Developer] has/will develop and implement an Air Quality and Noise Management Plan (AQNMP) to mitigate air and noise pollution during construction and operation phases on local communities in line with local laws, permitting conditions, and [insert Applicable Standards][[21]](#footnote-22).

It is likely that the power plant sites will be located close to sensitive receptors such as houses, schools, clinics, etc. Therefore, particular attention will need to be paid to manage pollution levels to avoid nuisance and health impacts. During construction, this will mainly pertain to dust generation from soil disturbance as well as noise generation related to heavy machinery and piling work. In operations phase, noise and air quality concerns will likely be as a result of co-generation with diesel generators.

For the diesel generators in particular, air emissions and/or noise monitoring may be required to be conducted on a regular basis to demonstrate compliance with local standards. Equally, demonstration also needs to be provided that noise levels shall comply with the WBG EHS Guidelines’ standards, particularly given their likely operation during night-time hours within residential settings. In these locations, the permissible noise level is 45 and 55 dBA for night and daytime hours respectively for residential areas, or a maximum of a 3dBA increase.

The following mitigation measures are recommended:

1. Equipment: Encourage acoustic soundproofing around noise-generating equipment and conduct regular maintenance of the equipment. This may involve purchasing new equipment or retrofitting existing equipment.
2. Schedule noise-intensive activities during off-peak hours when fewer people are likely to be affected. This may involve coordinating with local communities and planning construction and operation activities accordingly. Community engagement activities through the SEP (see the Stakeholder Engagement Plan guidelines) should cover consultations on these direct impacts.
3. Annex 3: ESIA outline

An ESIA is a comprehensive study that identifies and assesses the potential environmental and social impacts of a proposed project or development. The IFC has developed a standard ESIA format, which includes the following sections:

1. Introduction
* Purpose and scope of the ESIA
* Project description
* Legal and regulatory framework
1. Project Description
* Overview of the project
* Project location
* Project components and activities
* Project alternatives
1. National permitting
2. Baseline Conditions
* Physical environment
* Biological environment
* Socio-economic environment
* Land issues
* Cultural heritage and archeology
1. Environmental, climate and social Impacts
* Identification and assessment of potential impacts
* Significance of potential impacts
* Mitigation measures
* Residual impacts
1. Environmental and Social Management Plan
* Management plans for environmental and social issues
* Monitoring, verification, and evaluation plans
1. Stakeholder Engagement
* Identification of stakeholders
* Engagement and consultation with stakeholders
* Grievance mechanism
* Indigenous Peoples
1. Disclosure and Reporting
* Disclosure of ESIA and other project documents
* Reporting on project performance
1. Annexes.
2. Annex 4: Resettlement Action Plan outline
3. Executive Summary
* Introduction
* Purpose and Scope
* Summary of Key Actions and Objectives
1. Introduction
* Project Background
* Objectives of the RAP
* Regulatory and Institutional Context
* IFC Performance Standard 5 Requirements
1. Project Description
* Location and Project Area
* Project Activities
* Timeline and Phases of the Project
1. Socio-Economic Baseline
* Baseline Socio-Economic Conditions
* Demographic Profile
* Housing, Land, and Asset Inventory
* Vulnerable Groups Identification
1. Legal and Policy Framework
* Relevant National and Local Laws
* International Standards and Guidelines
* Project-Specific Resettlement Policies
1. Impact Assessment
* Methodology for Impact Assessment
* Description of Impacts on Housing and Assets
* Vulnerability and Risk Analysis
1. Eligibility and Entitlement
* Eligibility Criteria for Affected Persons
* Categories of Affected Persons
* Entitlement Matrix
1. Resettlement Sites and Housing
* Site Selection and Planning
* Housing Design and Standards
* Infrastructure and Services at Resettlement Sites
* Environmental Considerations
1. Livelihood Restoration and Improvement
* Livelihood Restoration Strategies
* Support for Agricultural, Commercial, and Other Livelihoods
* Training and Capacity Building Programs
1. Implementation Arrangements
* Institutional and Organizational Structure
* Roles and Responsibilities
* Partnerships
* Implementation Schedule
1. Budget and Resources
* Detailed Budget for Resettlement Activities
* Financial and Human Resources
* Sources of Funding
1. Stakeholder Engagement and Consultation
* Stakeholder Identification and Analysis
* Consultation and Participation Plan
* Grievance Redress Mechanism
1. Monitoring and Evaluation
* Monitoring Objectives and Indicators
* Monitoring Methodology and Frequency
* Roles and Responsibilities for Monitoring
* Data Management and Reporting
* Evaluation Criteria and Process
1. Reporting and Documentation
* Internal and External Reporting Requirements
* Documentation and Record-Keeping
* Reporting Templates and Formats
1. Review and Update
* Plan Review Frequency
* Update Procedures
* Continuous Improvement
1. Contingency Planning
* Procedures for Addressing Unforeseen Impacts
* Adaptive Management Strategies
* Emergency Response Plan
1. References
* Bibliography of Sources Used
* Relevant Laws and Regulations
* IFC Performance Standards and Guidance Notes
1. Appendices
* Socio-Economic Baseline Data
* Detailed Impact Assessment Results
* Consultation Records and Stakeholder Feedback
* Housing and Infrastructure Plans
* Monitoring Protocols and Template
1. Annex 5: Biodiversity Action Plan outline
2. Executive Summary
* Introduction
* Purpose and Scope
* Summary of Key Actions and Objectives
1. Introduction
* Project Background
* Objectives of the BAP
* Regulatory and Institutional Context
* IFC Performance Standard 6 Requirements
1. Project Description
* Location and Project Area
* Project Activities
* Timeline and Phases of the Project
1. Baseline Biodiversity Conditions
* Description of the Baseline Environment
* Key Biodiversity Features
* Species of Conservation Concern
* Critical Habitats and Ecosystem Services
1. Impact Assessment
* Methodology for Impact Assessment
* Direct and Indirect Impacts on Biodiversity
* Cumulative Impacts
* Residual Impacts
1. Mitigation Measures
* Hierarchy of Mitigation (Avoid, Minimize, Restore, Offset)
* Specific Mitigation Measures for Identified Impacts
* Biodiversity Offsets (if applicable)
1. Monitoring and Evaluation
* Monitoring Objectives and Indicators
* Monitoring Methodology and Frequency
* Roles and Responsibilities
* Data Management and Reporting
1. Management and Implementation
* Biodiversity Management Structure
* Roles and Responsibilities
* Training and Capacity Building
* Communication and Stakeholder Engagement
1. Action Plan
* Detailed Description of Each Action
* Timelines and Milestones
* Resources and Budget
* Responsible Parties
1. Contingency Planning
* Procedures for Addressing Unforeseen Impacts
* Adaptive Management Strategies
* Emergency Response Plan
1. Reporting and Documentation
* Internal and External Reporting Requirements
* Documentation and Record-Keeping
* Reporting Templates and Formats
1. Review and Update
* Plan Review Frequency
* Update Procedures
* Continuous Improvement
1. References
* Bibliography of Sources Used
* Relevant Laws and Regulations
* IFC Performance Standards and Guidance Notes
1. Appendices
* Maps and Spatial Data
* Species Lists and Conservation Status
* Detailed Impact Assessment Results
* Monitoring Protocols
* Stakeholder Consultation Records
1. The E&S Committee comprises of the Managing Director, E&S Manager, Legal, Technical, Customer, and Operations Managers. [↑](#footnote-ref-2)
2. Solar mini-grids are classified into one of the following four categories according to the relevance of their potentially adverse E&S impacts and risks: “A” (high risk), “B+” (substantial risk), “B” (moderate risk) or “C” (low risk). Given the scale of the Projects, solar mini-grids are typically classified as B+ or B. [↑](#footnote-ref-3)
3. An Exclusion list is a predetermined list of activities, industries, products, or practices that a company or organization has decided to avoid or exclude from its operations or investment portfolio due to their negative environmental or social impacts. These lists typically include activities that are deemed harmful to the environment, communities, or other stakeholders, such as industries involved in tobacco, weapons manufacturing, or activities associated with significant environmental degradation or human rights abuses. [↑](#footnote-ref-4)
4. This refers to determining whether the site would impact ecologically or culturally fragile landscapes. [↑](#footnote-ref-5)
5. A member of the commercial team who was leading the project at the time of the incident. [↑](#footnote-ref-6)
6. Recommended standards include IFC PS4 and AfDB OS 4. [↑](#footnote-ref-7)
7. Recommended standard is IFC’s *Good Practice Handbook: Use of Security Forces: Assessing and Managing Risks and Impacts* [↑](#footnote-ref-8)
8. Recommended standards include the AfDB Operational Standards 2, IFC PS2, and ILO core conventions. [↑](#footnote-ref-9)
9. Recommended standard include IFC PS 2 and the European Bank for Reconstruction and Development (EBRD) *Workers' Accommodation: Processes and Standards*. [↑](#footnote-ref-10)
10. Recommended standards include IFC PS5, and AfDB OS5. [↑](#footnote-ref-11)
11. Recommended standard includes IFC PS7, and guidelines provided in AfDB OS 7. [↑](#footnote-ref-12)
12. Recommended standard includes IFC PS8. [↑](#footnote-ref-13)
13. Recommended standard is [IFC Good Practice Handbook on Stakeholder Engagement](https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/publications/publications_handbook_stakeholderengagement__wci__1319577185063) and [↑](#footnote-ref-14)
14. Recommended standards include IFC PS6 and AfDB OS 6 [↑](#footnote-ref-15)
15. Recommended standard includes IFC PS6 [↑](#footnote-ref-16)
16. 'No Net Loss' is a goal for a development project, policy, plan, or activity in which the impacts on biodiversity it causes are balanced or outweighed by measures taken to avoid and minimise the impacts, to restore affected areas and finally to offset the residual impacts, so that no loss remains. [↑](#footnote-ref-17)
17. [↑](#footnote-ref-18)
18. Recommended standard includes with IFC PS3 and AfDB OS 3 [↑](#footnote-ref-19)
19. Recommended standards includes WBG EHS Guidelines, and IFC PS3 [↑](#footnote-ref-20)
20. The waste management hierarchy gives top priority to waste prevention, followed by re-use, recycling, recovery and finally disposal. [↑](#footnote-ref-21)
21. Recommended standards include IFC PS3 and AfDB OS 3 [↑](#footnote-ref-22)