



Environmental and Social Management System Toolkit



Image source: PEG Africa

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Purpose of this document



REPP will only support renewable energy projects that will have - or are already having - a positive impact on people and planet. But just like any infrastructure project of their type, these projects also run the risk of causing harm. To help ensure that the environmental and social performance of all supported projects is sustainable, REPP has developed and adopted the REPP Environmental and Social Policy and Procedures.

All REPP-supported projects must follow this policy, which is based on the IFC Performance Standards on Environmental and Social Sustainability, the EIB Environmental and Social Standards No. 3 and No. 10, and the Ten Principles of UN Global Compact on corporate sustainability.

In order to fulfil the requirements of REPP Environmental and Social Policy and Procedures, each developer **must establish and maintain an environmental and social management system (ESMS)** for their project(s). This includes the identification and assessment of its environmental and social risks and impacts, and the development of a set of appropriate responses and procedures for dealing with those risks and impacts that are commensurate with the nature and scale of the project and the level of those risks and impacts.

An environmental and social impact assessment (ESIA) must also be carried out by a third party at independent project level.



How to use this toolkit

This toolkit serves as a **guide for establishing and implementing** an ESMS.

It has been created in such a way as to provide the structure and required sections for an ESMS in accordance with IFC Performance Standards on Environmental and Social Sustainability and, where relevant, the EIB Environmental and Social Standards.

Each section starts with a description of the relevant standard and is followed by tailored guidance for meeting that standard.

Used in conjunction with the separate “ESMS Workbook” (which can be downloaded [here](#)), project developers can produce a full ESMS that addresses each of the above-mentioned standards. Simply fill in each of the corresponding sections in the ESMS Workbook as you progress through the toolkit.

It is important to keep a record of any amendments to the ESMS over time. Please make sure all changes are logged and approved in the **version control form** provided in the ESMS Workbook.

As a general note, in situations where individual project sites have not been identified yet, the ESMS should serve as a framework for managing environmental and social impacts and risk. The ESMS should be updated to reflect site-specific risks and impacts as soon as the project site is confirmed and the ESIA has been carried out by an independent third party.

If you require any support using this toolkit, email info@camco.energy.

A guide to symbols used in this toolkit

Descriptive overview



Indicates guidance specific to solar home systems and solar mini-grids projects



Good practice considerations



Indicates where the user’s input is required on the separate ESMS Workbook



Suggested further reading



Good practice checklist



Tip

1

IFC Performance Standard 1: Assessment and management of environmental and social risks and impacts

1.1 Environmental and social assessment and management system

As the project developer you need to establish and maintain an environmental and social management system (ESMS) at the organisation level that is appropriate to the nature and scale of the project and commensurate with the level of its environmental and social (E&S) risks and impacts.

An ESMS is a set of policies, procedures, tools and internal capacity to identify, manage and mitigate a project's E&S risks and impacts. As a minimum, it should include a gender sensitive third-party assessment of your project's impacts, your company's E&S policy/ies, and plans for stakeholder engagement, emergency response, occupational health and safety, waste management, diversity action and monitoring.

In Figure 1 below, the dark gray components of the ESMS are necessary policies and plans, while the lighter gray components should only be included if required based on the project context.

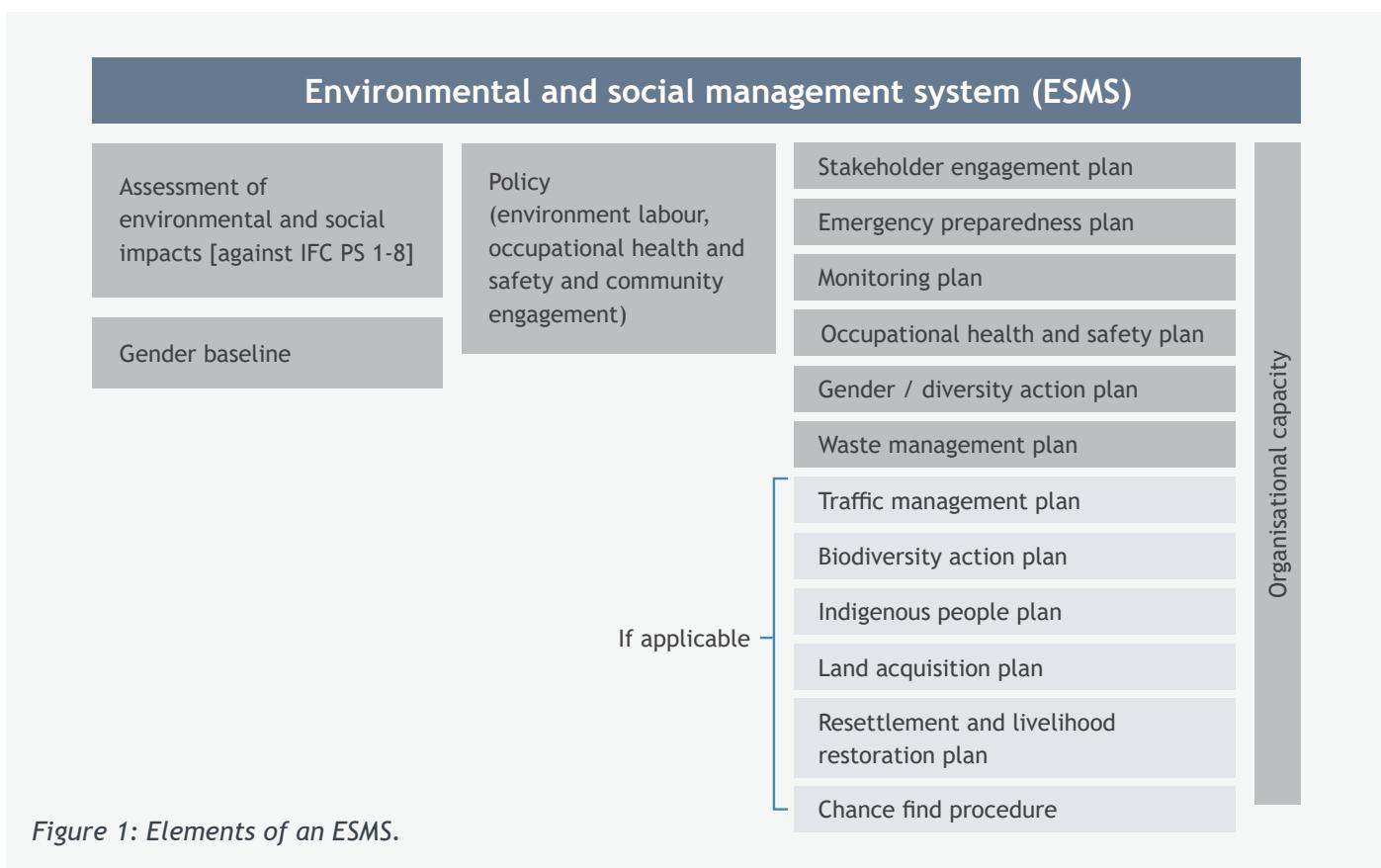


Figure 1: Elements of an ESMS.



Please fill in Section 1.1 of the ESMS Workbook based on the guidance provided above.



For a solar mini-grid or solar home system (SHS) standard operating procedures and monitoring plans can be used as a basis for the ESMS. These should be particularly focused on occupational health and safety when installing and operating the units, as well as and the safe handling of toxic chemicals contained within the solar panels, portable batteries (if applicable) and accompanying appliances. This is to extend to the staff, contractors and community.

1.2 ESMS - Policy

Policies are the foundation of your ESMS. They provide the rules you expect your employees to follow and are a public statement about what your company believes in and how it conducts business.

Developers should:

- Establish an overarching policy defining the E&S objectives and principles that guide the project(s), including an organisational structure of responsibilities for its execution at the organisation level.
- Adopt and effectively implement human rights commitments in company operations in line with the UN Guiding Principles on Business and Human Rights.
- Declare that the project(s) will comply with the applicable local laws and regulations and IFC PS and EIB ESS. State the relevant laws as applicable.
- Ensure clear communication of policies throughout the company. Consider how you ensure all new employees are aware of policies and know where to find them. When dealing with suppliers and business partners make it clear that they are expected to comply with your polices in contracts and agreements.



Good practice considerations

The following relate to drafting your E&S policy and your project's potential impact on them.

Environment

- Environmental laws and regulations
- Resource utilisation efficiency (energy, water, important input materials, etc.)
- Release of pollutants into air, water and land (from use of diesel fuels, geothermal, etc.)
- Handling, storage, and disposal of hazardous chemicals
- Handling of hazardous and non-hazardous waste generated
- Recovery, reuse, treatment and proper disposal of waste
- Non-chemical means to control economically significant pests and vectors (biomass projects)
- Natural forest lands, or impact on wetlands, critical habitats or endangered species

Gender equality and ethnic inclusion

- Leadership, commitment and support for women's empowerment and inclusion of ethnic minorities
- Respecting the rights of women and girls and ethnic minorities in local communities
- Equal opportunity procurement to expand relationships with women-owned businesses in your value chain
- Strategy to ensure gender balance and ethnic inclusion in management positions and across the company
- Approach to ensure equal pay for equal work
- Maternity and paternity leave policy

Labour and working conditions

- Labour policies and procedures
- Respecting indigenous people and surrounding community's rights to land and free, prior and informed consent
- Respecting collective bargaining agreement, if applicable
- Reasonable working conditions and terms of employment (e.g. working hours, compensation, benefits)

- Protection for migrant, contract and/or temporary workers
- Workers' rights to form and to join workers' organisations
- Non-discrimination in hiring, promotion and compensation practices
- Training, tools and opportunities for advancement
- Freedom from harassment by management or other workers
- Transparent process for receiving and resolving worker complaints ("grievance mechanism")
- No retaliation following discrimination complaints
- Minimum age for employment and conditions for engagement of young workers¹
- Freedom of movement and freedom to resign (not forced labour)
- No retention of identification papers or money to detain workers
- Emergency prevention and response
- Extension of policies and monitoring to supply chain (in case of high risk)

Community health and safety

- Consumer product safety (SHS and mini-grid projects)
- Health and safety of the public related to company activities
- Health and safety of the public related to the construction, operation and decommissioning of equipment and project infrastructure
- Potential community exposure to hazardous materials and substances
- Transportation and disposal of hazardous wastes
- Impact on ecosystem services on which communities rely
- Impact on land ownership through acquisition and resettlement
- Community exposure to communicable diseases, such as COVID-19, tuberculosis, Ebola, HIV/AIDS, which company activities may aggravate. Includes communicable diseases associated with the influx of temporary or permanent project labour
- Emergency situations caused by company activities, equipment and infrastructure
- Excessive or unregulated vehicle traffic near the facility and through communities
- Appropriate screening, training, equipping and monitoring of direct or contracted workers providing security services/personnel
- Grievance mechanism for workers and the community to express concerns about the security system and personnel
- Investigation of allegations of past abuse



Further reading:

Business and Human Rights Resource Centre's [Renewable Energy & Human Rights Benchmark. Key Findings from the Wind & Solar Sectors](#) (2020)



Please fill in Section 1.2 of the ESMS Workbook based on the guidance provided above.

1.3. ESMS - Identification of risks and impacts

Developers should establish and maintain a process for identifying the E&S risks and impacts of the project, delivered by a third-party service provider. The process may comprise of a full-scale environmental and social impact assessment (ESIA) or in the case of a mini-grid or SHS a limited or focused E&S assessment that is subject to the project size, type and location.

Always seek to avoid any potential negative impacts of the risks. If that is not possible, take steps to minimise the impact of the risks. If negative impacts have occurred, offset or compensate for them.

Consider this list of the types of country-specific regulations your project may be expected to abide by:

- ESIA
- Environmental conservation and management
- Forest conservation
- Biodiversity conservation
- Water conservation
- Land and resettlement
- Building safety
- Labour
- Occupational health and safety
- Fire safety
- Energy or electricity acts

Specify the status of any ongoing permit applications and any conditions that they may include, such as placement of the plant, height of weir, water abstraction volume, environmental flow, replanting of vegetation, working hours during construction, etc. Table 1 below provides a suggested format for listing permits and their conditions.

PERMIT NAME	ISSUING DATE	ISSUING AUTHORITY	CONDITION	PHASE	EXPIRY DATE	ACTION
E.g. Environmental licence	dd/mm/yyyy	Ministry of Environment	Construction work to take place between 7.30-16.30	Construction	n/a	Site Manager to enforce

Table 1: Example of a status of permits record sheet.

Provide a summary of key impacts based on the third-party ESIA in accordance with IFC PS2-PS8, EIB E&S Standards No 3 and 10.

Describe the ESIA process that has or will take place: Consultant name, date, timeline, project site description, methodology of desktop and on-site analysis and results.



Good practice considerations²

- Use external consultants and experts in setting up the ESMS for complex projects and to train in-house personnel to undertake monitoring and reporting.
- Cover baseline environmental impacts (incl. flora, fauna and ecosystems) determined in literature review against field surveys. Please note: for hydro projects, a dry season and wet season baseline study will need to be conducted to understand the fluctuation of biodiversity within the proposed project site.
- Cover occupational health and safety, labour, community and gender risks.
- Increased traffic due to construction may pose risks and should be assessed and, if relevant, managed in a traffic management plan.

- Cover sources of livelihoods, levels of education, cultural beliefs, values and active participation of women and men within the community and active women's associations.
- Review risks and impacts any time there are significant changes to operations.
- Consult risks and impacts any time there are external changes, such as new laws or regulations.
- Include input from affected communities and other external stakeholders.
- In post-conflict areas, consider the project's potential for fuelling a conflict, as well as the potential threat of unexploded land mines.
- Consider waste management and health and safety risks in your supply chain, as well as in your own company.
- Link your monitoring plans to your prioritised risks.
- Scale ESMS as appropriate to the size and complexity of your business/project.



What are the health and safety issues arising from providing SHS, portable batteries and appliances to communities and what steps are taken for maintenance of the project equipment?

- How will working conditions affect the health and safety of workers? ([see Section 2](#))
- How could the operation of equipment affect the health and safety of the community? ([see Section 4](#))
- How will waste and hazardous materials generated by the project, such as batteries, e-waste, chemicals and oils be dealt with safely?
- Have you considered the safe disposal of broken panels and batteries? What plans are in place for end-of-life waste management and recycling and storage of spent batteries and panels ([see Section 3](#)).

Use Table 2 below to summarise key impacts and how they are being addressed to satisfy the requirements of specific standards.

STANDARD	PS NAME	SATISFACTION OF THE PS		
		Summary of main impacts/concerns raised	How the impacts/concerns are addressed and monitored	Reference to the relevant section of the ESIA and/or relevant management plan(s)
IFC PS 1 & EIB 10	Assessment and management of E&S risks and impacts Stakeholder engagement			
IFC PS 2	Labour and working conditions			
IFC PS 3	Resource efficiency and pollution prevention			
IFC PS 4	Community health safety and security			
IFC PS 5	Land acquisition and involuntary resettlement			
IFC PS 6 & EIB 3	Biodiversity conservation and sustainable management of living natural resources Standards on Biodiversity and Ecosystems			
IFC PS 7	Indigenous peoples			
IFC PS 8	Cultural heritage			

Table 2: Satisfaction of IFC Performance Standards and EIB Sustainability Standards 3 and 10.

Determine the project to the [IFC risk category](#) (see below) as per third-party assessment. The following guiding questions should be considered when determining the significance of risk:

- Intensity: how big will the impact be?
- Manageability: can the risk be managed?
- Duration: how long will the risk be present?
- Reversibility: can the situation be restored if/when negative impacts occur?

Category A:

Activities with potentially significant adverse environmental or social risks and/or impacts that are diverse, irreversible, or unprecedented.

Having large geographic scale; involving large-scale infrastructure; being located in valuable ecosystems and critical habitats; entailing adverse impacts to the rights, resources and lands of indigenous peoples; entailing significant (>10) resettlement of affected peoples.³

Category B:

Activities with potentially limited adverse environmental or social risks and/or impacts.

Risks and impacts are considered limited, and the magnitude is expected to be low to moderate. The risks and impacts are few in number, contained within the footprint of the activities, largely reversible, and readily mitigated through generally accepted mitigation measures and good international industry practices. Typically, small and medium-scale renewable energy projects fall into this category, unless the project will impact negatively valuable ecosystems, critical habitats, indigenous peoples or require significant resettlement, or other avoidable adverse impact.

Category C:

Activities with minimal or no adverse environmental or social risks and/or impacts.

Small-scale projects undertaken within an already built environment, with no additional footprint such as SHS and rooftop PV installations. In certain contexts, small-scale renewable energy activities that have a physical footprint may also be considered as low risk, particularly where projects are implemented within an already modified environment and have minimal or no adverse impacts.



Please fill in Section 1.3 of the ESMS Workbook based on the guidance provided above.

1.4. ESMS - Organisational capacity and competency

Developers should establish and maintain an organisational structure with a responsibility matrix that defines roles, responsibilities and authority to implement the ESMS and designates specific personnel with sufficient skills, knowledge and resources.

An ESMS is of course not just about documented policies and procedures; it is about the effective implementation and updating of the ESMS to reflect the true operation of the business and/or project. This does not mean that ESMS implementation should become a full-time job; rather, the newly identified responsibilities should be incorporated into relevant job descriptions and E&S performance should be evaluated based on the consistent implementation of assigned duties as defined in procedures.

The developer must designate a position within the company that will oversee the management and mitigation of each E&S risk. For all projects above 1MW it is recommended to have an Environmental, Health and Safety Manager on site during construction and early operation.



For mini-grids and SHS projects with a total capacity below 1MW we suggest that the organisation appoints an “E&S champion” whose responsibilities are to implement the ESMS and to ensure that the company enforces its E&S policies. This E&S champion should receive training on IFC PS and E&S impacts.

Use organisational diagrams to better understand the reporting lines and designation of responsibilities in each role, or design a responsibility matrix to define roles. Think about these questions to help you:

- Who does what and when, and how will it be recorded?
- What are the different levels of engagement with the ESMS (e.g. senior management, ESMS team, HR, workers and managers, procurement, etc.) and their relative training needs?
- Have you ensured that the roles and responsibilities are clear for monitoring and reporting of key performance indicators and core E&S parameters?
- Consider also whether it is necessary to establish a Health and Safety Committee during stakeholder engagement, which includes workers representatives, as well as a Community Committee to discuss urgent matters that arise during the construction and operational phases of the project with members of the public?

Use the responsibility matrix below to identify roles and responsibilities suitable for your organisation.

RESPONSIBLE	E&S POLICY	RISK MANAGEMENT	TRAINING & AWARENESS	OPERATIONAL CONTROL	EMERGENCY PLANNING	MONITORING, REPORTING	INCIDENT MANAGEMENT	STAKEHOLDER ENGAGEMENT & COMMUNICATION
[title/position]	[specify role]	[specify role]	[specify role]	[specify role]	[specify role]	[specify role]	[specify role]	[specify role]
e.g. EHS Manager	e.g. Responsible	e.g. Responsible, together with PM	e.g. Responsible, together with PM	e.g. Support COO & PM	e.g. Responsible	e.g. Responsible	e.g. Support COO & PM	e.g. Support CLO & monitor
e.g. COO	e.g. Support EHS	e.g. Support EHS	e.g. Support EHS	e.g. Responsible	e.g. Responsible	n/a	e.g. Responsible	e.g. Support CLO & QA
e.g. Project Manager (PM)		e.g. Responsible, together with EHS	e.g. Responsible, together with EHS	e.g. Responsible	e.g. Responsible	e.g. Support EHS	e.g. Responsible	e.g. Support & inform CLO
e.g. Community Liaison Officer (CLO)	e.g. Support EHS	e.g. Support EHS	e.g. Support EHS	n/a	e.g. Support EHS	e.g. Support EHS	n/a	e.g. Responsible

Table 3: Example of a responsibility matrix.

Ensure relevant training to raise awareness, gain commitment and teach people the knowledge and skills they need to implement and deliver the ESMS. Communication is key for successful implementation!



Please fill in Section 1.4 of the ESMS Workbook based on the guidance provided above.

1.5. ESMS - Management programmes

Developers should establish E&S action plans and standard operating procedures, defining the desired outcomes and mitigative actions to address the identified risks. The plans and procedures should include elements such as performance indicators, targets or acceptance criteria that can be tracked, as well as estimates of necessary resources and responsibilities for implementation.

As part of the ESMS, the developer should establish and implement a management programme based on E&S management and monitoring plans, which will assist you in addressing the risks identified above in [Section 1.3](#).

Key questions to think about, when establishing action plans/management programmes:⁴

- What are the E&S risks you want to address?
- How are related actions and procedures to be implemented to address the risk?
- Why have the actions and procedures been specified (objectives), and what are the expected results (targets)?
- When will the programme be implemented and what are the deadlines for each action?
- Who are the responsible people?

Ensure relevant training needs are covered for each management plan. Training logs should entail:

- Subject/scope
- Roles and responsibilities
- Who is to be trained (employee, new employees, sub-contractors, etc.)
- Record keeping methods and archiving



Please fill in Section 1.5 of the ESMS Workbook based on the guidance provided above.

1.6. ESMS - Emergency preparedness and response

Establish and maintain an Emergency Preparedness and Response Plan, including identification of areas where accidents and emergency situations could occur and the communities and individuals that may be impacted. The plan should cover response measures, provision of equipment and resources, training, reviews etc. in a manner appropriate to prevent and mitigate any harm to people and/or the planet.

The emergency preparedness and response plan should be specifically relevant to your responses to labour and working conditions ([see Section 2](#)) and community health, safety and security ([see Section 4](#)).

An emergency preparedness and response plan should include:⁵

- Identification of potential emergencies based on hazard assessments. Examples of potential hazards include:
 - moving and rotating equipment or vehicles
 - loud noise
 - exposed or faulty electrical devices
 - welding/hot work
 - eye hazards
 - working at height
 - working in remote locations
 - corrosive, oxidising, and reactive chemicals
 - exposure to fires
- Emergency response procedures to respond to the identified emergency situations with staff and community.
- Procedures to shut down high-powered equipment.
- Locations of alarms and list schedules of maintenance, inspection and testing of emergency equipment.
- A list of emergency contacts and location of emergency response equipment (firefighting, electrocution, spill response, first aid kits, personal protection equipment for emergency response teams etc.).
- Protocols for the use of the emergency equipment and facilities.
- Clear identification of evacuation routes and meeting points.
- Schedule of trainings, including with local emergency response services (fire fighters).
- Procedures for emergency drills.
- Procedures for periodic review and update of emergency response plans.

Depending on the location of your project, it might also be necessary to consider appropriate response plans for the following:

- Severe weather, such as storms and flooding.
- Local and regional fires.
- Earthquakes and associated tsunamis.
- Volcanic eruptions.
- Civil unrest or terrorism.

Mini-grid and SHS developers need to consider the necessary steps for ensuring the safe use of SHS and other electric equipment by both staff and customers and reducing operational hazards. This includes developing procedures that respond to identified emergency situations, such as fires, electric shock, exposure to chemicals released by batteries (if applicable) and other situations that require first aid.



Please fill in Section 1.6 of the ESMS Workbook based on the guidance provided.



Further reading:

Sample Fire Response Procedure in IFC's [ESMS Toolkit](#) (p38)

World Bank Group's [Environmental, Health and Safety Guidelines](#) for further guidance on hazard identification

1.7. ESMS - Stakeholder engagement plan (SEP)



Image source: Virunga Power

Stakeholder engagement is a valuable tool for mitigating risks, managing expectations, and establishing broad community support. It should be appropriate to the nature and scale of the project, as well as being tailored to it and executed in a systematic manner throughout the project lifecycle. Specific focus should be given to facilitate and encourage the participation of women, ethnic minorities, and other vulnerable groups.

As a REPP investee, you must establish and implement a SEP (including grievance mechanisms), based on a standard process at the corporate level that is applied to every site and which considers each site's characteristics. Stakeholder engagement should include activities that have already been carried out by the developer in initial project development prior to establishing a SEP, ideally based on documented evidence of such engagement.

Stakeholder engagement sessions are a platform to conduct awareness raising on the project's identified risks and impacts during construction and operation and the measures taken to address these risks. The SEP should identify the relevant personnel to whom issues should be raised to.

Ongoing stakeholder engagement processes should:

- Identify stakeholders.
- Implement and maintain a procedure for external communications that includes methods to:
 - receive and register communications from the public and offtakers;
 - screen and assess the issues raised and determine how to address them;
 - provide, track, and document responses, if any; and
 - adjust the management programme to reflect changes in the management of communication.
- Provide periodic reports to the affected communities that describe progress with the implementation of the project action plans.

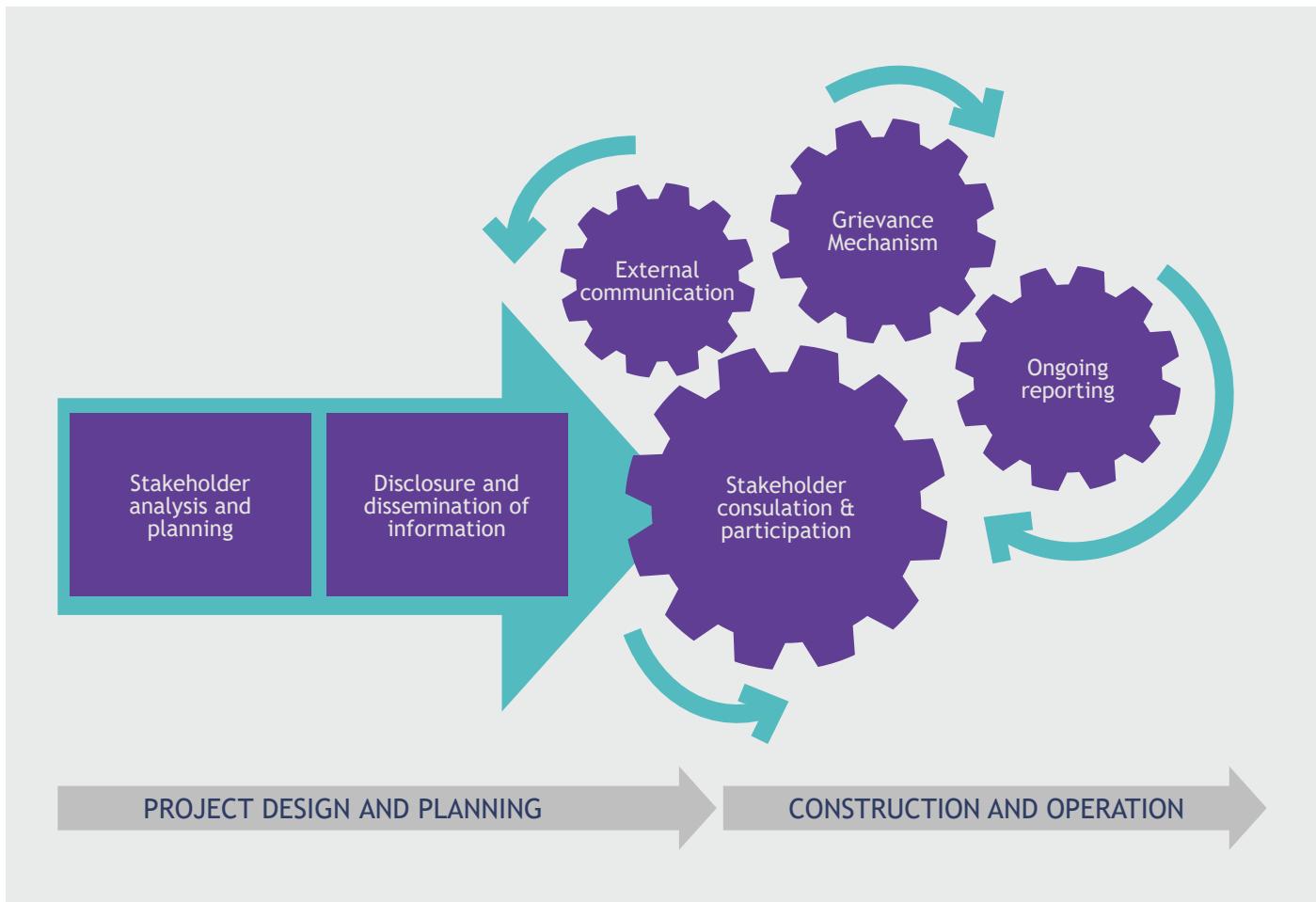


Figure 2: Elements of stakeholder consultation (adapted from IFC PS 1).

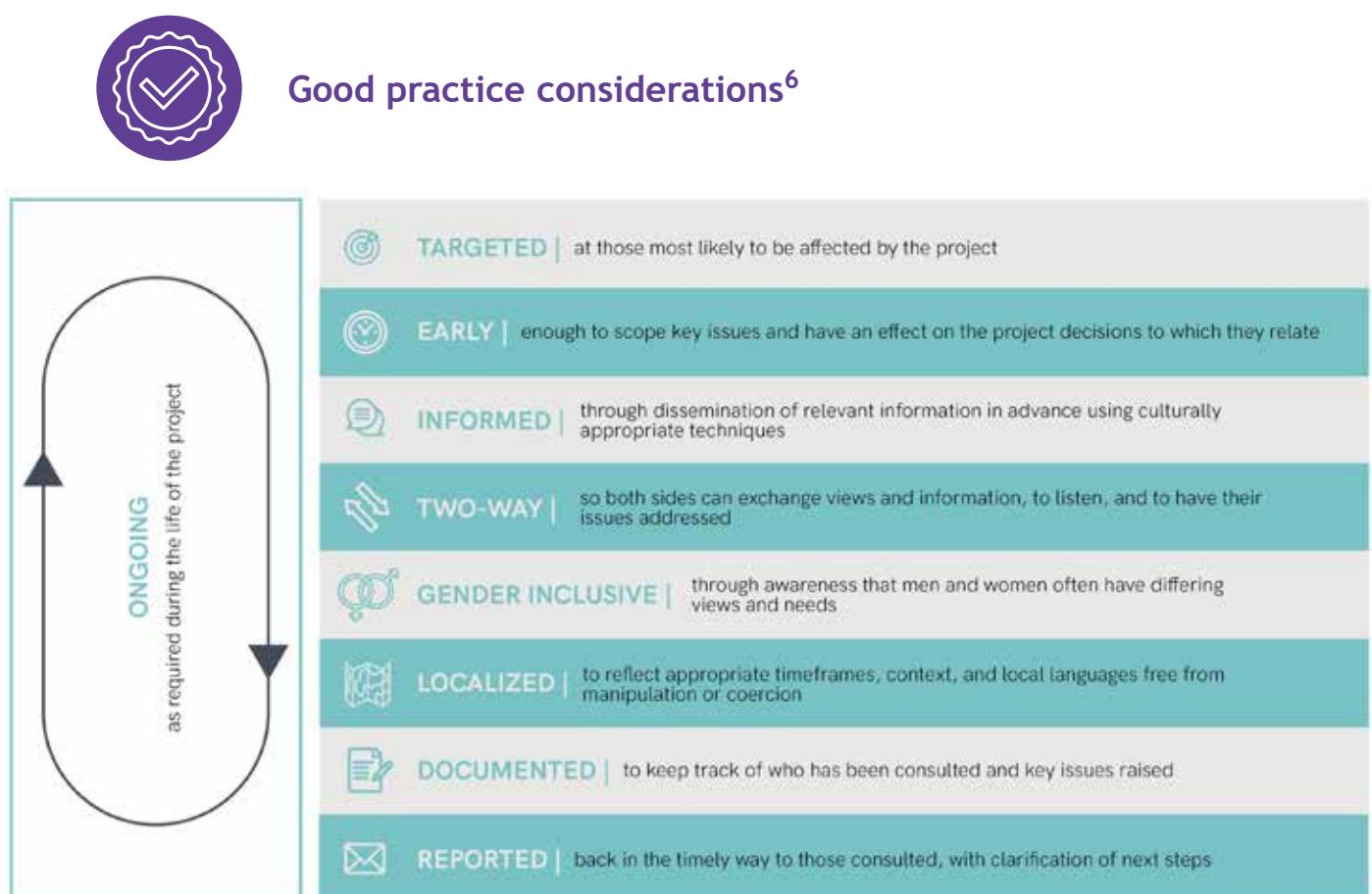


Figure 3: Basic principles of good practice for stakeholder consultation (Adapted from: IFC 2007).

Be careful to manage expectations by clearly outlining potential opportunities for the community, if there are any, during stakeholder engagement. For example, job opportunities are often identified as a benefit to the community, in which case the project developer should clarify the exact number and type of local jobs and not raise expectations beyond what is likely to be available.



For customer-facing projects, such as mini-grids and SHS, stakeholder engagement is typically done on a smaller scale. Developers should pay specific attention to the following aspects:

- Before a customer's house is connected:
 - Have customers been told how to use electricity in a safe manner?
- Once the house is connected:
 - 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)?

1.7.1. Stakeholder identification and analysis

Stakeholder engagement should be planned for and carried out in line with the principles of free, prior and informed engagement and participation (FPIC), which defines a practice of public consultation and participation that is:⁷

- Free from external manipulation, interference, or coercion, and intimidation;
- Based on prior disclosure and dissemination of information;
- Undertaken on an informed basis with information that is relevant, transparent, objective, meaningful and easily accessible in culturally appropriate local language(s), and using a format that is understandable to the affected individuals and communities;
- Is responsive to the needs, rights and interests of both women and men. It may be necessary to establish separate forums and engagement processes to ensure this; and
- Includes targeted capacity building and/or other assistance as necessary to empower impacted individuals and communities to fully and effectively participate in engagement and consultation processes. This is particularly relevant to vulnerable and marginalised people.

Note: FPIC is a specific right for indigenous peoples that is triggered by particular circumstances and defined project impacts. ([see Section 7 for more](#))

Three main groups of stakeholders that should be identified for each project are:⁸

- **Affected communities:** local communities directly affected by the project.
- **Other stakeholders:** those not directly affected by the project but who have an interest in it, such as national and local authorities, nongovernmental organisations, neighbouring projects, etc.
- **Vulnerable groups:** individuals and/or groups that suffer from discrimination, unequal access to rights, unequal access to and control over resources or unequal access to development opportunities. Vulnerable individuals or groups may include: women; children; the elderly; the poor; ethnic, religious, cultural or linguistic minorities; or indigenous groups. In conflict zones and post-conflict contexts, certain groups may suffer further (e.g. women and children lacking the capacity to claim heritage from missing parents) and new categories may appear, such as refugees, returnees, internally displaced people and demobilised soldiers in need of economic and social reintegration into society. More often than not, the resilience levels of such groups to adverse impacts are lower.⁹



Good practice considerations:¹⁰

- Who will be adversely affected by potential E&S impacts in the project's area of influence?
- Who are the most vulnerable among the potentially impacted, and are special engagement efforts necessary?
- At which stage of project development will stakeholders be most affected (e.g. procurement, construction, operations, decommissioning)?
- What are the various interests of project stakeholders and what influence might this have on the project?
- Which governmental and authority organisations would provide important considerations to the effects of the project?
- Which stakeholders can best assist with the early scoping of issues and impacts?
- Who strongly supports or opposes the changes that the project will bring and why?
- Whose opposition could be detrimental to the success of the project?
- Who is it critical to engage with first, and why?



Please fill in Section 1.7.1 of the ESMS Workbook based on the guidance provided above.

1.7.2. Stakeholder engagement framework

A stakeholder engagement framework is intended as a blueprint that outlines a project's stakeholder engagement strategy and guides its roll-out.¹¹

In cases where the exact location of the project is not known, but it is reasonably expected to have significant impacts on local communities, the project developer should prepare a Stakeholder Engagement Framework. This forms part of the company's management programme and outlines general principles and a strategy to identify affected communities and other relevant stakeholders, as well as plan for an engagement process compatible with this ICF Performance Standard that will be implemented once the physical location of the project is known.¹²



Good practice considerations:

- Describes the regulatory and/or promoter's requirements for consultation and disclosure; identifies and prioritises key stakeholder groups.
- Provides a strategy and suggested frequency of engagement for sharing information and consulting with each of these groups.
- Describes resources and responsibilities for implementing stakeholder engagement activities.
- Describes how stakeholder engagement activities will be incorporated into the project's ESMS.
- Establishes firm references and links to the operation's grievance mechanism, emphasising confidentiality.



Please fill in Section 1.7.2 of the ESMS Workbook based on the guidance provided above.

1.7.3. Information disclosure and dissemination

Project developers should through information disclosure and dissemination ensure that stakeholders have access to information early on in the E&S impact assessment process, and that they will continue to do so as it unfolds.¹³

Good practice for information disclosure and dissemination involves taking steps to increase transparency and accountability as a means of understanding your project and establishing public trust. Remember that a lack of information can lead to the spread of misinformation about a project that can be both damaging to a company's reputation and undermine efforts to engage in an informed dialogue with stakeholders. This is an area where perception matters. If companies are viewed as closed or secretive, consumer confidence and public trust can be affected.¹⁴



Good practice considerations:¹⁵

- Disclose information early.
- Disclose objective information on the project, its timelines and positive and negative impacts.
- Design disclosure to support the consultation process. Leave sufficient time between the provision of information about the realistic benefits and disadvantages of the project (or changes to project operations and their implications) and the start of consultations.
- Provide meaningful information in local language(s).
- Ensure easy accessibility of information.



Please fill in Section 1.7.3 of the ESMS Workbook based on the guidance provided above.

1.7.4. Stakeholder consultation

Stakeholder consultation involves a constructive, two-way consultation relationship over the project timeframe with the key stakeholders.



Good practice considerations

Note: Basic good practice principles for stakeholder consultation are illustrated in Figure 3 above.

Gender-inclusive consultation is needed to provide the full picture of stakeholder perspectives. Experience shows that men and women often have different priorities, different perspectives on key issues and may be differentially impacted by a project or programme - with women bearing disproportionate negative impacts. Good practice encourages seeking out the views of women to provide companies with a more complete picture of potential risks, impacts and opportunities relating to their project.¹⁶ See Camco Clean Energy's [Gender Mainstreaming Toolkit](#) for more information.

Documenting consultation activities and their outcomes is critical for the effective management of stakeholder engagement, and should cover the following issues:

- For projects with potentially significant adverse impacts on affected communities, the project company should conduct an in-depth informed consultation and participation (ICP) process. The ICP involves an exchange of views and information, and an organised and iterative consultation. The idea is that this then leads to the project company incorporating into their decision-making processes the views of the affected communities on matters that affect them directly, such as the proposed mitigation measures, the sharing of development benefits and opportunities, and implementation issues. The ICP process should:
 - Capture both men's and women's views, if necessary through separate forums or engagements.
 - Reflect men's and women's different concerns and priorities about impacts, mitigation mechanisms and benefits, where appropriate.
 - Record when and where the meetings took place.
 - Record who attended the meetings.
 - Record what topics and themes were discussed.
 - Provide details of the results of the consultations, including whether any commitments were made to stakeholders made during or as a result of them.
 - Keep minutes of all stakeholder meetings and distribute them to participants afterwards. In the case of formal meetings, the minutes should be signed by the relevant actor(s).
- For projects that involve physical and/or economic displacement, IFC PS 5 applies. Involuntary resettlement refers both to physical displacement (relocation or loss of shelter) and to economic displacement (loss of assets or access to assets that leads to loss of income sources or other means of livelihood as a result of project-related land acquisition and/or restrictions on land use).

Questions and topics to discuss with the community:

- What are people's feelings about the project?
- Clarify how many jobs will be created through the project (construction and implementation).
- Will the local community receive electricity? If so, to what extent and at what price?
- Are there any sites that are used as part of or for cultural rituals within the project boundary and how is access to these ensured?
- Are some of the species of wildlife in the area considered rare, endangered or culturally significant?

- Are there any people in the community that are considered/consider themselves as indigenous peoples?
- If the project is in a post-conflict area, ask if the community is aware of any landmine contamination in the area.
- Does the community know who they need to speak to when a grievance occurs?

External communications

- Project developers should implement and maintain a procedure for external communications that includes methods to:
 - receive and register external communications from the public;
 - screen and assess the issues raised and determine how to address them;
 - provide, track, and document responses, if any; and
 - adjust the management programme, as appropriate.
- In addition, project companies are encouraged to make publicly available periodic reports on their E&S sustainability.



Please fill in Section 1.7.4 of the ESMS Workbook based on the guidance provided above.

1.7.5. Grievance mechanism for affected communities

A grievance mechanism is a formal complaint process that can be used by individuals and communities to raise any concerns about the project

The grievance mechanism should be designed so that it is:¹⁷

LEGITIMATE and trusted, and encourages dialogue and shared responsibility for outcomes;

SCALED to the risks and potential adverse impacts of the project;

PUBLICISED and **ACCESSIBLE**, appropriately tailored to all potentially affected persons and communities and other interested parties, irrespective of their literacy and administrative capacity;

FREE of cost for the stakeholders;

includes an **ANONYMITY** option, where feasible, and guarantees confidential handling of requests, if so requested by the complainant. Examples of this can be in the form of a box by the project office or community centre, or a dedicated call line;

fair, **TRANSPARENT** and inclusive about the process and outcomes;

ADAPTIVE to the stakeholder's preferred communications channel;

guided and supported by engagement and **DIALOGUE**;

a **PREDICTABLE**, defined process that includes assignment of responsibility, time limits and monitoring of outcomes; and

TIMELY, resolving concerns promptly. An example of this is having an easy-access online portal, complaint box or call centre whereby employees and community members are able to speak with the project's liaison officer or communications officer to lodge an anonymous concern or complaint. The method of how to lodge a complaint or concern should be publicised during the stakeholder engagement process. The grievance mechanism must provide a step-by-step process on how each grievance is addressed in a transparent and impartial way.



Please fill in Section 1.7.5 of the ESMS Workbook based on the guidance provided above.



Further reading:

IFC's [Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emerging Markets \(2007\)](#)

IFC's [ESMS Toolkit - General Version 1.2](#) (2015) - see [Section 7](#) for an example of a grievance log

1.8. ESMS - Monitoring and review

Project developers need to establish procedures to monitor and measure the effectiveness of their management programme as well as compliance with any related legal and/or contractual obligations and regulatory requirements. This involves 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. You should document monitoring results and identify and reflect on the necessary corrective and preventive actions in the amended management programme and plans.



Good practice considerations¹⁸

- What parameters will you monitor to determine your success? (This can be derived from the impacts, indicators and mitigative measures specified in the ESIA)
- How frequently will you collect samples?
- What methods, tools, and equipment will you use to collect and analyse samples?
- What standards or benchmarks will you use to establish acceptable values?
- Who will be responsible for collecting, analysing and acting upon the data?
- What records will you maintain and review?

Means of monitoring¹⁹

- Visual observation - i.e. physical walk-throughs of the facility and surrounding land.
- Interviews - i.e. consultations with workers, managers and external stakeholders.
- Measuring and testing using equipment that is properly calibrated. Examples include energy consumption, emissions to air, effluents, noise decibel levels, dust levels, ambient temperature, light levels.
- Document review - i.e. looking through documents and records. Examples include water and energy bills, waste disposal records, chemical use and discharge records, complaints logs, training records.

REPP requirements

The monitoring plan is typically provided in Excel form and should contain the following:

- potential impact (against IFC Performance Standards);
- proposed mitigation measures;
- parameters to be monitored (i.e. how mitigation measures are to be monitored);
- measurement unit;
- measurement range/target level;
- source of data;
- timings (construction/operation);
- frequency of monitoring (continuous/daily/weekly/monthly);
- frequency of reporting (weekly/monthly/annually);
- location where recorded (document name and location);
- corrective action, where parameter over/under indicated range;
- quality assurance and/or supporting document; and
- name of responsible person.

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

- installed capacity of the plant;
- operational capacity of the plant;
- amount of electricity generated;
- amount of electricity sold;
- number of sales/customers;
- number of people with improved access to clean energy (disaggregated by gender) and location of new access points;
- number of jobs generated disaggregated by gender, stage (construction/operation) and level (low skilled/high skilled);
- fossil fuel consumption (on-site generation, plus transport for biomass projects);
- grievances raised and addressed;
- occupational health and safety incidents; and
- training events run.

If the project provides improved access to energy for a school, a clinic/hospital and/or waterworks/water-pumping station then this should be separately accommodated in the monitoring plan to assess positive impact.

 Tip: A monitoring plan template is provided in the ESMS Workbook.



Please fill in Section 1.8 of the ESMS Workbook based on the guidance provided above.

2.1. Working conditions and management of worker relationships

Developers should adopt and implement human resourcing policies and procedures to ensure reasonable working conditions in alignment with national laws and regulations and laws governing the corporate level. You should also make employment decisions, provide for professional development and implement any retrenchment plans based on non-discrimination and equal opportunities. Gender and ethnic inclusion balance should be promoted at management level and across the company.

This performance standard applies in conjunction with the emergency preparedness and response plan ([see Section 1.6](#)) and the grievance mechanism ([see Section 1.7.5](#))

Principles, policy and general guidance of the occupational health and safety (OHS) plan can be established at the corporate level. However, each project will have its unique impacts that should be considered at the project level.

Project developers should have in place and enforce a corporate-wide staff policy, stating:

- fair treatment, gender-equality, non-discrimination and equal opportunity;
- good worker-management relationships;
- compliance with national employment and labour laws;
- protection for workers, in particular those in vulnerable categories;
- the promotion of safety, health and hygiene needs of women at work;



*Image source: Voltaia,
lead EPC contractor on Gigawatt
Global's solar project in Burundi*

- the company's commitment to closing the gender gap;
- the company's commitment to a living wage, defined as remuneration that meets basic needs and provides some discretionary income. In some countries minimum wage is exceptionally low and revised rarely. In the absence of strong national labour policy, companies should ensure workers are paid a proper living wage. For further guidance visit [Global Living Wage Coalition's website.](#)
- the grievance mechanism for employees and contractors; and
- The company's commitment to avoiding the use of forced labour or child labour. For definitions of forced and child labour, [see Section 2.3](#) below.



Please fill in Section 2.1 of the ESMS Workbook based on the guidance provided above.



2.2. Occupational health and safety

Your company should have in place appropriate labour and health and safety policies and processes, as well as the resources for their enforcement to protect the health and safety of workers. Establish an Occupational Health and Safety (OHS) Plan, which supports the provision of a safe and healthy working environment. This includes identifying potential hazards and providing preventative and protective measures, training, and the documentation and reporting of occupational accidents, diseases and incidents, as well as arrangements for emergency prevention, preparedness and response.

For PPE below: please check [Personal Protection Equipment Poster & Website](#).



Good practice considerations^{20,21}

- Identify hazards to workers, particularly those that may be life-threatening.
- Define preventive and protective measures, including modification, substitution or elimination of hazardous conditions or substances, in standard operating procedures. This covers:
 - eliminating the hazard by removing the activity from the work process;
 - controlling the hazard at its source, if possible;
 - minimising the hazard through the design of safe work systems and administrative or institutional control measures, such as job rotation, training in safe work procedures, limiting exposure or work duration, etc. In addition, be sure to install warning signs on all hazardous electrical equipment, the fences, power poles, etc., and ensure lightning protection and earthing is installed on all required electrical equipment; and
 - providing appropriate personal protective equipment (PPE) in conjunction with training, use, and maintenance of the PPE.
- Provide training for workers, including security personnel, in the following topics:
 - emergency preparedness procedures
 - first aid
 - fire fighting
 - toolbox training
 - hygiene measures
 - HIV/AIDS awareness
- Ensure documentation and reporting of all occupational accidents, diseases and incidents, as well as training events. An example format is provided below.
- Establish a health and safety committee with representatives from the labour force to engage and monitor OHS issues.
- Put in place emergency prevention, preparedness and response arrangements.
- Describe the site's facilities, workers welfare (including availability of drinking water) and sanitation provisions.
- Describe appropriate PPE at site and for different tasks.
 - Promote HIV/AIDS and sexual assault awareness to help protect employees as well as people in the community where the project takes place. Projects with migrant construction labour and construction camps should provide training, potentially in partnership with local NGOs or health care organisations. Smaller projects, such as mini-grids, might address the issues using informative poster directed to both employees and community.



Please fill in Section 2.2 of the ESMS Workbook based on the guidance provided above.

INCIDENT/ACCIDENT REPORT FORM		
The report should include, but not be limited to, the following information:		
Name of injured person:		
ID number:		
Date of birth:		
Exact number of injured person:		
Occupation:		
Company:		
Insurance company:		
Insurer's name:		
Where injury occurred:		
Date/time:		
Brief description of incident, include type of incident (e.g. fall from height, collision, uneven step, contact with electricity), nature of the injury (e.g. cut, fracture, muscle injury, back/neck/skin/soft tissue injury) & g., etc., age, sex, etc.		
Treatment (e.g. first aid, hospitalisation, corrective action taken)		
Attach photographs as supporting evidence, where relevant.		

TRAINING RECORD FORM			
The report should include, but not be limited to, the following information:			
Subject:			
Details:			
Date/time:			
Presented by:			
Quotations:			
Participants:			
#	Name	Comments and Practices	Signature
1			
2			
3			
4			
5			

⚠ Tip: An incident/accident report and a training record form are provided in the ESMS Workbook.



Further reading:

Global Living Wage Coalition's [What is a living wage?](#)

World Bank Group's *environmental, health, and safety guidelines for:*

- [Occupational health and safety](#)
- [Geothermal power generation](#)
- [Wind energy](#)

World Bank Group's [Good Practice Note: Environmental, Health, and Safety Approaches for Hydropower Projects](#)



Image source: Virunga Power

2.3. Protecting the occupational health and safety of workers engaged by third parties and in the supply chain

Project developers should take reasonable efforts to ascertain that third parties who engage their workers are reputable and legitimate enterprises with an appropriate ESMS. Establish policies and procedures for managing and monitoring the performance of such third-party employers, including EPC contractors.

Where there is a high risk of child/forced labour in the primary supply chain, identify those risks, take appropriate steps to remedy them in developing a supply chain assessment, and monitor on an ongoing basis. Mined minerals known to have a high risk of child labour are cobalt and lithium, both present in batteries.

Certain minerals, such as cobalt, wolframite, nickel, bauxite and lithium, are considered “conflict minerals”, if mined from conflict-affected and high-risk areas. According to OECD, special due diligence should be given to minerals mined from Angola, Burundi, Central African Republic, Democratic Republic of the Congo (DRC), Malawi, Republic of the Congo, Rwanda, South Sudan, Tanzania, Uganda and Zambia.

Conflict-affected and high-risk areas include places that are in a state of armed conflict, a state of fragile post-conflict, or are witnessing weak or non-existent governance and security, such as failed states. It is common in these areas for there to be widespread and systematic violations of international law, including human rights.²²

Child labour:

In accordance with ILO’s convention concerning minimum age for admission to employment and its recommendations to ensure the avoidance of 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 jeopardise children’s physical, mental or moral health and safety should not be done by anyone under the age of 18.

Project developers must ensure that their labour policy and employment practices are in accordance with the above, and never employ children in any manner that is economically exploitative or is likely to interfere with the child’s education or be hazardous or be harmful to the child’s health or development.

Forced labour:

Defined by ILO’s Forced Labour Convention as “all work or services which is exacted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily”.

Project developers should never employ forced labour.

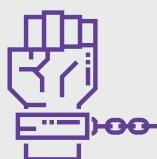


Good practice considerations

- Ensure through your actions, for example having a relevant clause in the service agreement, that contractors comply with your company’s ESMS and that its workers health and safety is covered in your own OHS plan. Also make sure contracted workers have access to a grievance mechanism by contracted workers. It is the investee’s responsibility to ensure compliance.

- To better understand the health and safety and employment practices within your supply chain, request proof of the following from your suppliers:
 - Certificates of accredited OHS and ESMS, including ISO 45001 and ISO14000.
 - Labour policy - to ensure that the supplier is committed to the avoidance of forced and child labour, including in their own supply chain.
 - E&S policy - to ensure the supplier's commitment to maintaining a minimal impact on the E&S aspects in which they operate.
 - OHS policy - to ensure commitment to providing said product and/or service in a health-conscious, safe and secure manner, including in their supply chain.
 - Origin of raw materials (country and mine). As the developer, you should undertake a supply chain impact assessment if the country of origin is a fragile or unstable state. Visit the [Fragile States Index](#) website for more information.

FACTS ABOUT SLAVERY



40.3

million people live in
modern slavery today



24.9

million people live in
forced labour



71%

of those living in modern
slavery are women

Source: Global Slavery Index 2018



Please fill in Section 2.3 of the ESMS Workbook based on the guidance provided above.



Further reading:

- IISD's [Green Conflict Minerals: the fuels of conflict in the transition to a low-carbon economy](#)
- OECD's [Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas](#)
- SolarScore's [Solar Manufacturer Ratings](#)

3.1. Resource efficiency: greenhouse gases and water consumption

Developers should identify and implement measures for improving efficiency in their project's consumption of energy, water and other resources and material inputs. You must also prevent, minimise and control pollution generating from project activities in line with internationally disseminated technologies and practices.

The principles and techniques applied for pollution prevention and control during the project life cycle will be tailored to the impacts identified in your project-specific esia.

To address potential adverse project impacts on existing ambient conditions, the project developer should consider relevant factors, including:^{23,24}

- Existing ambient conditions;
- The finite assimilative capacity of the environment;
- Existing and future land use;
- The project's proximity to areas of importance to biodiversity;
- The potential for cumulative impacts with uncertain and/or irreversible consequences;
- Landscape, seascape, and visual impacts;
- Air emissions and ambient air quality. Generally, these are minimal in most renewable energy projects, with the exception of particle matter (dust) from clearing and construction
- Energy conservation during the construction phase;
- Water, wastewater and ambient water quality and availability. Consider the availability of water for construction and operation, including drinking water. Estimate the required quantity and how this might impact the surrounding community. Drinking water sources, whether public or private, should at all times be protected so that they meet or exceed applicable national acceptability standards or in their absence the current edition of the who's guidelines for drinking-water quality.;
- Water conservation and wastewater management. Consider dry toilets where applicable;
- Greenhouse gas emissions from fossil fuels in case of back-up generation;
- Hazardous materials management;
- Waste management;
- Noise
- Contaminated land - assure proper handling and storage of any hazardous materials, including batteries, oils and chemicals.



Please fill in Section 3.1 of the ESMS Workbook based on the guidance provided above.

3.2. Pollution prevention: waste, hazardous materials and pesticide use and management plan

Developers should establish and implement a waste management plan for their projects. The plan should , include actions for the appropriate handling, storing and recycling or disposal of any hazardous waste and materials (such as end-of-life PV panels and batteries, fuels, oils and chemicals,) and the minimisation and appropriate management of construction-stage waste.

You should identify waste streams and types and specify hazardous and flammable substances, and include them all in your E&S monitoring plan. Avoid or minimise the release of pollutants and/or control the intensity and mass flow of their release. Where waste and other pollutants cannot be recovered or reused, they should be destroyed or disposed of in an environmentally sound manner that includes the appropriate control of emissions and residues resulting from the handling and processing of the waste material.



Good practice checklist

- Ensure fuel and other hazardous materials are securely stored above the flood level and at least 20m from any waterbody, watercourse, canal or storage pond. If this is not possible, ensure secure measures are in place and storage facilities are lined to prevent potential leakages.
- Describe your company's storage procedures, record keeping and signage in relation to waste and hazardous materials.
- Where contamination has occurred, monitor the contaminated material/area frequently to ensure no run-off into nearby water sources or waterbodies.
- Ensure construction waste is disposed of in a manner that minimises pollution.
- Ensure a clear process, signage and containers for different waste streams.
- Consider Extended Producer Responsibility (EPR) in your company's recycling and reuse strategy especially for PV panels, batteries and SHS.
- When hazardous waste disposal is conducted by third parties, use contractors that are reputable and legitimate enterprises licensed by the relevant government regulatory agencies (i.e. they have a hazardous waste treatment license) and obtain chain of custody documentation to the final destination.
- Maintain a waste disposal management record - see Table 4
- Roles, responsibilities and training should be considered in line with [Section 1.4](#).

ACTIVITY	WASTE TYPE	WASTE CLASSIFICATION	DISPOSAL METHOD	RECOVERY PLUS REUSE, RECYCLING OR RESPONSIBLE DISPOSAL TARGET	RESPONSIBILITY
E.g. Site clearance	Vegetation	Organic waste	Used by community	100%	A.N. Other
E.g. Earthworks	Soil, rock	Excavated natural material	Re-use on site	100%	A.N. Other
E.g. Construction finishing	Leftover paints and solvents	Liquid hazardous waste	Dispose of off-site at a licensed facility	100%	A.N. Other
E.g. Sanitation	Human waste	Sewage	Septic tank or fecal matter from dry toilets may undergo composting in accordance with country regulation	100%	A.N. Other

Table 4: Template for waste disposal management.



- Consider the full retrieval of hazardous waste materials and e-waste through an incentive mechanism to ensure that waste is disposed of in safe and environmentally secure manner, aligned with the company's waste objectives and values. See Table 5 below which provides guidance on end-of-life waste management in the off-grid solar sector. Consider using third-party service providers for the disposal of waste lead-acid batteries.
- When storing waste batteries, consider the following good practice:²⁵
 - Manually discharge the batteries with a battery discharger.
 - Do not attempt to dismantle battery packs or damaged cells.
 - Cover the poles of the batteries with insulated tape.
 - Battery storage areas should be sheltered from direct sun, heat and rain, and secured to prevent unauthorised entry. Store lithium-ion batteries in drums/buckets with sand to insulate the battery should “thermal runaway” occur. Lithium-ion batteries should also be stored in a separate area to mitigate the risk of fire spreading in the event of an incident. The temperature in the storage drums should be consistently monitored for a rise in temperature which could cause a fire.
 - Lead-acid batteries should be stored and transported on pallets, with similar-sized batteries placed next to one another. Place similar-sized batteries next to each other. Place thick layer of cardboard in between lead-acid batteries to absorb any leakage of battery acid. The batteries should not be stacked further than three layers high. Once stacked, the pallets should be wrapped and sealed with plastic wrap according to shipping requirements. Wet batteries that require an addition of distilled water should be drained, and the acid stored in secure bins.
 - Store waste batteries for several weeks to ensure no self-discharge occurs while workers are handling them.

COMPONENT GROUP	EXPECTED LIFETIMES	PRESENCE OF TOXIC/HAZARDOUS COMPONENTS	RECYCLABLE COMPONENTS
PV panels	>10 years	Cadmium, tellurium (used in thin-film solar cells) and lead (contact layers, solder paste)	Silicon wafers and back foils
Control devices	5 - 15 years	Potentially: lead, cadmium and hexavalent chromium	Printed circuit boards, electronic components
Cables	>10 years	Copper, plastic insulation, chromium, brominated	Copper or other metal cores
Electrical and electronic equipment	2 - 10 years	Varies based on devices, but may include lead, cadmium, chromium, brominated flame retardants or polychlorinated biphenyls, mercury (used in CFLs)	Electronic components, aluminum and copper
Batteries	2 - 6 years	Lead, lead-oxide, cadmium (Despite the absence of heavy metals in Lithium-ion batteries, there are various constituent parts with potentially negative effects on human health and ecosystem)	Require recycling in facilities specialised on hazardous waste

Table 5: End-of-life waste management in the off-grid solar sector (adapted from End-of-life Management of Batteries in the off-grid solar sector, GIZ, 2018).



Please fill in Section 3.2 of the ESMS Workbook based on the guidance provided above.



Further reading:

- World Bank Group's [Environmental, Health and Safety Guidelines](#) (2007)
- World Bank Group's [Good Practice Note: Environmental, Health, and Safety Approaches for Hydropower Projects](#) (2018)
- GOGA's [E-waste Toolkit, Module 1 Briefing Note: Technical introduction to recycling of off-grid solar products](#)
- GIZ's [End-of-Life Management of Batteries in the Off-Grid Solar Sector](#) (2018)

4.1. Community health and safety

It is the project developer's responsibility to avoid or minimise the risks and impacts to community health, safety and security that may arise from project-related activities, with particular attention to vulnerable groups.

In conflict and post-conflict areas, the level of risks and impacts may be greater. The risk that a project could exacerbate an already sensitive local situation and put further strain on scarce resources must not be overlooked as it may lead to further conflict.

Ensure that the safeguarding of personnel and property is carried out in accordance with relevant human rights principles and in a manner that avoids or minimises risks to affected communities.

This IFC Performance Standard should be used in conjunction with the **emergency preparedness and response plan** ([see Section 1.6](#)) and the **grievance mechanism** ([Section 1.7.5](#)) as well as the IFC Performance Standard relating to indigenous people ([see Section 7, below](#))



Good practice considerations²⁶

- Infrastructure and equipment design and safety: Design, construct, and operate and decommission the structural elements or components of the project in accordance with good international industry practice.
- Traffic safety: Estimate the quantity of vehicles and traffic and its impact on the community, including safety, noise, dust and pollution. Ensure children's safety at all times and establish a traffic management plan, where relevant. These points are particularly relevant during construction.
- Hazardous materials management and safety: Prevent or minimise the potential for community exposure to hazardous materials that may be released by the project.
- Environmental and natural resource issues: Avoid impact of project on natural resources. Consider how your project's direct impacts on priority ecosystem services (including access to project area, if relevant) may result in adverse health and safety risks and impacts to affected communities.
- Community exposure to disease: Evaluate the risks and impacts to the health and safety of affected communities during the project life cycle (including water-borne diseases and transmission of communicable diseases that may be associated with the influx of temporary or permanent project labour).
- Emergency preparedness and response: 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 preparedness and response plan.



Good practice checklist

During construction

- Is public health information provided to the construction workforce prior to the commencement of on-site work, primarily covering the prevention of HIV/AIDS and COVID-19? This is especially relevant to projects that involve migrant labour and required construction camps.
- Will construction activities be restricted to daylight hours, with local communities informed of the schedule?
- Are construction camps required? If yes, remember to include in stakeholder engagement. Consider also effluent from the camps.

During operation

- Have warning signs been installed on all hazardous aspects of the site, such as electrical equipment, fences, power poles, dam walls etc.?
- Have precautions been made to prevent exposure to hydrogen sulphide gas (geothermal projects)?
- Has lightning protection and earthing been installed on all required electrical equipment?



Please fill in Section 4.1 of the ESMS Workbook based on the guidance provided above.

4.2. Security personnel

Developers should identify and assess risks posed by direct or contracted workers to provide security arrangements to those within and outside the project site.

Any concerns raised by affected communities about the security arrangements and acts of security personnel should be included in the grievance mechanism.

Project developers also typically need to protect the project against theft with fences etc, although good community relations can help to reduce theft and vandalism and the extent of security arrangements required.

Project developers also need to ensure security personnel are involved in employee trainings, are afforded labour rights, and have access to the grievance mechanism.



Good practice checklist

- Is the project site fully enclosed?
- Is appropriate signage in place to warn trespassers of potential dangers?
- Do any of the security features/infrastructure pose a risk to the community?
- Have all security personnel undertaken OHS trainings, outlined in [Section 2.2](#) above, especially in emergency response procedures?
- Are security personnel provided with sanitary facilities?
- Is appropriate cover or shade provided for security personnel?



Please fill in Section 4.2 of the ESMS Workbook based on the guidance provided above.

Land acquisition and resettlement is one of the more complex challenges in project development. It involves balancing the timing of events relating to site selection, developing livelihood restoration programmes, preparing replacement land, consultation processes, consensus building and community mobilisation. It is ultimately for the developer to portray a sense of support in maintaining or improving the community's quality of living, livelihood, and ambitions for development within their community as well as individual families. If the developer is unable to achieve this, the associated risks are high. Impacts across financial projections, environmental concerns, legal status, etc. continue throughout the project life cycle.

Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in physical or economic displacement. This occurs in cases of (i) lawful expropriation or temporary or permanent restrictions on land use and (ii) negotiated settlements in which the buyer can resort to expropriation or impose legal restrictions on land use if negotiations with the seller fail.²⁷

If a project results to involuntary resettlement, its risks are immediately higher. If resettlement considers more than 10 people, the project risk category increases to level A automatically.

The IFC's Performance Standard 5 does not apply to resettlement resulting from voluntary land transactions (i.e., market transactions in which the seller is not obliged to sell). However, such settlements should be prescribed, recorded and archived as part of ESMS (impact assessment and stakeholder engagement). In the case of multiple sites and several landowners, the development of a land acquisition procedure is advisable, to ensure all crucial elements of land negotiations are addressed consistently across each site and discussions are recorded in a consistent manner.

The applicability of this performance standard should be confirmed at the project level. The compensation and resettlement will be tailored to the impacts identified in the project-specific ESIA. Please note that the performance standard also applies to customary or traditional rights on land. The use of negotiated settlements meeting the requirements of this performance standard are encouraged, even if the project has the legal means to acquire land without the seller's consent. Community acceptance and support is key for successful project development.

In the ESIA report, the E&S consultant should either confirm that the project avoids displacement and economic resettlement, or in cases where this performance standard applies, establish a resettlement plan. Refer to country-specific land acquisition acts or regulatory compensation frameworks for sufficient compensation structures.



Good practice considerations^{28,29}

- Project design and planning: Avoid, and when avoidance is not possible, minimise displacement by exploring alternative project designs. Undertake legal and qualitative research of related laws and customs that affect women's property rights to understand how land acquisition will affect women in the project community.
- Engage a resettlement expert to lead the process.
- Allow sufficient time, typically several years, for the resettlement process.
- Undertake extensive stakeholder consultations in accordance with the guidance provided under [Section 1.7](#). This includes allowing for separate, women-oriented stakeholder engagement and consultation sessions to create a conducive and unbiased environment. Consider also the need

for separate consultations for ethnic and other minorities. Consider who has what rights in the bundle of rights associated with land during “community training”. When scheduling meetings and other consultation activities, give careful consideration to people’s work and domestic duties to maximise potential attendance. Conduct census, inventory and valuation, considering the following:

- Land use and its capability i.e. potential land use
- Customary or traditional rights to land
- Productive capacity should be assessed through independent survey
- Houses and associated structures
- Other private physical assets
- Private enterprises
- Natural resources of which people have traditionally made use
- Employment and income-generating resources, such as fishing, small-scale farming
- Assets held collectively, such as infrastructure, water resources, cultural property, should be recorded and assessed separately.
- Anticipate and avoid, or where avoidance is not possible, minimise adverse social and economic impacts from land acquisition or restrictions on land use by:
 - providing compensation or benefits for loss of assets at replacement cost reflective of project life-cycle duration, and
 - ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected.
- While some people may not have rights over the land they occupy, the performance standard requires that compensation on non-land assets be retained, replaced, or compensated for; any relocation to take place with security of tenure; and lost livelihoods be restored;
- Resettlement and livelihood restoration planning and implementation should look to improve, or restore, the livelihoods and standards of living of displaced persons.
- Developers should look to improve the living conditions among physically displaced persons through the provision of adequate housing with security of tenure at resettlement sites. Displaced persons may be classified as persons:
 - who have formal legal rights to the land or assets they occupy or use;
 - who do not have formal legal rights to land or assets, but have a claim to land that is recognised or recognisable under national law; or
 - who have no recognisable legal right or claim to the land or assets they occupy or use (i.e. even illegal settlements need to be compensated accordingly). The census will establish the status of the displaced persons.
- Where physical displacement is unavoidable consider livelihood restoration and enhancement as a key driver for the resettlement.
- Community training content should be completed at project level and should entail:
 - legal rights of women on land, including inheritance and divorce;
 - special problems encountered by women (for example, documentation or access to credit);
 - the involvement of women and men in the adjudication process and in registration of rights; and
 - benefits of participation.
- Document, monitor and report the process including but not limited to:
 - number of public meetings held;
 - attendance registers;
 - grievances raised;
 - compensation payments made;
 - housing lots allocated, housing and related infrastructure completed;
 - relocation of people completed;
 - livelihood programmes initiated and implemented.

- A plan for the resettlement (for physical displacement) and livelihood restoration (for economic displacement) should be established at project level and cover the following:
 - Community engagement, inclusive of an agreed methodology of how to compensate each site and to be applied throughout sites.
 - Grievance mechanism to extend to all members of the community, including nomadic and vulnerable groups.
 - Continuous engagement with the community throughout the resettlement process to be cognisant of newer additions to the community.
 - Plan of implementation for resettlement and livelihood restoration.
 - Land ownership to be evidenced by documentation as well as all agreements made with the community during stakeholder engagement before undertaking negotiations.
 - Infrastructural or economic improvements to be agreed with the community and documented before land negotiations begin.



Please fill in Section 5 of the ESMS Workbook based on the guidance provided above.



Further reading:

- FAO's [*The Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security*](#) (2012)
- IFC's [*Guidance Note 5: Land Acquisition and Involuntary Resettlement*](#) (2012)
- IFC's [*Draft Good Practice Handbook: Land Acquisition and Resettlement*](#) (2019)
- Interlaken Group's [*Respecting Land and Forest Rights: A Guide for Companies*](#) (2019)
- IFC's Handbook for [*Preparing a Resettlement Action Plan*](#) (2002)



Image source: Filipe Canário, STRIX



Image source: Buffalo Energy

6.1. Biodiversity

Biodiversity is the variability among living organisms from all sources including inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part. This includes diversity within species, between species, and of ecosystems.³⁰

It is important that we stress the development of a comprehensive biodiversity baseline during the ESIA study, as this provides granular insight of the project site. What this entails is an in-depth analysis of the different species that inhabit the area, including vegetation, insects, birds, smaller animals, etc. This must also be cross referenced against the International Union for Conservation of Nature (IUCN) Red List of endangered species to ensure all species impacted by the project are protected.

Ecosystem services are the benefits that people, including businesses, derive from ecosystems, and are organised into four types:

- provisioning services, which are the products people obtain from ecosystems;
- regulating services, which are the benefits people obtain from the regulation of ecosystem processes;
- cultural services, which are the nonmaterial benefits people obtain from ecosystems; and
- supporting services, which are the natural processes that maintain the other services.

Developers should categorise their projects based on three considerations:³¹

- The legal conservation regime of the area, if any.
- The type of habitat (natural, semi-natural - or socio-ecosystems, urban);
- The biodiversity value of the habitat (criticality), also known as areas that provide ecosystem services such as the provision of food and fibre, air quality, soil formation, regulation of water supply, climate regulation, etc.

The project-level ESIA should consider direct and indirect project-related impacts on biodiversity and ecosystem services and identify any significant residual impacts. This process will consider relevant threats to biodiversity and ecosystem services, especially focusing on habitat loss, degradation and fragmentation, invasive of alien species^{32,33}, overexploitation, hydrological changes, nutrient loading and pollution.³⁴

Any impact on biodiversity and ecosystems needs to be either avoided or minimised through mitigation.³⁵

The following categorisation applies:³⁶

- Modified habitats are areas that may contain a large proportion of plant and/or animal species of non-native origin, and/or where human activity has substantially modified an area's primary ecological functions and species composition. IFC Performance Standard 6 applies to those areas of modified habitat that include significant biodiversity value.
- Natural habitats are areas composed of viable assemblages of plant and/or animal species of largely native origin, and/or where human activity has not essentially modified an area's primary ecological functions and species composition.
- Critical habitats are areas with high biodiversity value, including:³⁷
 - presence of critically endangered, endangered or vulnerable species, as defined by the IUCN Red List of threatened species and in relevant national legislation;
 - importance to the survival of endemic or restricted-range species, or unique assemblages of species;
 - required for the survival of migratory species or congregatory species;
 - required for the maintenance of biological diversity with significant social, economic or cultural importance to local communities;
 - required for the maintenance of ecosystem functioning and the provision of key ecosystem goods and services; and
 - key scientific value.

Project development in natural habitats and critical habitats should only be considered if no other viable alternatives within the region exist and the stakeholder consultation has established the views of stakeholders' including affected communities, with respect to the extent of conversion and degradation. Any conversion or degradation should be mitigated according to the mitigation hierarchy. Furthermore, the project shall not lead to measurable adverse impacts on those biodiversity values for which the critical habitat was designated, and on the ecological processes supporting those biodiversity values. A robust, appropriately designed, and long-term biodiversity monitoring and evaluation programme needs to be established for critical habitats.³⁸

The project shall not intentionally introduce any new alien species (not currently established in the country or region of the project) unless this is carried out in accordance with the existing regulatory framework for such introduction. As practicable, the project developer should take measures to eradicate such species from the natural habitats over which they have management control.³⁹

The views and perspectives of local stakeholders should be considered when defining the values attached to particular biodiversity and ecosystem.

The biodiversity assessment should follow the process of scoping, impact assessment and management as represented in Figure 4 below.

In the project-specific ESIA report, the E&S consultant should confirm whether and how the project does affect biodiversity. The project-specific ESIA should take place in three clear stages.⁴⁰ No assessment will be valid unless these stages have been completed in the right order:

1. Establishment of an adequate baseline of the original state of the project site and its area of influence with regards to all biodiversity aspects, proportionate with the project impacts and risks.
2. The assessment impacts of the various alternatives - both during the construction and operation phase - against the benchmark of the without-project scenario.
3. The consideration of a range of alternative project designs, including a without-project scenario.



Good practice considerations

- Check whether the project site is part of any protected area.
- If the proposed project site is within a wildlife reserve or buffer zone and the clearance of forest or acquisition of land is proposed, obtain written approval from the relevant authorities for the proposed activities.
- Make sure you record the biodiversity value of the site on the project-specific ESIA.
- Estimate whether any vulnerable or endangered species exist as part of the project-specific ESIA.
- Include biodiversity value determination and definition of ecosystem services as part of stakeholder engagement.

Complete a biodiversity monitoring plan (see example template in Table 6).

PARAMETER TO BE MONITORED	MITIGATION MEASURE	FREQUENCY	TARGET	REPORTING	RESPONSIBILITY
E.g. Sedimentation	Minimise soil clearance/maintain vegetation on project site	Weekly during construction	0% sedimentation	e.g. daily E&S monitoring sheet saved in a shared drive.	e.g. EHS Manager
E.g. Fish species population	Monitor impacts on population/relocation of species and team up with conservation efforts within the area	Monthly during construction and operational phases	Population degradation of 0%	e.g. daily E&S monitoring sheet saved in a shared drive. Provide summary data at the end of each month	e.g. a fish expert
E.g. Endangered flora species	Relocation of species and conservation efforts in place	Daily during construction	Population degradation of 0%	e.g. daily E&S monitoring sheet saved in a shared drive. Provide summary data at the end of each month	e.g. EHS Manager

Table 6: Example of a biodiversity monitoring plan template.

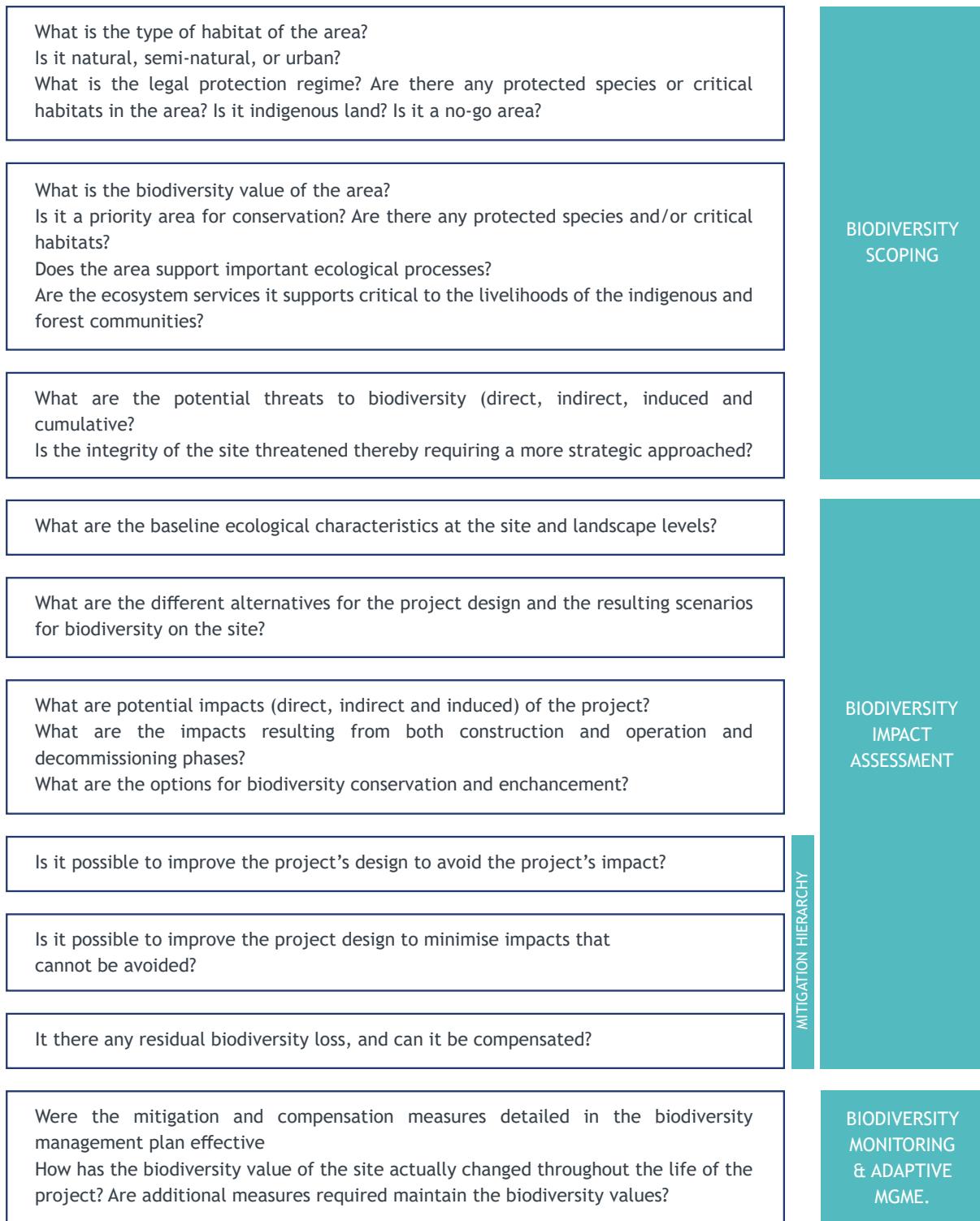


Figure 4: The Biodiversity Assessment Thought Process (Adapted from: EEB 2013).

Monitoring and evaluation programmes should consist of three levels:⁴¹

1. In-field monitoring of relevant biodiversity values.
2. Monitoring of the implementation and effectiveness of all relevant forms of mitigation measures. If a biodiversity offset is part of the mitigation strategy its success should be evaluated independently.
3. As appropriate, and especially in the case of semi-natural habitats, projects should also monitor levels of human activities having an impact on the biodiversity of the site (e.g. changes in agricultural or hunting practice).



Please fill in Section 6.1 of the ESMS Workbook based on the guidance provided above.

6.2. Management of ecosystem services

Developers should work to maintain the benefits from ecosystem services. Where the project has adverse effects on an ecosystem establish an ecosystem service baseline to identify priority ecosystem services, which are:

- those services on which project operations are most likely to have an impact and, therefore, which result in adverse impacts to affected communities; and/or
 - those services on which the project is directly dependent for its operations (e.g. water).
- When affected communities are likely to be impacted, they should participate in the determination of priority ecosystem services in accordance with the stakeholder engagement process ([see Section 1.7](#)).
 - Developers should minimise impacts on ecosystem services and implement measures that increase resource efficiency ([see Section 3](#)) of their operations. For example, a developer might plant vegetation in the surrounding areas of the plant to stabilise the soil as well as conserve endangered or medicinal flora species specific to the community and/or agricultural vegetation used in subsistence farming. The relocation and conservation of species can be applied to both flora and fauna to ensure fishing or hunting practices are still maintained to support the community, as well as demonstrate investment in cultural and traditional practices of the community.

In the ESIA report, the E&S consultant should confirm the project-specific impact to ecosystem services, if any.

Where feasible, an economic assessment (cost benefit analysis) of the biodiversity and ecosystem services should be carried out on the site, where possible with a monetary valuation of these benefits.



Good practice considerations

- Use stakeholder engagement as an opportunity to identify endangered species or species critical to the habitat, since any sampling of biodiversity carried out for the ESIA study will be at a single point in time and will not incorporate year-round population fluxes of different species.



Please fill in Section 6.1 of the ESMS Workbook based on the guidance provided above.

6.3. Sustainable management of living natural resources

Project developers should promote the sustainable management of living natural resources through the adoption of practices that integrate conservation needs and development priorities. This section is particularly relevant to biomass projects, which includes plantations.

- Developers of biomass plantations should apply credible and globally, regionally, or nationally recognised standards for sustainable management of living natural resources.
- Use independent verification or certification where applicable. Consider [Forest Stewardship Council](#), [Programme for the Endorsement of Forest Certification](#) or [Sustainable Forestry Initiative](#).

Note: REPP only invests in renewable biomass projects and follows the UNFCCC guidance on renewable biomass. To that end, biomass is considered “renewable” if:⁴²

- The land area it originates from a) remains a forest, and b) is sustainably managed; in particular, this requires that the level of carbon stocks on these land areas does not systematically decrease over time.
- The biomass originates from croplands and/or grasslands where the land area a) remains cropland and/or grasslands or b) is reverted to forest, and c) is sustainably managed.
- Any national or regional forestry, agriculture and nature conservation regulations are complied with.
- The biomass is a biomass residue and the use of that biomass residue in the project activity does not involve a decrease of carbon pools (in particular, dead wood, litter or soil organic carbon) on the land areas where the biomass residues are originating from.
- Biomass is the non-fossil fraction of an industrial or municipal waste.

Furthermore, the use of biomass from land converted from forest, other high-carbon stock areas and highly biodiverse areas, as well as legally protected and internationally recognised areas, is forbidden.

Sources of biomass that are forbidden include:

- Alien species with an invasive behaviour
- Any food crops, including residues
- Palm oil or by-products of the palm oil industry
- Genetically modified organisms

In accordance with the Convention on Biological Diversity, alien species are subspecies or lower taxon, introduced outside of their natural past or present distribution. This includes any part, gametes, seeds, eggs, or propagules of such species that might survive and subsequently reproduce. An invasive alien species are species whose introduction and/or spread threaten biological diversity.⁴³



Please fill in Section 6.3 of the ESMS Workbook based on the guidance provided above.

6.4. Supply chain

The identification and management of supply chain impacts on biodiversity and ecosystem services is an important consideration for developers of biomass project in particular.

Where the primary feedstock is purchased in a region that is known for significant conversion risk of natural and/or critical habitats, systems and verification practices should be adopted as part of the project developer's ESMS to evaluate its primary suppliers. This is especially, but not exclusively, relevant to feedstocks that are food or fibre commodities.



Good practice considerations

The systems and verification process includes:

- Identification of where the supply is coming from and the habitat type of this area.
- Ongoing review of the primary supply chains.
- Limiting procurement to those suppliers that can demonstrate that they are not contributing to significant conversion of natural and/or critical habitats (this may be demonstrated by delivery of certified product, or progress towards verification or certification under a credible scheme in certain commodities and/or locations).
- Where possible, require actions to shift the project developer's primary supply chain over time to suppliers that can demonstrate that they are not significantly adversely impacting these areas.



Please fill in Section 6.4 of the ESMS Workbook based on the guidance provided above.



Image source: upOwa



Image source: IPACC

Indigenous peoples are defined by the IFC as “social groups with identities that are distinct from mainstream groups in national societies, are often among the most marginalised and vulnerable segments of the population. In many cases, their economic, social, and legal status limits their capacity to defend their rights to, and interests in, lands and natural and cultural resources, and may restrict their ability to participate in and benefit from development.”

Indigenous peoples are particularly vulnerable if their lands and resources are transformed, encroached upon or significantly degraded. Their languages, cultures, religions, spiritual beliefs and institutions may also come under threat. This performance standard fosters full respect for human rights, dignity, aspirations, culture and natural resource-based livelihoods and applies to communities or groups of indigenous peoples who maintain a collective attachment, i.e., whose identity as a group or community is linked to distinct habitats or ancestral territories and the natural resources therein.

Furthermore, it may also apply to communities or groups that have lost collective attachment to distinct habitats or ancestral territories in the project area due to forced severance, conflict, government resettlement programmes, dispossession of their lands, natural disasters or incorporation of such territories into an urban area.

This includes:⁴⁴

- Communities of indigenous peoples who are resident upon the lands affected by the project as well as those who are nomadic or who seasonally migrate over relatively short distances, and whose attachment to ancestral territories may be periodic or seasonal in nature.
- Communities of indigenous peoples who do not live on the lands affected by the project, but who retain ties to those lands through traditional ownership and/or customary usage, including seasonal or cyclical use. This may include indigenous peoples resident in urban settings who retain ties to lands affected by a project.
- Communities of indigenous peoples who have lost collective attachment to lands and territories in the project area of influence, occurring within the concerned group members’ lifetime, as a result of forced severance, conflict, involuntary resettlement programmes by governments, dispossession from their lands, natural calamities or incorporation into an urban area but who retain ties to lands affected by a project.
- Groups of indigenous peoples who reside in mixed settlements, such that the affected indigenous peoples only form one part of the more broadly defined community.
- Communities of indigenous peoples with collective attachment to ancestral lands located in urban areas.

The considerations of the IFC Performance Standard around indigenous peoples should be applied during the project-specific ESIA process.

Be aware that projects may adversely impact indigenous peoples' identity, natural resource-based livelihoods (e.g. through water, grazing, hunting and fishing areas, forest, timber), food security and cultural survival (e.g. fuel wood, medicinal and herbal plants, craft materials, nomadic routes and seasonal uses). Engagement with the indigenous peoples is therefore required for the assessment of potential impacts.

Key objectives:

- Avoid adverse impacts.
- Where this is not possible, mitigate adverse impacts and establish development benefits in consultation with the indigenous people.
- Establish and maintain an ongoing relationship based on Informed Consultation and Participation (ICP) ([see Section 1.7.4.](#)) This is required for all projects whose influence area includes indigenous peoples. Integrate in stakeholder engagement and grievance mechanism process presented under [Section 1.7](#).
- Ensure free, prior, and informed consent of the affected communities of indigenous peoples.



Good practice considerations

Prepare an indigenous peoples plan that, together with the documents prepared by the responsible government agency, will address the relevant requirements of the performance standard. This should involve the following key elements:

- Establishment of an implementation plan, and documentation of the ICP process, stakeholder engagement and FPIC, where relevant.
- Description of the government-provided entitlements of affected indigenous peoples.
- Description of measures proposed to bridge any gaps between such entitlements and the requirements of the performance standard.
- Description of the financial and implementation responsibilities of the government agency and/or project developer.

The indigenous peoples management plan should, as a minimum, include the following elements:⁴⁵

- Baseline information from the E&S risks and impacts assessment process, which clearly profiles indigenous peoples in the project's influence area.
- An overview of the project's key impacts on indigenous peoples, including risks and opportunities, and recommended possible measures to mitigate adverse impacts.
- Assessments of circumstances requiring FPIC and alternative project design/siting to avoid adverse impacts.
- Information disclosure, consultation and participation, including results of consultations during the E&S risks and impacts assessment process and future engagement.
- Mitigation and management measures, including benefit-sharing arrangements and community-based natural resource management.
- Grievance redress mechanism.
- Costs, budget, timetable and organisational responsibilities.
- Monitoring, reporting and evaluation.



Please fill in Section 7 of the ESMS Workbook based on the guidance provided above.

7.1. Circumstances requiring free, prior and informed consent

A process of FPIC with the affected communities of indigenous peoples is required with regard to project design, implementation and expected outcomes if these are associated with any of the potentially adverse impacts identified below:⁴⁶

- Impacts on lands and natural resources subject to traditional ownership or under customary use.
- Relocation of indigenous peoples from lands and natural resources subject to traditional ownership or under customary use.
- Significant impacts on critical cultural heritage that is essential to the identity and/or cultural, ceremonial, or spiritual aspects of indigenous peoples' lives, including natural areas with cultural and/or spiritual value such as sacred groves, sacred bodies of water and waterways, sacred trees and sacred rocks.
- Use of cultural heritage, including knowledge, innovations or practices of indigenous peoples for commercial purposes.

FPIC builds on and expands the ICP process described in [Section 1.7.4](#), and should be established through good faith negotiation between the project developer and the affected communities of indigenous peoples. As the project developer you should document both the mutually accepted process between your company and the affected communities of indigenous peoples, and evidence of agreement between the parties at the outcome of the negotiations. FPIC does not necessarily require unanimity.



Good practice considerations

Project developers should take the following steps:⁴⁷

- Document efforts to avoid and otherwise minimise the area of land proposed for the project.
- Document efforts to avoid and otherwise minimise impacts on natural resources and natural areas of importance to indigenous people.
- Identify and review all property interests and traditional resource uses prior to purchasing or leasing land.
- Assess and document the resource use without prejudicing any indigenous peoples' land claim. The assessment of land and natural resource use should be gender-inclusive and specifically consider women's roles in the management and use of these resources.
- Ensure that affected communities of indigenous peoples are informed of their land rights under national law, including any national law recognising customary use rights.
- Offer affected communities of indigenous peoples compensation and due process in the case of commercial development of their land and natural resources, together with culturally appropriate sustainable development opportunities, including:
 - Providing land-based compensation or compensation-in-kind in lieu of cash compensation where feasible;
 - Ensuring continued access to natural resources, identifying the equivalent replacement resources or, as a last option, providing compensation and identifying alternative livelihoods if project development results in the loss of access to and the loss of natural resources independent of project land acquisition;
 - Ensuring fair and equitable sharing of benefits associated with project usage of the resources where the project developer intends to utilise natural resources that are central to the identity and livelihood of affected communities of indigenous peoples and their usage thereof exacerbates livelihood risk; and
 - Providing indigenous peoples with access, usage and transit on land it is developing subject to overriding health, safety and security considerations.

Relocation requirements:

- Consider feasible alternative project designs to avoid the relocation of indigenous peoples from their lands (i.e. traditional ownership or under customary use.)
- If relocation is unavoidable the project can only proceed when a FPIC has been obtained.
- Any relocation should be consistent with the requirements described in [Section 5.1](#).

Considerations regarding critical cultural heritage:

- Avoid impact on critical cultural heritage that is essential to the identity and/or cultural, ceremonial or spiritual aspects of indigenous peoples' lives.
- Where significant project impacts on critical cultural heritage are unavoidable, as the project developer you should obtain the FPIC of the affected communities of indigenous peoples.
- Where a project proposes to use the cultural heritage (including knowledge, innovations or practices) of indigenous peoples for commercial purposes, project developers should inform the indigenous peoples of:
 - their rights under national law;
 - the scope and nature of the proposed commercial development;
 - the potential consequences of such a development; and
 - obtain their FPIC.

Developers should also obtain indigenous peoples' FPIC and ensure fair and equitable sharing of benefits from commercialisation of such knowledge, innovation or practice consistent with the customs and traditions of the indigenous peoples.



Please fill in Section 7.1 of the ESMS Workbook based on the guidance provided above.

7.2. Mitigation and development benefits

Various factors, such as the nature of the project, the project context and the vulnerability of the indigenous peoples, should be assessed to determine how these communities should benefit from the project.

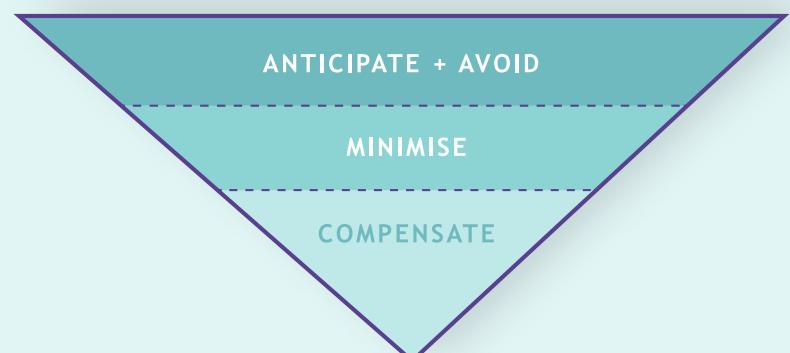
The determination, delivery and distribution of compensation and other benefit-sharing measures to indigenous peoples should take account of the laws, institutions and customs of these communities, as well as their level of interaction with mainstream society.

Project developers must ensure that the following mitigation hierarchy applies:

1. Anticipate and avoid.
2. Where avoidance is not possible, minimise.
3. Where residual impacts remain, compensate/offset impacts to affected communities and the environment.

In addition, you should:

- Ensure the timely and equitable delivery of agreed measures to affected communities of indigenous peoples; and
- Document the process.





Please fill in Section 7.2 of the ESMS Workbook based on the guidance provided above.

7.3. Private sector responsibilities

Where the government has a defined role in the management of indigenous peoples issues in relation to the project, you as the project developer should collaborate with the responsible government agency to the extent feasible to achieve outcomes that are consistent with the objectives of the performance standard. Where government capacity is limited, project developers should play an active role during planning, implementation and monitoring of activities to the extent permitted by the agency.



Image source: IPACC



Further reading:

- The Indigenous Peoples of Africa Co-ordinating Committee [website](#)
- LandMark's [Global Platform of Indigenous and Community Lands](#)
- IFC's [General Note 7. Indigenous People, including Annex A: Indigenous Peoples Plan](#) (2012)

This performance standard (PS8) recognises the importance of cultural heritage for current and future generations and is consistent with the Convention Concerning the Protection of the World Cultural and Natural Heritage. The objective of PS8 is to protect cultural heritage in project design and execution and to promote the equitable sharing of benefits from the use of cultural heritage. The applicability of PS8 is established during the project-specific ESIA.

Cultural heritage refers to:⁴⁸

- tangible forms of cultural heritage, such as concrete moveable or immovable objects, property, sites, structures or groups of structures, which have archaeological (prehistoric), paleontological, historical, cultural, artistic or religious values;
- unique natural features or tangible objects that embody cultural values, such as sacred groves, rocks, lakes, and waterfalls; and
- certain instances of intangible forms of culture that are proposed to be used for commercial purposes, such as cultural knowledge, innovations and practices of communities embodying traditional lifestyles.

8.1. Protection of cultural heritage in project design and execution

As the project developer, you are expected to ensure compliance with applicable laws on the protection of cultural heritage. This involves identifying and protecting cultural heritage by ensuring that internationally recognised practices for the protection, field-based study and documentation of cultural heritage are implemented.

Developers are expected to retain competent professionals to assist in the identification and protection of cultural heritage. Where a project may affect cultural heritage, developers should consult with affected communities within the host country who use, or have used within living memory, the cultural heritage for long-standing cultural purposes. Developers should use the stakeholder engagement process with the local community to identify any potential cultural heritage.

The following mitigation hierarchy applies:

- Favour avoidance.
- Where avoidance is not feasible, minimise adverse impacts and implement restoration measures, *in situ*, that ensure maintenance of the value and functionality of the cultural heritage, including maintaining or restoring any ecosystem processes needed to support it.
- Where restoration *in situ* is not possible, restore the functionality of the cultural heritage in a different location, including the ecosystem processes needed to support it.
- The permanent removal of historical and archaeological artefacts and structures must only be carried out if the following conditions are met:
 - There are no technically or financially feasible alternatives to removal.
 - The overall benefits of the project conclusively outweigh the anticipated cultural heritage loss from removal.
 - Any removal of cultural heritage is conducted using the best available technique.
 - The affected communities are compensated for any loss of that tangible cultural heritage.

Critical cultural heritage consists of one or both of the following:⁴⁹

- The internationally recognised heritage of communities who use, or have used within living memory, the cultural heritage for long-standing cultural purposes.
- Legally protected cultural heritage areas, including those proposed by host governments for such designation.

Project developers must not remove, significantly alter or damage critical cultural heritage. In exceptional circumstances when impacts on critical cultural heritage are unavoidable, the developers are required to use a process of Informed Consultation and Participation (ICP) of the affected communities as described in [Section 1.7.4](#).

Prescribed steps taken to identify cultural heritage and protect it, including:

- Legal requirements
- Local considerations
- Cultural heritage investigation and surveys
- Development of chance find procedures
 - A chance find procedure is a project-specific procedure that outlines the actions to be taken if previously unknown cultural heritage is encountered, and
 - This procedure will should be applied in the event that cultural heritage is discovered during project construction or operation.
 - As a rule, developers must not disturb any chance find until an assessment by competent professionals and community approval is made and actions consistent with the requirements of PS8 are agreed.
- Community access, whereby developers allow continued access to the cultural site or provide an alternative access route, in accordance with the consultation process and subject to overriding health, safety and security considerations
- Roles and responsibilities
- Training and awareness raising
- If no cultural heritage is identified within the project footprint, this should be stated in the project-specific ESIA.



Please fill in Section 8 of the ESMS Workbook based on the guidance provided above.



Further reading:

IFC's [General Notice 8. Cultural Heritage](#) (2012)

IFC's [Guidance Notes: Performance Standards on Environmental and Social Sustainability](#) (2019)

References

Business and Human Rights Resource Centre's [Renewable Energy & Human Rights Benchmark. Key Findings from the Wind & Solar Sectors](#) (2020)

Convention on Biological Diversity's [Alien species that threaten ecosystems, habitats or species](#) (footnote to Guiding Principles COP 6 Decision VI/23 (2002))

European Investment Bank's [Environmental and Social Standards](#)

IFC's [Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emerging Markets](#) (2007)

IFC's [General Note 7. Indigenous People](#) (2012)

IFC's [Performance Standards on Environmental and Social Sustainability](#) (2012)

IFC's [ESMS Implementation Handbook](#) (2015)

IFC's [ESMS Toolkit - General Version 2.1](#) (2015)

IFC's [Good Practice Note: Environmental, Health, and Safety Approaches for Hydropower Projects](#) (2018)

IFC's [Good Practice Handbook: Land Acquisition and Resettlement](#) (2019, draft version)

IISD's [Green Conflict Minerals](#) - interactive map (2019)

IFC's [Guidance Notes: Performance Standards on Environmental and Social Sustainability](#) (2019)

ILO's [Using the ILO Code of Practice on HIV/AIDS and the world of work](#)

LandMark's [Global Platform of Indigenous and Community Lands](#)

[OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas](#)

Office of the United Nations High Commissioner for Human Rights' (OHCHR) [Guiding Principles on Business and Human Rights: Implementing the United Nations “Protect, Respect and Remedy” Framework](#) (2011)

Solar Scorecard's [Solar Manufacturer Ratings](#)

The Indigenous Peoples of Africa Co-ordinating Committee [website](#)

UNFCCC's [Definition of renewable biomass](#) (Annex 18, CDM Executive Board 23 Report)

World Bank Group's [Environmental, Health and Safety Guidelines](#) (2007)

Footnotes

¹ 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 aged 13 and 14 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 jeopardise children's physical, mental or moral health and safety should not be done by anyone under the age of 18.

² IFC's ESMS Implementation Handbook (2015)

³ Guidance modified from Green Climate Fund guidance on risk categorisation (2019)

⁴ IFC's ESMS Implementation Handbook (2015)

⁵ IFC's ESMS Implementation Handbook (2015)

⁶ IFC's Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emergent Markets (2007)

⁷ EIB's Environmental and Social Handbook. Standard No. 10 (2008)

⁸ IFC's Performance Standards on Environmental and Social Sustainability. PS 1 (2012)

⁹ EIB's Environmental and Social Handbook. Standard No. 7 (2018)

¹⁰ IFC's Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emergent Markets (2007)

¹¹ EIB's Environmental and Social Handbook. Standard No. 10 (2018)

¹² IFC's Performance Standards on Environmental and Social Sustainability. PS 1 (2012)

¹³ EIB's Environmental and Social Handbook. Standard No. 10. (2018)

¹⁴ IFC's Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emergent Markets (2007)

¹⁵ IFC 's Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emergent Markets (2007)

¹⁶ IFC's Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emergent Markets (2007)

¹⁷ EIB's Environmental and Social Handbook. Standard No. 10 (2018)

¹⁸ IFC's ESMS Toolkit General (2015)

¹⁹ EIB's Environmental and Social Handbook. Standard No. 10 (2018)

²⁰ IFC's Performance Standards on Environmental and Social Sustainability. PS 2. (2012) and World Bank Group's Environmental, Health and Safety Guidelines (2007)

²¹ World Bank Group's Environmental, Health and Safety Guidelines. Occupational Health and Safety Guidance (2007)

²² Regulation (EU) 2017/821 of the European Parliament and of the Council on non-binding guidelines for the identification of conflict-affected and high-risk areas and other supply chain risks

²³ IFC's Performance Standards on Environmental and Social Sustainability. PS 3 (2012)

²⁴ World Bank Group's Environmental, Health and Safety Guidelines (2007)

²⁵ GOGLA's E-waste Toolkit Module 1 Briefing Note (2019)

²⁶ IFC's Performance Standards on Environmental and Social Sustainability. PS 4 (2012) and World Bank Group's Environmental, Health, and Safety Guidelines (2007)

²⁷ IFC's Performance Standards on Environmental and Social Sustainability. PS 5 (2012)

²⁸ IFC's Draft Good Practice Handbook: Land Acquisition and Resettlement (2019)

²⁹ IFC's Performance Standards on Environmental and Social Sustainability. PS 5 (2012)

³⁰ IFC's Performance Standards on Environmental and Social Sustainability. PS 5 (2012)

³¹ EBI's Environmental and Social Handbook. Standard No. 3 (2018)

³² In accordance with Convention on Biological Diversity, invasive alien species are species whose introduction and/or spread threaten biological diversity. (CBD, Guiding Principles COP 6 Decision VI/23, Annex, footnote i. to the Introduction. 2002)

³³ In accordance with Convention on Biological Diversity alien species is a subspecies or lower taxon, introduced outside its natural past or present distribution; includes any part, gametes, seeds, eggs, or propagules of such species that might survive and subsequently reproduce. (CBD, Guiding Principles COP 6 Decision VI/23, Annex, footnote i. to the Introduction. 2002)

³⁴ IFC's Performance Standards on Environmental and Social Sustainability. PS 5 (2012)

³⁵ EBI Environmental and Social Handbook. Standard No. 3 (2018). For more information, see <https://www.forest-trends.org/publications/standard-on-biodiversity-offsets/>

³⁶ IFC's Performance Standards on Environmental and Social Sustainability. PS 6 (2012)

³⁷ EBI's Environmental and Social Handbook. Standard No. 3 (2018)

³⁸ IFC's Performance Standards on Environmental and Social Sustainability. PS 6 (2012)

³⁹ IFC's Performance Standards on Environmental and Social Sustainability. PS 6 (2012)

⁴⁰ EBI's Environmental and Social Handbook. Standard No. 3 (2018)

⁴¹ EBI's Environmental and Social Handbook. Standard No. 3 (2018)

⁴² CDM's Definition of renewable biomass

⁴³ CBD, Guiding Principles COP 6 Decision VI/23, Annex, footnote i. to the Introduction. 2002)

⁴⁴ IFC's Guidance Notes: Performance Standards on Environmental and Social Sustainability. Note 7 Indigenous Peoples (2012)

⁴⁵ IFC's Guidance Notes: Performance Standards on Environmental and Social Sustainability Note 7 Indigenous Peoples (2017)

⁴⁶ IFC's Guidance Notes: Performance Standards on Environmental and Social Sustainability Note 7 Indigenous Peoples (2007)

⁴⁷ IFC's Performance Standards on Environmental and Social Sustainability. PS 7 (2012)

⁴⁸ IFC's Performance Standards on Environmental and Social Sustainability. PS 8 (2012)

⁴⁹ IFC's Performance Standards on Environmental and Social Sustainability. PS 8 (2012)



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