ENVIRONMENTAL AND SOCIAL SAFEGUARD POLICY OF AEPC

1. Introduction

Alternative Energy Promotion Centre (AEPC) has brought into effect this Environmental and Social Safeguards (ESS) Policy to assure that the AEPC's activities are executed in such a way that the environmental and social impacts are minimized to the extent possible through appropriate mitigation measures if it is not possible to avoid them completely. This policy recognizes and ensures the prevalence of Nepal's Environmental Protection Act and Environment Protection Rules wherever applicable.

A key principle of AEPC's ESS Policy is to avoid, reduce and mitigate any harm to the environment and society by incorporating environmental and social concerns as an integral part throughout AEPC's project cycle. This Policy applies throughout the project cycle from design and implementation to monitoring and evaluation. This policy is adopted to ensure environment friendly and socially acceptable project execution both at the project design and implementation phases.

2. ESS Policy Statement

Socially accepted and sustainably exploited renewable energy resources are the keys to achieve AEPC's mission "to make renewable energy mainstream resource through increased access, knowledge and adaptability contributing for the improved living conditions of people in Nepal" and shall be built-in to AEPC's project design and execution framework. AEPC looks integration of ESS to its project cycle as an opportunity which shall be identified during project design, recognized during project implementation and evaluated post implementation.

AEPC supported projects shall ensure the adherence to the ESS Principles and put efforts towards: a) proper identification of the ESS issues, b) avoid, to the extent possible, the ESS issues and where unavoidable, adopt appropriate minimization, mitigation and compensation measures and c) strengthen stakeholders' engagement in identifying the issues and devising the minimization, mitigation and/or compensation measures. In order to achieve this, AEPC shall strengthen its in-house capacity and the capacity of its project implementation partners.

AEPC shall support the projects for execution if they comply with all national statutory requirements and the international convention/treaties to which Nepal is a party, if the requirements of such convention/treaty are attracted to the project under consideration. All the grievances related to the project execution on environmental and social grounds shall be recorded, codified and reported.

3. ESS Policy Objectives

AEPC's social and environmental safeguard principles have been developed in coherence with International Finance Corporation's (IFC) Performance Standards (2012). While the Principles adopted align with IFC's performance standards they have been modified to suit the needs and scale of AEPC's projects, programs, and activities. While AEPC shall work towards achieving the following ESS Policy objectives, Annex-1 highlights the operational principles for each policy objective.

- **ESS Policy Objective 1**: To ensure the project design and implementation are carried out in environmentally sustainable and socially acceptable manner abiding by the national statutory requirements and respective international treaty/convention to which Nepal is a party.

- **ESS Policy Objective 2:** To ensure that the project implementation is carried out in a way that the alteration to natural environment is avoided to the extent possible. If such alterations are unavoidable, they are decided with consent of the local community affected by such alterations.

- **ESS Policy Objective 3:** To ascertain that design and implementation of any project activity will recognize the human right of the people residing in the project area and respect their right to say "no" for exploitation of any natural resources or alteration of any physical resources which they have been using.

- **ESS Policy Objective 4:** To ensure that working conditions are safe and conducive, and the workplace is designed in a way that it doesn't pose any hazard of occupational or community significance.

- **ESS Policy Objective 5:** To promote equal employment opportunities for men and women, and discourage child labors during execution of any project component.

- **ESS Policy Objective 6:** To promote the conservation of living natural resources and discourage activities entailing environmental pollution.

- **ESS Policy Objective 7:** To discourage any activity that contributes to GHG emission in post execution and/or increase climate vulnerability.

4. ESS Policy Implementation

AEPC adopts the following principles to implement this policy:

- Mainstream ESS Principles in AEPC's activities and operations;
- Develop ESS risk procedures and tools;
- Assign responsibility in implementation of the ESS policy internally;
- Improve public consultation and information disclosure mechanisms;
- Build partnerships to address ESS risks and opportunities; and
- Adopt inclusive and transparent reporting.

An overview of the implementation approach is described below.

4.1 ESS Screening

All projects are screened for ESS risks using the AEPC's Environmental and Social Management Framework (annex 2). This framework helps in the identification, assessment, and management of ESS issues. Projects assessed shall be categorized as follows on the environmental and social safeguards point of view.

- **Category A –** Projects with the potential to cause significant adverse social and/or environmental impacts that are diverse, irreversible or unprecedented.
- **Category B –** Projects with the potential to cause limited adverse social and/or environmental impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures.
- **Category C –** Projects that include activities with minimal or no risks of adverse social and environmental consequences.

Appropriate consultations with internal and external stakeholders will be carried out to ensure risks are adequately identified, assessed and categorized.

Category A projects should not currently be considered for AEPC support (as an implementing or executing agency). As such, if a project is categorized as a Category A project during concept development, work should be discontinued at that point.

4.2 Roles and Responsibilities

Overall responsibility for implementing this ESS Policy lies with AEPC. AEPC will assign a staff (Director Level) as a focal point to take upon the specific responsibilities related to ESS risk management. The director will be assisted by respective managers heading the technical components to confirm the implementation of the ESS policy across all technologies implemented. Apart from the component managers, director will be assisted by ESS experts. ESS experts will undertake ESS due diligence to assess the capacity of project developers and represent the Technical Review Committee (TRC) meetings to assess the adequacy of the ESS component in the project design.

4.3 Monitoring, Evaluation, and Reporting

ESS issues will be incorporated into the monitoring, evaluation and reporting of projects and activities, as specified in the AEPC's reporting matrix (see annex 8 of the SOP). Periodic and annual performance reports and end of project closure reports will include information on ESS risk mitigation measures, and this information will be reported to senior management.

4.4 Grievance Mechanism

AEPC's complaint handling mechanism provides people affected by any projects with an accessible, transparent, fair and effective process for raising complaints about environmental or social harms caused by any such project.

Stakeholders can lodge a complaint via AEPC's website (www.aepc.gov.np*)*. Formal complaints can also be forwarded to the grievance desk (grievance@aepc.gov.np) who shall handle as appropriate. Appropriate authority levels as specified in AEPC's governance structure will handle all complaints, in a professional and timely way.

5. Changes to this E&S Safeguards Policy

AEPC will review this ESS Policy periodically to ensure compliance with relevant national and international laws and alignment with requirements of development partners and other funding agencies. The review will also ensure that the overall approach to assessing and managing E&S risk remains relevant and aligns with global best practices and standards.

ANNEX-1: ESS Policy Objective and Operational Principles

SN	ESS Policy Objective	Operational Principles	Applicable IFC PS
1.	To ensure the project design and implementation are carried out in environmentally sustainable and socially acceptable manner abiding by the national statutory requirements and respective international treaty/convention to which Nepal is a party.	▪ Identify the scope for project's environmental assessment requirement in accordance with Schedule 1 and Schedule 2 of the Environmental Protection Rules of Nepal. ▪ Use screening and project categorization matrix (Annex-2) to identify ESS risk category (Category-A, Category-B or Category-C) of the project under consideration using. ▪ Perform preliminary stakeholders' consultation meeting to inform them about the project- scope and scale of project, siting of project components, time and costs required to implement project. ▪ Evaluate potential physical, biological and socio-economic impacts of the proposed project including potential human health and safety impacts. ▪ Assess the alternatives to the project to ensure that the proposed project is best alternative considering the environmental and social concerns. ▪ Propose minimization, mitigation and compensation measures appropriately and highlight the costs involved. ▪ Prepare Environmental Management Plan to ensure that the role of implementation of proposed minimization, mitigation and compensation measures are defined. ▪ Communicate the environmental assessment report to the stakeholders through appropriate means and conduct a final stakeholders' meeting to inform them about the environmental impacts identified, mitigation measures proposed and role defined for the implementation of the proposed mitigation measure.	PS-1: Assessment and Management of Environmental and Social Risks and Impacts.
2.	To ensure that the project implementation is carried out in a way that the alteration to natural environment is avoided to the extent possible. If such alterations are unavoidable, they are decided with	▪ Strictly avoid conversion/alteration of natural habitats that fall under the legally protected areas, officially proposed for protection, identified by authoritative sources for their high conservation value, or recognized as protected by traditional local communities. ▪ If the proposed area doesn't fall under any of the conditions mentioned above, proceed with the project getting prior consent for the proposed alterations to the natural environment from the resident locals or their recognized representative.	PS-6: Biodiversity Conservation and Sustainable Management of Living Natural Resources

	consent of the local community affected by such alterations.	▪ For the purpose of siting of project components, give preference to the lands that are already converted or degraded or are not significant from the biodiversity or agro-biodiversity point of view. ▪ Local residents of the project area are informed well before the project is commissioned regarding the placement of project structures and alterations proposed to the natural environment and developer has received consent for that.	
3.	To ascertain that design and implementation of any project activity will recognize the human right of the people residing in the project area and respect their right to say "no" for exploitation of any natural resources or alteration of any physical resources which they have been using.	▪ Strictly avoid the project that involves any involuntary resettlement of the affected families. ▪ Strictly avoid the project that involves any sort of "livelihood threat" to the local communities reliant on specific natural resource and the specific community is not willing to give up using those resources. ▪ Strictly avoid the project that involves any sort of demolition or relocation of physical resource that holds cultural, historic or ethnic significance and the community using it don't give consent for that. ▪ If the natural or physical resources discussed above are noted, the community shall be informed about the changes expected after project implementation, anticipated impacts and compensation measures. Once the specific community provides consent for that it shall be documented separately as the "Vulnerable Community Development Plan" and the project implementation unit shall acknowledge it separately.	PS-5: Land Acquisition and Involuntary Resettlement PS-7: Indigenous Peoples PS-8: Cultural Heritage
4.	To ensure that working conditions are safe and conducive, and the workplace is designed in a way that it doesn't pose any hazard of occupational or community significance.	▪ Ensure ergonomically safe construction works and provide protective gears to the construction workers during work. ▪ Ensure adequacy of basic amenities like safe drinking water, rest-rooms and change rooms. ▪ Human waste from the project site will be contained at site itself and their surface/sub-surface drainage will be prevented.	PS-2: Labor and Working Conditions PS-4: Community Health, Safety, and Security
5.	To promote equal employment opportunities for men and women, and discourage child labors during execution of any project component.	▪ Employment of staffs in a project will ensure the highest level of gender balance to the extent possible. ▪ Ensure there is no discrimination regarding the remuneration of men and women employed for the project in comparable positions. Women are privileged with associated maternity and medical exemptions. ▪ Conduct age verification of the construction worker before employing	PS-2: Labor and Working Conditions

		them for any purpose.	
6.	To promote the conservation of living natural resources and discourage activities entailing environmental pollution.	▪ Natural living resources will be protected to the extent possible. If not, efforts shall be put to recreate the natural environment. ▪ Preventive actions shall be taken towards pollution. If the preventive measures are not possible, pollution arising from the project site will be contained at the site and treatment will be done, if required.	PS-3: Resource Efficiency and Pollution Prevention
7.	To discourage any activity that contributes to GHG emission in post execution and/or increase climate vulnerability.	▪ Strictly avoid any project activity that involves GHG emission post project execution. ▪ Strictly avoid project activity that increased vulnerability of a community to the climate induced disasters.	

ANNEX-2: Environment and Social Management Framework

Screening and Project Categorization

Screening

The environmental and social screening has to be carried out for renewable energy technologies which are considered to have environmental and social impacts, but the extent may be minor impacts. Specially, household technologies have negligible negative environmental and social impacts. The purpose of the screening process is to:

- determine whether the proposed RETs are likely to have potential negative environmental and social impacts;
- to establish the level of environmental/social assessment required,
- to help the proponent, users committee to understand environmental issues related to the RETs before they are considered for implementation, and
- to assist in the decision making process

Categorization

Category A Projects: A proposed project is classified as Category A if it is likely to have potentially significantly adverse environmental impacts. These impacts may affect an area broader than the sites or facilities subject to physical works. An EIA level study shall be required for Category A project. Furthermore, Environment Protection Rules 1997, schedule 2 lists the projects that require undertaking of EIA study. The RETs promoted by AEPC would have very low chance to fall under this category.

From social perspective, sub-projects that will affect more than 50 people due to involuntary land taking and/or physical relocation or losing 10% or more of their productive (income-generating) assets, such projects fall under Category A projects and a full Resettlement Action Plan (RAP) must be prepared.

Category B Projects: Usually the impacts are assessed to be less significant as these are site-specific; and irreversible; and in most cases mitigation measures can be designed and implemented more readily than for Category A projects and subjected to limited EIA. Environment Protection Rules 1997, Schedule 1 lists the possible projects that require undertaking IEE level study.

From social perspective, sub-projects that will affect less than 50 people as a result of physical displacement due to involuntarily land taking or lose less than 10% of their productive (income-generating) assets, such projects fall under Category B and an abbreviated RAP shall be prepared.
AEPC will ensure to disclose ESS documents at-least 30 days before the decision of financing is made. This provision will be applied to the executing entity.

Category C Projects: The proposed RET is classified as Category C if it is likely to have minimal or no adverse environmental impacts. Beyond screening, no further environmental action is required for a Category C projects.

For the projects which fall under Category C, but not fall under threshold criteria of EPR 1997 shall not require undergoing any environmental/social assessments or preparation of respective safeguard documents as per provision of GoN. However, minimal environmental impacts can still be

expected from category C projects, it is recommended that a brief environmental and social management plan (ESMP) shall be prepared for RET projects.

Safeguard Document to be prepared

The different safeguard documents shall be prepared for individual RET projects in accordance with respective screening category. The safeguard document shall be prepared during detailed design or detailed feasibility study phase. The safeguard documents especially for category B and Category A shall be disclosed to public through AEPC website or respective project website, if available.

Environmental and Social Management Plan (ESMP) for Category C projects: This document shall be prepared for the RET projects falling under category C. The ESMP shall essentially contain description of project and location and baseline environmental and social condition. The ESMP shall also include, inter alia, the following: (i) Alternatives - alternative measures for avoiding, minimizing, controlling adverse impacts (or for enhancing beneficial impacts); (ii) Mitigation -site-specific, cost effective and detailed measures for each impact that will reduce the identified adverse impact to acceptable levels; (iii) Capacity Development and Training/ awareness - specific and targeted training / awareness/ capacity building, if necessary (targeted to, for example, subproject staff, contractors, and community groups); (iv) Implementation Schedule and Cost Estimates - For all mitigation and capacity development. The ESMP must be integrated into the project's plan and design, budget, specifications, cost estimated, bid documents, contract/agreement clauses. The ESMP shall also include the site specific monitoring plan illustrating indicators of monitoring, frequency, time of action and monitoring responsibility.

Initial Environmental Examination (IEE) study Report for Category B projects: RETs under category B projects during environmental screening shall be required to prepare IEE report during detailed design/detailed feasibility study phase. The procedural steps including preparation of Terms of Reference, public notice and public consultation, shall be conducted as per Environment Protection Rules, 1997 while conducting the IEE study and shall be approved by concerned ministry. The report shall be prepared as per Schedule 5 related to Rule 7. In case of donor funded projects having specific environmental requirement, the same shall also be followed.

Environmental Impact Assessment (EIA) study Report for Category A projects: Those RETs which fall under category A during environmental screening shall be required to prepare EIA study report during detailed design/detailed feasibility study phase. The procedural steps including preparation of Scoping Document and Terms of Reference, public notice and public consultation, public hearing, shall be conducted as per Environment Protection Rules, 1997 while conducting the EIA study and shall be approved by Ministry of Population and Environment (MoPE) through concerned ministry. The report shall be prepared as per Schedule 6 related to Rule 7. In case of donor funded projects having specific environmental requirements, the same shall also be followed.

Resettlement Action Plan (RAP) and Abbreviated Resettlement Action Plan (ARAP): During social screening, if the proposed project refers involuntary resettlement and dislocation, RAP (Category A) and ARAP (Category B) document shall be prepared. RAP and ARAP shall essentially consist of information of project affected families/households and project affected people, social impact caused by the project (involuntary land taking and resettlement), its mitigation measures, entitlement framework, capacity development and skill enhancement measures etc.

Vulnerable Community Development Plan (VCDP) or Indigenous People Plan (IPP): If the involuntary land acquisition and involuntary resettlement imparts to vulnerable community and/indigenous community, VCDP and/IPP shall be prepared along with RAP or ARAP. Ensure that project engages in free, prior, and informed consultation with the vulnerable community wherever they are affected. The main purpose of preparing specific VCDP in addition to RAP/ARAP is to ensure project benefits are accessible to the vulnerable community living in the project area and to avoid any kind of adverse impact on the vulnerable community to the extent possible and if unavoidable ensure that adverse impacts are minimized and mitigated.

Implementation of Safeguard Measures

After preparation and approval of respective safeguard measures against the project category, the commitments and mitigation measures shall actually be implemented during construction and operation phase. The mitigation measures and enhancement measures, if any, shall strictly be implemented by respective responsible authority.

Monitoring

The proponent(s) and user committees will be responsible for regular monitoring and reporting of implementation of mitigation measures. The AEPC, from time to time, may conduct monitoring on sample basis. AEPC can appoint third party consultant/individual consultant for periodic monitoring of safeguard implementation.

Environmental and Social Screening Checklist

Environmental Screening Checklist

1. Project Description

SN	Description	Details
1	Name of the project	
2	Address	
3	Technology	
4	Installed capacity	
5	Total land use for project installation	
6	Total project cost	

2. Project Location

2.1 Does the project facilities adjacent to or within the following area?

SN	Location	Yes	No	Remarks
1	Protected Area			
2	Buffer zone of protected area			
3	Community forest			
4	Special area for protecting biodiversity			
5	Private forest			
6	Government forest			
7	Religious forest			
8	Leasehold forest			

9	Cultural heritage site			
10	Unique or aesthetically valuable land or water form			
11	Range of endangered or threatened animals and birds			
12	Wetland			
13	Area used by indigenous peoples			

3. Potential Environmental Impacts

Does the project cause following environmental impacts?

SN	Location	Yes	No	Remarks
1	Short-term construction impacts such as soil erosion, deterioration of water and air quality, noise and vibration from construction equipment?			
2	Disturbance of large areas due to material quarrying?			
3	Disposal of large quantities of construction spoils?			
4	Impounding of a long river stretch?			
5	Dryness (less than 50% of dry season mean flow) over a long downstream river stretch?			
6	construction of permanent access road near or through forests			
7	Clearing of large forested area for ancillary facilities and access road?			
8	creation of barriers for migratory land animals			
9	Construction of permanent access road near or through forests?			
10	Loss of precious ecological values due to flooding of agricultural/forest areas, and wild lands and wildlife habitat; destruction of fish spawning/breeding and nursery grounds?			
11	Deterioration of downstream water quality due to anoxic water from the reservoir and sediments due to soil erosion?			
12	Loss or destruction of unique or aesthetically valuable land or water forms?			
13	Loss of migratory fish species due to barrier imposed by the dam?			
14	Risks and vulnerabilities related to occupational health and safety during project construction and operation?			
15	Social conflicts if workers from other regions or countries are hired?			
16	Uncontrolled human migration into the area, made possible by access roads and transmission lines?			
17	Disproportionate impacts on the poor, women, children or other vulnerable groups?			
18	Community health and safety risks due to the transport, storage, and use and/or disposal of materials likely to create physical, chemical and biological hazards?			
19	Risks to community safety due to both accidental and natural hazards during project construction, operation and decommissioning			
20	Loss of productive land			

Social Screening Checklist

1. Project Description

SN	Description	Details
1	Name of the project	
2	Address	
3	Technology	
4	Installed capacity	
5	Total land use for project installation	
6	Total project cost	

2. Types of land use for the project installation

SN	Types of land	Yes	No	Remarks
1	Private land			
2	Public land			
3	Government land			
4	Leasehold land			
5	Others (if any)			

2.1 What is the type of land procurement? (Yes/ no)

SN	Procurement types	Yes	No	Remarks
1	Voluntary donation			
2	Direct Purchase			
3	Land acquisition			
4	Others (if any)			

3. Does the project affect the following area?

SN	Affected area	Yes	No	Remarks
1	Vulnerable group			
2	Natural resources			
3	Indigenous people or group			
4	Cultural and religious sites			
5	Impacts on livelihood			
6	Others (if any)			

4. Benefit expectation of community towards project intervention

- ……
- ……..

Generic Table of Content of Environment and Social Management Plan (ESMP)

1. Executive Summary both in English and Nepali
2. Introduction
3. RET description and Relevancy of preparing ESMP
4. Environmental and Social Baseline
5. Environmental and Social Impacts
   a. Beneficial Impacts
      i. Construction Phase
      ii. Operation Phase
   b. Adverse Impacts
      i. Construction Phase
      ii. Operation Phase

6. Mitigation Measures including Alternatives (summarize in matrix Form): shall include respective mitigation measures of impacts, time of action, mitigation cost and responsibility. These, inter alia, include (i) Alternatives - alternative measures for avoiding, minimizing, controlling adverse impacts (or for enhancing beneficial impacts); (ii) Mitigation -site-specific, cost effective and detailed measures for each impact that will reduce the identified adverse impact to acceptable levels; (iii) Capacity Development and Training/ awareness - specific and targeted training / awareness/ capacity building, if necessary (targeted to, for example, project staff, contractors, and community groups); (iv) Implementation Schedule and Cost Estimates - For all mitigation and capacity development, the ESMP provides (a) an implementation schedule for measures that must be carried as a part of the subproject, and (b) cost estimates for implementing the ESMP.
7. Monitoring Plan (In matrix Form): shall prescribe monitoring plan with indicators, methods (laboratory test, visual observation, interview etc.), frequency and time of action, location, responsibility and monitoring cost.
8. Conclusions and Recommendations

Salient Features of RETs promoted by AEPC

Technology	**Capacity Range**	**Tentative Total Cost (NRs)**	**Construction Period**	**Environment safeguard**	**Social safeguard**
Community Electrification (CE)					
Pico Hydro and Improved Water Mills	less than 1 kW for pico and upto 5 kW for IWM			Not Required	Not Required
Micro hydro	(1kW to 100 kW)	500000 per kW	8 -12 months	Screening, At least ESMP	Screening
Mini-hydro	(100 kW to 1 MW)	500000 per kW	14 – 18 months	IEE according to ADB Safeguard Policy Statement	Not required
Biomass Subcomponent					
Household Improved	Domestic	1,000 to		Not required	Not required

Technology	Capacity Range	Tentative Total Cost (NRs)	Construction Period	Environment safeguard	Social safeguard
Cook stoves (ICS) including metallic ICS, Rocket Stoves and Gasifier Stoves	range	25,000			
Institutional ICS				Not required	Not required
Biomass Electrification		500000/kW	5 – 6 months	Screening, At least ESMP	Screening
Solar Subcomponent					
Domestic Solar PV	(upto 100 kWp)	10,000 to 25,000		Not required	Not required
Urban Solar PV	(greater than 200 kWp)	50,000 to 200,000		Not required	Not required
Household Solar Dryer and Cooker				Not required	Not required
Institutional solar (ISPS)		greater than 3 million		Screening, At least ESMP	Screening
Solar Water Supply Scheme and Solar Irrigation System				Screening, At least ESMP	Screening
Municipal Solar Street Lighting				Screening, At least ESMP	Screening
Institutional Solar Dryer and Solar cooker	greater than 3 sq. ft (dryer)			Not required	Not required
Institutional Solar Water Heating System				Screening, At least ESMP	Screening
Solar Mini-grid	Up to 100 kWp	600000/ Wp	2 -3 months	IEE according to ADB Safeguard Policy Statement	Not required
Wind Energy					
Wind Energy	upto 100 kW			Screening, At least ESMP	Screening
Solar Wind Hybrid	5 to 100 kW	600000/ Wp	2- 3 months	IEE according to ADB Safeguard Policy Statement	Not required
Biogas Technology					
Domestic Biogas and Urban Biogas	upto 12m³	less than 100,000	1 month	Not required	Not required
Institutional and Community Biogas	greater than 12.5m³ size	greater than 200,000	greater than 2 months	Screening, At least ESMP	Screening
Commercial Biogas	greater than 12.5m³	greater than 200,000	greater than 2 months	Screening, At least ESMP	Screening
Municipal Solid Waste (MSW) Biogas Plants	greater than 12.5m³	greater than 10 million	greater than 6 months	IEE (Category B projects) as per SREP EMF	Screening, may require Abbreviated RAP and/or VCDP as per SMF