Environmental and Social Safeguard Performance of Alternative Energy Promotion Centre

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ABBREVIATION AND ACRONYMS

ADB	Asian Development Bank
AEPC	Alternative Energy Promotion Centre
AEPDB	Alternative Energy Promotion Development Board
BMZ	German Federal Ministry for Economic Cooperation and Development
CREF	Central Renewable Energy Fund
DAE	Direct Access Entity
DAI	Development Alternatives, Inc
DFID	Department for International Development
DFS	Detailed Feasibility Study
DED	Detailed Engineering Design
EARF	Environmental Assessment and Review Framework
EIA	Environmental Impact Assessment
EMF	Environment Management Framework
EPA	Environment Protection Act
EPR	Environment Protection Rules
ESIA	Environmental and Social Impact Assessment
ESMF	Environment and Social Management Framework
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Safeguards
GCF	Green Climate Fund
GoN	Government of Nepal
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
ICS	Improved Cooking Stoves
IEE	Initial Environmental Examination
IFC	International Finance Corporation
IFC PS	International Financial Corporation Performance Standard
ISPS	Institutional Solar Photovoltaic System
IWM	Improved Water Mills
MGEAP	Private Sector-Led Mini-Grid Energy Access Project
NREP	National Renewable Energy Programme
NGO	Non-Government Organization
PPP	Public Private Partnership
RAP	Resettlement Action Plan
RERA	Renewable Energy for Rural Areas

RERL	Renewable Energy for Rural Livelihood
SASEC	South Asia Sub-regional Economic Cooperation
SMF	Social Management Framework
SPS	Safeguard Policy Statement
SRC	Subsidy Review Committee
SREP	Scaling Up Renewable Energy Program
TRC	Technical Review Committee
UNDP	United Nations Development Programme
VCDF	Vulnerable Community Development Framework
VCDP	Vulnerable Community Development Plan

1.0 INTRODUCTION

1.1 Background

1 Alternative Energy Promotion Centre (AEPC) is a government institution established in 1996 under then Ministry of Science and Technology (now under the Ministry of Energy, Water Resources and Irrigation, MoEWRI). The mission of AEPC is to make renewable energy mainstream resource through increased access, knowledge and adaptability contributing for the improved living conditions of people in Nepal. The vision of AEPC is to make AEPC an institution recognized as a regional/international example of promoting large-scale use of renewable energy sustainable and a national focal point for resource mobilization. Alternative Energy Promotion Development Board (AEPDB) is the supreme body that supervises AEPC's core managerial and functional areas. The board is represented by different ministries, private sector, non-government organizations and financial institutions.

2 AEPC adopts the Public Private Partnership (PPP) Model to fulfil its objectives and works on a demand based approach. Public sector works on the demand side and private sector works on the supply side. AEPC collaborates with the local government bodies throughout Nepal to mainstream renewable energy at the local level. Apart from the collaboration with the local government, AEPC implements its programs with engagement of the non-Government Organizations (NGOs) and private sectors to reach on the ground for better service delivery.

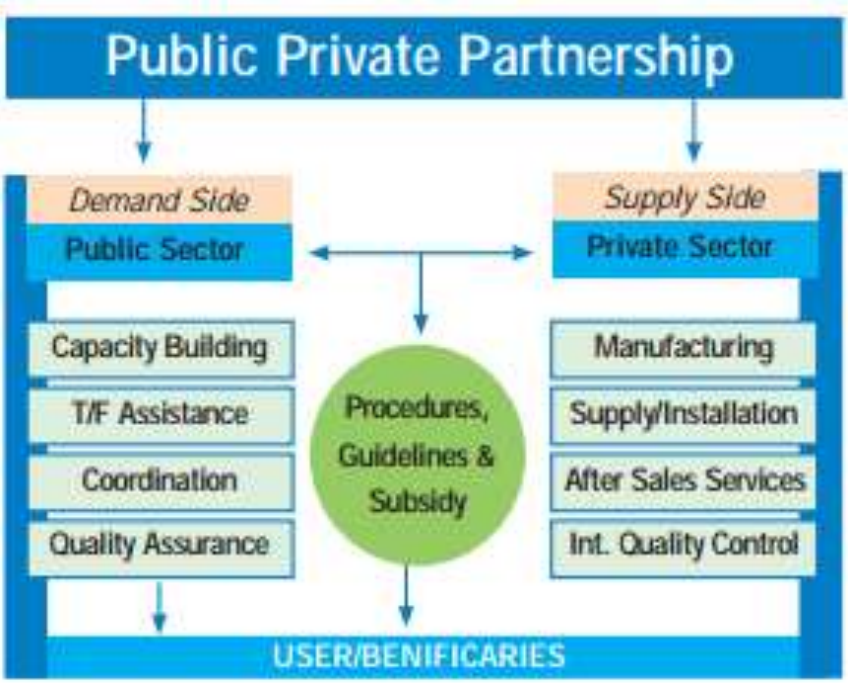

Figure 1: Working modality of AEPC

3 All the legal requirements enforced by the Government of Nepal (GoN) and the GoN policies are applicable to AEPC including the environmental policy and legislations of Nepal; the National Environment Policy 2076, the Environment Protection Act (EPA) 2076 and Environment Protection Rules (EPR) 2077. Promoting environmentally sound renewable energy technologies has been the main intervention approach for the projects/programs implemented by AEPC. However, the environmental legal instruments of GoN are based on

sector based project threshold and generally don't require technologies promoted by AEPC undergo any sort of environmental assessment based on threshold. However, AEPC often requires executing projects deliberating the safeguard assessment outcomes, should the agreement terms between AEPC and development partner requires such assessments to be conducted.

4 As discussed in paragraph 3, threshold of most of the projects promoted by AEPC are not required to undergo the environmental assessment as required by the environmental legislations of Nepal. However, AEPC is accustomed implementing safeguard requirements of the development partners as agreed in the bilateral/multilateral agreements with the respective partners. During the review period, AEPC continued implementation of World Bank supported "Scaling up Renewable Energy Program (SREP)", Asian Development Bank (ADB) supported "South Asia Sub-regional Economic Cooperation: Power System Expansion Project (SASEC-PSEP)" and the World Bank supported "Private Sector-Led Mini-Grid Energy Access Project (MGEAP)". All these projects have specific safeguards requirement.

5 At its 22nd Board Meeting of GCF held in February 2019, AEPC was accredited by GCF as the Direct Access Entity (DAE) for the small scale project size category with up to medium environmental and social risks level (Category B). In order to comply with its accreditation standards as well, AEPC shall require implementation of its ESS policy for all the projects it intends to implement.

1.2 Assignment Rationale

6 Pursuant to Section 4.3 of the ESS policy, AEPC decided to perform the third annual ESS performance review of AEPC corresponding to fiscal year 2019/20 through an independent consultant. Accordingly this assessment has been prepared and submitted.

1.3 Objectives and Scope

7 The main objective of this assignment is to assess an effectiveness of implementation of ESS policy and ESS risk management at AEPC level. The scope of work, includes the following:

- Assess an effectiveness of AEPC, as an institution, in closing the review findings from the second performance review covering a period corresponding to fiscal year 2018/19.
- Review the ESS policy of AEPC and assess procedures for identifying, assessing and managing environmental and social risk.
- Review screening and categorization of sub-projects based ESS Policy.
- Review the level of assessment based on categorization/application of ESS instruments.
- Assess whether appropriate decision-making process is in place for ESS review and implementation.
- Assess documentation and record keeping mechanism.
- Conduct overall performance analysis based on relevancy, effectiveness, efficiency and sustainability.
- Recommend necessary improvements and actions required to implement the ESS policy effectively.

2.0 METHODOLOGY

8 The methodology adopted for this assignment included desktop review and interviews with respective staffs and experts engaged with the ESS affairs. As a part of the desktop review, the policy, national legislative measures for environmental and social safeguards in Nepal, safeguards review report of projects implemented by AEPC, monitoring report prepared by ESS team at sub-project level and previous annual ESS performance review of AEPC were reviewed. Once the desktop review was completed, the performance review was conducted with focus on the following areas aligning the assessment under the domain of performance review established through first and second performance reviews.

a) Institutional Arrangement
b) Human Resource and Technical Capacity
c) Budgetary Provisions
d) Project Appraisals, Implementation and Monitoring
e) Decision Making Process
f) Documentation and Knowledge Management

9 After reviewing AEPC's progress in settling the open issues identified in second performance review and additional progress achieved during the review period, the assessment findings were drafted. The review captures key impacts envisaged by the second ESS performance review, the mitigation measure recommended and their status. The "status" implies the level of conformity with the mitigation measure prescribed. Complete settlement of the issue identified with full conformity is labelled as "closed", for the mitigation action for the impacts identified being underway or a part of mitigation measure being implemented the issue is labelled as "partially closed" and for any finding from the previous performance review assessed to be irrelevant respective issue is labelled as "redundant". In cases where the issue(s) identified has remained unattended during the review period, the same has been labelled as "Open" issue.

3.0 REVIEW OF POLICIES AND PROCEDURES

3.1 National legislative measures

10 GoN adopted the Environment Protection Act and Environment Protection Rules in 1997, which have been repealed by Environment Protection Act, 2019 and Environment Protection Rules, 2020. EPR provides basis to perform the environmental and social assessment for any development project that is attracted within the threshold determined for the specific type of the development project listed in Schedule 1, Schedule 2 and Schedule 3 of the EPR. The EPR also requires project developer adopt appropriate disclosure procedure for different levels of safeguards assessments envisioned. EPR has defined the level of rigor to be adopted during the safeguards assessment based on the criteria of threshold. For example, under normal circumstances, a hydropower project with installed capacity of 1 to 50 MW is required to undergo an Initial Environmental Examination (IEE) while the project exceeding 50 MW installed capacity has to undergo the Environmental Impact Assessment (EIA).

11 Since AEPC's core functional area is related to energy; safeguards assessment for the types of projects stipulated in point F (Water Resources and Energy Sector) of EPR Schedule-2 and Schedule-3 are more relevant. Similarly, the provisions relating to Forest sector, Industry and Waste Management are also triggered in the projects. GoN has mandated AEPC for the development of renewable energy projects with installed capacity of up to 10 MW. This mandate requires AEPC promoted renewable energy technologies undergo safeguards assessment as required by the provisions stipulated in the EPR. Similarly, the EPR has also specified thresholds for the renewable energy projects that require different levels of safeguards assessment, which is listed in Table 1. The AEPC projects that require one hectare of forest area or use of forest area for 66 kV transmission line or 5 to 10 hectare of land should undergo Brief Environmental Study (Schedule 1, EPR, 2077).

Table 1: Statutory safeguards requirement for renewable energy projects

SN	Projects	Thresholds	
		IEE	EIA
1	Solar energy to electricity production	1 MW to 10 MW (Ref. Schedule 2 (f) Water resource and energy sector Clause 7 (a))	> 10 MW (Ref. Schedule 3 (f) Water resource and energy sector Clause 6 (a))
2	Wind energy to electricity production	1 MW to 10 MW (Ref. Schedule 2 (f) Water resource and energy sector Clause 7 (b))	> 10 MW (Ref. Schedule 3 (f) Water resource and energy sector Clause 6 (b))
3	Bio-energy to electricity production	0.5 MW to 2 MW (Ref. Schedule 2 (f) Water resource and energy sector Clause 7 ©)	> 2 MW (Ref. Schedule 3 (f) Water resource and energy sector Clause 6 ©)
4	Industrial Bio-Gas production, storage, filling, refilling	Require IEE (Ref. Schedule 2 (b) Industry Area Clause (10)	
5	Electricity production from renewable energy sources (solar, wind, bio-energy etc.) cogeneration (for industrial use)	4 to 40 MW (Ref. Schedule 2 (b) Industry sector Clause (57))	>40 MW (Ref. Schedule 3 (b) Industry sector Clause (19)
6	Biogas plant construction	Above 1500 m^3 Capacity (Ref. Schedule 2 (f) Water resource and energy sector Clause 2 ©)	
7	Use of 1 to 5 hectare forest area	Require IEE (Ref. Schedule 2 (a) Forest Area Clause (12)	
8	Installation of transmission line or construction of substation connecting with transmission line within Buffer zone	Require IEE (Ref. Schedule 2 (a) Forest Sector Clause (18, a)	
9	Construction of 10 MW hydropower or 132 kV /less than 132 kV transmission line / distribution line and connecting substation in Protected Forest area, Protected area, Buffer zone, or environmental protection area	Require IEE (Ref. Schedule 2 (a) Forest Sector Clause (18, b)	
10	Installation of 132 kV or higher voltage transmission line	Require IEE	

SN	Projects	Thresholds	
		IEE	EIA
		(Ref. Schedule 2 (f) Water resource and energy sector Clause (1, a)	
11	Displacement of permanent settlement of 25 to 100 people for water resource related development work	Require IEE (Ref. Schedule 2 (f) Water resource and energy sector Clause (5)	
12	Cogeneration of electricity from Bagasse in sugar industry	Require IEE (Ref. Schedule 2 (f) Water resource and energy sector Clause (7,d)	
13	Compost plant related work spread out in 5 to 10 hectare area	Require IEE (Ref. Schedule 2 (I) Solid waste management sector Clause (4)	
14	Operation of 5 MLD capacity sewerage management project	Require IEE (Ref. Schedule 2 (I) Solid waste management sector Clause (5)	
15	Use of 5 hectare forest land except for the installation of electricity transmission line		Require EIA (Ref. Schedule 3 (A) Forest sector Clause (9)
16	Project implementation in National Park, Wildlife Reserve, Hunting Reserve		Require EIA (Ref. Schedule 3 (A) Forest sector Clause (10)
17	Permanent displacement of settlement of more than 100 people for hydropower development work		Require EIA (Ref. Schedule 3 (F) Forest sector Clause (3)
18	Compost plant related work spread out in more than 10 hectare area		Require EIA (Ref. Schedule 3 (I) Solid waste management sector Clause (1, d)
19	Operation of more than 5 MLD capacity sewerage management project		Require EIA (Ref. Schedule 3 (I) Solid waste management sector Clause (1, f)

(Source: EPR, 2077)

12 Approach for safeguards assessment stipulated in the EPR is different compared to the approaches used by other development agencies; specifically, the World Bank, the Asian Development Bank (ADB) and the International Finance Corporation (IFC). While the level of rigor adopted by the GoN is threshold based specific to sector (Schedule 1 , Schedule 2 and Schedule 3 of EPR 2020), the internationally practiced approach of safeguards assessment requires such assessment based on issues, risks and impacts. As such, there is difference in approach to conduct the safeguard assessment as required by Schedule 1, Schedule 2 and Schedule 3 of EPR, 2020 and other international agencies stated earlier in this paragraph.

3.2 The ESS policy and procedure

13 AEPC adopted its Environmental and Social Safeguard (ESS) policy on May 30, 2017. AEPC's ESS policy is aligned with the environmental and social safeguards performance standards adopted by the IFC. 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 project cycle. This policy applies throughout the project cycle

from planning, designing and implementation to monitoring and evaluation. The policy is adopted to ensure environmentally friendly and socially acceptable project execution during the project design and implementation phases. Since the policy was new to the organization, there was limited technical capacity to effectively roll out the policy immediately after it was adopted. In this context, AEPC planned to roll out the ESS policy starting from the onset of fiscal year 2017/18 i.e. effective from mid July 2017. By the time this report was prepared, second review of AEPC's ESS policy performance review has been completed and the review period corresponds to the third full calendar year of the implementation of AEPC's ESS policy.

14 ESS policy adopted by AEPC requires higher level of rigor for the safeguards assessment of renewable energy projects promoted by AEPC. Environmental and Social Management Framework (ESMF) annexed to the ESS policy requires project to undergo assessment through four main activities; namely, the project screening and categorization, preparation of safeguards documents, implementation of the safeguards measures and post implementation monitoring and auditing. Based on the screening tool provisioned by the policy, the projects are required to undergo screening to determine the environmental and social safeguards risk category of the project. The ESS policy has envisioned the following categories of the project on the safeguards grounds.

Table 2: Project categories based on ESS risk

SN	Category	Description	ESS Instrument to be prepared
1	Category "A"	Projects with the potential to cause significant adverse social and/or environmental impacts that are diverse, irreversible or unprecedented.	GoN requirement: project categories listed in Schedule-3 of EPR 2077-Environmental Impact Assessment (EIA) If not in threshold under GoN requirement ***- Environmental and Social Impact Assessment (ESIA)***
2	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.	GoN requirement: project categories listed in Schedule-2 of EPR 2077-Initial Environmental Examination (IEE) ***If not in threshold under GoN requirement - ESIA***
3	Category "C"	Projects that include activities with minimal or no risks of adverse social and environmental consequences	GoN requirement: project categories listed in Schedule-1 of EPR 2077- Brief Environmental Studies ***If not in threshold under GoN requirement - Environmental and Social Management Plan (ESMP)***

(Source: AEPC's Updated ESS Policy, 2017)

15 Essentially the category "A" projects recognized by AEPC's ESS policy are the projects that would require to undertake EIA study according to the EPR, 2020, category "B" correspond to the projects that require IEE study and category "C" projects require a Brief Environmental study. AEPC has updated ESS policy to implement the renewable energy projects that is likely to require undergo any of the three levels of risk categories identified which initially did not consider the potential category "A" project for implementation. However, most of the AEPC promoted technologies are small scale renewable energy technologies that do not entail significant environmental or social risks.

16 In cases where the requirements for safeguards assessment vary, commonly adopted practice is to apply the standard with more rigorous requirements. The same applies for the projects implemented by AEPC. Since most of the projects, specifically the ones based on hydro, promoted by AEPC do not require to undertake environmental assessment as per the EPR, the same are assessed as per the safeguards requirement of ADB as is done for the SASEC projects. There might as well be other hydro projects promoted by AEPC but not supported under SASEC projects; such projects shall therefore undergo assessment as per the safeguards requirements of AEPC's ESS policy.

3.3 Review of findings from the Second Performance Review

17 Second annual ESS performance review of AEPC was concluded in August 2019. The second performance review rates AEPC's institutional performance with regards to the ESS affairs as moderately satisfactory for the review period corresponding to FY 2018/19. The review flagged few areas with "medium" to "severe" risks for AEPC to consider in order to plan its forward action to maintain coherence with its safeguarding policy.

18 Second ESS performance review was structured around six key components, namely; the institutional arrangement, human resource and technical capacity, budgetary provision, project appraisal, implementation and monitoring, decision making process, and documentation and knowledge management. Key impacts identified during the second ESS performance review and their prescribed mitigation measures are summarized in **Table 3**.

Table 3: Impacts and Mitigation outlined in the Second ESS performance review, 2019

SN	Risk Category/ Identified Impacts	Mitigation Measures
1.	***Severe***	
1.1	Policy induced limitation to implement projects with category "A" environmental and social risk.	Policy amendment to revise clause that prevents implementing category "A" environmental and social risk.
1.2	Projects remain un-assessed if the specific program to which it is linked doesn't require doing so.	1. Introduce the ESS requirements in technical procedures to implement particular technology. 2. Restructure TRC to ensure appraisal from the safeguards perspective.
2.	***High***	
2.1	Inertia to change from common project appraisal practice due to poor enforcement of ESS policy.	Action plan to revise technical procedure and conduct first full safeguards assessment of a project in accordance with the centre's ESS policy.
2.2	Perception over requirement of AEPC's ESS policy as low priority.	Organize training program for AEPC staffs on AEPC's ESS policy requirement.
2.3	Lack of access to safeguards documents through AEPC's website.	1. Upload safeguard documents in AEPC website. Upload all the decisions from TRC meetings in the AEPC's website.
3.	***Medium***	
3.1	Lack of independence in oversight function	Policy amendment to ensure independence of safeguards oversight function.
3.2	Lack of appropriate measures for oversight function	Compliance and Ethics Sub-Committee and compliance unit to ensure effectiveness of the oversight function.

SN	Risk Category/ Identified Impacts	Mitigation Measures
3.3	Lack of capacity on ESS affairs to keep abreast with the policy provisions of different multi-lateral agencies.	Ensure participation of ESS staffs in capacity building programs on ESS affairs organized by multilateral organizations.
3.4	Inadequacy of budget planned at activity level to implement measures outlined in review report.	Reassess budget allocation and disbursement during mid-term review and re-allocate it for the required activities.
3.5	Lack of access to safeguard documents to the public.	Prepare database comprehending ESS impacts and mitigations and upload the summary in the AEPC's website.

19 In addition to the second ESS performance review of AEPC, a review mission for SREP extended biogas project was concluded in September 2019. The review mission, among others, scoped the ESS performance of the SREP program which was rated as moderately satisfactory. The aide memoir released after the mission rates the environmental safeguards performance of the SREP project as "moderately satisfactory" and social safeguards performance as "satisfactory".

4.0 PROJECTS IMPLEMENTED AND THE SAFEGUARD REQUIREMENTS

20 AEPC has been implementing several projects with technical and financial support from various development partners. While some programs may have specific safeguards requirement to be addressed for intervention planned for execution, for others that may not be required. Depending on the agreed terms, AEPC has been executing the programs. With implementation of its own ESS policy, all the projects implemented by AEPC needs to comply with policy provisions. However, the same may not be applicable should the agreement terms between AEPC and other development partners supporting the project require safeguard assessment against other specific safeguard standard or provisions. Currently AEPC is implementing several projects supported by development partners. This section briefly highlights key features of the projects implemented by AEPC during the review period including their respective ESS requirements.

4.1 Scaling Up Renewable Energy Program (SREP)

21 Since 2015, AEPC has been implementing SREP extended biogas program with support from the World Bank. The project aims to promote large scale commercial and municipal scale biogas (the sub-projects) at viable locations for the generation of electrical energy and/or thermal energy. The sub-projects are screened and categorized against the safeguards requirements of the World Bank Operational Policies. The safeguards documents for each category of project are prepared consistent to requirement stated in **Table 2** above. The ESS function of the program is supported by a team of environmental and social safeguard experts of AEPC's "Environmental and Social Safeguards Section".

22 A total of 401 project obtained Technical Review Committee (TRC) clearance during the review period, and ESS screening was completed for 375 commercial and 35 municipal waste to energy projects. Similarly, safeguards documents were prepared for 365 projects; of which, ESMP was prepared for 337 projects, ESA was prepared for 23 projects and IEE reports of five

projects were approved pursuant to the EPR. During the period, the ESS unit monitored a total of 13 sub-projects supported by SREP. The program's ESS performance is periodically assessed by the review mission from the bank; both at the program and sub-project level. Snapshot of the ESS function in the SREP project is presented in **Table 4**.

Table 4: Summary of ESS activities of SREP project

SN	Particulars	Until FY 19/20	Until FY 18/19	Remarks
1	Total number of projects in pipeline	601	552	Total Application received
	a. Commercial Biogas	531	493	
	b. Municipal Waste to Energy	70	59	
2	Total FS approved by TRC	401		Total till date
	a. Commercial Biogas	366		
	b. Municipal waste to Energy	35		
3	Screening completed	410	346	Total till date
	a. Commercial Biogas	375	333	
	b. Municipal waste to Energy	35	13	
4	Safeguard document prepared	365	348	Total till date
	a. ESMP	337	324	
	b. ESIA/ESA	23	22	14 Municipal, 9 Commercial
	c. IEE		0	11 in progress
	d. IEE approved by GoN system	5	2	Envipower, GandakiUrja, Kankai Municipality, Ghorahi SMC and Dharan SMC
5	Number of projects monitored	13	68	Total of FY 2019/20
	a. Category "C"	5	64	5 Operation Monitoring
	b. Category "B"	8	4	5 Construction Monitoring & 3 Operation Monitoring

(Source: SREP PIU, 2020)

4.2 South Asia Sub-regional Economic Cooperation (SASEC)

23 Implementation of SASEC power system expansion project (PSEP) continued in the review period. The project aims to promote mini hydro, solar and solar wind hybrid mini-grid sub-projects in off-grid areas for the electricity generation and distribution. The sub-projects under SASEC are screened according to Indigenous Peoples Plan Framework for Social Safeguard and Environmental Assessment and Review Framework (EARF) utilizing checklist for mini hydro sub-projects and Environmental Assessment Checklist for solar and solar wind sub-projects for screening and categorization of the sub-projects. A proposed sub-project is classified as category "B" if its potential adverse environmental impacts are less than those of category "A" sub-project. These impacts are site-specific, few if any of them are irreversible, and in most cases mitigation measures can be designed more readily than for category "A" sub-projects. An Initial Environmental Examination (IEE) according to ADB's Safeguard Policy Statement (SPS), 2009 would be required.

24 The project is supported by the pool of environmental and social safeguards experts housed under ESS unit of AEPC in order to deal with the required environmental and social affairs. During the review period, ESS screening was completed for 2 projects; one mini hydro and one solar mini-grid. Similarly, IEE study and social due diligence were conducted for two projects each, during the review period. Snapshot of the ESS function in the SASEC project is presented in **Table 5**.

Table 5: Summary of ESS activities of SASEC project

SN	Particulars	Until FY 19/20	Until FY 18/19	Remarks
1	Total number of projects in pipeline			
	a. Mini/micro hydro	3	2	Saniveri Mini Hydro Sub-project (998 kW), Rukum Aankhe Khola MHP , Dolpa (750 kW) Hepka Khola MHP, Humla (998 kW)
	b. Solar mini-grid	1	2	Chittibang Solar Mini-grid Sub-project (17 kWp), Rolpa
	c. Solar/wind hybrid	0	1	
2	Screening completed			
	a. Mini/micro hydro	1	1	Aankhe Khola MHP , Dolpa (750 kW)
	b. Solar/wind hybrid	-	-	
	c. Solar mini grid	1	2	Thabang Solar Mini-grid Sub-project (150 kWp), Rolpa
3	Safeguard document prepared			
	a. IEE	2	2	Aankhe Khola MHP , Dolpa (750 kW) Thabang Solar Mini-grid Sub-project (150 kWp), Rolpa
	b. Social Due Diligence	2	0	Saniveri Mini Hydro Sub-project (998 kW), Rukum Thabang Solar Mini-grid Sub-project (150 kWp), Rolpa
	c. IEE approved by GoN system	0	0	Not applicable
4	Number of projects monitored			
	a. Category "C"	0	0	-
	b. Category "B"	0	0	All sub-projects under SASEC off-grid components are Category "B"

(Source: SASEC PIU, 2020)

4.3 Private Sector-Led Mini-Grid Energy Access Project (MGEAP)

25 During the review period, AEPC started implementation of the Mini-Grid Energy Access Project. The project aims to support mini-grid based renewable energy systems in off-grid areas for AEPC which includes installation of aggregated capacity up to 3.8 MW, in selected rural communities. The project, in April 2018, adopted Environmental and Social Management Framework (ESMF), including Resettlement Policy Framework (RPF) and Vulnerable Community Development Framework (VCDF) to ensure effective management of these specific social risks in the sub-projects financed. During the review period, ESS screening was completed for 2 mini-hydro sub-projects and 5 solar minigrid sub-projects. ESS Screening of 3 Mini-hydro sub-projects (Ghami Mini-hydro, Amadablam Mini-hydro and

Monjo Khola Mini-hydro sub-projects) was completed during Project preparatory phase. All these three project are undergoing ESIA as per the WB safeguards requirement while the two of them are undertaking IEE and one is undertaking EIA study to comply with GoN's statutory requirements. Snapshot of the ESS function in the MGEAP project is presented in **Table 6**.

Table 6: Summary of ESS activities of MGEAP

SN	Items	Values	Remarks
1	Total number of subprojects in pipeline	10	
	a. Mini Hydro Subproject	5	
	b. Solar Mini Grid Subproject	5	
2	Screening completed		
	a. Mini Hydro Subproject	2	- Lower Leguwa Khola Mini Hydro Subproject (500 kW), Dhankuta - "Category B" - Dhunsel Khola Mini Hydro Subproject (998 kW), Dhading - "Category B"
	b. Solar Mini Grid Subproject	5	- Ghurmi Solar Mini Grid Subproject, Ghurmi (221 kWp), Udaypur-"Category C" - Koshahaat Solar Mini Grid Subproject (58.5 kWp), Okhaldhunga -"Category C" - Subhakalika Solar Mini Grid Subproject, Kalikot (Greenfield, 150 kWp) - "Category C" - Tatopani Solar Mini Grid Subproject (997.92 kWp), Jumla - "Category B" - Solu Khola Solar Mini Grid Subproject (200 kWp), Solukhumbu - "Category C"
3	Safeguard document prepared		
	ESMP	2	- Ghurmi Solar Mini Grid Subproject, Ghurmi, Udaypur - Subhakalika Solar Mini Grid Subproject, Kalikot
	ESIA (in progress) as per WB requirement	3	- Amadablam Khola Mini Hydro Subproject - Monju Khola Mini Hydro Subproject - Tatopani Solar Mini Grid Subproject, Jumla
	IEE (in progress) as per GoN requirement	2	- Monju Khola Mini Hydro Subproject - Tatopani Solar Mini Grid Subproject, Jumla
	EIA (in progress) as per GoN requirement	1	- Amadablam Khola Mini Hydro Subproject

Source: MGEAP PMT, 2020

4.4 Renewable Energy for Rural Livelihood (RERL)

26 The Renewable Energy for Rural Livelihood (RERL) programme continued to be implemented during the review period. The program is supported by Global Environment Facility (GEF) as a part of its Climate Mitigation Portfolio and United Nations Development Programme (UNDP). The UNDP-GEF RERL programme has been providing technical assistance in Large Micro Hydro, Mini Hydro, Large Solar PV, Productive Energy Use and support to Central Renewable Energy Fund (CREF). The scope of activities RERL supports include the technical support in the areas stated above. There is no specific requirement for the environmental and social safeguards itself for the scope of services RERL supports to AEPC.

4.5 Renewable Energy for Rural Areas (RERA)

27 During the review period, AEPC continued implementation of Renewable Energy for Rural Areas (RERA) program, a joint technical support programme for the Nepalese small-scale renewable energy sector of the Government of Nepal (GoN) and the German Federal Ministry for Economic Cooperation and Development (BMZ). The over-arching vision for RERA is 'to ensure efficient and effective service delivery of small-scale renewable energy through improved outreach and enhanced local cooperation in a federalized and decentralized Nepal'. This vision will be delivered through improving and developing a framework for participatory and demand-led promotion of small-scale renewable energy in central, provincial, and local government authorities, ensuring the effective cooperation with civil society and the private sector in the context of federalization and constitutional reform. At its core, the RERA is technical support program and doesn't have specific provision for environmental and social safeguards.

4.6 Nepal Renewable Energy Programme (NREP)

28 In the review period, Nepal Renewable Energy Program (NREP) started the implementation with support from United Kingdom. Through this program, Development Alternatives, Inc (DAI) with Winrock international as a key partner, capacity of the Government of Nepal will be enhanced to lead and manage National Small-scale Renewable Energy Framework. Indicative list of activities planned for implementation under this program include; capacity building to lead and manage the National Small-Scale Renewable Energy Framework through the Alternative Energy Promotion Centre and other relevant institutions, strengthening capacity of CREF to manage and spend climate finance, deliver activities related to increasing demand, supply and finance for renewable energy and develop network of partners. The indicative list of activities mainly relates to the capacity development activities and no specific safeguards requirement is relevant for this program.

4.7 Kreditanstalt für Wiederaufbau (kfw)

29 During the review period, AEPC (Project-Executing Agency) continued implementation of Institutional Solar PV Systems (IPVS) through financial support of KfW. It basically supports to provide subsidies IPVS and strengthening of quality assurance in RE sector. The purpose of the Project is to promote high quality solar energy systems for an increased and sustainable access of affordable and environmentally-friendly solar energy systems in line with the NRREP objective. The Project aims to contribute to the improvement of the living standards of rural women and men, increasing employment as well as productivity and reduction of dependency on traditional energy and attainment of a sustainable development through integration of alternative energy with the socio-economic activities in rural communities. Though, there is no provision of Environmental and Social Safeguard requirements in project documents, Environmental and Social Screening of all subprojects to be implemented are carried out under this project. Accordingly until the review period (i.e. FY 2019/20), 40 such projects have completed preparation of ESMP for each subproject (Solar Drinking Water Project) during the preparation of DFS.

Table 7: Summary of ESS activities of KfW Solar Project

SN	Particulars	Values	Remarks
1	Total number of projects in pipeline	40	Total Application received
	a. Solar Drinking Water Project	40	
2	Screening completed		Total of FY 2018/19
	a. Solar Drinking Water Project	40	
3	Safeguard document prepared	40	Total of FY 2018/19
	a. ESMP	40	
	b. ESIA/ESA	-	
	c. IEE	-	
	d. IEE approved by GoN system	-	
4	Number of projects monitored		
	a. Category "C"	-	

Source: kfw PMT, 2020

5.0 ESS PERFORMANCE REVIEW

30 While conducting AEPC's annual ESS performance review for the fiscal year 2018/19, altogether ten actions were flagged by the reviewer; of these, two actions were rated with severe risk, three with high risk and five actions with medium risk. In order to assess the overall ESS performance of AEPC, the reviewer picked-up the previously flagged area as the starting point. Of the total actions flagged, during the review period, AEPC has successfully closed few while others still need institutional attention for closure.

5.1 Institutional Arrangement

31 ESS Section of AEPC oversees the ESS functions related to the projects that it implements. The overall responsibility of the entire activities that AEPC performs rests on the Executive Director. In order to have more focused management, responsibilities and authority conferred to the Executive Director through AEPC's formation order are devolved across different divisions and sections. AEPC has provision for three separate divisions; the Administration Division, Planning and Monitoring Division and Technology Promotion Division. ESS function, during the review period, is placed under the Planning and Monitoring Division, which previously (during second annual review period) was placed under Technology Promotion Division as a unit. As far as the unit or section has defined terms of reference, its placement under one division or another should not be a matter of concern and the same applies for which level of staff it is headed by. However, frequent changes in the attachment of ESS function to specific division implies a prevailing confusion. While any functional deformity due to placement of ESS section to a specific division is not envisaged, it is advisable to deliberate better and maintain consistency until major institutional or structural changes are triggered. **Figure 2** depicts the structure of ESS Section and **Figure 3** depicts positioning of ESS structure in AEPC's overall organizational structure.

Figure 2: Structure of ESS Section of AEPC

(Source: ESS Section, 2020)

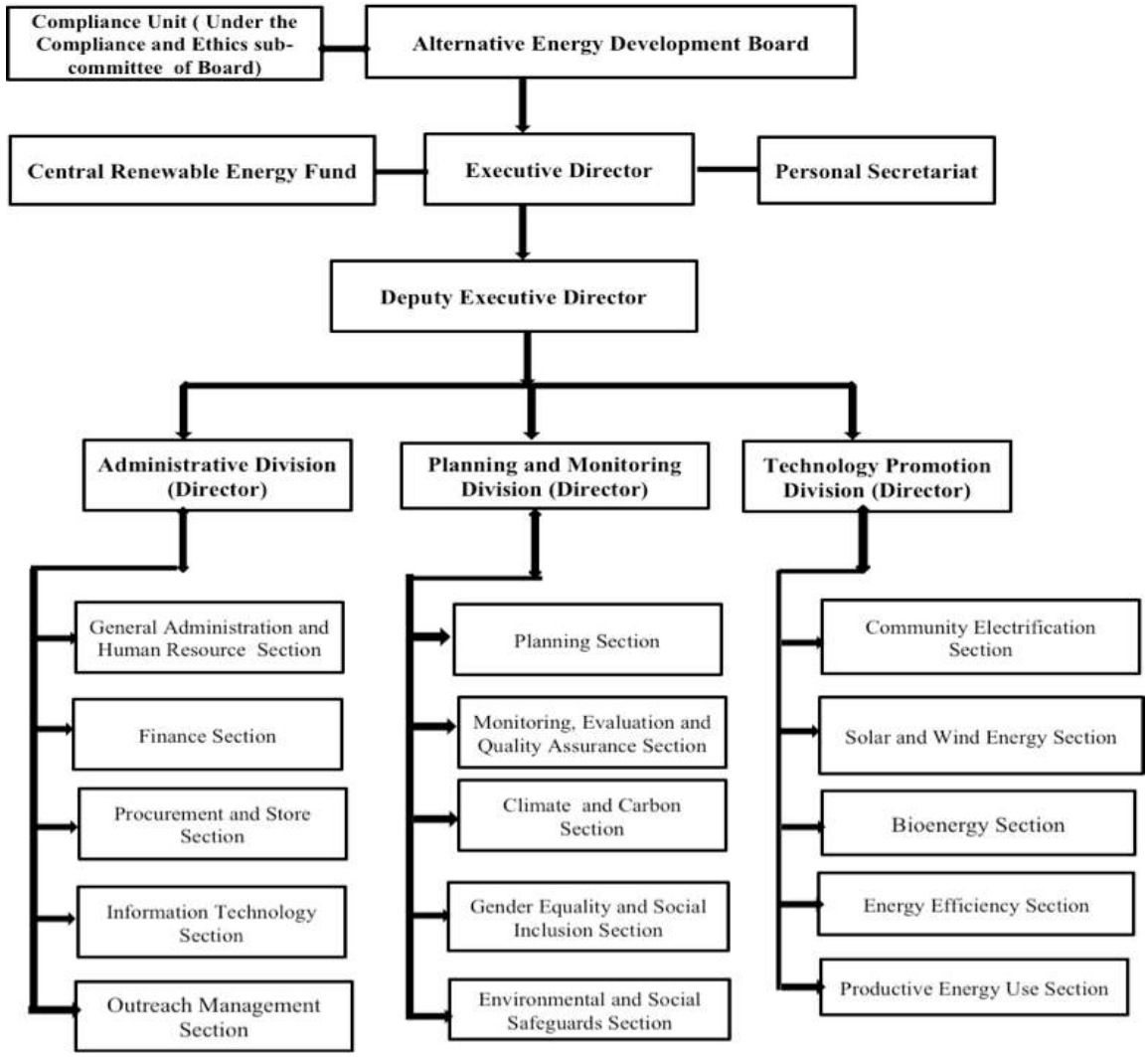

Figure 3: Positioning of ESS Section in AEPC's organogram

(Source: ESS Section, 2020)

32 Being an integral component of the division, responsibility of the overall ESS affairs comes under the purview of the Director of the Planning and Monitoring Division. The ESS Section

is headed by an Assistant Director of AEPC and necessary staffs with relevant expertise on ESS activities are deputed and appointed to support Section's functions. Moreover, AEPC has maintained roster of experts to support AEPC's ESS functions on need basis which however needs to be updated on periodic basis. In order to perform activities as guided by the policy, necessary devolution of authority and responsibilities have been made. Key responsibilities of different levels of staffs envisioned by the policy are summarized in **Table 8** and the responsibility flow is depicted in **Figure 4**.

Table 8: Roles and responsibilities to implement ESS policy

SN	Activity	Responsibility
1	Project screening and categorization	ESS Expert
2	Screening approval decision	Asst. Director, ESS Section
3	Safeguard document preparation	ESS experts/External Consultants
4	Public consultation on safeguard documents	ESS Experts/External Consultants
5	E&S clearance for safeguard documents	Director, Planning and Monitoring Division

(Source: AEPC's Roles and Responsibilities for Implementing ESS Policy, 2020)

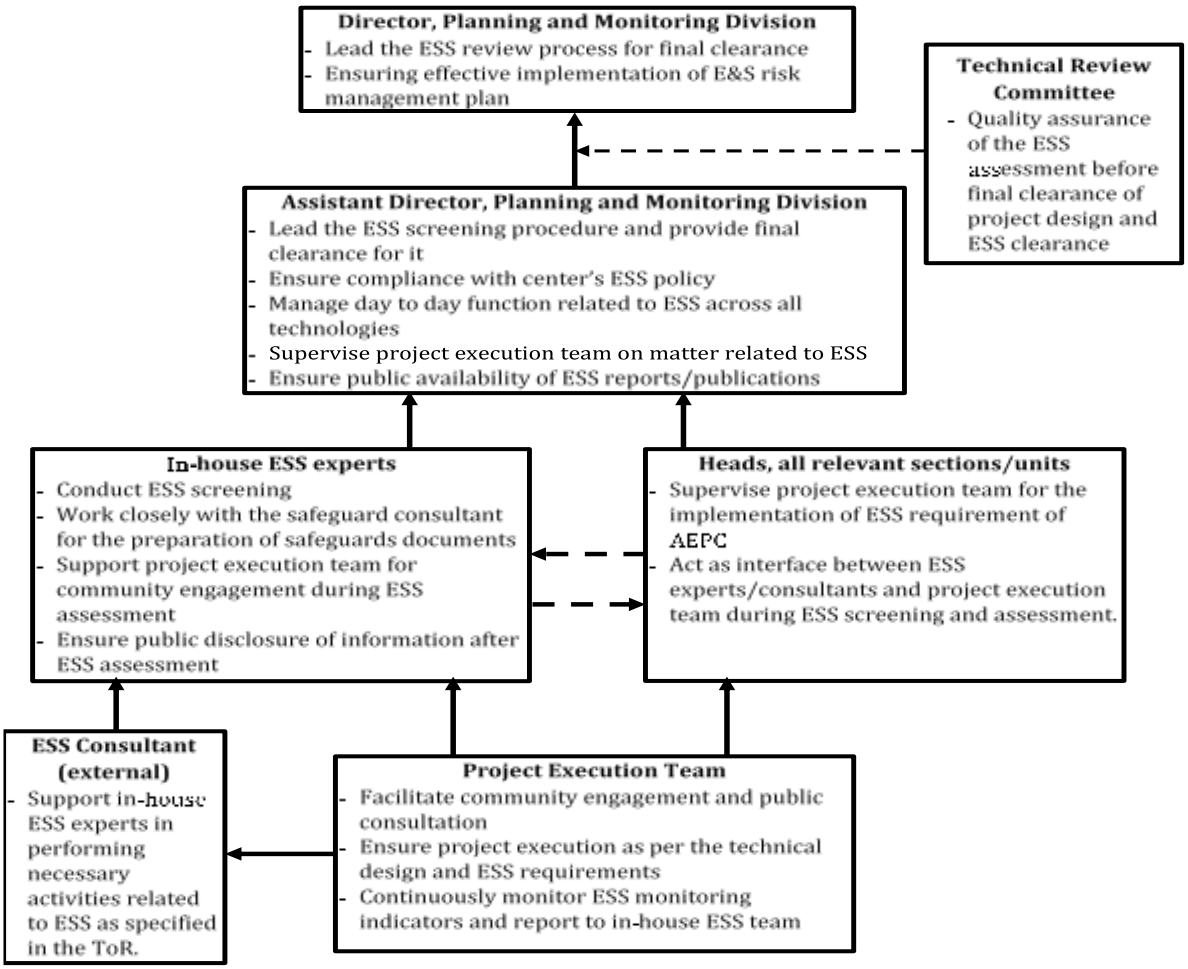

Figure 4: ESS Responsibility Flow Diagram

(Source: AEPC's Roles and Responsibilities for Implementing ESS Policy, 2020)

33 In order to proceed with the implementation of ESS policy, AEPC built on the ongoing projects with specific safeguards requirement. While this approach was fair enough to begin with the policy implementation, there is need to scale-up implementation of policy in other programs where the safeguard measures are not explicitly defined but the policy requires doing so.

Since the program with specific safeguard requirements supported by development partners shall have scrutiny beyond AEPC, issues related to compliance with safeguards provisions as agreed for the program are not expected. As discussed in section 3, AEPC's ESS policy scopes activities beyond the threshold criteria stipulated by national legislative measures to undergo safeguards assessment. Though the implementation of the policy has gradually been institutionalized, more proactive role from AEPC is required to fully implement ESS policy provisions for the programs that don't have defined safeguards requirement neither in the program document nor in the thresholds defined by the EPR, 2077.

34 AEPC's ESS policy explicitly ruled out possibility to implement projects with environmental risk Category "A" which will require EIA level study pursuant to the EPR, 2077. Until recently projects implemented by AEPC normally were the category "B" and "C" projects. AEPC entered into agreement with the World Bank for implementation of MGEAP which can implement category "A" project. As discussed above, the project during its preparatory phase had performed environmental and social screening of three sub-projects and all these projects would require an EIA level study.

35 Under the domain of "institutional arrangement", four potential impacts were flagged by the previous ESS performance review; one potential impact was flagged under "severe risk" category, one under "high risk" while other two were flagged with "medium risk". Policy induced limitation to implement projects with category "A" environmental and social risk was flagged under severe risk, for which Policy amendment to revise clause that prevents implementing category "A" projects has been recommended as a mitigation measure. An amendment to ESS Policy has been drafted which allows implementation of "Category A" projects as well. Therefore, the flagged item is assessed to have been closed satisfactorily.

36 Inertia to change from common project appraisal practice due to poor enforcement of ESS policy was flagged under high risk. Prepare Action Plan to revise technical procedure and conduct first full safeguards assessment of a project in accordance with the centre's ESS policy has been recommended to mitigate the risk. In the context where the action plans were drafted, not much could be done owing to the spread of global COVID-19 pandemic that also engulfed Nepal. Considering that hardly half the time of the review period could purposefully be used, preparation of action plan is assessed to conform partial fulfilment of the item flagged.

37 During the review period it was noted that certain ambiguities should desirably be taken into account to ensure convenient implementation of projects. The existing threshold requiring safeguards assessment of the large biogas projects supported by the SREP trigger two aspects from the safeguards perspective; first the waste management and second the energy generation from biogas. Disregarding the presence of SREP program, the wastes were still managed but construction and operation of biogas can be attributed to project. Therefore, while deciding environmental and social risk category of the project it is advisable to screen the project from the perspective of energy generation rather than waste management. Alternately, while applying the threshold based safeguard (based on the EPR schedules) as well, the thresholds related to the production of biogas or the energy generation shall be considered for the safeguard assessment. This finding however is issued as an advice to

rationally adopt the safeguards assessment route and will trigger performance rating during next review.

38 Lack of independence in oversight function related to policy provision that functions related to the preparation of safeguards documents and stakeholder consultation may be carried out by the in-house expert was flagged under medium risk. As a mitigation measure to this risk, the performance review recommended for policy amendment to eliminate the clause to enhance more independent function. During the review period, AEPC's ESS team conducted screening verification and compliance and under-construction monitoring of the sub-projects supported by different program thereby ensuring the independence of oversight function in practice. In order to proceed with this, AEPC's ESS Section also confirmed that the necessary amendments to the policy provision have been drafted which however needs to be approved from the authority to ensure that amendments come to an effect. Nevertheless, since the policy provision is open for such documents to be prepared by AEPC's in-house expert, this flagged item needs necessary policy amendment to confirm its complete closure. At the moment, this issue is assessed to have been partially closed.

39 Similarly, lack of appropriate measures for oversight function was flagged as a medium risk impact by the second performance review of AEPC. As a mitigation to this, the review recommended the compliance unit to oversee the ESS function. While the AEPC's compliance unit essentially holds right to scrutinize any activity performed by AEPC as an institution, matters related to the ESS have been reported to have been started in the monitoring activities carried out by the compliance unit. Moreover, the compliance unit has started to scope this in compliance review reporting. So, the flagged item is marked as closed satisfactorily.

5.2 Human resource and technical capacity

40 AEPC has 54 sanctioned positions, of which, 42 positions are fulfilled. As observed during second Performance Review period, there is one position of the socio-economist but no position specifically requiring expertise in environmental safeguard. In order to overcome the human resource crunch led by unavailability of adequate number of staffs, AEPC continued to maintain the roster of technical experts for the environmental and social safeguards functions. Moreover, two impacts of high and medium nature were identified in the preceding ESS performance review under the domain of "human resource and technical capacity". Second performance review report identified lack of capacity of AEPC staffs on ESS affairs to keep abreast with the policy provisions of different multi-lateral agencies and their perception over requirement of AEPC's ESS policy as low priority as a whole as the foreseen impacts. In order to mitigate this, the report recommended ensuring participation of AEPC ESS staffs in capacity building programs on ESS affairs organized by multilateral organizations and organize training program for AEPC staffs on AEPC's ESS policy requirement. During the review period, AEPC is organized several training programs (see table 10) targeted to different level of the stakeholders and staffs. Considering the short effective work duration during the review period, progress evidenced on the training and capacity building is noteworthy. The flagged item therefore has been closed satisfactorily.

41 During the review period, AEPC ensured full functionality of institutional set-up created with the establishment of "Environmental and Social Safeguards Section". The section was staffed with the ESS experts employed across different projects implemented by AEPC. Led by AEPC Assistant Director, the ESS section engaged one senior officer, one senior environmental expert, two social safeguards experts, and two environmental safeguard experts to perform required actions related to the ESS affairs at AEPC during the review period. Staffing at the ESS unit is assessed to be sufficient to deal with the AEPC's ESS functions. However, there is equal need to capacitate regular and permanent staffs at AEPC to be able to uptake the ESS related matters so that there is no capacity crunch at the institutional level after a specific project or programme is over. **Table 9**presents the staffing base at AEPC's ESS unit.

Table 9: List of staffs at ESS unit

SN	Name	Position
1	Mr. Rudra Prasad Khanal	Director
2	Ms. Parbata Bhatta	Assistant Director
3	Ms. Roshani Regmi	Senior Officer
4	Dr. Anusuya Joshi	Senior Environmental Safeguard Expert
5	Mr. Shivahari Budathoki	Social Safeguard Expert
6	Ms. Sunita Khatiwoda	Environmental Safeguard Expert
7	Ms. Surina Kayastha	Social Safeguard Expert
8	Mr. Shreejan Ram Shrestha	Environmental Safeguard Expert

(Source: AEPC ESS Section)

42 As depicted in Table 10, AEPC organized Environmental and Social Safeguard Clinic to capacitate Senior Management and officers, Engineers of AEPC on ESS policy of AEPC and the ESS requirements of the World Bank supported projects. Moreover, AEPC conducted "Waste to Energy Stakeholders' Interaction Program" on 25 & 26 November 2019 to bring all the key stakeholders together to share their experiences, learning and to discuss the issues, bottlenecks and come-up recommendation and suggestions to enhance implementation of the project. In which, second day was focused on Environmental and Social Safeguard aspects, to discuss on ESS issues and effective implementation of ESS in compliance with safeguard documents at sub-project level.

43 In addition, AEPC organized capacity development program for project developers and social mobilizers supported by the SASEC program. These capacity development program contained elements related to safeguards. While the need of further capacity development activities to reinforce knowledge gained through training program organized in the review period remains valid, flagged item related to training program in the second performance review report is assessed to have been satisfactorily closed.

Table 10: Training on Environmental and Social Safeguards

SN	Dates	Training Title	Duration	No. of Participants
1	Nov. 15 – 16 ,2019	Environmental and Social Safeguard Clinic	1.5 Days (MGEAP)	24 (17 Male; 7 female)
2	Nov. 25-26, 2019	Waste to Energy Stakeholders' Interaction Program	2 day (SREP)	106 (90 male; 16 female)
3	Sep. 27-29 2019	Leadership Training	3 days (SASEC)	30 (8 male, 22 female)

SN	Dates	Training Title	Duration	No. of Participants
4	Dec. 6-10, 2019	Cooperative Management Training at subproject (field level) level	5 days (SASEC)	19 (11 male; 8 female)
5	Dec. 12-16, 2019	Cooperative Management Training at subproject (Sugarkhal, Kailali)	5 days (SASEC)	33 (18 male; 15 female)
6	Dec. 15-21, 2019	Solar/Wind mini-grid Operator Training	7 days (SASEC)	23(22 male; 1female)
7	Dec. 10-14, 2019	Mini/Hydro Operator Training	5 days (SASEC)	10 (all male)

(Source: AEPC ESS Section and training/workshop reports)

Environmental and Social Safeguard Clinic, November 2019

Waste to Energy Stakeholders' Interaction Program, November 2019

5.3 Budget Allocations

44 The second performance review identified inadequacy of budget planned at activity level to implement measures outlined in review report as an envisaged impact and suggested to reassess budget allocation and disbursement during mid-term review and re-allocate it for the required activities to mitigate the impact. During the review period, a specific budgetary allocation under separate heading was reported for the ESS Section. Though few activities

specific to the ESS function were conducted, all planned activities could not be organized in the review period due to the COVID-19 pandemic. It is also evidenced that the budget is proposed for ESS Section's activities for the next FY. It is assessed that some progress has been achieved in executing AEPC's ESS function; therefore, the flagged item is assessed to be closed. However, it is recommended to continue the budgetary allocation for ESS activities in coming years as well.

45 Since the activities and budget for successive review period has already been approved, there is quite less scope for the activities outlined in this review report to be completely implemented. Moreover, the restricted mobility and health concerns raised due to the COVID-19 pandemic is likely to hinder the planned activities until the pandemic comes under complete control. Since the occupation safety and health is one of the priority concern related to social safeguarding principle, to avoid any work related infection it is advisable to conduct activities that are feasible via virtual platform and it is also encouraged that the AEPC considers remote monitoring as one of the tools. It is envisaged that the hindrance created by the pandemic is likely to avoid a situation of budgetary crunch. Nevertheless, should the pandemic come under complete control, there is option for AEPC to reassess the budgetary allocations to decide for mid-term re-allocation of necessary budget for the pertinent activities that have been carried over to the successive review period.

5.4 Project appraisals, implementation and monitoring

46 The project cycle of renewable energy projects promoted by AEPC, leaving household based technologies as exception, begin with the project identification, followed by feasibility and/or detail feasibility assessment, decision on subsidy, project implementation and monitoring. After completion of the feasibility assessment, a Technical Review Committee (TRC) appraises the project under consideration based on the technical and technological aspects. Second level of scrutiny is performed by the Subsidy Review Committee (SRC) which assesses the eligibility of the projects proposed for subsidy. The project then enters into the implementation phase. AEPC performs under construction monitoring of the systems being deployed while a monitoring by independent entity/expert ex-post implementation.

47 AEPC promotes wide range of technologies for the household, community, institutional or commercial consumption and there are number of technologies that are households based. ESMF annexed to the ESS policy provides framework for environmental or social safeguard assessment for the renewable energy technologies promoted by AEPC. **Table 11** summarizes needs for environment or social safeguards requirements as stipulated outlined in ESMF.

Table 11: Safeguards requirement for renewable energy technologies promoted by AEPC

Technology	Capacity Range	Environmental and Social safeguard
Pico Hydro and IWM	Less than 10 kW for pico and up to 5 kW for IWM	Screening
Micro hydro	(10kW to 100 kW)	Screening, ESMP
Mini-hydro	(100 kW to 1 MW)	Screening, Based on Categorization IEE according to ADB Safeguard Policy Statement

Technology	Capacity Range	Environmental and Social safeguard
Household Improved Cook stoves (ICS) including metallic ICS, Rocket Stoves and Gasifier Stoves	Domestic range	Not required
Institutional ICS	-	Not required
Biomass Electrification	-	Screening, ESMP
Household Solar PV	(upto 100 kWp)	Not required
Urban Solar PV	(greater than 200 kWp)	Screening, ESMP
Household Solar Dryer and Cooker	-	Not required
Institutional solar PV (ISPS)	-	Screening, ESMP
Solar Water Supply Scheme and Solar Irrigation System	-	Screening, ESMP
Municipal Solar Street Lighting	-	Screening
Institutional Solar Dryer and Solar cooker	greater than 3 sq. ft (dryer)	Not required
Institutional Solar Water Heating System	-	Screening, ESMP
Solar Mini-grid	Up to 100 kWp	IEE according to ADB SPS
Wind Energy	upto 100 kW	Screening, At least ESMP
Solar Wind Hybrid	5 to 100 kW	IEE according to ADB SPS
Domestic Biogas and Urban Biogas	upto $12m^3$	Screening
Institutional and Community Biogas	greater than $12.5m^3$ to 500 m^3 size	Screening, ESMP
Commercial Biogas	greater than $12.5m^3$ to 500 m^3 size	Screening, ESMP
Municipal Solid Waste (MSW) Biogas Plants	greater than $12.5m^3$	IEE (Category B projects) as per SREP EMF

(Source: ESS Policy, 2020)

48 For the World Bank supported SREP Waste-to-Energy Biogas sub-projects, the feasibility study (FS) is conducted and the project screening is submitted. The screening is submitted along with the FS for appraisal by the technical review committee (TRC). Upon approval of the screening by the TRC, detailed feasibility study (DFS) is conducted. Based on screening outcome, the category "C" projects are required to prepare ESMP while for the category "B" projects an Environmental and Social Impact Assessment (ESIA) is prepared. The ESIA is submitted along with DFS to seek clearance from the World Bank. On receiving clearance from the bank, the ESIA is submitted along with DFS to the TRC and is approved from the TRC. For the projects that require assessments based on the threshold criteria stipulated in schedule-2 of the EPR, the IEE study is required to be submitted separately to the concerned authority for necessary approval.

49 For the Asian Development Bank supported SASEC sub-projects, the DFS and detailed engineering design (DED) are conducted. For the sub-projects, environmental screening and IEE are conducted according to ADB's Safeguard Policy Statement, 2009. Similarly, social due-diligence is conducted to assess the underlying social safeguards issues related to the specific sub-project. The IEE and social due diligence study is submitted to the ADB for final clearance. For the SASEC sub-projects, no separate approval from the TRC is required.

50 For the World Bank supported MGEAP sub-projects, AEPC conducts ESS screening and categorize sub-projects based on the screening. As per the WB requirements, ESMP is prepared for "Category C" sub-projects and ESIA is prepared for "Category A" and "Category B" sub-projects. Vulnerable Community Development Plan (VCDP) and Resettlement Action Plan (RAP) are prepared only if required. It is the responsibility of Energy Service Companies (ESCOs) to conduct Environmental Assessment, except "Category C" sub-projects, and submit report to AEPC. ESIA for "Category A" sub-projects only require clearance from the WB. Otherwise, it is reviewed by ESS Experts of AEPC/MGEAP and approved by the TRC.

51 Approved safeguards documents contain provisions for implementation and post implementation monitoring. Either the ESS team of the respective projects or external experts entrusted by AEPC perform screening verification or compliance monitoring against the provisions stipulated in the safeguards documents. In the review period, projects were assessed on safeguards grounds for the sub-projects of SREP, SASEC and MGEAP programs which require the detail assessment. In addition to this, screening of the solar mini-grids has also been done during the reporting period. Other technologies like household biogas, solar home systems, improved water mills which do not require ESS assessment as indicated in the policy were not assessed in the review period. But institutional systems which requires initial screening and at-least ESMP needs to be assessed accordingly. This confirms the progress and hence the item flagged has been assessed to have been "closed". However there is need to scale up the assessment as per the policy throughout all technologies and/or sub-projects.

52 A central level Grievance Redress Mechanism (GRM) includes the provision of grievance receiving mechanism via AEPC's website, email, phone and suggestion box. Director of the Administration Division heads the Grievance Redress Committee (GRC), and Assistant Director and Senior Officer are the members. In the review period, the Grievance Redress Committee (GRC) formed for effective implementation of the Grievance Redress Mechanism (GRM) for the Projects SASEC, SREP and MGEAP were found to be operational along with the central level GRC. Though the different projects have its own GRM, a generalised GRM is presented in **Figure 5**. During the reporting period, few grievances have been recorded specific to some projects, of which have been appropriately addressed by the management.

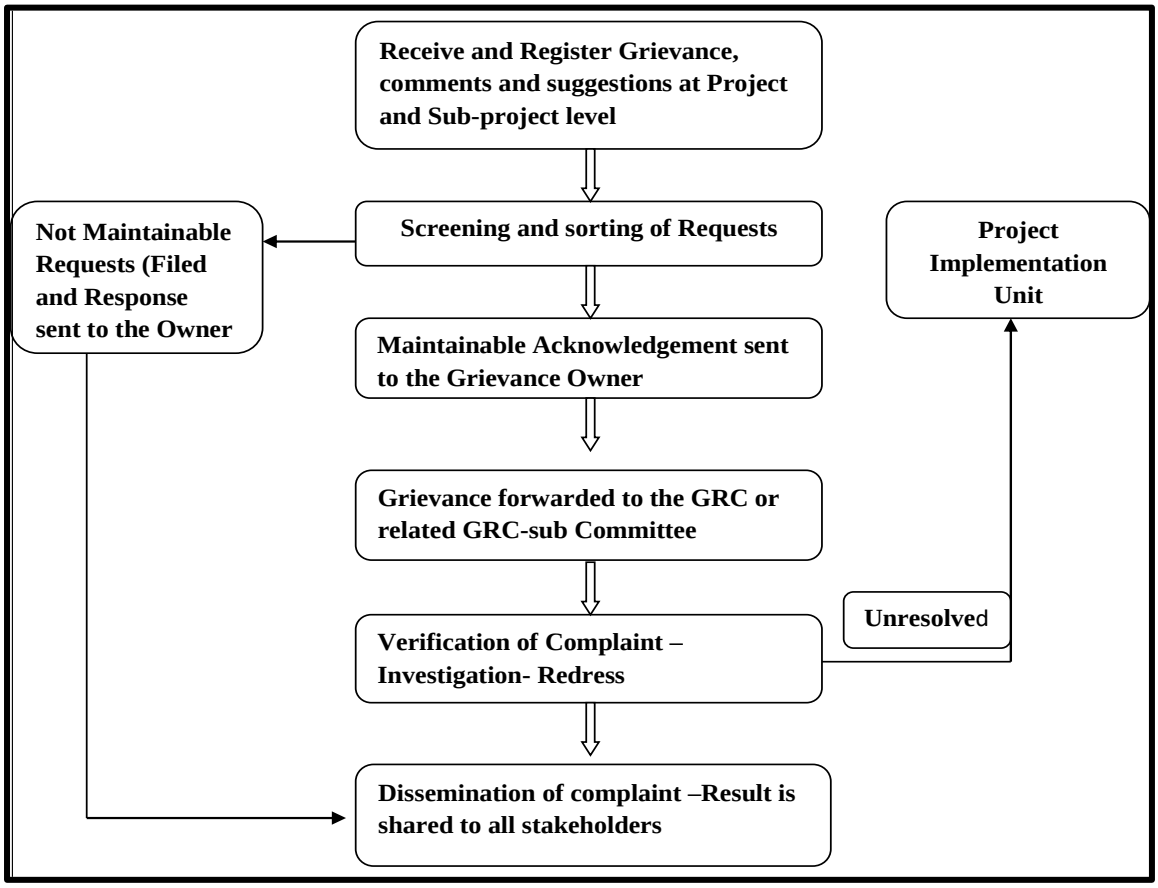

Figure 5:GRM of AEPC

53 Under the broad domain of "project appraisal, implementation and monitoring", the second performance review has flagged almost certain impacts. As a severe risk impact, the review outlines the possibility for a project to remain un-assessed on the safeguards grounds should the specific program under which the project being implemented doesn't require doing so. In order to mitigate this, the review report recommended to incorporate elements related to safeguards in the technical procedure of respective technology and also recommended to restructure the TRC to scrutinize the project on the grounds of environmental and social safeguards. During the review period, it is found that the ESS experts are invited in the TRC where and when required. If provision of an ESS expert in the TRC is ensured in subsidy delivery mechanism, the ESS assessment of the projects will be improved. Therefore, the identified issue is still flagged as "partially closed" and it is further recommended to consider the incorporation of ESS expert in TRC while updating subsidy delivery mechanism.

5.5 Decision making process

54 Decision making process for the ESS related affairs follows the normal procedure through which other decisions related to AEPC are taken. Since there is functional liberty for AEPC to exercise the authority conferred to it through its formation order, the decisions that do not have policy implication or that do not put additional financial burden to the entity can be decided by the management.

55 Stakeholder consultation is a key procedure adopted by AEPC implemented projects to determine the environmental and social risks associated with the project. Therefore, for any

project promoted by AEPC and requiring safeguards assessment, the decision regarding the project component and facilities are well discussed with the stakeholders. In order to have their feedback on the proposed activity, the stakeholders are invited to raise their concerns regarding the project and this provision is stipulated in the EPR, 2020. EPR 2020 required project proponent to allow the project stakeholders the right to receive Information regarding decisions related to ESS affairs and that the likely project impacts are required to be communicated to the respective stakeholders through the means of public hearing. Although the safeguards documents of AEPC supported projects are available upon request, there is no special tracking of the decisions on a single platform. In order to ensure consistency in the communication of decisions, it is advisable to make the TRC meeting minutes publicly available for all the projects implemented by AEPC.

56 Since AEPC sooner or later needs to confirm ESS in the projects it supports, it is advisable to maintain the public availability of TRC meeting minutes regardless of the program to which the project under consideration is linked to. Doing this will enhance transparency of activities performed by AEPC. Moreover, it will also establish a working procedure which ultimately is inevitable provided that the policy requires doing so.

57 Under the domain of "decision making process" second performance review flagged "Lack of access to safeguards documents through AEPC's website." as potential impact of high risk. The review recommended to organize safeguards related decisions in a single platform and ensure periodic reporting of the safeguards affairs to overcome the impact resulting from the risk identified. With the ESS Section being completely functional in the review period, the risk of spread-out of the safeguards related documents and decisions is minimized and its availability is ensured through a single platform in form of ESS Section. With this progress in place, the recommended mitigation measures outlined in the second performance review has been complied with and hence the issue is assessed to have been closed.

58 It was noted that the safeguards documents are submitted to AEPC by the project developers and these are routed to the respective entities whose safeguards standards have been applied; safeguard documents of all SASEC sub-projects are routed to ADB, for example. There might however be cases where the projects are also required to comply with EPA and EPR. It was reported that such projects are taken for approval by the project developer to the competent government authority with which the project activities aligns with. While deciding upon for such project, it is advisable that AEPC routes safeguards documents of all the renewable energy project activities under its purview to its line ministry (MoEWRI) for approval. This may require necessary approvals from the board and ministry; but, it is worth an attempt so that AEPC is well informed of the progress on the safeguards affairs. Since this might involve jurisdictional issues, this finding is issued as an advice and doesn't make part of the overall review finding that will trigger performance rating during next review.

5.6 Documentation and knowledge management

59 As a part of "documentation and knowledge management" procedure, the second performance review flagged potential impact due to unavailability of the safeguards documents to the public under the medium risk category. During the review period, the ESS unit prepared many reports for ESS assessment and compliance monitoring. However, the

process to prepare database to comprehend the ESS impacts and mitigation measures and upload the summary in the AEPC's website has already been initiated and the issue is assessed to have been closed. Nevertheless, the continuity remains to be pertinent for any review period onward.

6.0 RISK ASSESSMENT

60 Out of 11different action areas flagged by the second performance review, 8are assessed to have been closed and3 issues are marked as "partially closed" considering the fact that these issues still need attention to close them completely. **Table 12**summarizes the status of the open issues identified by the second performance review.

Table 12: Status of issues identified by second performance review

SN	Risk Area	Envisaged Impacts	Mitigation Measures	Status	Remarks
1	Institutional arrangement	Lack of independence in oversight function	Policy amendment to ensure independence of safeguards oversight function.	The necessary amendments to the policy provision have been drafted which however needs to be approved from the Board to ensure that amendments come to an effect.	Partially closed
		Lack of appropriate measures for oversight function	Compliance unit to oversee the ESS functions.	The compliance unit has started to scope ESS functions in compliance review reporting.	Closed
		Policy induced limitation to implement projects with category "A" environmental and social risk.	Policy amendment to revise clause that prevents implementing category "A" environmental and social risk.	AEPC has amended ESS policy provision that allows the implementation of category "A" projects. The updated policy is under the process of Board approval.	Closed
		Inertia to change from common project appraisal practice due to poor enforcement of ESS policy.	Action plan to revise technical procedure and conduct first full safeguards assessment of a project in accordance with the centre's ESS policy.	The proposed mitigation measure is under process.	Partially closed
2	Human resource and technical capacity	Lack of capacity on ESS affairs to keep abreast with the policy provisions of different multi-lateral agencies.	Ensure participation of ESS staffs in capacity building programs on ESS affairs organized by multilateral organizations.	AEPC has organised in-house trainings and ESS staffs have participated in trainings organised by development partners.	Closed
		Perception over requirement of AEPC's ESS policy as low priority.	Organize training program for AEPC staffs on AEPC's ESS policy requirement.	Organised trainings and orientations as presented in Table 10.	Closed
3	Budgetary provision	Inadequacy of budget planned at activity level to implement measures outlined in review report.	Reassess budget allocation and disbursement during mid-term review and re-allocate it for the required activities.	Specific budgetary allocation under separate heading was reported for the ESS Section. Though few activities specific to the ESS function was conducted, all planned activities could not be organized in the review period due to the pandemic COVID-19. It is also evidenced that the budget is proposed for ESS Section's activities for the next FY.	Closed

SN	Risk Area	Envisaged Impacts	Mitigation Measures	Status	Remarks
4	Project appraisal, implementation and monitoring	Projects remain un-assessed if the specific program to which it is linked doesn't require doing so.	1. Introduce the ESS requirements in technical procedures to implement particular technology.	1. ESS requirements are already introduced in technical procedures to implement particular technology.	Closed
			2. Restructure TRC to ensure appraisal from the safeguards perspective.	2. ESS experts are invited in the TRC where and when required.	Partially closed
5	Decision making process	Lack of access to safeguards documents through AEPC's website.	1. Upload safeguard documents in AEPC website. 2. Upload all the decisions from TRC meetings in the AEPC's website.	1. Uploaded 2. Uploaded	Closed
6	Documentation and knowledge management	Lack of access to safeguard documents to the public.	Prepare database to comprehending the ESS impacts and mitigation measures and upload the summary in the AEPC's website.	The process to prepare database to comprehend the ESS impacts and mitigation measures and upload the summary in the AEPC's website has already been initiated.	Closed

61 In the review period, AEPC continued to implement the required ESS activities. It is noteworthy that not only the action items recommended by previous performance review report or outcomes from other mission findings have been addressed; rather few steps are proactively taken. Nevertheless, this doesn't undermine the need of improvement and it is critical that few of the review findings from the previous performance review report were not attended with priority to completely close during the review period. AEPC management needs to act with greater focus to fully implement the ESS policy and close critical findings reported during previous performance review.

62 The ESS policy provides guidance for risk rating of the safeguards issue considered during the safeguards assessment. This assessment has adopted the provision stipulated in the policy to rate the risk identified during the review exercise. The risks are rated as low, medium, high and severe based on the likelihood of occurrence of the envisaged impacts and the consequences the impacts can impart. Outcome of the risk assessment provided in **Table 13**has assessed the impacts under the guidance of risk matrix presented in **Figure 6**. Moreover, the risk matrix also suggests relevant mitigation measures for the risks identified.

		Consequence				
		Insignificant	Minor	Moderate	Major	Critical
Likelihood	Almost Certain	Low	Medium	High	Severe	Severe
	Likely	Low	Medium	Medium	High	Severe
	Possible	Low	Low	Medium	High	Severe
	Unlikely	Low	Low	Low	Medium	High
	Rare	Low	Low	Low	Medium	High

Figure 6: The risk matrix

(Source: ESS Policy, 2017)

Table 13: Risk Assessment Matrix from ESS Performance Review

SN	Risk Area	Envisaged Impacts	Likelihood	Consequences	Risk Rating	Mitigation Measures	Remarks
1	Institutional arrangement	Lack of independence in oversight function	Possible	Moderate	Medium	Policy amendment to ensure independence of safeguards oversight function.	Issue partially closed since second performance review.
		Inertia to change from common project appraisal practice due to poor enforcement of ESS policy.	Likely	Moderate	Medium	Action plan to revise technical procedure and conduct first full safeguards assessment of a project in accordance with the centre's ESS policy.	Issue partially closed since second performance review.
		Poor enforcement of ESS policy considering the loose and volatile structure of the ESS section	Unlikely	Critical	High	Deliberate and firmly decide on the positioning of the ESS section.	
2	Human resource and technical capacity	Capacity crunch on the ESS affairs at the institutional level beyond specific project life.	Possible	Major	High	Ensure participation of ESS focal persons in capacity building programs on ESS affairs organized by different	

SN	Risk Area	Envisaged Impacts	Likelihood	Consequences	Risk Rating	Mitigation Measures	Remarks
						institutions and multilateral organizations.	
3	Budgetary provision	Budgetary issues for the activities queued up from the review period to the successive review period.	Possible	Minor	Low	Utilize budget allocated for the activities in previous year, which could not be implemented due to COVID-19 for the pending activities	
4	Project appraisal, implementation and monitoring	Incompliance of ESS policy requirement	Possible	Major	High	1. Conduct periodic compliance monitoring 2. Formulate and Implement SoP at office and project implementation sites during COVID-19 pandemic 3. Restructure TRC to ensure appraisal from the safeguards perspective.	Issue partially closed since first performance review
5	Decision making process	Constrained access of safeguards documents leading to reduced transparency.	Likely	Minor	Medium	1. Regular uploading of safeguard documents in AEPC website. 2. Upload all the decisions from TRC meetings in the AEPC's website.	Process has already been initiated
6	Documentation and knowledge management	Limited access to safeguard documents to the public.	Possible	Minor	Low	Continuation of preparing database to comprehend the ESS impacts and mitigation measures and upload the summary in the AEPC's website.	Process has already been initiated

7.0 PRIORITIZATION OF ACTIVITIES

63 This section of the report intends to provide senior management with the priority of the activities in four categories based on their importance and urgency through a table popularly known as the "Eisenhower Matrix". The matrix in **Table 14**is prepared to prioritize various mitigation measures for the envisaged impacts outlined in the risk assessment matrix (Table 13) of this report.

Table 14: Prioritizing the mitigation proposed

(+) IMPORTANT (-)	**IMPORTANT BUT NOT URGENT** 1. Deliberate and firmly decide on the positioning of the ESS section. 2. Ensure participation of ESS focal persons in capacity building programs on ESS affairs organized by different institutions and multilateral organizations. 3. Policy amendment to ensure independence of safeguards oversight function.	**URGENT AND IMPORTANT** 1. Conduct periodic compliance monitoring 2. Formulate and Implement SoP at office and project implementation sites during COVID-19 pandemic 3. Restructure TRC to ensure appraisal from the safeguards perspective. 4. Action plan to revise technical procedure and conduct first full safeguards assessment of a project in accordance with the centre's ESS policy.
	NOT IMPORTANT AND NOT URGENT 1. Continuation of preparing database to comprehend the ESS impacts and mitigation measures and upload the summary in the AEPC's website. 2. Utilize budget allocated for the activities in previous year, which could not be implemented due to COVID-19 for the pending activities	**URGENT BUT NOT IMPORTANT** 1. Regular uploading of safeguard documents in AEPC website. 2. Upload all the decisions from TRC meetings in the AEPC's website.
	(-) URGENT (+)	

8.0 CONCLUSION

64 AEPC's third annual ESS performance review was conducted based on the policy provisions and demonstrable actions taken by the organization; firstly to implement the policy and secondly, to successfully close the issues flagged by the previous reviews. Of the six broad areas considered for the performance review, improvement is observed in all the six areas; however, few issues have remained open since previous review period broadly from the "Institutional Arrangement" and "Project appraisal, implementation and monitoring" domains. Similarly, three issues each are identified with the high and medium risk rating while two issues of low risk rating have been identified. No any issues with severe risk rating was identified for the review period.

65 The situation of the COVID-19 pandemic is expected to have led to a compromise to implement the ESS activities during the review period; yet, with the review outcome it can be concluded that AEPC successfully closed open issues from the second performance review and the progress in implementing ESS affairs is "Satisfactory". Nevertheless, few issues from second review period and few new issues identified from the current review period will require attention in the successive review period to maintain the progressive track in implementing ESS affairs.