Stakeholders Engagement Framework

for

Promotion of Solar Energy in Rural and Semi-urban Regions of Nepal

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Submitted To:
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Abbreviations and Acronyms

AC	Affected Communities
ADB	Asian Development Bank
AEPC	Alternative Energy Promotion Centre
CBOs	Community Based Organizations
CES	Centre for Energy Studies
C&I	Commercial and Industrial
CNI	Confederation of Nepalese Industries
CO_2	Carbon Dioxide
CREF	Central Renewable Energy Fund
DCC	District Coordination Committee
DKTI	The German Climate and Technology Initiative
DoWRI	Department of Water Resources and Irrigation
EHS	Environmental Health and Safety
EIA	Environmental Impact Assessment
EPA	Environment Protection Act 2019
EPR	Environment Protection Rule 2020
ERC	Electricity Regulatory Commission
ESCO	Energy Service Company
ESCOP	Environmental and Social Code of Practices
ESF	Environmental and Social Framework
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Safeguard
E&S	Environmental and Social
EUR	Euro
EV	Electric Vehicle
FAN	Fishery Association of Nepal
FCDO	UK's Foreign, Commonwealth and Development Office
FGD	Focus Group Discussion
FIs	Financial Institutions
FNCCI	Federation of Nepalese Chamber of Commerce and Industries
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GoN	Government of Nepal
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
GWRDB	Groundwater Resource Development Board
HAN	Hotel Association Nepal
HISSAN	Higher Institutions and Secondary Schools' Association Nepal
HH	Household
ICIMOD	International Centre for Integrated Mountain Development
IFC	International Finance Cooperation
IPs	Indigenous Peoples
IWMI	International Water Management Institute
KfW	Kreditanstalt für Wiederaufbau
KII	Key Informants Interview

KU	Kathmandu University
kW	Kilo Watt
kWp	Kilo Watt peak
LG	Local Government
MFIs	Microfinance Institutions
MGEAP	Mini Grid Energy Access Project
MoEWRI	Ministry of Energy, Water Resources and Irrigation
MuAN	Municipal Association of Nepal
NARMIN	National Association of Rural Municipality in Nepal
NEA	Nepal Electricity Authority
NEPQA	Nepal Photovoltaic Quality Assurance
NFIWUAN	National Federation of Irrigation Water Users' Association Nepal
NGO	Non-Governmental Organization
NPR	Nepalese Rupees (Nepalese Currency)
NREP	Nepal Renewable Energy Program
O&M	Operations & Maintenance
PABSON	Private & Boarding School's Organization Nepal
PAP	Project Affected People
PEA	Project Executing Agency
PG	Provincial Government
PIC	Project Implementation Consultant
PMAMP	Prime Minister Agriculture Modernization Project
POSTED	Promotion of Solar Technologies for Economic Development
PV	Photovoltaic
RE	Renewable Energy
RECON	Renewable Energy Confederation of Nepal
RERL	Renewable Energy for Rural Livelihood
RETS	Renewable Energy Test Station Nepal
RM	Rural Municipality
RSEL	Renewable and Sustainable Energy Laboratory
SASEC	South Asia Subregional Economic Cooperation
SEF	Stakeholder Engagement Framework
SEMAN	Solar Electric Manufacturers' Association Nepal
SEP	Stakeholder Engagement Plan
SIP	Solar Irrigation Pumping
SMG	Solar Minigrid
TU	Tribhuvan University
UG	Users Group
UNDP	United Nations Development Program
USD	United States Dollar
VCDF	Vulnerable Community Development Framework
VCDP	Vulnerable Community Development Plan
WB	The World Bank
WWF	World Wildlife Fund

1. Introduction

This Stakeholder Engagement Framework (SEF) is developed for the 'Promoting Solar Energy in Rural and Semi-urban Regions, Nepal', The German Climate and Technology Initiative 'DKTI' project.

1.1. Objective of the Stakeholder Engagement Framework

The major objective of stakeholder engagement is to keep all stakeholders informed of the project activities and to ensure that stakeholders actively participate in all levels of the project cycles, come up with Environmental and Social Management Plans (ESMPs)/Environmental and Social Code of Practices (ESCOP) to minimize the potential adverse impacts of the project. This will support to narrow down the gaps between the project officials and beneficiaries and help create a conducive-environment to mitigate the adverse social and environmental issues through optimal cooperation from the project beneficiaries themselves. Stakeholder engagement framework recommends a set of stakeholders' engagement activities to be carried out throughout the project development phases.

The specific objectives of the SEF are to:

- To identify and assess the stakeholders and their profiles, interests, issues/impacts, support and concerns relevant to the Project (stakeholder mapping), and more specifically to each Project component.

- To identify specific initiatives (e.g., community meetings, focus group discussions, face-to-face meetings, notices in public facilities) to allow meaningful engagement with the different stakeholders in culturally appropriate manner that is transparent and accessible with a specific focus on vulnerable groups;

- To provide information on the project to government agencies, non-government organizations, International non-government organizations, private sector companies, beneficiaries and community.

- To provide timely information to stakeholders on technical, economic, environmental and social risks and impacts as well as proposed mitigation measures in a timely, understandable, accessible and culturally appropriate manner and format.

- To encourage all affected groups for equal participation during the consultation process. Specific engagement strategies will be proposed for the project-specific demand assessment phase where broad engagement shall be done to ensure all potential beneficiaries will be informed, even if they are considered as vulnerable people.

- To obtain input/feedback from stakeholder on the project modality and mitigation measures and to consider this feedback in the project design and environmental and social performance.

- To facilitate continuous coordination and consultation among various stakeholders.
- To establish a Grievance Redress Mechanism (GRM) for addressing any concerns, feedback and dispute resolution.

1.2. Scope of the Stakeholders Engagement Framework

Stakeholder Engagement is a process of:

- sharing information and knowledge in a meaningful manner,
- seeking to understand and respond to the concerns of individuals potentially impacted or affected by an activity in a transparent, inclusive ad timely process, and
- building relationships based on trust

Stakeholder engagement process is essential to make the project success. The Project Executing Agency (PEA) as well as the Project developer shall undertake the stakeholder engagement throughout the project cycle i.e., during planning, construction, operation and decommissioning phases. Thus, this SEF builds on and documents all consultations undertaken till date, presents the methodology for the planned engagement activities to be conducted and highlights the regulatory as well as institutional framework.

The scope of the SEF including grievance Redress Mechanism covers the project area such as subproject sites, transmission and distribution lines, distribution canals, transportation routes, labor camps, other ancillary facilities.

The employees of the project, subprojects, workers and contractors all shall comply with this SEF.

1.3. Principles of Stakeholder Engagement and Grievance Redress Mechanism

The following principles will guide the stakeholder engagement and grievance redress mechanism for the Project.

Meaningful Information: The stakeholders shall be provided with the meaningful information for their active and informed engagement.

Accessibility and cultural appropriateness: All beneficiaries of the Project, community members or groups, workers and other interested parties shall know and have access to the grievance redress mechanism. Individual People, group or organization who is/are affected by the Project's activities directly or indirectly, or who have an interest in the Project or the ability to influence its outcome, either positively or adversely, can raise a grievance. The project specific GRM shall be published in the local languages of the community and communicated to all stakeholder groups including vulnerable groups in a clear and culturally appropriate manner to

ensure their access to the mechanism.

Transparency and fairness: The grievance resolution process shall be transparent, in harmony with the local culture, and in the understandable as well as appropriate language. The GRM shall not impede the one's access to other judicial or administrative remedies.

Channels of communication shall be open throughout the Project period so that the focal person responsible for receiving grievances can address every grievance received in sensitive and culturally appropriate manner.

Written records: Every grievance received and its resolution status shall be recorded in a Register, in a prescribed Form, **Appendix 2**.

Incorporation of feedback: The feedback received from the stakeholder engagement and grievance redress process till date shall be incorporated into the Project design, and the same shall be reported back to the stakeholders in a clear and culturally appropriate manner including vulnerable groups.

2. Legal and Institutional Framework

This section provides the provision related to stakeholder engagement, including information disclosure and grievance management in the existing policies and regulatory frameworks. The first sub-section focuses on the national legal and institutional framework, while the later provides the stakeholder engagement policy and practices of the World Bank.

2.1. National Regulations

The key regulation that envisages stakeholder engagement during the project development and implementation are discussed as follows.

2.1.1 The Constitution of Nepal

The Article 27 of the Constitution guarantees that every citizen has the right to demand and receive information on any matter of their interest or of public interest either through the public information system adopted by all government agencies or by filing an appeal through the National Information Commission. However, it is quiet on the requirement of stakeholder engagement in development projects. The Constitution, though indirectly, has provided platforms for stakeholder consultations and engagement since both benefit sharing and equity participation require extensive participation of project-affected people and stakeholders, as provisioned in Article 4.51.c.3 relating to social and cultural transformation to make community development through enhancement of local public participation, by promoting and mobilizing the creativity of local communities in social, cultural and service-oriented works. As per the constitution, the Federation, State, and Local levels shall provide for the equitable distribution of benefits derived from the use of natural resources. The practice of benefit sharing, however, is well established only in the energy sector. With respect to GRM, article 117 of the Constitution

of Nepal prescribes a three-member Judicial Committee at the local level coordinated by its Vice-Chairperson in the case of a Village Body and by its Deputy Mayor in the case of a Municipality, in order to settle disputes under their respective jurisdictions in accordance with the law.

2.1.2 Local Government Operation Act 2017

As per the constitutional provisions, the Clause 46 of the Local Government Operation Act 2017 has a provision of such committee every rural municipality and municipality.

2.1.3 National Environment Policy, 2019

The Policy requires to ensure the rights of people to live in a clean and healthy environment by controlling, lessening, and preventing all types of environmental pollution and managing household and industrial wastes. The policy aims to promote the role of stakeholders in environmental management by ensuring their meaningful participation in the decision-making process and has envisaged strategies to inform and empower stakeholders for environment protection through capacity enhancement.

2.1.4 Land Acquisition, Resettlement, and Rehabilitation Policy, 2015

The policy envisages the requirement to undertake a social impact assessment in consultation with elected representatives of the local bodies, affected families, beneficiaries, and other concerned agencies by the project proponent. The policy envisages meaningful consultation with the project-affected families and other stakeholders throughout the project cycle, right from the planning phase to the completion. The policy states that the participants shall be informed in advance about the discussion topic, date, time and venue, and the project proponent shall maintain records of all the discussions and consultations along with the decisions made during the consultation.

2.1.4 Environment Protection Act, 2019

The *Environmental Protection Act, 2019* provisions three levels of environmental studies for the development projects based on the scale, magnitude and extent of environmental and social impact. The act makes it mandatory to undertake prior informed public hearing/s for all three levels of environmental studies covering the entire project site so that the project can promote stakeholder engagement and information disclosure about the project and its planned activities.

2.2. International standards

The project has to comply with IFC Performance Standards and the World Bank Environmental and Social Framework. The requirements for stakeholder engagement according to Performance Standard 1 and Environmental and Social Standards 1 and 10 are:

- Begin as early as possible in the project cycle and continue throughout the life of the project
- Conduct engagement based on timely, relevant, understandable and accessible information in a culturally appropriate format

- Focus inclusive engagement on those directly affected as opposed to those not directly affected
- Be free of external manipulation, interference, coercion, or intimidation
- Enable meaningful participation, where applicable
- Be documented

To allow meaningful consultations with stakeholders on project design, relevant information should be disclosed as early as possible to the stakeholders and in particular to the affected communities (ACs), including:

- The purpose, nature, and scale of the project
- The duration of proposed project activities
- Any risks to and potential impacts on such communities and relevant mitigation measures
- The envisaged stakeholder engagement process including means for participating where applicable
- The grievance mechanism

Any project variation along the project life will have to be disclosed timely.

Differentiated strategies should be utilized to allow for the effective engagement of various stakeholder groups, including those identified as disadvantaged or vulnerable. Thus, this SEF comply with ESS7, as the Project requires addressing Indigenous Peoples (IPs). The requirements of ESS7 are to enable targeted meaningful consultation, including identification and involvement of IP communities and their representative bodies and organizations; culturally appropriate engagement processes; providing sufficient time for IPs decision making processes; and allowing their effective participation in the design of project activities or mitigation measures that could affect them positively or negatively. The project should understand the representativeness of leaders and representatives to ensure that the views of ACs are truly represented in the process. Gender considerations should be considered and views of both genders should be included in engagement as well as decision making processes.

When projects have potentially significant adverse impacts on communities, the project should engage in informed consultation and participation through in-depth exchange of views and information and iterative consultation. The outcomes of these consultations should be incorporated into the project design, mitigation and benefit-sharing measures.

3. Stakeholder Identification and Analysis

3.1. Stakeholder Analysis Process

Project stakeholders are people and groups that (i) will be affected by the Project, Affected Parties; (ii) are likely to be interested, Interested Parties; and/or, (iii) could influence the outcome of the Project or have decision-making role in the Project, Decision-makers. These stakeholder groups, individuals and representatives have been identified and analyzed so as to determine the most effective engagement methods for each component. This identification and analysis should be updated as the Project progresses and the social context evolves.

Stakeholders with diverse perspectives, interests and relationships to the Project can contribute to varied understandings of the local context and how the Projects activities impact the local environment, thus the importance of thorough stakeholder identification and analysis.

3.1.1. Common stakeholders for all 3 components

- Affected local individuals, communities or households
- Project beneficiaries
- Government agencies and their representatives at various levels (federal, province, local), from concerned ministries and departments,
- Elected officials of concerned Rural Municipalities (RMs), Municipalities, District Coordination Committee (DCCs) or constituencies,
- Entrepreneurs,
- Research institutes
- Concerned Non-Governmental Organization (NGOs), Community Based Organizations (CBOs) and user groups,
- Solar Electric Manufacturers Association Nepal (SEMAN),
- Political party representatives and local parliamentarians,
- Local influential from the affected areas, such as informal or traditional community heads, schoolteachers, healers, social and religious leaders, and other notable women and men,
- Social workers and marginal group workers (such associations or organizations dedicated to the upliftment of the poor, the landless, women, children and other vulnerable groups), and
- The project developers/proponents themselves.

3.1.2 Specific Stakeholder for Component 1: C&I Solar rooftop project

- Electricity Regulatory Commission (ERC): facilitates in tariff fixation
- Nepal Electricity Authority (NEA): facilitates Power Purchase Agreement (PPA)
- Federation of Nepalese Chambers of Commerce and Industry (FNCCI): support to establish contact with commercial and industrial entities listed with it
- Confederation of Nepalese Industries (CNI Nepal): support to establish contact with industries listed with it
- Hotel Association Nepal (HAN): primary contact to reach hotels in the countries
- Restaurant and Bar Association Nepal: primary contact to reach restaurants in the countries
- Private & Boarding School's Organization Nepal (PABSON): support to establish contact with private educational institutes
- National Private and Boarding Schools Organisation (N-PABSON): support to establish contact with private educational institutes
- Higher Institutions and Secondary Schools' Association Nepal (HISSAN): support to establish contact with private educational institutes
- Association of Private Medical and Dental Colleges of Nepal: support to establish contact with medical colleges
- Commercial and Industrial Entities: can be identified individually as well

3.1.3 Specific Stakeholder for Component 2A: Solar Irrigation Pumping

- Department of Water Resources and Irrigation (DoWRI): policy guidance
- Ground Water Resource Development Board (GWRDB): provides information on water table and demand of irrigation systems
- Prime Minister Agriculture Modernization Project (PMAMP): support to identify potential sites
- National Federation of Irrigation Water Users' Association Nepal (NFIWUAN) support to establish contact with agro-entrepreneur associated with farmers
- Floriculture Association Nepal: support to establish contact with agro-entrepreneur associated with floriculture
- Fishery Association of Nepal (FAN): support to establish contact with agro-entrepreneur associated with fishery

3.1.4 Specific Stakeholder for Component 2B: Solar Minigrid

- Electricity Regulatory Commission (ERC): facilitates in tariff fixation
- Nepal Electricity Authority (NEA): facilitates net metering
- Local people at concerned project sites

3.2. Disadvantaged and Vulnerable Groups and Individuals

The Fifteenth Plan 2019/20 – 2023/24 of the country recognizes women, elderly people, indigenous communities (including Dalits, Madhesis), Muslims, endangered minorities and marginalized citizens, (refer to Table 9 of ESMF, Section 6.2) as the groups who are deprived of economic, social and political opportunities and aims to ensure proportional and inclusive access to resources and facilities available in the country for them. Amongst all, women in all social groups and regions have been proven as more disadvantaged than their male counterpart and even among women, widows, separated, divorced and female-headed households are particularly disadvantaged.

In addition, vulnerable community could be the communities living in a remote location who are commonly landless, marginal farmers living below subsistence level and often *ex-kamaiyas* (bonded labourers). Moreover, these groups have no or limited access to public resources, and they almost never participate in national planning, policy, and do not participate in decision making processes or in development initiatives. As a result, their risk of falling below the income poverty line is extraordinarily high. The disadvantaged and vulnerable groups/individuals are the major Project stakeholders, who need special attention and must be engaged throughout the Project period starting from design phase.

Some indigenous communities may trigger the WB ESS7 definition of Indigenous Peoples. As such, the project will "ensure they are fully consulted about and have opportunities to actively

participate in project design and the determination of project implementation arrangements. The scope and scale of consultation, as well as subsequent project planning and documentation processes, will be proportionate to the scope and scale of potential project risks and impacts as they may affect Indigenous Peoples."

In addition, in line with ESS7, the project "will design and implement the project in a manner that provides affected Indigenous Peoples with **equitable access to project benefits**. The concerns or preferences of Indigenous Peoples will be addressed **through meaningful consultation and project design, and documentation will summarize the consultation results and describe how Indigenous Peoples issues have been addressed in project design**. Arrangements for ongoing consultations during implementation and monitoring will also be described."

3.3 Stakeholder mapping and suggested communication and consultation methods

It is important to engage stakeholders in a meaningful and productive way, and the developer's willingness and ability to work with them. The project plans to organize one Project Launching and Dissemination workshop by January 2023, in which most of the identified stakeholders will participate. This analysis is summarized in **Table 1** below which shows the potential engagement strategies which could be implemented depending on the results of the mapping exercise of each of them.

Table 1: : Project stakeholders and suggested communication and consultation methods

S.N.	Stakeholder Group	Stakeholder identified	Stakeholder relevance			Engagement Methods			
			Affected	Interested	Decision Maker (Influence level)	Public Meetings	Face to Face Meetings	Focus groups	Others
Common Stakeholders									
1.	**Government agencies**	Ministry of Energy, Water Resources and Irrigation (MoEWRI)		**X**	**X**		**X**		Workshop
		Electricity Regulatory Commission (ERC)		**X**	**X**		**X**		Workshop
		Nepal Electricity Authority (NEA)		**X**	**X**		**X**		Workshop
		Provincial Government (PGs) and Local Government (LGs)		**X**	**X**		**X**		Workshop (PGs only)
		Central Renewable Energy Fund (CREF)		**X**	**X**		**X**		Workshop
		Renewable Energy Test Station-RETS Nepal		**X**	**X**		**X**		Workshop
2.	**Installer Companies /Consulting firms**	Solar Companies		**X**			**X**		Workshop
		Engineering & Procurement Companies		**X**					Newspapers tenders releases + advertising
		Consulting firms/Individual consultants		**X**			**X**		Through tendering by newspaper ads

S.N.	Stakeholder Group	Stakeholder identified	Stakeholder relevance			Engagement Methods			
			Affected	Interested	Decision Maker (Influence level)	Public Meetings	Face to Face Meetings	Focus groups	Others
3.	**Civil Societies/NGOs**	Renewable Energy Confederation of Nepal (RECON)		**X**			**X**		Workshop
4.	**Private Sector/Association**	SEMAN,		**X**			**X**		Workshop
5.	**Development Partners and program**	ICIMOD,		**X**			**X**		Workshop
		GIZ/INTEGRATION/POSTED		**X**			**X**		Workshop
		FCDO/NREP		**X**			**X**		Workshop
		UNDP/RERL		**X**			**X**		Workshop
6.	**Research Institutions**	Centre for Energy Studies (CES), Institute of Engineering, TU		**X**			**X**		Workshop
		Renewable and Sustainable Energy Laboratory (RSEL), KU		**X**			**X**		Workshop
7.	**Project beneficiaries**	Vulnerable groups	**X**	**X**		**X**	**X**	**X**	Newspaper, radio broadcast, …
Specific stakeholders for Component 1: On-grid solar roof systems									
1.	**Financial Sector**	Class-A commercial banks of Nepal working in Renewable Energy Sector		**X**	**X**		**X**		Workshop
2.	**Private Sector/Association**	FNCCI		**X**			**X**		Workshop
		CNI		**X**			**X**		Workshop

S.N.	Stakeholder Group	Stakeholder identified	Stakeholder relevance			Engagement Methods			
			Affected	**Interested**	**Decision Maker (Influence level)**	**Public Meetings**	**Face to Face Meetings**	**Focus groups**	**Others**
		Private entities (medical college, hospital, schools/college, hotels, beverage industries, EV Charging station, shopping malls etc.)	**X**	**X**	**X**		**X**	**X**	
3.	**Project beneficiaries**	Commercial and Industrial entities	**X**	**X**			**X**		**Workshops**
Specific stakeholders for Component 2A: Off-grid solar irrigation pumps									
1.	**Government agencies**	Department of Water Resources and Irrigation (DoWRI)		**X**	**X**		**X**		
		Ground Water Resource Development Board (GWRDB)		**X**	**X**		**X**		Workshop
		Prime Minister Agriculture Modernization Project (PMAMP)		**X**	**X**		**X**		Workshop
2.	**Financial Sector**	Micro-finance Institutions (MFIs)		**X**	**X**		**X**		
3.	**Civil Societies/NGOs**	National Association of Rural Municipality in Nepal (NARMIN)		**X**			**X**		
		Municipal Association of Nepal (MuAN)		**X**			**X**		Workshop
		National Federation of Irrigation Water Users' Association Nepal (NFIWUAN)		**X**			**X**		Workshop
4.		IWMI,		**X**			**X**		Workshop

S.N.	Stakeholder Group	Stakeholder identified	Stakeholder relevance			Engagement Methods			
			Affected	**Interested**	**Decision Maker (Influence level)**	**Public Meetings**	**Face to Face Meetings**	**Focus groups**	**Others**
	Development Partners and program	WWF Nepal		**X**			**X**		Workshop
5.	**Project beneficiaries**	UGs	**X**	**X**		**X**		**X**	
		Cooperatives		**X**			**X**		
		Farmers	**X**	**X**		**X**	**X**	**X**	
Specific stakeholders for Component 2B: Off-grid solar mini-grids									
1.	**Development Partners and program**	World Bank/MGEAP		**X**			**X**		Workshop
		ADB/SASEC		**X**			**X**		Workshop
2.	**Project beneficiaries**	Community	**X**			**X**		**X**	
		Households	**X**			**X**		**X**	
		Entrepreneurs	**X**			**X**	**X**		**Workshops**

3.3. Summary of Project Stakeholder Roles and responsibilities

The project has identified following key stakeholders working in this sector and contributing to the various steps of the project implementation.

Table 2: Project Stakeholder Roles and Responsibilities

S.N.	Institutions	Roles and Responsibilities
1	**Government/Public Sector**	
Ministry of Energy, Water Resources and Irrigation (MoEWRI)		• Policy guidance, supervision and monitoring tasks at different stages of project implementation
Electricity Regulatory Commission (ERC)		• Facilitate in tariff fixation or setting
Nepal Electricity Authority (NEA)		• Net metering and grid interconnection arrangements.
Department of Water Resources and Irrigation (DoWRI) Integrated Energy and Irrigation Special Program (IEISP)		• Coordination and collaboration as per need
Ground Water Resource Development Board (GWRDB)		• Provide monitoring data of groundwater table • Coordination and support in potential sites identification
Prime Minister Agriculture Modernization Project (PMAMP)		• Coordination and collaboration if necessary
Provincial Government (PGs) and Local Government (LGs), DCCs		• Provide co-financing for the development of subprojects, if necessary • Facilitate registration and renewals of sub-projects • Facilitate for tariff fixation • Facilitate to resolve grievances and issues • Coordinate with pertinent stakeholders for the development and implementation of subprojects • Facilitate Periodic monitoring and evaluation of subprojects • Develop a handover mechanism and implement as per the agreement between the parties. • Facilitate for long term operation • Facilitate registration of cooperative or other management model if necessary • Other obligations as provisioned in constitution and laws.
Central Renewable Energy Fund (CREF)		• Provide services that enable the successful delivery of subsidies and credits to the sub-projects in accordance with existing rules and standards.
Renewable Energy Test Station- RETS Nepal		• Prepare Technical Standards and Quality Assurance
2	**Financial Sector**	
Class-A commercial banks of Nepal working in Renewable Energy Sector particularly with AEPC" as handling and partner banks.		• Provide loans or credit facilities to the selected ESCOs. • Responsible for evaluation and approval of loan applications for subprojects if necessary
Micro-finance Institutions (MFIs)		• Provide loans or credit facilities to the farmers or ESCO (for SIPs).
3	**Installer Companies /Consulting firms**	

S.N.	Institutions	Roles and Responsibilities
	ESCOs[1] or EPC companies/solar companies	• Perform the FS, EA, and document/report review as agreed (if ESCO). • Supply, installation, O&M works • Ensure legal compliance in all areas, including environmental, social, GESI, and CSR. • Assemble an adequate human resource team for the subproject's successful implementation and management. • Oversees the subproject's periodic monitoring and timely reporting. • Prepare and submit all subproject implementation reports as per the specified format or structure
	Consulting firms/Individual consultants	• Carry out the FS, EMP, monitoring and evaluation of document/reports as per need.
4	**Civil Societies/NGOs**	
	• Renewable Energy Confederation of Nepal (RECON) • National Association of Rural Municipality in Nepal (NARMIN) • Municipal Association of Nepal (MuAN) • National Federation of Irrigation Water Users' Association Nepal (NFIWUAN)	• Coordination and collaboration as per need
5	**Private Sector/Association**	
	FNCCI, SEMAN, CNI, FNCSI, PABSON, N-PABSON, HAN, REBAN, HISSAN, FAN, Private entities (medical college, hospital, schools/college, hotels, beverage industries, EV Charging station, shopping malls etc.)	• Coordination and collaboration as per need. • Support in demand collection and successful project implementation.
6	**Development Partners and program**	
	ICIMOD, IWMI, FCDO/NREP, UNDP/RERL, World Bank/MGEAP, WWF Nepal, ADB, WI-Nepal, Renewable World, Practical Action Nepal	• Knowledge sharing partners • Support in project implementation
	GIZ/POSTED	• Provides technical support to DKTI
7	**Research Institutions**	
	• Centre for Energy Studies (CES), Institute of Engineering, TU • Renewable and Sustainable Energy Laboratory (RSEL), KU	• Knowledge sharing or idea exchange • Support in project implementation
8	**Local beneficiaries** (UGs, Cooperatives, Farmers, Entrepreneurs etc)	• Support in project identification, implementation, operation and management

[1] **Energy Service Company (ESCO)** is defined as a private commercial entity legally registered to carry out energy service businesses (generation, transmission and distribution).

4. Brief Summary of Previous Stakeholder Engagement Activities

The consultation with relevant stakeholders was initiated by conducting one-to-one meetings with bilateral organizations such as GIZ/Integration and FCDO, and handling bank for Central Renewable Energy Fund (CREF) of AEPC, to introduce the DKTI project. The one-to-one consultation with relevant stakeholders such as solar companies, concerned GoN entities, bilateral organizations, financial institutions and concerned associations continued throughout the inception period. Most of the discussion was focused on the technical and financial viability of the 3 components of the Project, viz. solar PV rooftop, solar irrigation pumps (small, midsize and large) and solar mini-grid. A brief summary of discussion is presented as follows and detail is provided in **Appendix 4**.

4.1. Consultation with Solar Companies

The PIC members have consulted with 5 private solar companies during the project inception phase, namely Saral Urja Pvt. Ltd., Suryodaya Urja Pvt. Ltd., Ghampower Nepal Pvt. Ltd., Sunbridge Solar Nepal Pvt. Ltd., and Sun Farmer Nepal Pvt. Ltd. The main agenda of discussion was to introduce the DKTI project to them and share their learning experience on implementation of 3 components of the Project viz, solar PV rooftop, solar irrigation pumps and solar mini-grid. Most of the consulted private companies are experienced in implementing all 3 systems and have pipeline of these systems to be implemented. It seems that the companies are well implementing solar PV rooftop systems in commercial entities such as hotels, colleges and shopping malls. In terms of SIP, most of them recommended for large scale community type SIP rather than individually owned.

4.2. Consultation with GoN Entities

A. Nepal Electricity Authority (NEA)

The consultation with Nepal Electricity Authority (NEA), government owned utility grid company, was focused on the discussion about NEA perspective on the promotion of rooftop PV to support energy mix objective of GoN and Net metering process. The meeting indicated that the End User Consumer or ESCO can easily participate in the Net metering process as NEA has 7 regional offices and 129 distribution centers throughout the country where they can submit the application.

The NEA was informed about introducing distributed renewable energy (DRE) systems as one of the sub-components of the project, proposed as pilot projects under DKTI Project. The project can be developed in partnership between private project developer

and the respective local government (LG) with Power Purchase Agreement (PPA) approach.

B. Groundwater Resource Development Board (GWRDB)

A meeting conducted with the Executive Director of Groundwater Resource Development Board (GWRDB) discussed the potential role of the Board in groundwater monitoring and their experience in irrigation sector. The Board is providing technical as well as financial support for the implementation of shallow tube well irrigation pumps and planning to prepare the dashboard or digital database in collaboration with POSTED to maintain the data on water table. The Board has identified the theft of solar panels and accessories as one of the major challenges for SIPs. The GWRDB is enthusiast to collaborate with DKTI project so that they can contribute to reduce carbon emission through replacing diesel pumps.

4.3. Consultation with Bilateral Organizations/Development Partners

A regular meeting organized with GIZ/POSTED discussed on potential synergy between two projects, as both share the common interest. The identified potential field of cooperation are capacity building, set up of technical standards, cooperation on establishing incentive/subsidize scheme and conducting monitoring activities in terms of groundwater usage, CO_2 emission reduction, generated kWhs etc. The organization also agreed to conduct site identification and feasibility studies on behalf of DKTI. A meeting organized with FCDO/NREP discussed on the potential collaboration with NREP as it has already established financing models. Moreover, IWMI agreed to support on Component 2A in sizing tool for pumps and providing advise on specific crop cultivation related to water source and availability etc.

4.4. Consultation with Financial Institutions

During the inception phase, the PIC team consulted with NMB Bank and Civil Bank, both are class ‘A’ commercial banks of the country. The NMB Bank is able to finance all kind of Renewable Energy (RE) projects without limitation procedure of loan setting and prefers to do the financial assessments as the leading partner and open to finance any of the opex or capex model. Another bank, Civil Bank Ltd., also expressed their interest to participate in the project financing for DKTI solar project, especially for rooftop Solar PV. The bank has prior experience working with AEPC for installing more than 1500 HH rooftop PV and a few C&I rooftop.

4.5. Consultation with Associations

The PIC team conducted meeting with two associations related to commercial and industrial sector; Federation of Nepalese Chamber of Commerce and Industries (FNCCI) and Confederation of Nepalese Industries (CNI). The discussion was focused on present power quality and reliability issues in Nepalese industrial communities and role of FNCCI and CNI in promotion of sustainable renewable systems. There are more than 2000 corporate business houses associated with FNCCI through its district chambers. Similarly, CNI is operational in all 7 provinces and has a separate Energy Efficiency Desk established on December 2019. The Desk has all three: business, environment and social purposes for its establishment. Through Energy Efficiency it believes to contribute the industrial community abating the production cost; contribute the environment by reducing the greenhouse gas (CO_2) emission; and contribute to society making available more energy for society (because one unit saving is equal to one unit generation). Both expressed their commitment to promote the project with the C&I entities registered with them.

A consultation was also conducted with Renewable Energy Confederation of Nepal (RECON), a common platform for business sector groups active in the supply and delivery of RETs and services, for introducing the project and sharing knowledge regarding solar projects. RECON recommended to provide upfront investment subsidy plus soft loan to ESCOs to attract them in this sector and shared its experience with banks that the lengthy process usually delays the project implementation.

4.6. Consultation with C&I Entities

Thee-Go Pvt. Ltd. is one of the commercial entities consulted during the inception phase. Understanding the issues and challenges of Electric Vehicle (EV) charging stations, quality and reliability of power at outlet of charging stations and willingness of the EV companies to adapt PV energy in their future business plan were some of the discussion points of the meeting. The company sees the potential only if the system provides solar backup power supply with energy storage system to backup power for customers or connect to the grid through NET metering. However, the company is willing to collaborate with the Project to implement solar rooftop PV system. In addition, the consultation was conducted with Prime Cable Industries (P) Ltd. and Yak Brewing Pvt. Ltd. Both industries expressed their interest to install solar rooftop PV, if they get either interest subsidy or upfront subsidy.

5. Stakeholder Engagement Program

For the Project, it is critical to plan each consultation process to make it inclusive, document the process and communicate it to relevant stakeholders. The principles of Free, Prior and Informed Consultation (FPIC) shall be adopted in all stakeholder

engagements, especially with disadvantaged and vulnerable groups, as ESS7 is triggered for the Project. The timing of stakeholder engagement shall be broken down based on the type of stakeholder and subproject phase. The Stakeholder Engagement Plan (SEP) shall be developed for each subproject for all 3 components; the template is provided in **Appendix 6**. The engagement and consultation shall be carried out based on the subproject specific SEP and on an ongoing basis as the issues evolves. The SEP shall include the following :

- Phase of the project
- Which stakeholders to engage with
- Purpose of the engagement and nature of the engagement
- Method of engagement
- Time, location and dates and how to inform stakeholders in advance of the engagement.
- Key message of the engagement,
- Potential risks and mitigation measures and who will be responsible for managing the risks.

5.1. Purpose and Timing of Stakeholder Engagement Program

The Project shall ensure that the environmental and social concerns as well as community voices are well included in the design and implementation phases of the subprojects of all 3 components. The main aim of stakeholder engagement is to provide updated information to the relevant stakeholders identified through stakeholder analysis and to provide timely information to them prior to and during the implementation of subprojects. This will enable meaningful participation of relevant stakeholders in the subproject activities. Generally, the subprojects will have 4 phases; design, implementation, monitoring and evaluation. Therefore, the purpose and timing of the engagement shall be based on these subproject phases.

5.2. Proposed strategy for stakeholder engagement

Affected parties: A close contact shall be maintained with this group and ensure their full engagement with the Project. They shall be regularly updated about the progress of the project status by organizing a group meeting or one-to-one meeting and inform about the planned activities including risks and impacts associated with it. Their concerns and suggestions shall be recorded. A minute shall be prepared for each meeting, which shall be signed by all participants at the end. The minute must include the issues/agenda discussed and decision made or action agreed and shall be made available for concerned people.

Major engagement strategy:

- Maintain contact details of the individuals/institutions and keep it updated.
- Keep close contact with them and maintain it throughout the project period.
- Conduct a regular consultation in a group or one-to-one meeting, which should be pre-informed.
- Provide update on the project activities, including potential risks and impacts.

Interested parties: This group of stakeholders shall be kept informed about the planned activities of the project and associated risks and impacts. A regular consultation shall be conducted and minutes with signature of all participants must be recorded. The minute must include the issues/agenda discussed and decision made or action agreed and shall be made available for concerned people.

Major engagement strategy:

- Maintain contact details of the individuals/institutions and keep it updated.
- Conduct a regular pre-informed consultation in a group
- Provide update on the project activities, including potential risks and impacts.

Disadvantaged/vulnerable groups: This group defined under Section 6.2 of ESMF shall be kept in close contact and ensure that they have access to the project information and their voice is heard. A regular consultation shall be conducted to ensure that they participate in various benefit sharing activities of the project.

Major engagement strategy:

- Maintain contact details of the individuals/institutions and keep it updated.
- Maintain close contact with them by organizing FGDs and through home visits, through mobile phones to elderly, people with disability and with difficulty in mobility.
- Conduct consultation in local language to ensure that IPs are able to understand the project activities and can communicate to provide their feedback/suggestion, lodge grievances etc.
- Inform them how their feedback/suggestion will be incorporated, and grievance will be processed and resolved.
- Ensure that consultation is organized in culturally appropriate manner and at suitable time and location.

5.3. Proposed strategy for information disclosure

Most often a development project, including its socio-economic and environmental setting, fails due to lack of information or misinformation. For the success of a given program the management must share all the information obtained about the proposed

activities and their expected results with the affected and interested stakeholders, especially with disadvantaged and vulnerable groups. In collaboration with different local authority, CBOs, NGOs and other groups, the project needs to disclose its all the relevant information to PAPs in the various stages of project cycle. Agencies working for environmental and social aspects should also be informed at both local and national level about the ongoing and planed activities, to identify jointly appropriate protective or corrective measures. The subprojects shall adopt the following approaches to make information accessible to all the concerned stakeholders throughout the project cycle and all over the country. A Stakeholder Communication Plan (SCP) shall be included in SEP developed for each subproject of all 3 components, which shall include project stage, key messages, method of engagement, time, location and date for the engagement and responsible person, **Appendix 7**.

In addition, the effective communication channels in the local communities during the entire project cycle shall be prepared whenever utilized. The Project disclosure and consultations shall take place on neutral grounds to ensure better participation, particularly for women and vulnerable groups. The DKTI-Solar Project shall safeguard disclosure materials available to stakeholders through the communication networks as follows:

Table 3: Strategy for Information Disclosure

Targeted Stakeholders	**Information Disclosure Networks**
• Affected individuals (project beneficiaries) • Local communities • Vulnerable groups including women's groups • Indigenous peoples • Local NGOs • Local press and media • Rural Municipalities/Municipalities and concerned officials • Local interest groups and Businesses	• AEPC/DKTI-PIU office • Rural Municipality or Municipality Office/Ward offices • E&S Team • Local schools • Locally formed Clubs, Groups
Provincial Level Stakeholders – including provincial government, interest groups, FIs, Medias, GOs/NGOs	• Provincial Government Offices • AEPC/DKTI-PIU office • FNCCI unit in district • NGOs and interest groups' network • Project Facebook Page
National Level Stakeholders- including line ministry (MoEWRI), GOs, NGOs, INGOs	• Ministry offices • AEPC/DKTI-PIU office • FNCCI, CNI, SEMAN • NGOs Network • Research Institutions: Centre for Energy Studies (CES) and Renewable and Sustainable Energy Laboratory (RSEL) • Project Facebook Page

AEPC website	• All stakeholders can access Project information materials including program document. Interested participants can email to request information, and raise issues/concerns.

The following **means and methods** shall be applied to **communicate the relevant stakeholders**.

- Phone, call centers, email, letters
- Orientation Program/ Training/workshop
- E&S team visit the potential project areas
    - Virtual/One-on-one meetings
    - Virtual/face-to-face focus-group discussions (FGDs)
    - Other outreach activities
- Public hearings or mass meeting at project influential areas
- Meetings with local municipalities
- Ward officers and notice boards
- Local teachers and school notice boards
- A local radio talks/notices where and when information is available
- Local NGO network, Youth Club, Users Group
- District level Journalist Association (If applicable)
- FNCCI unit in district level (If applicable)
- Advertisement on daily newspapers and/or TV/FM Radios suggesting where information is available.
- Regular information updates in the AEPC website i.e., regular sharing of project related information.

Information disclosure through mass meetings, brochures, flyers, AEPC website and local media, among other shall be established.

Communication Materials:

- **DKTI-Solar Program Document**: It consists of a summary of the Project, financing modalities, implementation targets, timeline and milestones. The Project information in Nepali language also will be prepared and disseminated.
- **Grievance Redress Mechanism (GRM):** Information on how to use the grievance procedure will be given. This will contain details on the grievance handling procedure, such as the turnaround times for responses.
- Project Information Brochures, Factsheet shall be made available at all the project sites as well as the office of implementation agency i.e., AEPC/DKTI-PIU office.
- Reports and publications, as deemed fit, shall be explicitly prepared for public dissemination. For instance, English version of the ESMF/SEF along with Executive Summary in Nepali language.
- Revised project information (if any)
- Periodic updates on project status, including the implementation of ESMF, SEF and mitigation measures.

5.4. Proposed strategy for consultation

5.3.1 Inception phase

1) One-to-one meeting with the identified stakeholders for all 3 components of the Project
2) Consultation workshop with the potential Commercial and Institutional entities, banks, MFIs, Private companies, GoN, PGs, LGs etc.
3) Public meetings in the project influence area
4) Information/ awareness campaigns through engaged locally formed Clubs, Groups and NGOs
5) Focus group discussions with beneficiaries
6) Formation of committees and/or groups including stakeholders at various stages of the Project.
7) Development of Grievance Redresses Mechanism (GRM) for the Project.
8) Disclosure/dissemination of project information including decision making process and how the received grievances will be addressed.

5.3.2 Implementation phase

1) One-to-one meeting with the identified stakeholders for all 3 components of the Project
2) Consultation workshop with the potential Commercial and Institutional entities, banks, MFIs, Private companies, GoN, PGs, LGs etc.
3) Public meetings in the project influence area
4) Information/ awareness campaigns through engaged locally formed Clubs, Groups and NGOs
5) Focus group discussions with beneficiaries
6) Formation of committees and/or groups including stakeholders at various stages of the Project.
7) Development of Grievance Redresses Mechanism (GRM) for the Project and Grievance Redress Committee (GRC) for each subproject under all 3 Components.
8) Disclosure/ dissemination of project information including decision making process and how the received grievances will be addressed.

The information dissemination will be effected through electronic and print media, during public consultation, and direct discussion with the affected families and institutions.

5.5. Proposed strategy to incorporate the view of vulnerable groups

The disadvantaged and vulnerable groups might not raise their voice and understand the benefits of the Project/Subproject due to various limitations. These vulnerable groups will be identified through screening of the subproject once the project gets demand application. Therefore, it is essential to identify them, understand their limitations and ensure their access to information and make it understandable to them by identifying the appropriate time and way of communication. Besides, their participation in decision making process shall be ensured by providing special measures and assistance. Thus, the principle of FPIC shall be applied to ensure the inclusive participation of disadvantaged and vulnerable groups in each subproject of all 3 Project Components. Generally, FGD with facilitated interactive dialogue with a group of people at guaranteed safe location shall be done along with KII, general conversation with them and site observation.

5.6. Resources and Responsibilities for implementing stakeholder engagement activities

5.6.1. Resources

5.6.2. Management functions and responsibilities

Team Member	Responsibilities
AEPC/DKTI-PIU Project Manager	• Overall responsibility for oversight of development and execution of the project. • Responsible for approving the Stakeholder Engagement Plan (SEP), including the annual budget required for the implementation.
International Experts	• Technical lead role in the implementation and monitoring of Environmental and Social Safeguard aspects in the subprojects in line with the WB ESF • Manage interactions with KfW and national level stakeholders
National Environment and Social Safeguard Expert	• Implementation and monitoring of Environmental and Social Safeguard aspects in the subprojects • Interactions with the Project Stakeholders • Coordinate the resolution of grievances as required • Reporting
Social Mobilization Expert	• Coordinate with concerned Rural Municipalities or Municipalities • Maintain the Project Information Centre • Organize community level meetings • Register stakeholder engagement activities and results, as well as grievances in the system. • Communicate urgent issues and grievances to the ESS Team in a timely manner • Assist to expert team as required

5.7. Timelines and responsibilities for engagement activities

Activity	Concerned stakeholders	Timing	Responsibility	Activity status

6. Grievance Redress Mechanism

A Grievances Redress Mechanism (GRM) shall be put in place wherein all project stakeholders are given a platform to lodge complaints regarding any aspect of the land acquisition and other project-related issues. The complaints can be made verbally or in written form. The PAPs shall have access to all level of grievances redress procedure. Special project grievance mechanisms such as on-site provision of complain hearing allows PAPs to get fair treatment on time. A focal person shall be appointed for handling grievances and the Grievance Redress Committee (GRC) shall be formed for each subproject, which is responsible for handling initial grievance. PAPs shall be exempted from all administrative fees incurred, pursuant to the grievance redressal procedures except for cases filed in court. Under the project following procedures/stages shall be taken to ensure the timely and effective handling of grievances.

ESS focal person or Safety Officer of the developer/Project Manager/Site In-charge shall be appointed as the focal person (Member Secretary of Subproject Level GRC) to receive/handle any kind of grievance related to the subproject. His/her name and contact number shall be displayed at the entrance of the subproject site, so that affected people can have direct access to him/her.

A register shall be maintained including the name of grievant, date and time of grievance recorded, issue raised and time frame to redress the received grievance. (Format presented in **Appendix 2**). The register shall provide information on how the grievance was solved.

A suggestion box shall be placed at the entrance of the subproject site as well as in subproject site premises to collect grievances and suggestions from employees. Grievances can be registered via website: https://www.aepc.gov.np/contact-us

If the subproject level GRC will not be able to redress the grievance, it shall be forwarded to the Project level GRC. Grievances received have to be resolved within 3 weeks of receipt of complaint. Affected persons have the option of accessing the court of law in case of dissatisfaction with the decision of the GRC. Therefore, the Project will have the following four levels of GRM.

First Level of GRM: Many grievances can be resolved by providing correct and complete information early in the subproject development process. The focal person appointed in each subproject shall be responsible to listen and provide information to PAPs and resolve their issues. He/she may seek the assistance of the Project's Safeguard Expert to help resolve the issue. The following information shall be recorded: (i) the name of person (s), (ii) date and time of the received complaint, (iii) nature of the complaint and detail, (iv) location, and (v) potential solution to reserve the complaint. The focal person shall try to resolve the received grievances within 10 days. If it is not

resolved, he/she shall forward it to the Subproject level Grievance Redress Committee (GRC). The recorded grievance and reports shall be submitted to the PEA and to the project safeguard specialist on a monthly basis.

Second Level of GRM: If the grievance remains unresolved, the ESCO or Developer (C&I Entity/LG) or UG forwards the complaint to the Subproject level GRC. The person (filing the grievance) shall be notified by that his/her grievance has been forwarded to the Subproject level GRC. The Member Secretary shall answer queries and find resolution for grievances regarding various issues including social, or livelihood impacts and environmental impacts. In addition, the Member Secretary shall undertake the corrective measure/s in the field within 7 days of the decision.

Subproject specific GRC for Component 1: On-grid solar roof systems

1. Chairperson/Managing Director of Developer (C&I Entity)/ESCO – Chairperson (1)
2. Representative of local body, Ward level – Member (1)
3. Focal Person for E&S Safeguard– Member Secretary (1)

Subproject specific GRC for Component 2A: Off-grid solar irrigation pumps

1. Chairperson of Developer (LG/UG) – Chairperson
2. Representative of local body, Ward level – Member (1)
3. Representative of local body, Municipality level – Member (1)
4. Representative of beneficiary or Project Affected People – Members (1)
5. Focal Person for E&S Safeguard– Member Secretary (1)

Subproject specific GRC for Component 2B: Off-grid solar mini-grids

1. Chairperson of Developer (LG) – Chairperson
2. Representative of local body, Ward level – Member (1)
3. Representative of local body, Municipality level – Member (1)
4. Representative of beneficiary or Project Affected People – Members (1)
5. Focal Person for E&S Safeguard– Member Secretary (1)

Third Level of GRM: If the grievance remains unresolved, it shall be referred to Project level Grievance Redress Committee (GRC). The GRC shall be headed by the Project Manager (PM), with other members made up of the Chairperson of the Subproject level GRC of the relevant Component, representative of beneficiary or PAP of the relevant Component, Team Leader/Deputy Team Leader of the Project and the Project's Safeguard Expert as the Member Secretary. The PAP shall be given the opportunity to present his/her concern and GRC shall suggest corrective measures within 10 days. The Project's Safeguard Expert shall be responsible for processing and placing all papers before the GRC, recording decisions, issuing minutes of the meetings, and taking follow-up action to see that formal orders are issued and the decisions are carried out.

1. Project Manager of DKTI - Chairperson
2. Chairperson of Subproject Level GRC of Relevant Component - Member
3. Representative of beneficiary or Project Affected People of Relevant Component - Member
4. Team Leader/Deputy Team Leader (Technical Expert) of AEPC/DKTI-Member
5. Project's Safeguard Expert - Member Secretary

Fourth level of GRM: If all of the above resolution methods fail, a legal redress mechanism can be adapted through Nepal's judicial or appropriate administrative system.

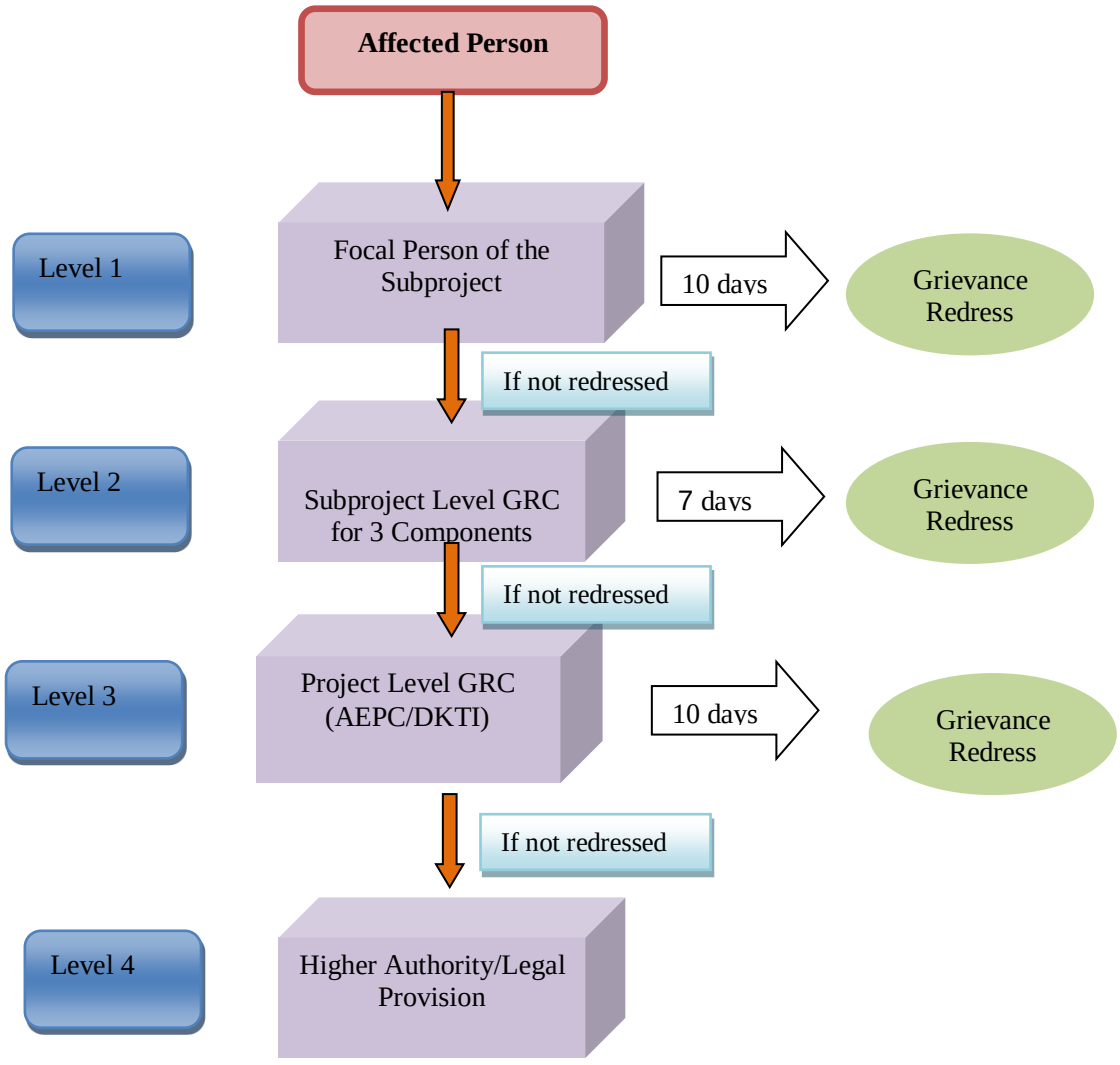

Figure 1: Grievance Redress Mechanism

7. Monitoring and Reporting

7.1. Involvement of stakeholders in monitoring activities

Monitoring is a major part of the SEF to ensure its goals and objectives are adequately met. The implementation of SEF shall be monitored internally. The team comprises of the representatives of Developers (LG/UG/C&I Entities) or ESCOs shall monitor the subproject site in the initial, construction, post construction and operational phase of subproject to ensure that all requirements of stakeholder engagement and GRM each are well addressed and comply with the requirements mentioned in SEF. Each subproject related to Component 2 shall prepare quarterly progress reports and submit them to the AEPC/DKTI. The AEPC/DKTI shall prepare semi-annual reports and submit to KfW and Non-Technical summaries of these reports can be published. Minutes of each meeting shall be recorded.

7.2. Reporting stakeholder groups

Once consultations have taken place, stakeholders may want to know which of their suggestions have been taken on board, what risk or impact mitigation measures will be put in place to address their concerns, and how project impacts are being monitored. Thus, each subproject shall prepare the report to keep track of many commitments made to various stakeholders at various times and for communicating progress made against these commitments on regular basis. The report prepared by each subproject shall be submitted to AEPC/DKTI on quarterly basis and AEPC/DKTI shall prepare reports semi-annually and submit to KfW. Project information can be made accessible to concerned stakeholders during the implementation of subprojects.

Appendixes

Appendix 1: Register of engagement activities

S. No.	Name	Gender (M/F/O)	Ethnicity	Address/ Organisation	Contact details	Photo consent/information disclosure consent	Signature
1							
2							
3							
4							
5							
…							

Appendix 2: Grievance Registration Form

Alternative Energy Promotion Centre

Ministry of Energy, Water Resources and Irrigation

"Promotion of Solar Energy in Rural and Semi-urban Regions of Nepal"

Grievance Record Form

(Subproject Name):

Subproject Reference No (assigned by PEA):	
Please enter your contact information and grievance. This information will be dealt with confidential. Please note: If you wish to remain anonymous, please enter your comment/grievance in the box below without indicating any contact information – your comments will still be considered.	
Full Name	_____
Anonymous submission	☐ I want to remain anonymous
Please mark how you wish to be contacted (mail, telephone, e-mail).	☐ By Mail (Please provide mailing address):_____ ☐ (Please provide Telephone number): _____ ☐ By E-mail (please provide E-Mail address): _____
Preferred Language for communication	: _____
Description of Incident or Grievance:	What happened? Where did it happen? Who did it happen to? What is the result of the problem?
Date of Incident/Grievance: _____	☐ One time incident/grievance (date _____) ☐ Happened more than once (how many times? _____) ☐ On-going (currently experiencing problem)
What would you like to see happen to resolve the problem?	
_____ Signature of Grievant	_____ Signature of Grievance Receive

Appendix 3 : Grievance Log Template

Alternative Energy Promotion Centre

Ministry of Energy, Water Resources and Irrigation

"Promotion of Solar Energy in Rural and Semi-urban Regions of Nepal"

Grievance Record Log Template

(Subproject Name)

S.No.	Date/Time/Location of grievance received	Name of Grievant	Contact detail Address, contact No., email id	Brief of grievance	Proposed resolution	Date of grievance acknowledgement	Present status	Remarks
1								
2								
3								
4								
5								
…								

Appendix 4: Immediate Incident Notification Form

Alternative Energy Promotion Centre

Ministry of Energy, Water Resources and Irrigation

"Promotion of Solar Energy in Rural and Semi-urban Regions of Nepal"

IMMEDIATE INCIDENT NOTIFICATION				
1. Incident Details				
Subproject Name:	Date of incident			
	Time of Incident			
Location of incident:	Type of Incident	Environmental	☐	
		Injury	*Workforce*	☐
			Public/Local community	☐
		Social incident (e.g., violent labor unrest)	☐	

2. WHAT HAPPENED
Brief description of incident

3. INJURED WORKERS						
Employee / Contractor	Sex	Age	Job Title / Description	Time with company	Cause	Injury Type (Major / Fatal)

4. INJURED MEMBERS OF PUBLIC						
Name	Sex	Age	Community	Place of Residence	Cause	Injury Type (Major / Fatal)

5. ENVIRONMENTAL INCIDENT			
Type (Spill / Gas Release)	Total Loss (Litres /Kgs)	Cause	Damage

6. WITNESSES TO INCIDENT			
Name	Sex	Place of Residence	Description of incident

7. OTHER RELEVANT INFORMATION				
Have the authorities been informed?	Yes	☐	No	☐
Please provide further information here				
Media attention?	Yes	☐	No	☐
Please provide further information here				
Any effects off-site?	Yes	☐	No	☐
Please provide further information here				
Photographs taken? *(Please include them in this report)*	Yes	☐	No	☐
Date				
Which immediate corrective actions have been taken after the accident? By whom?				
Please describe here if the accident lead to changes into the works Organisation or process, if specific equipment has been acquired/mobilized, if protection measures were implemented, if works have stopped etc.				
Person completing form:				
Name and position:				
Contact details:	Phone:	Email:		

Appendix 5: Detail of stakeholder consultation during Inception Phase

	Type of Stakeholder	Entity/Organisation Name	Date of meeting	Topics of Discussion	Outcome	Remarks
introduction of the DKTI Project	Bilateral organization	GIZ/ Integration	24-Mar-22	GIZ introduced their "POSTED" project to KFW Potential synergies between POSTED and DKTI joint lobbying of usage of PV	Potential fields of cooperation: capacity building, set up of technical standards (material and implementation), Monitoring activities (ground water usage, CO2 Emission reduction, generated kWhs, etc), cooperation on establishing incentive/subsidize schemes. GIZ is active in province 1 and 7, but can extend their activities also to other provinces.	INTEGRATION is the implementing agency for the POSTED project with the same topics as the DKTI project. GIZ/Integration focused on TA, project end by end of 2023., useful for all kind of documentation. According to GIZ energy mix: 10% on RE in Nepal. At present 125MW PV is online.
	Financial Institution	NMB Bank	25-Mar-22	Introduction of the DKTI project. NMB bank is able to finance all kind of RE project without any limitation procedure of loan setting	The bank prefers a slim setting on loan disbursement on PPt, ideal three-party approach: bank-owner- installation company. For smaller systems the bank is able to provide 100% loan. Payback by saving energy cost. Interest rate 11-12%. The Bank is open to finance the opex or capex model	The bank is handling bank for central renewable energy fund (CREF). The bank prefers to do the financial assessments as the leading partner.
	Bilateral organization	FCDO	28-Mar-22	Introduction of the NREP project, discussion of cooperation since NREP has established all financing modalities	All functioning but problems in operation since MOE has stopped their operation. Offered to KfW to transfer the funds to their basked and take over just the TA, FCDO is paying the gap between 7.3 and 5.94 at present.	
Elaborating the Financing Modalities	solar company (Private)	Saral Urja (SU) Pvt. Ltd.	10-Apr-22	Learning of SU in implementing rooftop PV, Solar Mini-grid (SMG) and solar irrigation pump (SIP). Project Financing models in practice at present, and that are sustainable & feasible	SU suggests to mobilize interest subsidy as viability gap rather than the upfront subsidy on Rooftop solar PV for C&I sector. The solar energy tariff equivalent to NEA grid rate can well compete for rooftop PV investment by ESCO. SU do have interest to participate on community based large size SIPs than the small size SIPs. Their new JV company (Simple Energy + Singapore based Company) has pipe-lined projects of cumulative capacity 5.00 MWp rooftop PVs for C&I sector and they have plan to implement those multiple projects within 2023.	SU had already experienced 250kWp rooftop PV for their number of C&I clients as ESCO (e.g. NMB Bank KTM: 75kWp, Saligram Hotel KTM: 25kWp, Commercial Complex, Thapathali KTM: 25kWp, Biratnagar Commerce: 50kWp). As ESCO, SU had also implemented 18kW Dubung solar mini-grid in 2012. As EPC, SU had also implemented 25kWp community SIP.

	Type of Stakeholder	Entity/Organisation Name	Date of meeting	Topics of Discussion	Outcome	Remarks
	solar company (Private)	Suryodaya Urja (SDU) Pvt. Ltd.	11-Apr-22	Ongoing PV promotion policy issues for grid-connection, learning of SDU in implementing SIP, SMG and Rooftop PV implementation practice at present, Project Financing sustainable models that are feasible at present context, Company's willingness to invest on proposed three PV applications as an ESCO	Providing energy access to rural communities by SMG has demonstrated a very positive impacts under the financing model of 90% upfront subsidy and 10% local contribution. However, as an ECSO to do investment in the remote SMG sites the 10% equity investment will payback in about 5 years and therefore model of 80% to 90% upfront grant might be feasible option for ESCO business of SMG. Large scale SIPs have been experienced more sustainable than distributed SIPs for an individual farmer's small SIPs. Financing of 60% upfront subsidy + 20% LG or Users equity + 20% ESCO investment on large scale SIPs will be of an interest of SDU company. Standardization of SIP technology is not mature in Nepal, therefore SDU requests to support on this part too. As there is limitation of off-grid solar interventions, SDU requests AEPC and DKTI-PIU also to support private sector in the policy lobbing for >10% PV penetration in the NEA grid system for rooftop PV and utility scale PV interventions.	As EPC contractor SDU did implement 6 solar mini-grids (15-150kWp), 700 SIPs (2HP-40HP) and 50 Rooftop PV in Nepal. Recently, SDU has implemented large scale SIP of 126kWp size for Nepal Government Irrigation Department. SDU has experience of PV rooftop Net Metering of capacity 115kWp on Hospital building, 375kWp on CIAA building, 30kWp on the solar electric manufacturer's association building, where they supplied and installed as EPC.
	solar company (Private)	Ghampower Nepal (GPN) Pvt. Ltd.	12-Apr-22	Ongoing PV promotion policy issues to Net Metering of rooftop PV, learning of GPN in implementing SIPs, SMGs and Rooftop PVs, as an ESCO and EPC, Project Financing models in practice and sustainable model that are feasible at present context, Company's willingness to invest on PV energy technologies as an ESCO	GPN has not experienced any kind of difficulties or obstacles in NEA grid-tie Net Metering implementation for rooftop PV below 500kWp capacity. They have been doing NET METERING at feeding rate of NRs 7.3 per kWh. Up to maximum 500kWp PV array capacity, the rate of NET METERING NRs 7.3 and it is being handled by NEA distribution centre offices without going to Power Trade section for PPA. As EPC they have implemented many rooftop PV and connected to the grid through NET METER. GPN suggests to mobilize interest subsidy as viability gap rather than the upfront subsidy on Rooftop solar PV for C&I sector (Average cost per kWp for rooftop PV system is around NRs 75,000 to NRs 85,000). The solar energy tariff equivalent to NEA grid rate can well compete for rooftop PV investment by the ESCO. GPN has 4 NOs of grid-tie rooftop PV projects under pipeline and they are seeking for supports either as interest subsidy or viability gap fund as well as upfront subsidy grant to expedite those C&I rooftop PV projects. This will help ESCO to compete with average cost of NRs 11/kWh grid energy for C&I. For SIPs, when 60% upfront subsidy will be available, GPN has high interest to mobilize 40% credit on SIPs mostly through MFIs in their network. GPN has successfully implemented 80 NOs of SIPs of 1-2 HP size with 30% Grant+10% Farmers equity+60% MFIs loan to farmers (loan@12% interest for 3 year tenure). In	Implemented rooftop PV as ESCO (captive plant to reduce NEA bill): Chitwan Medical College (200kWp), Chitwan Medical Hospital (100kWp), Blue Bird Shopping Mall (86kWp), Birat Medical College (200kWp), Implemented rooftop PV as EPC: Hotel Yak & Yeti (414kWp), Dhokaima Kafe (5.8kWp), St. Xaviers College (25kWp), Monastery (24kWp) Implemented SMGs as ESCO: Halesi SMG in Okhaldhunga and Khotang district (Harkapur, Kaduwa and Chyasmitar),

	Type of Stakeholder	Entity/Organisation Name	Date of meeting	Topics of Discussion	Outcome	Remarks
					2012, GPN had implemented and operated Halesi SMG as an ESCO by utilizing 20% bank credit (10% GPN's equity + 10% energy users) and another 80% grant fund that was supported by ADB.	
	solar company (Private)	Sunbridge Solar (SBS) Nepal Pvt. Ltd.	15-Apr-22	Experience of SBS on rooftop PV implementation, Potential Rooftop PV clients and project in pipeline for the implementation, Community based large scale SIP Vs individual farmer-based SIP, Issues and challenges to implement SIPs, Learning from SIP and SMG financing and operational modalities	SBS experience shows no NEA policy obstacles on rooftop PV net metering implementation below 500kWp capacity. In 2020, SBS did implement 500kWp rooftop PV as EPC for the Lumbini Medical College/Palpa Hospital, where they also supported to the client on grid-connection process through NET METERING@NRs 7.3 per kWh. SBS also facilitated this client to receive loan from a Commercial bank (80% bank financed@13% interest, out of which 50% interest subsidy for the period of 7-years was provided in advance by AEPC). This hospital has been paying average tariff NRs 16 to NRs 21 per kWh to NEA, so found to be motivated to keep captive PV plant as well as to do power exchange with NEA grid. For SBS the potential rooftop PV clients are Hospital, School, Bank, shopping mall etc. The average cost per kWp for rooftop PV system is around NRs 75,000- NRs 80.000. The solar energy tariff equivalent to NEA grid rate can well compete for rooftop PV investment by ESCO. SBS has got 2.8 MWp grid-tie rooftop PV projects in pipeline and they will be happy to collaborate if there will be upfront grant or interest subsidy. SBS has already implemented 900+SIPs in Nepal (from 2016 to till the date). The effective us of SIPs are in Jun-Jul (Rice plantation), Dec-Jan (Wheat irrigation), March-April (seasonal crops). They feel that the full operation of SIP is around 100 Days/annum, so other productive uses or power selling to grid could be the effective way to receive best output from the PV array. SBS is willing to participate in the SIP project when there will be 60% upfront subsidy+20% LG or Users equity+20% ESCO investment. Technical Issues to be taken care are: Water table do highly fluctuate (e.g. 21-meter in 2017 which went down to 25-meter in 2020), therefore system design need to consider safety factor. An overhead tank of 15,000-to-20,000-liter capacity may help in low-land/Terai regions to maintain optimum flow and protects possible pipe-line damage due to pressure effects. Pumped water supply through close cannel will save huge amount of water in comparison to open cannel supply. SBS implemented ESCO model solar mini grid (SMG) in 2018 with their 80% investment as an ESCO, where they comfortably sold electricity @NRs35	Implemented rooftop PV as EPC (500kWp), Implemented SMG as ESCO (30kWp), Some SIPs implemented as EPC: Community based SIP in Chitwan and Nawalparasi (5 & 10kW = 50kW), Rajahar Nawalparasi grid-integrated SIP (9.75kWp) and many more in the recent days.

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					per kWh. Their experience shows, the viability of mini-grid under ESCO model depends on the site and agreed energy tariff.	
	Financial Institution	NMB Bank and CREF	20-Mar-22	Introduction of the DKTI project, Learning of NMB Bank as Handling Bank of CREF for RE Projects, Loan Conditions for RE Projects, Experience of NMB and CREF collaboration efforts in RE financing	NMB Bank is the only bank in Nepal having its separate Renewable Energy Department within the Bank. The Bank has got 0.6% pure RE portfolio maintained in its overall transaction. The Bank is open to PV project finance either on OPEX or CAPEX as well as Hybrid of OPEX+CAPEX model. In general, for larger size PV projects their experience is of Loan and Equity is 70% and 30% respectively. However, for smaller systems the bank is providing up to 100% Loan for 5 years tenure. Since there is collateral based loan lending in general, so do with rooftop PV where PV system itself will be counted as collateral of the loan. As per NBM & CREF, together with the interest subsidy on Rooftop PV, the upfront subsidy might be attractive to the sector which will also give some relief through minimizing total interest amount to be paid by the developer. As per CREF, there shouldn't be geographical restrictions while implementing DKTI PV technologies unlike some development partners followed in past. As CREF has long experience working for ADB and the World Bank supported RE project to handle grant and credit, CREF suggested AEPC-DKTI project to have in place the project implementation guideline like "project operational manual".	NMB bank has handled above 500 number of Rooftop PV in the model of 50% interest subsidy for C&I, and 75% interest subsidy for Households.
	Solar company (Private)	Sun Farmer Nepal (SFN) Pvt. Ltd.	26-Apr-22	Experience of SFN on rooftop PV implementation, Potential Rooftop PV clients and project in pipeline for the implementation, viable model of SIP implementation and experience of SDN. Learning from the off-grid solar mini-grids as ESCO or EPC contractor.	SFN has implemented 6-solar mini-grids as EPC contractor (JV with other company) under AEPC subsidy model, of total cumulative capacity 340kWp. Recently, the company is exploring funds for 2 solar mini-grids that are under preparation as ESCO model. The 60% upfront subsidy from AEPC will help to do financial closure as they are also trying for Innovation Fund to meet the remaining 40% budget for ESCO model solar mini-grid SFN has implemented 200 SIPs as EPC contractor subsidized from AEPC regular projects in the past. Out of 200 SIPs, some 100 SIPs are implemented using 60% AEPC subsidy plus 40% investment by individual Farmers through the Local Financial Institutions (LFI) credit as well as equity Cash. Another 100 SIPs are implemented using 60% AEPC subsidy plus 20% equity by Farmer and 20% external donor/investors. New 35 SIPs are in pipeline to implement using 60% AEPC subsidy and US$10,000 external donation. In 2018, SFN did implement two community-based SIP projects in each Dhading district and Makwanpur district but those were not success due	SFN experience shows that the credit mobilization by ESCO through local MFIs is found to be attractive and sustainable option in case of small holder farmers solar irrigation pumps. However, FMIs are not found to be interested to lend credit to community based larger SIPs unless ESCO provides some guarantee to MFIs. In addition, AEPC and LG can sign MoU for longer term sustainability of the SIPs. In case of Rooftop PV financing model, SFN recommends Interest Subsidy than the upfront subsidy financing. One of the reasons is that, there is tax deduction when some private entity

	Type of Stakeholder	Entity/Organisation Name	Date of meeting	Topics of Discussion	Outcome	Remarks
					to poor social mobilization during the implementation phase. The financing modality was like 30% external donor, 20% community equity and 50% SFN. In the year 2015, SFN had implemented 28 SIPs (1 to 2 HP size) as ESCO, where a Tri-party agreement worked between SFN, Farmer and local MFIs. The total investment of SFN was paid-back in 2-years, through the credit mobilization of MFIs and systems were handed over to the Farmer (Note: In this scheme, 10% interest rate to farmer was charged, out of which local MFIs received 7% and SFN received 3% interest on their credit mobilization). In case of small SIPs for individual Farmers the SIPs hardware was considered as collateral, whereas the land used by the particular SIP systems will also be required as collateral for the community based larger size SIPs. SFN has also implemented Rooftop PV projects in the C&I entities, both as an EPC and an ESCO contractor. In 2019, SFN implemented Rooftop PV NET Metering of total capacity of cumulative capacity 300kWp in private hospital, school and corporate house buildings under EPC model. In 2020, cumulative capacity of 600kWp PV rooftop was completed in Metal industry, Pharmaceutical Industry and others commercial entities where 50% interest subsidy was provided through CREF for 10 year loan tenure on the 70% to 100% credit. In 2021, SFN implemented another 200kWp rooftop PV for C&I. Although SFN signed contract with 6-Industries of total cumulative capacity of 3.0 MWp rooftop PV but those projects couldn't move forward due to the impact of COVID pandemic. The company has got those 3.0 MWp rooftop PV in pipeline projects for the Industrial entities where they are seeking for additional financing support.	receives upfront subsidy but there is no tax deduction when private entity receives subsidy on interest rates.

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	Financial Institution	CIVIL Bank Ltd.	27-Apr-22	Introduction of the DKTI project, Experience and Learning of CIVIL Bank as Partner Bank of CREF for RE Project Financing, Loan Conditions for RE Projects	CIVIL Bank shows willingness to take part in the project financing for DKTI solar project basically in the Rooftop PV for C&I. The bank is open to finance either on OPEX or CAPEX or Hybrid of OPEX+CAPEX models. The Bank has successfully collaborated with AEPC and Solar Company to implement more than 1,500 household-based rooftop PV (having 75% interest subsidy of AEPC for the loan) in past. Similarly, under EPC model of rooftop PV, Civil bank provided credit finance to Hotel, Medical College, Pharma Industry etc (having 50% interest subsidy of AEPC for the loan). The bank charges interest rate between 9% to 13% depending on the applicable base-rate of the bank. In the recent days, the bank is under discussion to collaborate with NREP on generation-based subsidy of Rooftop PV of NREP proposal @NRs 4.5 per kWh. For AEPC-DKTI project, the bank advices to go as certain percent upfront grant and certain percentage of generation-based incentives to the Developer. As an interested bank for DKTI solar project financing it is suggested that no enlisting of solar companies to be done and it shall be open for all capable companies. Likewise, the rooftop PV implementation may take speed if there will be effective awareness program for end users and stakeholders.	CIVIL Bank has already worked for AEPC and PV companies for above 1,500 household size Rooftop PV with 75% interest subsidy, and few C&I Rooftop with 50% interest subsidy.
	Association	Renewable Energy Confederation of Nepal (RECON)	2-May-22	Introduction of DKTI project, Knowledge sharing and their views regarding the Solar projects	The PIC team has highlighted the project background, its scope and area. Previously, RECON has initiated RE for Ag program. The private sector or companies are not willing to go in remote areas from their business perspective. There should be designed a separate entity "Renewable Energy Authority" under selected LG, Mr. Gun suggested. Such entity shall conduct a "management and operational contract" with the supplier or selected installer company to provide post-installation supports for the sustainability of sub-project. The upfront investment subsidy plus soft loan should be provided to private company (ESCO model). The banking process is lengthy and so the project implementation process is being delayed. To address this issue the soft loan can be channelized through dedicated entity or separate RE company in near future. The stakeholders' consultation gap should be addressed. Only the consortium of large solar companies leading	RECON is a common platform for business sector groups active in the supply and delivery of RETs and services, as well as NGOs interested in alternative energy promotion in Nepal. More than 100 zoom meetings were conducted to create awareness and support in RE promotional activities.

	Type of Stakeholder	Entity/Organisation Name	Date of meeting	Topics of Discussion	Outcome	Remarks
					the sector so bidding process should be open for all RE companies.	
	C&I Association	Federation of Nepalese Chamber of Commerce and Industries (FNCCI)	3-May-22	Introduction of the DKTI project, understanding the present power quality and reliability issues in the Nepalese Industrial community, role of FNCCI in the promotion of sustainable renewable energy systems.	Under FNCCI there are more than 2,000 corporate business houses associated as its members and also the large number of Industries are associated through their district Chambers. Head of FNCCI Energy Committee and Director General showed their interest on rooftop PV that helps to intervene clean energy systems on the roof of C&I also to displace backup diesel generator. FNCCI higher management informed that, in past they supported and facilitated various bilateral projects in voluntary basis but in the recent days they have a policy to charge some administrative costs. They showed FNCCI's interest to facilitate the DKTI project activities but suggested to do a MoU between FNCCI and AEPC in order to engage in the supportive roles.	
	Commercial Entity (Electric Vehicles and Charging Station)	Thee-Go Pvt. Ltd.	12-May-22	Introduction of the DKTI project, Understanding the issues and challenges of EV Charging stations, Power quality and reliability at outlet of the Charging stations, Willingness of the EV company to adopt PV energy for vehicle charging in their future business plan.	Thee-GO is the Pioneering company promoting Electric Vehicle through sales, maintenance and operation of EV charging stations in Nepal, as an commercial entity. At present they are also operating E-stops charging station at national highway for example: Mulkot (Sindhuli), but other two bigger size charging stations are under construction in Kurintar (Chitwan) and Daldale (Nawalparasi) that are on the national highway. The EV Charging stations are of power capacity 15kW, 30kW and 60kW fast chargers. Although the NEA grid is available in their existing and new E-stop charging station, the grid power quality and reliability is a big issue they are suffering in all the stations. Therefore, they have been exploring options of power backup through Rooftop PV system in all the highway E-stop Charging stations. They have experienced and projected a big market for EV operations in coming days, therefore expanding in many more highway points from west to east Nepal. Thee-GO is willing to collaborate to implement Rooftop PV project thereby improving service to the E-stops.	The EV charging stations (E-Stops) seek solar backup power supply with energy storage system (ESS) to backup power for customer cars/Jeeps charging, although the PV system can also be connected to the grid through NET metering. Their expectation is observed to be owning solar PV system with Lithium-Ion Battery technology.
Understanding Grid-connection Net Metering Issues for Rooftop PV	Government owned utility grid company	Nepal Electricity Authority (NEA)	19-Apr-22	NEA prospective on the promotion of Rooftop PV to support energy mix objective of GoN, NET METERING application process and processing time, cost of acquiring NEA Energy Meter (Net meter), Technical	NEA has recently revised old grid-connection guidelines and service delivery mechanism (of the year B.S. 2074) by a new guidelines of the year B.S. 2078. As per NEA Head Office (Ratnapark Distribution Centre) Engineers, in the urban areas peak load occurs during day-time. Therefore, the PV capacity addition on the roof of their consumers is helpful to meet burden of addressing the day-time peak load. NEA Technical officers working in the urban area distribution centre are found to be very	It is noted that, for the new consumer of NEA who doesn't have Transformers and Time of Day (ToD) energy meter in their premises, the cost of connection is different rate for them. The consumer of above category willing to connect more than 200kWp

	Type of Stakeholder	Entity/Organisation Name	Date of meeting	Topics of Discussion	Outcome	Remarks
				challenges to connect rooftop PV in the local grid feeder line, Criteria and Conditions of Rooftop PV grid connection for power exchange with NEA line, Present status and application for rooftop PV NET METERING, Information on the energy tariff to Irrigation Pumps.	positive to promote rooftop PV in the premises of domestic, institutional, commercial and industrial consumers. The PV grid connection policy allows NET METER Connection up to 500kWp solar PV capacity and beyond that capacity the approval through power trade department will require to do PPA. The connection to NEA power line shall be in such a way that, from 0.5kWp to 5kWp solar PV to be connected to 230V single phase, from 5kWp to 40kWp solar PV to be connected to 400V three phase and above 40kWp the solar PV shall be connected to 11kV distribution network of NEA. Meanwhile, the PV generator must maintain power factor between 0.85 lag to 0.95 lead in order to integrate with the NEA grid line. The process of PV NET METERING is not that complicated where the end user consumer or ESCO can submit application to NEA. NEA has 7 regional offices and 129 distribution centers throughout the country where PV rooftop developer or consumer can submit their applications. Within one month of complete application submission, the NEA distribution centre serving to the particular consumer will make an agreement with the applicant and install NET METER when the solar PV system installation will be completed. NEA Engineer or Technical Expert do visit to the site and setup NET METER. At the end of each month the accounting of energy inflow and outflow happens, and any amount surplus PV energy fed to the grid will be paid by NEA to the generator at the rate of NRs 7.3 per kWh. The related NEA regional office will do handling of payment to the eligible PV producers. The cost of NET ENERGY METERS to the PV producer is NRs 8,000 to single phase 230V consumers, NRs 16,000 to the three phase 400V consumers and NRs 33,000 to the 11kV or ToD owned consumers. The rooftop PV Net Metering interventions is slow because of high cost of technology and low level of awareness to the end user consumers. In regard to the GoN recent announcement of free electricity to agricultural pumps, NEA officials clarified that the power demand charge is zero but energy consumed by the irrigation pump is not free of cost.	power, which will be done through HT metering of NEA has to pay NRs 200,000 for grid connection through NET METER.

	Type of Stakeholder	Entity/Organisation Name	Date of meeting	Topics of Discussion	Outcome	Remarks
Information on groundwater monitoring/SIPs related issues	Government Institution	Ground Water Resource Development Board (GWRDB), Babarmahal	26-May-22	Introduction of DKTI project, the role of GWRDB on groundwater monitoring (both quality and depletion level), their experiences particularly on irrigation sector	There are 10 nos. of field offices of GWRDB located in different places of Terai region. The field offices receive the demand for shallow tube well irrigation pumps and have been providing both technical and financial support for the implementation of those selected sub-projects. According to Mr. Belbase, still there is a huge demand of diesel pumps. The existing diesel pump users as well as potential farmers (who are highly willing to install diesel pumps in near future) should be prioritized by the program, he added. The field offices could support to identify the potential sites. In this regard, the PIC team has requested the list of farmers having diesel pump set in their farmland. Moreover, the further support will identify the potential farmers. Highly willing to collaborate or jointly implement the program at field level if possible. Further suggested that the SIPs are indeed a viable alternative to diesel pumps. The technical standards and specifications (RETS certified or IQ) are required for durability and reliability. The installer or supplier company shall provide services for the operation and maintenance during the post-installation period i.e. at least for 3-5 years. Theft prevention measures of solar panels and accessories are to be incorporated in technical design. The financial closure of the SIPs apart from AEPC subsidy might be different as per the site-specific cases. The LG contribution, MFIs lending process, ESCO water use rental agreement, users' self-investment, PG support or other sources may possibly pertinent.	A query on monitoring and evaluation of groundwater table and its available data, they are planning to prepare the dashboard or digital database in near future. The POSTED team had verbally committed to collaborate with them.

Appendix 6: Stakeholder Engagement Plan

Project stage	Stakeholder	Method of Engagement					Time, Location, Date	Key Message	Potential Risk	Risk Management Strategy	Responsible Person
		Inform	Consult	Involve	Collaborate	Empower					

Appendix 7: Basic Stakeholder Communication Plan

Project stage	Stakeholder	Method of Communication	Time, Location, Date	Key Message	Potential Risk	Risk Management Strategy	Responsibility